TEACHING MATERIAL ON
TRADE AND GENDER
VOLUME 1: UNFOLDING THE LINKS

MODULE 4D
TRADE AND GENDER LINKAGES: AN ANALYSIS OF CENTRAL AMERICA
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ACKNOWLEDGEMENTS

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The module was coordinated and supervised by Simonetta Zarrilli, Chief of the Trade, Gender and Development Programme at UNCTAD. David Einhorn was in charge of English editing.

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Module 4d
Trade and Gender Linkages: An Analysis of Central America
1. Introduction

This document is the eighth module in Volume 1 of the teaching manual on trade and gender prepared by the United Nations Conference on Trade and Development (UNCTAD). The teaching manual has been developed with the aim of enhancing the capacity of policymakers, civil society organizations, and academics to assess the gender implications of trade flows and trade policy, and to formulate gender-sensitive policies on gender and trade.

The first three modules of Volume I provide a review of theoretical frameworks and empirical studies on the two-way relationship between gender and trade. These three modules have been followed by the development of additional teaching material to illustrate how the framework presented in Modules 1 to 3 can be applied to examine the specific circumstances and institutions of individual world regions. Module 4 examines the Common Market for Eastern and Southern Africa (COMESA); Module 4a focuses on the East African Community (EAC); Module 4b centres on the Southern African Development Community (SADC), and Module 4c examines the Southern Common Market (Mercado Común del Sur - MERCOSUR). The present study, Module 4d, applies the framework developed in Modules 1 to 3 to the case of Central America (figure 1). The module covers Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. Central American countries have diverse linguistic, ethnic and economic structures, even though they share a geographic region and a common language (Spanish). Despite the diversity across the region, gender norms and stereotypes play an influential role in shaping people’s lives in all of the countries. They lead to structural inequalities and discrimination both at home and in the workplace and broader society. Even though gender equality is higher in educational attainment and health outcomes, women lag behind men in economic life and in terms of political empowerment (Gibbons and Luna, 2015). These differences and similarities will be highlighted in this module.

This module starts with a brief overview of trade liberalization policies in Central America and presents a comparative picture of the socio-economic profiles of the countries in the region. The second section examines the gender gaps in the domains of capabilities (i.e. education), access to resources and opportunities (i.e. employment, resources, decision-making), and security (i.e. gender-based violence). It also discusses the implications of these gaps for women’s participation in trade. Section 3 introduces gender-related inputs, namely the legal and institutional framework on gender equality at the international, regional and national levels. Section 4 presents an overview of gender mainstreaming efforts in trade policy and a descriptive analysis of the trade structure for each country. It then presents a review of case studies on the gender impact of trade liberalization in each broad sector of the economy (i.e. agriculture, industry and services), and carries out a macroeconomic empirical analysis on how trade openness affects female employment patterns in the region. The last section concludes the module and discusses the policy implications derived from the study.

At the end of this module, students should be able to:

- Interpret and use various measures of gender inequalities in the Central American countries and assess their implications for trade
- Understand the relationship between trade and gendered economic outcomes in the context of Central America
- Interpret the findings of the study to propose gender-sensitive policies to support women’s participation in trade and reduce gender inequalities.

Figure 1

Overview of the modules in the UNCTAD teaching manual on gender and trade

- The economy as a gendered structure
- Transmission channels through which trade impacts women
- How gender inequalities affect export competitiveness and trade performance
- Trade and gender linkages in:
  - 4: COMESA
  - 4a: EAC
  - 4b: SADC
  - 4c: MERCOSUR
  - 4d: Central America

Source: UNCTAD Secretariat.
1.1. An overview of trade liberalization in Central America

Central America has experienced significant political and economic changes over the last four decades. Some of the countries experienced armed conflict until the adoption of the Esquipulas Agreement in 1987 and the creation of the Central American Integration System in 1990 (Protocol of Tegucigalpa), and then succeeded to build a durable peace following the Guatemala Peace Accords in 1996. The regional integration process gained pace along with the peace process, accompanied by economic growth and poverty reduction after 1990 compared to the period between 1970 and 1990 (Frigenti, 2011). Besides the peace and democratisation process, the structural adjustment process marked another major development that has shaped the societies and economies of the region since the early 1990s. It emphasised achieving macroeconomic balance, increasing the role of the private sector, and promoting integration into the global economy (Stenman, 2007).

International trade and the promotion of both intra-regional and extra-regional integration have been central to the development agenda in Central America. This has been partly driven by the small sizes of Central American economies and the need for external markets to exploit economies of scale. Integration was also a key variable in the Peace Agreements, which had a focus on peace, democracy and development (Campoamor et al., 2018). Today the region has a relatively high degree of trade openness compared to other developing countries. However, there are significant differences in export structures across the region, as discussed in section 4.2.

The origins of Central American regionalism, one of the oldest in Latin America, date to the Letter of the Organization of Central American States (Organización de Estados Centroamericanos - ODECA) of 1951 (Martinez, 2019) and the signature of the General Treaty on Central American Economic Integration between El Salvador, Guatemala, Honduras and Nicaragua in 1960 (Costa Rica acceded in 1962). Article I of Chapter I of the treaty called for the creation of a common market (Central American Common Market - CACM) and a customs union. The Central American Integration System (Sistema de la Integración Centroamericana - SICA) was established on 13 December 1991 with the signing of the Tegucigalpa Protocol by Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama to extend earlier cooperation and manage different dimensions of regional integration. El Salvador, Guatemala, Honduras, and Nicaragua (named as the Central American Four) have political, cultural, and migratory integration, share common internal borders, and have a similar type of passport (Gonzalez Diaz, 2016).

The customs union in Central America was initially established by Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua in the 1960s. Panama has been in the gradual process of customs union membership since 2013, hence its tariff and productive structure were significantly different. The customs union is considered imperfect for a number of reasons. There are two multilateral exceptions (unroasted coffee and sugar cane) and a few bilateral restrictions to free intra-regional trade. Moreover, there are several safeguard clauses and other non-tariff barriers, which are especially prevalent in the case of Costa Rica. Central American countries have introduced a common external tariff for all but 4 per cent of items, which are still under negotiations. They have also introduced a comprehensive common policy on various trade measures such as non-tariff barriers, safeguard measures, sanitary and phytosanitary measures, customs administration, and transit of goods, among others (Campoaomor et al., 2018). As part of the integration process, in May 2019, the Unified Customs Declaration (Declaración Unica Centro Americana - DUCA) entered into force in the six Central American countries covered in this study. It is still in process as a trade facilitation measure and is based on a harmonised (one-for-all) system for customs (Palma, 2019). In 2017, what was called a “deep integration” customs union agreement was reached between Guatemala and Honduras, with El Salvador joining in 2018. In this way, the countries of northern Central America are advancing at a faster pace with the integration of their economies (Martinez, 2019).

The United States is the most important extra-regional trading partner of Central American countries, which have gained preferential access to the United States market since 1983 as a result of the Caribbean Basin Initiative, along with duty-free access to approximately 75 per cent of their exports to the United States by 2000 (Lopez and Shankar, 2011). The Dominican Republic–Central America Free Trade Agreement (DR-CAFTA), the first free trade agreement between the United States and a group of developing countries, was signed by Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and the United States on 5 August 2004 with an implementation period that ends in 2025. Besides trade liberalization for goods and services, DR-CAFTA governs other areas such as customs...
Administration and trade facilitation, technical barriers to trade, government procurement, investment, telecommunications, e-commerce, intellectual property rights, transparency, and labour and environmental protection. The major change in terms of tariff liberalization occurred for United States exports to the region, since DR-CAFTA developing country members already enjoyed duty-free access to the United States market for most of their exports through the Caribbean Basin Initiative.6

As another regional free trade agreement as a bloc, the Central American countries – namely Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama – signed the European Union -Central America association agreement with the European Union on 29 June 2012. The agreement covers three main pillars: political dialogue, cooperation and trade. The trade pillar has been provisionally applied since 2013 with an implementation period that ends in 2027. Besides these regional agreements signed as a bloc, Central American countries have other free trade agreements involving one or more countries.7

1.2. Socio-economic profiles of Central American countries

Figure 2 presents the map of Central American countries with the key socio-economic indicators for each country. They include GDP (total, real per capita), population (total, density), poverty and inequality (poverty headcount ratio, Gini index), and human development (Human Development Index [HDI] value, rank). Guatemala is the largest economy and by far the most populous country in Central America. Panama, followed by Costa Rica, has the highest GDP per capita in the region. In contrast, Honduras and Nicaragua have the lowest levels of GDP per capita. In terms of per capita income groupings, the World Bank’s June 2019 classification lists Panama as a high-income economy; Costa Rica and Guatemala as upper-middle-income economies; and El Salvador, Honduras and Nicaragua as lower-middle-income countries.8

All countries in the region have high levels of income inequality, as measured by the Gini index,9 as is common in Latin America. The poverty headcount ratio is highest in Honduras and Guatemala, and lowest in Costa Rica and Panama.10 Panama and Costa Rica correspond to the group of high human development countries, whereas El Salvador, Nicaragua, Guatemala and Honduras correspond to the medium human development group of countries.11

Migration and personal remittances play an important role in most parts of Central America in terms of supporting livelihoods of those who remain in the home country. Many of those who stay behind are women. This is particularly important when social security is not available. In 2018, personal remittances as a share of GDP were 21 per cent in El Salvador, 20 per cent in Honduras, and 12 per cent in Guatemala and Nicaragua, while less than 1 per cent in Costa Rica and Panama.12

Women also represent an increasing share of immigrants who have arrived in Mexico and the United States from Central America over the last decade. Instability in the region in the form of violence of gangs and organized-crime groups, entrenched poverty, and the desire to reunify with relatives push both men and women to flee in large numbers from Central America. Women face further gendered challenges that have driven the increase in their out-migration to North America in recent years. Especially in the Northern Triangle countries of El Salvador, Guatemala and Honduras, social norms and legal settings often allow gender-based crimes to go unpunished, women are forced to become the girlfriends of gang members, and femicide rates are high. All of these factors explain the increased out-migration of women from the region (Hallock et al., 2018).

With respect to the sectoral structure of the economy, the services sector represented the largest share of economic activity in all countries in Central America in 2018 (figure 3). Costa Rica stands out with a share of services above 70 per cent, which is usually expected at high levels of development. This seems to be a sign of premature de-industrialisation. For all countries under review, agriculture held its share of economic activity, varying from around 2 per cent in Panama to 17 per cent in Nicaragua in 2018. The industrial sector holds a significant share of economic activity, ranging from 21 per cent in Costa Rica to 30 per cent in Panama. Within the industrial sector, El Salvador, Guatemala and Honduras (all 18 per cent), Nicaragua (16 per cent) and Costa Rica (13 per cent) were the countries with a relatively significant share of manufacturing sector in total economic activity in 2018.13 Between 2000 and 2018, the share of services increased (in order of importance) in Costa Rica, Guatemala, Honduras and El Salvador, and the share of the industrial sector increased (in order of importance) in Panama, Nicaragua and Guatemala. Agriculture lost its share in all countries, and more pronouncedly in Guatemala.
Selected economic and social indicators, 2018

**Guatemala**
- GDP: US$78.5 billion
- GDP per capita: US$4,549
- Population: 17.2 million
- Population density: 163 people per sq. km
- Gini index: 48 (2014)
- Poverty ratio: 24 per cent (2014)
- HDI value & rank: 0.651 & 126th

**Honduras**
- GDP: US$24 billion
- GDP per capita: US$2,506
- Population: 9.6 million
- Population density: 86 people per sq. km
- Gini index: 52 (2018)
- Poverty ratio: 30 per cent (2018)
- HDI value & rank: 0.623 & 132nd

**El Salvador**
- GDP: US$26.1 billion
- GDP per capita: US$4,058
- Population: 6.4 million
- Population density: 310 people per sq. km
- Poverty ratio: 8 per cent (2018)
- HDI value & rank: 0.667 & 124th

**Nicaragua**
- GDP: US$13.1 billion
- GDP per capita: US$2,021
- Population: 6.5 million
- Population density: 54 people per sq. km
- Gini index: 46 (2014)
- Poverty ratio: 13 per cent (2014)
- HDI value & rank: 0.697 & 125th

Source: World Bank, World Development Indicators database (accessed on 24 June 2020) for all the indicators except the Human Development Index (HDI) value and rank, which are based on UNDP (2019).

Note: GDP and GDP per capita figures are measured in current United States dollars. Population density is measured as persons per square kilometre of land area. GDP and population figures and HDI value and rank are for 2018.

**Sectoral composition of economic activity, 2000 and 2018 (percentage shares)**

Source: UNCTADStat database (accessed on 24 June 2020).

Note: The data represent gross value added by kind of economic activity expressed as percentage shares of total value added. LAC: Latin America and the Caribbean.
From the 1990s onward, the region recorded significant per capita GDP growth and corresponding reductions in poverty and inequality levels. All Central American countries except Nicaragua had a rise in their average per capita GDP growth rate between the 1998–2002 and 2014–2018 periods, and all countries in the region performed well above the Latin American and the Caribbean (LAC) average in terms of GDP growth performance (figure 4). These achievements were the result not only of the peace process but also of the significant modernization agendas carried out in the region. The promotion of international trade was a key component of these agendas, in part because the domestic economies were too small for domestic firms to exploit their comparative advantage and achieve scale economies (Frigenti, 2011).


Note: The per capita GDP growth rate refers to the annual percentage growth rate of per capita GDP at market prices based on constant local currency. LAC: Latin America and the Caribbean.


Note: LAC: Latin America and the Caribbean.
As a result, Central America today is characterized by a high degree of trade openness, reflecting the influence of intra- and extra-regional trade liberalization efforts and their small economies, among other factors, as depicted in figure 5. Merchandise exports predominate in El Salvador, Guatemala, Honduras, and Nicaragua. In Costa Rica, services exports are close to merchandise exports in terms of share in total exports, whereas in Panama services generate more export revenue than merchandise exports.

In the first months of 2020, the world experienced an outbreak of the coronavirus disease (COVID-19). COVID-19 was declared a pandemic and social distancing measures were introduced all around the world, with an unprecedented disruption in economic activity. According to the June 2020 projections by the International Monetary Fund (IMF), the world economy is expected to contract by 4.9 per cent in 2020 and to then have a gradual recovery process. Since the impact on low-income households is acute, the progress in poverty reduction achieved since the 1990s has been imperilled (IMF, 2020).

As a result, the COVID-19 pandemic of 2020 has led to the worst economic and social crisis since the Great Depression, resulting in a combination of both domestic and external shocks around the world. LAC is no different from the rest of the world. The COVID-19 pandemic is expected to have negative repercussions for employment, poverty and inequality in the region. The Economic Commission for Latin America and the Caribbean (ECLAC) projects that the LAC region as a whole will contract by 5.3 per cent, experience an increase in unemployment rate by 3.4 percentage points (resulting in an unemployment rate of 11.5 per cent), and have an increase in the poverty rate by 4.4 percentage points, leading to a poverty rate of 34.7 per cent in 2020. The volume of global trade is expected to contract by between 13 and 32 per cent. Trade volumes and prices in LAC, especially for commodities, have been hurt by the economic contraction in China, the United States and European Union. Reduced remittances from migrants and declining tourism activity also hurt the countries in LAC (ECLAC and ILO, 2020).

2. Gender-related outputs: An assessment of the various dimensions of gender inequalities

Gender inequality remains a significant barrier to human development despite some progress since 1990, negatively affecting women’s ability to develop their capabilities, empowerment and autonomy (UNDP, 2019). Gendered power relations shape economic institutions, transactions, and relations, and gender bias operates and affects women in their economic roles as workers, producers, traders, consumers and taxpayers. Any economic analysis must examine the economy from a gender perspective, taking into account both productive and reproductive activities. Module 1 identified three domains of gender equality that are important for women’s participation in the economy: (i) capabilities, which refers to achievements of basic human abilities (e.g. education and health); (ii) access to resources and opportunities, which refers to conditions that enable individuals to earn adequate livelihoods through access to economic assets such as land, property and infrastructure, access to income and employment, and by exercising their decision-making power; and (iii) security, which refers to vulnerability to violence and conflict.

As discussed in Module 3, existing gender inequalities in these domains have direct implications for participation in trade and export competitiveness. For example, gender inequalities in the labour market (e.g. occupational segregation and the gender wage gap) may render female workers “sources of competitive advantage” for exporting firms in international markets through a cost-cutting strategy. Similarly, women may be “under-achievers of competitive advantage” as self-employed producers and small entrepreneurs due to gender inequalities in access to resources, assets, market information, etc. It is therefore critical to reduce gender inequalities in these domains and support gender equality for women’s successful participation in trade. This section compares gender inequalities among the Central American countries in these three domains.

2.1. Capabilities domain

Let us first examine the international stance of the Central American countries according to the United Nations Development Programme (UNDP) Gender Inequality Index (GII) and key indicators of education, labour force participation, and income (table 1). Based on the GII values, all countries except Costa Rica perform worse than the LAC average on gender equality.

In terms of education outcomes, women have slightly better educational attainment than men in all countries but El Salvador. Overall, the gender gap in adult literacy is low in the region. For most of the countries, average years of schooling are higher for females than for males. This finding contrasts that of most developing countries, where education favours boys. This is partly
explained by girls’ higher probability of school completion than boys, and by their attainment of higher levels of education (Nopo, 2012). Gender norms also explain this difference: social norms expect boys to start working at an early age, while it is preferred that girls stay at school to be better protected against violence (Cunningham et al., 2008).

2.2. Access to resources and opportunities domain

As explained in Module 1, income and employment are among the key indicators to assess gender inequality in access to economic resources and opportunities. Trade liberalization has direct implications for women’s employment and income opportunities. Trade leads to distributional outcomes through sectoral shifts in production, as discussed in detail in Module 2. This in turn leads to changes in labour market outcomes. Women have a significantly lower labour force participation rate (LFPorr) than men in all the countries, partly because unpaid care and domestic work falls mostly on the shoulders of women, as discussed further below. Across the region, the female LFPorr ranges between 41 per cent in Guatemala and 53 per cent in Panama. Similarly, the gender gap in the LFPorr (i.e. the ratio of the female to male LFPors) is highest in Guatemala and lowest in Panama (table 1). Particularly in countries with aging populations, increasing the labour force participation of women would bring significant gains for GDP growth, in addition to the desired gender parity in the labour market. For example, the McKinsey Global Institute estimates that such potential GDP gains would be particularly high in countries with high gender inequality in labour force participation, such as Guatemala (Cadena et al., 2017). This could in turn increase the export capacity of these countries.

Youth in particular constitute a highly vulnerable group in LAC. It is estimated that around 30 million young women and men between the ages of 15 and 29, corresponding to 22 per cent of all young people, are not in education, employment, or training. Of this group, 73 per cent are women, 66 per cent live in urban areas,15 55 per cent (mostly women) perform unpaid domestic and care work, 18 per cent are searching for paid employment after having worked before, and 6 per cent are first-time job seekers. Finally, 17 per cent of them are not in education, employment, or training without any obvious reason. A significantly higher share of young men (30 per cent) falls in this category than young women (8 per cent), and they constitute the most socially marginalized young people that come from lower-income households (ECLAC, 2016). The probability of not being in education, employment, or training falls when levels of education and socio-economic status improve. For women, it increases with the number of young children in the household. This reflects the role of unpaid work carried out mostly by women (OECD et al., 2016).

Table 1

<table>
<thead>
<tr>
<th>Gender Inequality Index</th>
<th>Gender Inequality Index (ranking)</th>
<th>Human Development Index (ranking)</th>
<th>Adult literacy rate</th>
<th>Mean years of schooling</th>
<th>Population with at least some secondary education</th>
<th>Labour force participation rate</th>
<th>Estimated gross national income per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>0.285</td>
<td>61</td>
<td>68</td>
<td>979</td>
<td>978</td>
<td>8.8</td>
<td>8.5</td>
</tr>
<tr>
<td>El Salvador</td>
<td>0.397</td>
<td>92</td>
<td>124</td>
<td>872</td>
<td>91.1</td>
<td>6.6</td>
<td>7.3</td>
</tr>
<tr>
<td>Guatemala</td>
<td>0.492</td>
<td>118</td>
<td>126</td>
<td>76.4</td>
<td>86.8</td>
<td>6.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Honduras</td>
<td>0.461</td>
<td>109</td>
<td>132</td>
<td>83.3</td>
<td>87.1</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.455</td>
<td>105</td>
<td>126</td>
<td>82.8</td>
<td>82.4</td>
<td>7.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Panama</td>
<td>0.461</td>
<td>109</td>
<td>67</td>
<td>94.9</td>
<td>96.0</td>
<td>10.4</td>
<td>9.9</td>
</tr>
<tr>
<td>LAC</td>
<td>0.386</td>
<td>-</td>
<td>-</td>
<td>91.4</td>
<td>94.3</td>
<td>8.6</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Source: UNDP (2019) for all the indicators except the adult literacy rate, which comes from the World Bank’s World Development Indicators database (accessed on 24 June 2020).

Note: LAC: Latin America and the Caribbean; F: Female, M: Male

1 The adult literacy rate is for 2018 in Costa Rica, El Salvador, Honduras, Panama and LAC, 2015 in Nicaragua, and 2014 in Guatemala.
The raw gender income gap (i.e. the ratio of female to male GNI per capita) is also high in all the Central American countries. In Guatemala, where this gap is the largest, women on average earn 48 per cent of the average income of men. In Nicaragua, which has the smallest gap, women’s average per capita income corresponds to 80 per cent of men’s (table 1). The raw earnings gap reflects both differences in qualifications such as education and experience, as well as the influence of discriminatory factors faced by women (e.g. unequal access to resources, discriminatory hiring practices and wages, lower hours of work due to unpaid work burden) in the economy. The gender earnings gap and its unexplained/discriminatory component tend to be high among low-income workers compared to high-income workers (Nopo, 2012). The incidence of poverty is also higher among women than it is among men across the region, and this shows that policies to reduce poverty are not benefiting men and women equally (box 1).

### 2.2.1. Employment patterns

Section 2.1 showed that girls in general perform better than boys in education in Central America, resulting in a low or non-existent gender gap in educational attainment. Despite this achievement in education, the traditional gender division of work and social norms remains a major constraint for women who want to enter the labour market in LAC. As a result, important disparities occur in terms of labour market outcomes. The sectoral distribution of employment shows a clear gender pattern in Central America. Most women work in the services sector, as is common in LAC. For men, agriculture and industry are relatively more important sources of employment (figure 6).

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Index value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicaragua</td>
<td>2014</td>
<td>102.6</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2014</td>
<td>104.4</td>
</tr>
<tr>
<td>El Salvador</td>
<td>2017</td>
<td>106.3</td>
</tr>
<tr>
<td>Honduras</td>
<td>2016</td>
<td>106.6</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2017</td>
<td>128.9</td>
</tr>
<tr>
<td>Panama</td>
<td>2017</td>
<td>130.0</td>
</tr>
<tr>
<td>Latin America</td>
<td>2017</td>
<td>113.0</td>
</tr>
</tbody>
</table>


Less than 12 per cent of female employment was in agriculture in all the countries, a feature common to LAC as opposed to other developing regions. In contrast, agriculture is the most important sector of employment for men in Guatemala (43 per cent), Honduras (44 per cent) and Nicaragua (45 per cent). Similarly, industry is a more important source of employment for men than for women in all six countries. The gap is particularly significant in Panama and Costa Rica.

The services sector presents a different picture. Between 71 per cent of women in Honduras and 85 per cent in Costa Rica were employed in services in recent years (figure 6). Women’s relatively high levels of educational attainment and migration to urban areas to take on services jobs are the two major factors that explain this phenomenon. The region is also characterized by women’s emigration, especially to the United States to work as caregivers.
That services is the sector with the largest female share of employment reflects the gender divide in sectoral employment patterns. Women hold more than 45 per cent of total services employment in all six countries. The share of female employment in industry is above 30 per cent in (decreasing order) Honduras, Nicaragua, El Salvador and Guatemala (figure 7).

Within services, accommodation and food services (i.e., tourism), the public sector and social services are predominantly female-intensive sectors in all the countries, reflecting the traditional gender division of labour. In wholesale and retail trade and repair, female labour accounted for 47 per cent of total employment in all countries except Costa Rica.
Trade and Gender Linkages: An Analysis of Central America

The female share of employment is also quite high in manufacturing within the industrial sector, surpassing 50 per cent in Honduras and Nicaragua (table 2). This is explained in part by the importance of textile and apparel industries, which are highly intensive in female labour.

The employment distribution of women and men across services sub-sectors show certain gender patterns. Wholesale and retail trade is a more important source of employment for women than for men in most countries, employing between 18 per cent of women in Costa Rica and 30 per cent in El Salvador. Costa Rica is an exception, where this sector accounts for similar shares of total employment for men and women (table 3). Women also hold larger employment shares in education, health, social work, tourism and activities of private households, extraterritorial organizations, and services n.e.c. – all jobs that essentially coincide with domestic work – in line with the traditional division of labour. In contrast, men hold a larger share of employment in the transport, storage and communications sub-sectors in all countries and in finance in all except Panama. Overall, men tend to hold relatively more positions in higher-skilled services than women in Central America.

### Table 2

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Costa Rica</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
<th>Panama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale and retail trade, repair</td>
<td>37.2</td>
<td>54.2</td>
<td>47.2</td>
<td>56.1</td>
<td>58.4</td>
<td>47.5</td>
</tr>
<tr>
<td>Transport, storage, communication</td>
<td>14.8</td>
<td>13.3</td>
<td>9.2</td>
<td>10.1</td>
<td>9.2</td>
<td>16.3</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>58.2</td>
<td>72.9</td>
<td>71.0</td>
<td>79.9</td>
<td>77.4</td>
<td>61.8</td>
</tr>
<tr>
<td>Business and administrative services</td>
<td>32.9</td>
<td>33.3</td>
<td>31.8</td>
<td>38.7</td>
<td>28.4</td>
<td>42.3</td>
</tr>
<tr>
<td>Public administration, community, social and other services and activities</td>
<td>63.8</td>
<td>60.0</td>
<td>61.8</td>
<td>66.3</td>
<td>67.8</td>
<td>63.8</td>
</tr>
</tbody>
</table>

Source: UNCTAD calculations based on data from the ILOStat database (accessed on 5 November 2019). Data are from household surveys and are for 2012 in Nicaragua, 2017 in Guatemala, and 2018 for the remainder of the countries.

### Table 3

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Costa Rica</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
<th>Panama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale and retail trade, repair</td>
<td>177</td>
<td>177</td>
<td>29.7</td>
<td>177</td>
<td>28.8</td>
<td>16.4</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>9.9</td>
<td>4.2</td>
<td>14.8</td>
<td>3.9</td>
<td>9.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>2.9</td>
<td>4.9</td>
<td>6.9</td>
<td>4.5</td>
<td>4.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Financial intermediation, real estate and business activities</td>
<td>8.7</td>
<td>10.6</td>
<td>4.9</td>
<td>6.9</td>
<td>4.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Public administration and defence, compulsory social security</td>
<td>3.3</td>
<td>4.2</td>
<td>2.7</td>
<td>5</td>
<td>2.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Education</td>
<td>11</td>
<td>3.7</td>
<td>4.9</td>
<td>1.9</td>
<td>8.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Health and social work</td>
<td>6.5</td>
<td>2.3</td>
<td>4.1</td>
<td>1.5</td>
<td>3.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Other community, social and personal service activities</td>
<td>7.1</td>
<td>3.7</td>
<td>5.6</td>
<td>3.7</td>
<td>6.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Activities of private households, etc.</td>
<td>177</td>
<td>1.9</td>
<td>10.6</td>
<td>1.0</td>
<td>8.2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Source: UNCTAD calculations based on data from the ILOStat database (accessed on 5 November 2019). Data are from household surveys and are for 2012 in Nicaragua, 2017 in Guatemala, and 2018 in the remainder of the countries.

Note: The percentages add up to the share of the services sector in total female employment. F: Female; M: Male.
In all countries in the region, most workers – men and women – are employees. The share of employees in total female employment ranges between 41 per cent in Honduras and 76 per cent in Costa Rica (figure 8). Own-account work, one of the vulnerable forms of employment, is the second most common type of employment. It is a particularly significant form of work for women in Honduras (41 per cent), Nicaragua (38 per cent), El Salvador and Guatemala (both 36 per cent). Contributing family work, the other component of vulnerable employment, is also significant in Guatemala and Honduras, representing more than 10 per cent of employed women. The differences with respect to the share of vulnerable employment are in line with the differences in GDP per capita across Central American countries.

Source: ILOStat database (accessed on 23 June 2020), based on household surveys.

Source: ILOStat database (accessed on 23 June 2020). Data are from household surveys and are for 2019 in Costa Rica and Panama, 2018 in El Salvador, 2017 in Guatemala and Honduras, and 2012 in Nicaragua.
Informal employment overwhelmingly dominates employment for both men and women in El Salvador (70 per cent of female employment), Guatemala (80 per cent), Honduras (81 per cent) and Nicaragua (82 per cent) (figure 9). Women have a higher level of informal employment than men in the non-agricultural sector in all countries except Panama. Domestic workers and street vendors are among the common informal jobs and they are more likely to be held by women.

Overall, employment patterns by work status and informality are in line with the development patterns as measured by GDP per capita. However, women are disproportionately employed in low-productivity sectors across the six countries regardless of the differences in their GDP per capita levels (box 2). This shows a distinct pattern of gender segregation in the labour market in all the countries covered in this study.

The impact of the COVID-19 pandemic on labour markets depends on the distribution of male and female employment in each sector; 44 per cent of employees in high-risk sectors in LAC are women. However, those in low-risk sectors such as health and education – both female-intensive sectors – face worsening working conditions. Women also face a sharp increase in their care burden – both paid and unpaid. Finally, the impact of the pandemic is felt disproportionately by informal workers who do not have access to quality health care.

Latin America has strong labour market segmentation, which translates into a high level of income inequality. This can be illustrated by the employment distribution by productivity levels. The Economic Commission for Latin America and the Caribbean (ECLAC) classifies sectors based on average labour productivity as either low-productivity (agriculture, wholesale and retail trade and services), medium-productivity (construction, manufacturing and transportation), or high-productivity (finance, electricity and mining). According to the ECLAC classification, women are disproportionately employed in low-productivity sectors. These activities are characterized by lower incomes, lower education, limited social security coverage, job instability and absence of work contracts (box figure 2.1). Men are employed to a greater extent in medium- and high-productivity sectors, which provide better working conditions, require a higher level of education, and use technology to a greater extent. The gender divide in employment distribution by productivity levels is particularly strong in Costa Rica and Panama, the two economies with the highest GDP per capita levels in the region.

The gender divide by productivity levels in Central America

Latin America has strong labour market segmentation, which translates into a high level of income inequality. This can be illustrated by the employment distribution by productivity levels. The Economic Commission for Latin America and the Caribbean (ECLAC) classifies sectors based on average labour productivity as either low-productivity (agriculture, wholesale and retail trade and services), medium-productivity (construction, manufacturing and transportation), or high-productivity (finance, electricity and mining). According to the ECLAC classification, women are disproportionately employed in low-productivity sectors. These activities are characterized by lower incomes, lower education, limited social security coverage, job instability and absence of work contracts (box figure 2.1). Men are employed to a greater extent in medium- and high-productivity sectors, which provide better working conditions, require a higher level of education, and use technology to a greater extent. The gender divide in employment distribution by productivity levels is particularly strong in Costa Rica and Panama, the two economies with the highest GDP per capita levels in the region.

The gender impact of the pandemic on labour markets depends on the distribution of male and female employment in each sector; 44 per cent of employees in high-risk sectors in LAC are women. However, those in low-risk sectors such as health and education – both female-intensive sectors – face worsening working conditions. Women also face a sharp increase in their care burden – both paid and unpaid. Finally, the impact of the pandemic is felt disproportionately by informal workers who do not have access to quality health care.
services and income replacement mechanisms such as unemployment insurance. Informal workers also face greater risk of infection and less savings capacity to make up for the income loss during economic inactivity (ECLAC and ILO, 2020). In Central America, both wholesale and retail trade and accommodation services are female-intensive sectors and employ a significant share of women (tables 2 and 3). Moreover, women have a higher rate of informal employment than men in the non-agricultural sector, which is affected the most by the pandemic (figure 9). Hence there seems to be significant gender implications of the pandemic on labour markets in Central America.

The ability of countries to adapt to changing work conditions shapes the labour market impacts of the pandemic. For example, adequate technology infrastructure is needed for working remotely or teleworking. There are large disparities in access to the Internet across and within countries. While LAC (overall), Chile, Brazil, Costa Rica and Uruguay had provided 80 per cent of their population with a mobile Internet connection by 2017, the same figure was only 30 per cent in Guatemala, Haiti, Honduras and Nicaragua. In LAC, countries that regulated teleworking encouraged its use and issued standards to facilitate its implementation, as in Brazil and Costa Rica. Other countries, such as Panama, El Salvador and Chile, recently issued laws on teleworking. Besides the short-term policy responses, countries also need to implement occupational safety and health measures at the heart of their return-to-work policies (ECLAC and ILO, 2020).

Given the concentration of female employment in services and the higher share of women in informal work, policy responses to the COVID-19 pandemic need to be gender-responsive. For example, income transfer programmes need to be extended to female domestic workers, many of whom are informal, and ensure their access to health and social security. Policy instruments such as hotlines need to be adapted to address the increased gender-based violence being experienced in many countries during the quarantine (ECLAC and ILO, 2020).

2.2.2. Time use

Gender inequalities in the labour market partially reflect the influence of unpaid domestic and care work that is disproportionately carried out by women. This is the case for the Central America region. The difference between the time that women spend on unpaid domestic and care work and the time that men spend on it ranges from 1.9 times more for women than men in Nicaragua to 7.5 times more for women than men in Guatemala (figure 10). Even though unpaid domestic work is not recorded in national accounts, it has a significant value. For example, it is estimated that the economic value of unpaid household work is 18-19 per cent of GDP in El Salvador and Guatemala. The unpaid work burden is also not uniform among women and depends in part on their income level (ECLAC, 2016).

![Figure 10](image_url)

Proportion of time spent on unpaid domestic and care work by sex (per cent of 24 hours)

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>8.7</td>
<td>22.6</td>
</tr>
<tr>
<td>El Salvador</td>
<td>7.0</td>
<td>20.2</td>
</tr>
<tr>
<td>Guatemala</td>
<td>2.6</td>
<td>19.5</td>
</tr>
<tr>
<td>Honduras</td>
<td>4.3</td>
<td>17.3</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>12.1</td>
<td>22.9</td>
</tr>
<tr>
<td>Panama</td>
<td>7.6</td>
<td>18.0</td>
</tr>
</tbody>
</table>

2.2.3. Access to finance and land

The gender gap persists in account ownership at a financial institution or with a mobile-money-service in all Central American countries. El Salvador and Nicaragua have both the lowest rates of account ownership for men and women and the largest gender gap among the countries in the region (figure 11).

Access to credit is especially critical for women farmers and business owners to start or expand their enterprise, as they often possess fewer resources and assets than men. As opposed to account ownership, borrowing from a financial institution is quite limited for both men and women in the region (table 4).

Land ownership is important for both its role in agricultural production and its use as collateral while accessing credit. Figures on land ownership are only available for a few countries and are not up to date. The share of female agricultural holders in total agricultural holders, for example, was 29 per cent in Panama in 2001 and 23 per cent in Nicaragua in 2013, the two highest rates among the countries for which data were available. Overall, there seems to be a high degree of gender inequality in access to land in the region.

### Table 4

<table>
<thead>
<tr>
<th>Source of and motivation for borrowing by sex (percentage of population age 15+)</th>
<th>Costa Rica</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
<th>Panama</th>
<th>LAC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Borrowed from a financial institution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>9</td>
<td>11</td>
<td>14</td>
<td>11</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>11</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td><strong>Borrowed from a financial institution or used a credit card</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>25</td>
<td>14</td>
<td>14</td>
<td>18</td>
<td>14</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td><strong>Borrowed from family or friends</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>14</td>
<td>13</td>
<td>17</td>
<td>10</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>7</td>
<td>13</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td><strong>Borrowed to start, operate or expand a farm or business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: LAC: Latin America and the Caribbean.
2.2.4. Decision-making power

Examining women’s roles in the economy and international trade also requires evaluating how women participate in decision-making processes in politics, firms and households. Women need to be part of political decision-making bodies to be involved in the design and implementation of policies, programmes and instruments related to gender and trade issues. In the private sector, women need to access managerial positions to both receive higher wages and better express the needs of women workers in business decisions. Women’s decision-making power in the household is a key component of their empowerment, as it has direct implications for...

**Figure 12**

Indicators of decision-making (per cent)

<table>
<thead>
<tr>
<th>Costa Rica</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
<th>Panama</th>
<th>LAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of seats held by women in national parliaments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of women in ministerial level positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firms with female participation in ownership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firms with female top manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: World Bank, World Development Indicators database (accessed on 24 June 2020). Firm indicators are for 2010 in Costa Rica and Panama, 2016 in El Salvador, Honduras and Nicaragua, 2017 in Guatemala, and 2019 in Latin America and the Caribbean (LAC). The proportion of seats held by women in national parliaments is for 2019 and the proportion of women in ministerial-level positions is for 2018 for all the countries and LAC.

**Figure 13**

Proportion of women subjected to physical and/or sexual violence in the last 12 months (per cent)

<table>
<thead>
<tr>
<th>Panama</th>
<th>Nicaragua</th>
<th>Honduras</th>
<th>Guatemala</th>
<th>El Salvador</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,1</td>
<td>7,5</td>
<td>11,0</td>
<td>8,9</td>
<td>6,7</td>
</tr>
</tbody>
</table>

women’s control of household resources and their employment outside the household.

Costa Rica and Nicaragua have a high level of women’s participation in national parliaments (46 and 45 per cent, respectively, in 2019), well above the rest of the countries studied and the LAC average (figure 12). Nicaragua (56 per cent) and Costa Rica (52 per cent) had the highest shares of women in ministerial-level positions in 2018 among the six countries. In the private sector, the share of firms with female participation in ownership is higher than the share of firms with a female top manager, implying that women’s participation in top management is still behind that of their ownership in firms in all countries.

2.3. Security domain

Gender-based and domestic violence inhibits women from being economically active, from retaining their own income, from receiving a share of their spouse’s income, and from asserting their rights to travel, access education and training, and engage in their own work. Between 7 to 11 per cent of women were subjected to physical and/or sexual violence in the previous 12 months in the selected countries (figure 13). Besides the influence of societal gender norms and traditions, the legal framework on gender equality matters for reducing gender-based violence, as discussed in section 3.

3. Gender-related inputs: The legal and institutional frameworks for gender equality

Gender-related inputs refer to the legal and institutional frameworks on gender equality and women’s empowerment. These frameworks differ in each country. They form the underlying legal and institutional gender setting for the observed gender-related outputs in different domains of economic and social life, such as capabilities, access to resources and opportunities, and security. The legal and institutional framework on gender equality at the international, regional and national levels has direct implications for transforming gendered structures of the economy and eliminating gender inequalities. It is therefore necessary to evaluate the gender policy framework of a country or a region while carrying out a gender analysis of its trade policy.

3.1. International and regional policy instruments

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which was adopted in 1979 by the United Nations General Assembly, is often referred to as an international bill of rights for women. Costa Rica, Guatemala, Honduras, Nicaragua and Panama ratified the CEDAW without reservations. El Salvador and Guatemala, however, declared that they did not consider themselves bound by article 29, paragraph 1, which involves arbitration. El Salvador also signed, while Costa Rica, Guatemala and Panama ratified the Optional Protocol to CEDAW. Besides the CEDAW, all six countries are parties to the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women or the Convention of Belem do Para (1994), Convention on the Rights of the Child (1989), International Covenant on Civil and Political Rights (1966), and International Covenant on Economic, Social and Cultural Rights (1966).

At the regional level, the SICA, which forms the basis for Central American regional integration, did not have any reference to gender, women or in broad terms to vulnerable groups. However, the Council of Ministers of Women’s Affairs of Central America and the Dominican Republic (COMMCA) was established as the political body of SICA on gender and women’s human rights in June 2005. COMMCA aims to transform the status, situation and position of women in Central America and to adopt a sustainable gender equity policy and strategy. The Declaration of Panama “On Gender, Integration, and Development,” which was adopted in June 2010, is a significant milestone in efforts to institutionalize a gender perspective in the integration process (COMMCA, 2018).

The SICA member countries approved the Regional Policy on Equity and Gender Equality of the Central American Integration System (PRIEG/SICA) in December 2013. It was then updated in February 2018. PRIEG/SICA is a binding instrument that is recognized as SICA’s gender agenda and aims to mainstream gender in all regional sectoral policies. The policy framework under PRIEG/SICA develops specific measures to respond to objectives in seven areas: financial autonomy, education, risk management, health, security, political participation and implementation conditions (COMMCA, 2018).

Overall, from 2005 onward the Central American countries as a regional group have taken important steps towards gender mainstreaming in policymaking. Participation of different stakeholders was also supported in the process. However, what is even more critical is to have both the financial means and the political will to implement the commitments, as discussed further in section 3.2.
3.2. Legal framework on gender equality at the national level

Multiple legal protections promote gender equality with respect to women’s participation in economic life (i.e. education, access to resources and opportunities) and against gender-based violence. This section mainly draws from the World Bank’s Women, Business and the Law 2020 database without going into details about country-specific issues.14

Table 5 presents summary scores on different dimensions of gender equality calculated by the World Bank (2020).25 The Women, Business and the Law (WBL) index provides a summary measure based on the scores on different dimensions of gender equality. A WBL index value of 100 shows full gender equality across the eight dimensions covered in the measure. Overall, El Salvador and Nicaragua score the highest on gender equality. Costa Rica, Panama and Honduras also perform relatively well. Guatemala scores the lowest among the countries under review.

Looking into each dimension of gender equality reveals the underlying factors behind these differences in the summary gender equality score. All six countries covered in this study provide legal protections for gender equality in terms of mobility, and all but Guatemala do so for workplace rights. Specifically, Guatemala does not provide any of the legal protections and criminal penalties on gender discrimination and sexual harassment in employment. In terms of gender equality in pay, none of the six countries has a law mandating equal remuneration for work of equal value. In Costa Rica, Guatemala, Honduras and Panama, women are not allowed to work in jobs deemed hazardous, arduous or morally inappropriate in the same way as men, and in Costa Rica they are not allowed to work the same night hours as men. Costa Rica and Nicaragua provide all of the equal rights related to marriage, and the remaining of countries provide most of these rights with a few exceptions.26 All six countries, and in particular Honduras, Costa Rica and Nicaragua, need to take bold steps to provide equal rights on parenthood. For example, Honduras, Guatemala, and Nicaragua do not even provide paid maternity leave of at least 14 weeks to women.

Central American countries perform well overall with respect to providing women with equal rights related to entrepreneurship and assets. However, Costa Rica, Guatemala, and Panama should introduce legislation that prohibits gender-based discrimination by creditors. Guatemala, Honduras, and Nicaragua need to introduce laws that establish explicit pension care credits for periods of childcare to ensure equality in pension rights. In terms of their development policy framework, all six countries include equality of opportunities for women in their development plans or policies (COMMCA, 2018).

The discrepancies in the different dimensions of gender equality show that the legal framework on gender equality needs to be assessed from a holistic perspective. Given that gender is a cross-cutting issue that affects all spheres of life, progress in one area does not necessarily imply success in others. Moreover, the progress to be made on gender equality is closely related to fiscal soundness and governments’ commitments. For example, in Central America, Costa Rica has by far the highest budget allocation in terms of share of GDP for women’s advancement, while Guatemala and Honduras...
have the lowest (table 6). This discrepancy partly reflects the level of economic development but is also related to governments' willingness to make such allocations. For example, El Salvador has the second-highest budget allocation as a share of GDP for gender equality even though it has the third-lowest GDP per capita among the six countries, as was seen in figure 1.

4. A gender analysis of trade policy and trade flows in Central America

This section discusses the gender implications of trade policy and trade flows in Central America by presenting case studies from each broad sector of the economy (i.e. agriculture, manufacturing, services) and through a macroeconomic empirical analysis. The section first briefly summarizes gender mainstreaming efforts in trade policy and provides an overview of trade structure in terms of products and trading partners of the six countries covered in this module.

4.1. Gender mainstreaming in trade policy

One way of making trade policy more gender-sensitive is to explicitly introduce gender considerations into the text of trade measures, including trade agreements. Gender issues have been incorporated into trade agreements through specific trade and gender chapters since 2016. This shift in approach increases the visibility of gender issues and their scope in trade agreements. Both the Chile-Uruguay Free Trade Agreement (FTA), signed in October 2016, and the Canada-Chile FTA, signed in June 2017 to amend the pre-existing agreement, are examples of the “last generation” agreements that incorporate gender issues more directly (UNCTAD, 2017a).

Nevertheless, these first examples of gender chapters in FTAs have had some important shortcomings. For example, they do not set specific gender-related goals or standards with which to comply, do not require the harmonization of legislation on gender equality between the parties, and are not subject to dispute settlement mechanisms, significantly undermining their efficacy. In a recent development, the Canada-Israel Free Trade Amending Protocol was signed on 28 May 2018 to replace the 1997 Canada-Israel FTA, incorporating a gender chapter with features similar to the first examples, and making the gender chapter subject to dispute settlement mechanism. This development may initiate a move in this direction for the new FTAs to follow.

There are important examples of gender mainstreaming in trade policy in the trade partnerships of Central American countries with other parties. A good example is the European Union–Central America Association agreement signed in 2012, which has many gender-related cooperation provisions, some of which are in a dedicated article on gender in the chapters on social cooperation, social development and social cohesion. The agreement is one of the few regional trade agreements that specifically refers to the CEDAW and specifies that all gender-related cooperation activities should be carried out in view of effectively implementing the CEDAW.

The DR-CAFTA, signed in August 2004, refers to gender issues in its annex on labour cooperation and capacity-building mechanisms. It has led to various development cooperation projects to increase the capacity of domestic labour institutions and raise awareness on labour issues and workers’ rights (Bensalem, 2017). A dispute settlement mechanism has been used to enforce labour provisions in the DR-CAFTA.

It also provides insights to examine trade policy frameworks at the national level from a gender perspective. The WTO’s Trade Policy Review Mechanism (TPRM) provides an important source in this regard to evaluate the national trade policies of Central American countries from a gender perspective. Among the countries

<table>
<thead>
<tr>
<th>National mechanism</th>
<th>Budget (United States dollars)</th>
<th>Per cent share of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica - National Institute of Women (INAMU)</td>
<td>35,000,000</td>
<td>0.060</td>
</tr>
<tr>
<td>El Salvador - Salvadoran Institute for the Development of Women (ISDEMU)</td>
<td>5,143,445</td>
<td>0.021</td>
</tr>
<tr>
<td>Guatemala - Presidential Secretariat for Women (SEPREM)</td>
<td>3,300,000</td>
<td>0.004</td>
</tr>
<tr>
<td>Honduras - National Women’s Institute (INAM)</td>
<td>992,486</td>
<td>0.007</td>
</tr>
<tr>
<td>Nicaragua - Ministry of Women (MINIM)</td>
<td>992,486</td>
<td>0.007</td>
</tr>
<tr>
<td>Panama - National Institute of Women (INAMU)</td>
<td>992,486</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Source: COMMCA (2018). The GDP share is calculated by the UNCTAD secretariat using GDP data from the World Bank’s World Development Indicators database.
reviewed. Costa Rica is the only one that directly introduced gender considerations in its trade policy review. In Guatemala and Honduras, gender is considered only in the context of the agro-food sector in their respective trade policy reviews. The rest of the countries did not have an explicit mention of gender or women in their trade policy review documents. There are also targeted programmes for women exporters, as in Costa Rica and El Salvador (box 3).

4.2. Trade structure

This section presents an overview of trade structure in Central American countries with respect to product groups and trading partners. Product groups are defined in terms of technological sophistication following Lall’s (2000) classification. These countries mainly export (1) agricultural commodities and some processed commodities, and (2) low- and medium-technology manufactures that are produced in export processing zones in several countries, some of which are highly intensive in female employment (e.g. textiles, apparel, medical devices).

In the 2016–2018 period, primary products and resource-based manufactures, the two lowest categories in terms of value-added content, constituted around half or more of merchandise exports in Costa Rica, Guatemala, Honduras and Nicaragua. Low- and medium-technology exports correspond to two-thirds of merchandise exports in El Salvador and between 34 and 45 per cent in the rest of the countries (figure 14).

There have been substantial changes in the merchandise export structure of some of the Central American countries over the last two decades. For example, in Costa Rica, the share of high-technology manufactures fell from 31 per cent in 1998–2000 to 9 per cent in 2016–2018, while the share of medium-technology manufactures

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Box 3

Foreign trade promotion agencies in Costa Rica (PROCOMER) and El Salvador (PROESA)

Costa Rica’s foreign trade promotion agency (Promotora del Comercio Exterior de Costa Rica - PROCOMER) developed an initiative called Women Export in 2017. This initiative provides tools and services for female entrepreneurs to facilitate their internationalization process. There are certain criteria to be met such as productive capacity, up-to-date sanitary registers, labelling and packing requirements, and a minimum participation of two years in the domestic market. In 2018, 30 women entrepreneurs participated in the programme. Gender equality became an area of emphasis in PROCOMER’s 2019 strategy (WTO, 2019). Similarly, in El Salvador, the foreign trade promotion agency (Organismo Promotor de Exportaciones e Inversiones de El Salvador - PROESA), established a Gender Unit in 2015 with the goal of promoting women-led export firms by supporting the development of both business and gender-related support strategies. Women Entrepreneurship Centres have also been developed by CONAMYPE, El Salvador’s National Commission for Micro and Small Enterprises. The centres offer training, market information, and technical assistance for business plans and financial issues, among other services. They also help identify companies led by women that have export potential (Frohmann, 2017).
increased. This mainly reflects the influence of Intel’s withdrawing from electronic chip production from Costa Rica in 2016 while continuing with only research services. Nicaragua, Panama and to some extent El Salvador and Guatemala had significant declines in their shares of primary products in total merchandise exports over time (figure 14).

Merchandise imports show a more balanced distribution among different product groups. Resource-based manufactures, medium-technology manufactures, and low-technology manufactures are the main groups of merchandise imports in the Central America region. Composition of merchandise imports was

Table 7

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Developing Asia</td>
</tr>
<tr>
<td>Developing Asia</td>
</tr>
</tbody>
</table>

Note: LAC: Latin America and the Caribbean.
relatively stable in all countries except Panama over the last two decades (figure 15). Central American countries mainly export to markets nearby. As shown in table A.1.2 in Annex 1, the United States is a major export destination for all countries except Panama. This is reflected in the dominant share of North America in merchandise exports of Central American countries (table 7). LAC is also a major export market for Central America and in particular for Panama, El Salvador and Guatemala. The European Union accounts for around one-fifth of merchandise exports from Costa Rica and Honduras. The share of North America in merchandise exports, however, fell in all countries except Nicaragua, and more pronouncedly in Honduras, Guatemala and Costa Rica over the last two decades. It has been replaced mainly by exports to LAC.

The North America and LAC regions are also important trading partners in terms of merchandise imports entering Central America (table 7). The only exception is Panama, where 42 per cent of merchandise imports come from the developing Asia region. This likely reflects trade carried out through the Panama Canal zone. Developing Asia ranks as the third origin of imports for other countries. Indeed, China ranks among the top three import origin markets for all the countries, as shown in table A.1.2 in Annex 1, reflecting China’s increasing dominance in global markets.

Services exports account for a significant share of total exports, especially in Costa Rica and Panama, as discussed in section 1.2. Travel services account for more than 40 per cent of total services exports in Guatemala, Nicaragua, and Costa Rica (figure 16). In Panama, around half of total services exports pertain to transport services, reflecting the influence of the Panama Canal. Costa Rica has the highest shares of other services in exports in LAC, being among the largest exporters of business process outsourcing services in the region. The country hosts regional shared services centres of several major multinational companies. Over time, other services have overtaken tourism as the main export category within services.

4.3 Gender implications of trade liberalization: Selected case studies

Module 2 presented a detailed discussion on how trade liberalization affects women in their different roles as wage workers, producers, traders, and consumers through changes in relative prices and the sectoral structure of economic activity. Besides the impact of economic changes driven by trade liberalization, the conditions of a given trade agreement also influence the gender impact of economic integration. The implications of trade liberalization in one sector can extend to other sectors of the economy as well. It is therefore important to consider the general equilibrium effects. For example, based on a general equilibrium macroeconomic model (Bussolo
Despite governments’ efforts to diversify local economies throughout Central America, coffee continues to be a major source of jobs and income for the foreseeable future. For example, Guatemala and Honduras export more than 3 million and 7 million 60 kg bags per year, respectively, and more than 245,000 families rely on income from coffee production in the two countries (Global Affairs Canada, 2018).

**Characteristics of the coffee value chain and the role of women**

Coffee is typically considered as a “male” crop in Latin America with an assumed marginal involvement of women; hence women’s actual labour put into coffee production often goes unnoticed. In fact, a study of fair trade cooperatives in Mexico and Guatemala found that women perform up to twice as much coffee labour as men due to the labour-intensive nature of their tasks, especially in the presence of low levels of capitalization (Lyon et al., 2010).

The coffee sector is characterized by sharp gender inequalities in different aspects of production. Indeed, existing gender inequalities in income, access to land and other assets, access to finance, inputs, training opportunities, and market information all lead to a significant disparity between male and female coffee producers in developing countries. In particular, land ownership and tenure security have important gender implications for coffee production given their critical role in women’s ability to obtain credit, join producer organizations, access technical training and productive resources, and exercise bargaining power in the household (Fisher, 2019).

It is therefore important to evaluate the gender implications of coffee production and trade in the Central American context.

The coffee value chain consists of a long season of fieldwork, followed by harvest, cherry processing, transporting, marketing and sales. The division of labour is highly segregated by gender. Women tend to play major roles in the initial segments of the value chain – i.e. labouring in the field, harvesting and processing – while men concentrate more on the higher end of transportation, marketing and sale. Additionally, female farmers bear the double burden of combining farm work with unpaid care and housework responsibilities (SCAA, 2015). Their contribution via production inputs, training opportunities, and market information all lead to a significant disparity between male and female coffee producers in developing countries. In particular, land ownership and tenure security have important gender implications for coffee production given their critical role in women’s ability to obtain credit, join producer organizations, access technical training and productive resources, and exercise bargaining power in the household (Fisher, 2019).

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example, in 2017, small- and medium-sized producers accounted for 86 per cent of total coffee production in Honduras. In Guatemala, smallholders corresponded to 80 per cent of the 125,000 total coffee farmers but produced 60 per cent of total coffee production. Smallholders are inefficient and vulnerable to changing conditions, and they lack the means to invest in new technology or take risks in terms of experimenting with new techniques (Global Affairs Canada, 2018). This in turn adversely affects their productivity and income-generation capacity.

Data on women’s roles and gender relations in the coffee value chain are quite scarce. The International Women’s Coffee Alliance (IWCA) has recently attempted to provide an estimate of the number of women working to produce coffee in major coffee-producing countries. The initial findings show that, among the Central American countries covered by the study, the female share of total coffee producers ranges from between 19 to 22 per cent in Guatemala and 19 per cent in Honduras to 33 per cent in El Salvador and 34 per cent in Costa Rica (table 8).

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated number of female producers</th>
<th>Females as per cent of total producers</th>
<th>Year of estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>15,450</td>
<td>34</td>
<td>2013</td>
</tr>
<tr>
<td>El Salvador</td>
<td>6,700</td>
<td>33</td>
<td>2013</td>
</tr>
<tr>
<td>Guatemala</td>
<td>4,000 to 7,000</td>
<td>19-22</td>
<td>2016–2017</td>
</tr>
<tr>
<td>Honduras</td>
<td>17,978</td>
<td>19</td>
<td>2016</td>
</tr>
<tr>
<td>Burundi</td>
<td>117,990</td>
<td>20</td>
<td>2006-2007</td>
</tr>
<tr>
<td>Rwanda</td>
<td>113,846</td>
<td>32</td>
<td>2015</td>
</tr>
<tr>
<td>Colombia</td>
<td>164,000</td>
<td>30</td>
<td>2015</td>
</tr>
</tbody>
</table>

Source: Church (2018).
Note: Estimates for Costa Rica are from the Instituto del Café de Costa Rica (ICAFE); for El Salvador from the Consejo en El Salvador; for Guatemala from Anacafe; and for Honduras from the Instituto Hondureño del Café (ICAFE) Registro Nacional de Productores.

The role of producer organizations, cooperatives and certification schemes

Producer organizations and cooperatives play an important role in supporting upgrading in the coffee value chain. They provide both men and women farmers with easier access to capital equipment, marketing channels, technical assistance and capacity-building that may be beyond their reach, especially for women farmers due to cultural barriers (CIAT, 2017). They also provide producers with higher prices, more revenues, financial security, and easy and accessible outlets for their coffee, as in the case of Fair Trade in Nicaragua (Dilley, 2011) and in Costa Rica (Dragusanu and Nunn, 2018).

Café Femenino, a women-owned coffee brand that includes 10 cooperatives of women coffee farmers including in Guatemala and Nicaragua, has had a positive impact on women farmers’ land ownership, decision-making power, family income and living conditions in coffee-growing areas. SOPPXCCA in Nicaragua markets women’s coffee under a separate label called “Las Hermanas,” helping women develop their technical capacity in production and gain land titles (Café Femenino, 2018; Chan, 2010; World Bank, et al., 2009).

Despite the proven role of farmer organizations in easing the access of smallholder farmers to finance, markets, and technical knowledge, only 20-25 per cent of smallholder farmers in Central America are part of such organizations (Global Affairs Canada, 2018). Certain types of producer organizations in terms of scale and structure (i.e. women-only versus mixed-gender) can help facilitate women’s empowerment. For example, smaller-scale, women-only settings may be more effective for creating pathways to empowerment for women, as documented for Costa Rica (Stein, 2017). Fair trade organizations also promote women’s empowerment through health programmes that support women’s access to health services (Terstappen et al., 2013). Besides the positive effects of producer organizations, certification schemes may also support women’s empowerment, mainly through increased incomes and access to resources in organizations. Table 9 presents an overview of the key findings on the impact of certification schemes in Central America based on the literature review. In Guatemala, for example, women’s participation in Fair Trade organic coffee improves their access to coffee organizations and skilled jobs, bolsters their property rights, and supports their access to higher income via higher union coffee prices – all especially if they are registered as farm operators. This is why women retain their membership despite significant organizational costs even when their spouses have migrated (Lyon et al., 2010). Given the different roles and responsibilities of men and women in family farm production, there are significant gender inequalities in returns, bargaining power and potential to upgrade in the coffee value chain (Verhart and
Pyburn, 2010). It is therefore important to take into account these different roles to support the upgrading of women coffee producers. Café de Mujer, a woman-only coffee certificate and label developed in 2006 by two Guatemalan organizations (MayaCert and Acodihue), is a good example in this regard.\textsuperscript{31} It aims to make the work of female coffee producers visible and value their contribution by applying gender-sensitive indicators (Verhart and Pyburn, 2010).\textsuperscript{32} Compliance with Café de Mujer standards by member organizations helped promote gender equality in the coffee value chain through women’s increased access to new knowledge, capacity-building and technical aspects of production. Women also increased their representation in governing bodies, gained responsibility for managing the (organic) production process, and, above all, had an increased sense of dignity and pride. Extension services were re-designed to become more gender-sensitive (e.g. schedules that take into account women’s reproductive work, introduction of mobile childcare services) (Verhart and Pyburn, 2010).

Despite their proven benefits, farmers’ access to certification schemes are constrained by certain barriers. For example, in El Salvador, certification costs, economies of scale to cover coffee export operations, stringent quality requirements and altitude constraints all play a role in limiting farmers’ access to Fair Trade certification. However, deeper causes such as lack of education and unequal access to land and debt forgiveness also contribute to this outcome (Tellman, et al. 2011). In SOPPEXCCA, a coffee cooperative in Nicaragua, women, who constitute a third of total members, cited completion of paperwork, attending meetings, and understanding the payment system as difficulties they encountered (Dilley, 2011).

Additionally, a number of factors limit the capacity of certifications to create pathways to women’s empowerment when they manage to access them. For example, fewer benefits reach women who are not registered farm operators and may instead bear the burden of increased work on crops under their husbands’ control. Women’s low education, or high childcare demands that can preclude their participation in meetings, can also exclude them from participation altogether (Smith, 2013). In addition to women’s double work burden, the dominantly male control of income from certificated produce also limits the benefits for women from certification schemes such as Fair Trade (Lyon, 2007). Cultural barriers also make it harder for female members to benefit, especially in well-established cooperatives. Low consumer demand for certified coffee is another inhibiting factor.

Despite their benefits, certification schemes alone may not bring about significant poverty alleviation, as documented for small-scale coffee farmer households in Central America and Mexico (Mendez et al., 2010). Moreover, if the benefits accrue mainly to those already in a good position, the overall goal of supporting those at the very bottom of the value chain may not be fully achieved. For example, in Costa Rica, Fair Trade benefited mainly skilled coffee growers while hurting intermediaries and providing no improvement for unskilled workers (Dragusanu and Nunn, 2018). Moreover, women are dominant in domestic informal markets and do not always benefit from interventions that aim to upgrade producers in the global value chain.

Finally, despite their shortcomings, certification schemes, especially Fair Trade, can serve as networks that leverage global development funding for small-scale, coffee-producing households. These networks should be supported through cooperation among farmers, cooperatives, certification and environmental and rural development organizations, and researchers in coffee-producing regions (Mendez et al., 2010).

4.3.2. Industry: The case of maquila workers

The manufacturing sector has played a key role in the process of export-oriented growth strategies in many developing countries, especially in Asia and Latin America. Export processing zones (EPZs), or “maquilas” in the Central American context, have become engines of employment growth in this process. EPZs or maquilas are generally

| Table 9: The effects of certification schemes in the coffee sector |
|----------------------|------------------------|
| Effect | Country – Study |
| Financial security, easier access to land and markets | Nicaragua – Dilley (2011) |
| Higher price, more sales and revenues | Costa Rica – Dragusanu and Nunn (2018) |
| Benefits mainly to skilled coffee growers | Guatemala – Verhart and Pyburn (2010) |
| Women’s increased access to knowledge and management | Costa Rica – Stein (2017) |
| Women’s greater sense of dignity | Guatemala – Lyon et al. (2010) |
| Smaller-scale and women-only producer organizations | |
| more effective for women’s empowerment | |
| Women’s increased access to coffee organizations, skilled jobs and higher incomes | |

Source: UNCTAD secretariat compilation based on the review of literature.
based on the importation of intermediate inputs for assembly and re-export.

As firms in the maquila sector are considered to be footloose companies, governments, including those in Central America, have provided them with generous incentives. EPZs provide three main sets of incentives to attract foreign investment: tax exemptions, regulation exemptions, and infrastructure incentives. The types of incentives introduced in EPZs can differ depending on the domestic economic conditions, the types of sectors targeted, and the ability to attract foreign direct investment (Cirera and Lakshman, 2017). EPZs are regulated according to their own legal frameworks introduced in each country’s domestic law. All the DR-CAFTA developing country members have introduced their own free zone laws (Gonzalez Diaz, 2016).

**Main features of maquilas in Central America**

Special economic zones (SEZs), which refer to integrated industrial development/free zones such as EPZs, technology development zones, and service zones, play an important role in economic activity in the Central America region. Indeed, Nicaragua (52), Costa Rica (49) and Honduras (39) have the highest number of SEZs after the Dominican Republic (73) among the countries in LAC. SEZs also provide more than 50 per cent of total exports in Costa Rica and Nicaragua (UNCTAD, 2019a).

Most of the maquilas in Central America used to be in the apparel and garment, textile and footwear manufacturing sub-sectors. However, there have been important policy and economic changes in the maquila sector over time, as summarized in box 4. Although EPZs, especially in low-income countries such as Honduras and Nicaragua, still focus on labour-intensive sectors including apparel and textiles, many of the EPZs in the region are restructuring themselves towards higher-value-added sectors due to pressure from intense competition from Asian EPZs. Electronics, metalworking, harness and automotive parts assembly, and assembly of computer hardware components have increased their shares in Central America (UNCTAD, 2019a).

For example, new areas such as surgical equipment and chemicals and plastics have emerged as export drivers in EPZs following the decline of the textiles and apparel sector. This development has a negative repercussion for female employment because of the demand for higher skills by these rising sectors (World Bank, 2016). In Costa Rica, there has been a shift in EPZs towards medical devices and advanced services such as sophisticated shared service centres and R&D operations (UNCTAD, 2019a). More recently, maquilas in the service sector are on the rise, for example in the form of call centres and business process outsourcing (Gonzalez Diaz, 2016).

Most of the maquila factories act as subcontractors, and they deal with orders from brands that can vary very quickly. This makes maquila firms highly volatile, and they can open and close very swiftly (Reyes and Quintero Ramirez, 2019). Moreover, Asian companies are significant actors in the region. For example, in Nicaragua, most of the companies in EPZs in the apparel industry are owned by Asian subcontractors that do so to benefit from trade preferences granted by the United States to Central American countries, and that assemble clothes in the region for their North American customers. Since they form no linkages with local suppliers, and expatriates are the managers and

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**Box 4**

**Historical developments in the maquila sector**

International competition in the apparel and garment sector intensified following the phasing out of the Multi-Fibre Arrangement (MFA) by the World Trade Organization between 1995 and 2005 through its Agreement on Textiles and Clothing. The MFA established quotas and preferential tariffs on apparel and textile items imported by the United States, Canada and many European countries from the early 1970s until their phasing-out. The 2008 global financial crisis and the resulting decline in global demand in major developed countries also led to production slowdowns and plant closures in most apparel-exporting economies (Frederick and Gereffi, 2011).

Despite their proximity and preferential access to the United States market, Latin American countries could not create a lasting source of competitive advantage. This is mainly because they lacked supplier upgrading and were locked in assembly production as opposed to more advanced full-package production. This was further intensified by the economic policies put in place in Asia, such as infrastructure investment and labour force development in China, and significant economies of scale and scope in textile and apparel production and upgrading achieved in developing Asia. As a result, increased competition from Asian developing countries resulted in significant downgrading among Mexican and Central American countries and losses of market share in the United States market (Frederick and Gereffi, 2011).
technicians of these factories, their impact on local industrial development is quite limited (van Wunnik, 2011).

The countries in the region face a number of challenges in terms of EPZs. Competition from Asian economies is putting pressure on the EPZs in the region, especially as regards the United States market, which is a major export destination for all the countries covered in this study (see section 4.2). Their reliance on the United States as a major export market makes them vulnerable to trade shocks. The sustainability of fiscal incentives provided in EPZs is also a big issue due to the substantial amount of potential tax revenues foregone, especially for countries where EPZs have a major share of economic activity. Indeed, El Salvador and Guatemala – along with Argentina, Brazil, Ecuador, Mexico, Paraguay, Peru, and Uruguay – have all re-examined their free zone strategies in the last five years to make them more conducive to economic development. New regimes have a focus on cluster specialization and internal markets among the goals for industrial parks and development zones (UNCTAD, 2019a).

**Women in maquila employment**

The apparel and garment sector has strong gender implications as it relies mainly on the influx of cheap labour to be competitive in international markets. Women make up the majority of workers in EPZs in most developing countries, and EPZs contribute to higher rates of female participation in the labour market (Cirera and Lakshman, 2017). Women account for more than half of employment in major labour-intensive manufacturing sub-sectors such as food and beverage, textile, and apparel in Central American countries, according to recent economy-wide data (figure 17).

Up-to-date statistics on EPZ employment are not available, but there is evidence of feminization of labour in EPZs in Central America based on past statistics. In 2005–2006, women constituted 90 per cent of total employment in the zones in Nicaragua, 85 per cent in El Salvador, 75 per cent in Honduras, and 70 per cent in Guatemala and Panama (Boyenge, 2007). The feminization of labour is mainly observed in the apparel manufacturing or production stage in Central American maquilas, when the whole value chain is considered. Other stages in the value chain including the management of input, pressing, packaging, shipping and transporting are carried out mainly by men (ECLAC, 2014). The main reason behind this pattern is the competitive advantage that female workers provide firms under increased international competition mainly thanks to women’s relatively lower wages and their perceived docility and submissiveness. This issue was discussed in Module 2 in the context of EPZs in developing countries in general.

Moreover, gender norms and stereotypes segment workers into specific economic activities on the basis of sex. Women are considered to have nimble fingers deemed more suitable

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**Figure 17**

*Female share of employment in selected manufacturing sub-sectors (per cent share)*

![Chart](chart.png)


Note: Data are for 2019 in Costa Rica, 2018 in El Salvador and Honduras, 2017 in Guatemala and 2014 in Nicaragua and Panama.
for labour-intensive tasks and unsuitable for technical work. This leads to their recruitment into low-skilled and low-paying positions with fewer opportunities for advancement in export-oriented industries. Overall, women workers help firms absorb the risks of production resulting from price fluctuations and supply volatility in the global markets (Tejani, 2011). The declining minimum wages and rising unemployment among men in many developing countries further push women into paid employment, in the absence of strong welfare states, to supplement family income and escape poverty. The occupational gender segregation in EPZs is evident also in Central America. For example, in El Salvador, which has one of the highest numbers of garment maquilas in Central America, women make up to 90 per cent of production workers, while men carry out mainly technical, supervisory and administrative functions (SOMO, 2011).

Workers’ labour rights and bargaining power constitute another issue that has been debated in the context of maquilas. Initially, there was a positive expectation that international outsourcing and export-oriented production would contribute to improved wages and unionization in developing countries through industrial growth. The evidence, however, shows that job growth through outsourcing often resulted in lower wages and declining unionization in these countries (Domínguez et al., 2010). Both “a race to the bottom” through trade competition and the restructuring of industrial production have contributed to this outcome.

**Implications of maquila employment on wellbeing**

Table 10 presents an overview of the key findings on the impact of maquila employment on wages, working conditions and other aspects of wellbeing in Central American countries based on the literature review. These studies are discussed in detail in what follows.

In the apparel and garment global supply chain, multinational corporations subcontract (outsource) parts of the production process to independent rival firms and in this way manage to lower costs through a competitive outsourcing process (i.e. numerous small firms competing for a limited number of contracts). This horizontal dispersion of production facilities weakens the bargaining power of workers and induces subcontractors to keep wages low and discourage unionization through the threat of plant mobility. For example, in Honduras and El Salvador, segmented firms (i.e. subcontractors) had lower unionization rates and wages relative...
to traditional, integrated manufacturing firms even after controlling for firm size and workforce demographics (Anner, 2011).

However, when compared to employment in agriculture and low-skilled services sectors, the maquila sector often provides workers with relatively better living standards in many developing countries. Based on a review of the literature, Cirera and Lakshman (2017) report that EPZs tend to pay higher wages than employers outside the zones in most cases. In Central America, it is documented that the apparel sector paid a wage premium relative to other sectors in both El Salvador (Robertson and Trigueros-Argüello, 2009) and Honduras (Marcouiller and Robertson, 2009). There is similar evidence for Guatemala, where it was found that maquila workers were paid higher wages than workers in the agriculture or commerce sectors (Calfat and Rivas, 2008).

In El Salvador, the wage differential and employment share in the apparel sector decreased following the expiration of Multi-Fibre Arrangement in 2005. However, the share of workers in the apparel sector with signed contracts or registered for social security remained above average, implying that the sector still provided better conditions compared to other sectors such as domestic service and agriculture (Robertson and Trigueros-Argüello, 2009).

Many women ranked their jobs in maquilas better than being a domestic worker. However, they also reported experiencing adverse working conditions and limited opportunities to take action in order to change these conditions without the threat of losing their jobs. This is particularly the case when it comes to workers’ right to organize. Based on a review of the literature, Cirera and Lakshman (2017) find a significant amount of evidence documenting restrictions on unionization in EPZs, either by limiting the right to organize or by de facto constraints on these rights. The situation is similar to firms outside the zone, implying that restrictions on unionization rights may reflect general failures in domestic labour institutions rather than being endemic to EPZs.

In the case of Central America, multinational corporations in EPZs had a considerably worse record than other sectors in terms of violating labour rights in 2006 (Dominguez et al., 2010). In Guatemala, the maquila sector also exhibited poorer working conditions than other manufacturing industries (Calfat and Rivas, 2008). In El Salvador, despite the wage raise introduced in early 2017, many employers refused to implement the raise and threatened to close factories, which left wages in the maquilas among the lowest in Central America. Collective bargaining through unions is almost non-existent in maquilas, and factory owners commonly use threats and blacklists to discourage workers from organizing (Reyes and Ramirez, 2019).

The results are mixed with respect to other dimensions of labour conditions, including health and safety, and working hours when comparing EPZ firms with firms outside. For example, working hours are long in most EPZs but the evidence is inconclusive when compared with the working hours of workers outside EPZs (Cirera and Lakshman, 2017).

Moreover, a common form of gender-based discrimination in maquilas is compulsory pregnancy testing, which prospective female employees must undergo before getting a contract. Those who get pregnant after being hired are often reassigned to more physically demanding posts in order to force them to quit (SOMO, 2011). Sexual harassment in garment factories continues to be an important issue despite steps taken by the International Labour Organization (ILO) to prevent it. According to a survey carried out in garment factories in Nicaragua, for example, 30 per cent of workers said that sexual harassment is a concern for workers in their factories; they either discussed it with co-workers or a supervisor or manager, and even considered quitting (ILO, 2019).

Overall, the findings on working conditions in EPZs show that non-wage working conditions can be quite adverse, negatively affecting the overall wellbeing of workers, despite the higher wages that maquila firms offer to workers, as documented for various Central American countries.

In terms of the gender wage gap, maquila firms were found to be less discriminatory than firms in Honduras, as summarized in case study A.3.2 in Annex 3. In contrast, in Guatemala, the maquila sector had a wide gender wage gap due to the substantially higher returns to male workers than to female workers (Calfat and Rivas, 2008). This might be reflecting the relatively lower bargaining power of female workers compared to male workers in this setting. In El Salvador, the gender wage gap is almost non-existent among production workers, while it has been found to be significant among higher-skilled workers (SOMO, 2011). Hence the situation in terms of the gender wage gap in maquilas varies widely.
across countries in the region. The impact of trade liberalization on the gender wage gap also depends on specific trade policy changes. As summarized in case study A.3.1 in Annex 3, the combined effect of export and import tariff liberalization under DR-CAFTA led to a decline in the gender wage gap in the region.

There are implications of EPZs for broader developmental issues as well. Maquila employment is often considered as a potential way to fight poverty in developing countries where rural poverty is intense. There is evidence for Honduras that maquila expansion was associated with poverty reduction, but the reduction was quite limited, as summarized in case study A.3.2 in Annex 3.

Remittances play an important role in reducing poverty, especially in El Salvador and Honduras. However, remittances also have implications for labour market outcomes influencing the way trade may impact wellbeing in a society. For example, it has been documented that remittances had a negative effect on labour force participation in El Salvador (Robertson and Trigueros-Argüello, 2011), and more so for women (Borja, 2013). In contrast, in Honduras, remittances did not have a significant negative effect on the labour force participation rate. However, they led to a reallocation of women as the main recipients of remittances from wage employment in the private sector toward self-employment. Hence, concerns regarding how remittances withdraw the labour force from the export sector (e.g. maquilas in northern Honduras) seem to be valid (Stanley, 2015). One should note that remittances do not alone explain the labour force participation decision; for most women, the unpaid work burden and the lack of public services to ease the work-family balance are the root causes behind not participating in the labour force.

4.3.3. Services: The case of tourism entrepreneurs and workers

Tourism affects employment, income, investment, and the balance of payments of a country through both visitor spending and tourism multiplier effects. In terms of employment opportunities for men and women, tourism provides both direct opportunities (e.g. hotels, restaurants, travel agencies, aircrafts, resorts, shopping outlets, etc.) and indirect opportunities (e.g. restaurant suppliers, construction facilities, handicraft producers, etc.) (UNWTO and ILO, 2014). At the global level in 2018, travel and tourism accounted for 10.4 per cent of GDP and generated 3.8 per cent of total employment directly and 10 per cent of total employment both directly and indirectly (WTTC, 2019).

The tourism sector has significant gender implications in terms of women’s participation in the economy. Tourism provides women with opportunities for employment (both formal and informal), entrepreneurship (e.g. handicrafts, tour guiding, food products, etc.) and training, particularly in developing countries. Tourism helps create investment, increases demand for local products and services, supports the improvement of infrastructure, transportation and utilities, and requires little start-up capital to enter the market. Both low entry barriers and flexible forms and hours of work (e.g. part-time and shift work) make it easier for women to access these opportunities given their unpaid domestic work burden. However, women’s limited access to education and resources may also prevent them from benefiting from tourism development, and in such instances it may even hurt women by replacing their traditional sources of income such as agriculture in the domestic economy (UNWTO and UN Women, 2011). Despite the low-paying, low-skilled and unstable nature of available tourism jobs, however, they may be still valued more by women when compared to alternatives in agriculture, as in Costa Rica (Ferguson, 2010b).

A number of stylized facts emerge regarding the situation of women in the tourism sector globally. Women constitute the majority of the tourism workforce, and the gender pay gap in the hotel and restaurant sector is smaller than in other sectors. There are a higher number of women employers in the hotel and restaurant sector and more ministerial positions in tourism held by women than in other sectors. However, men hold more professional and high-skilled positions and receive more education and training than women in the hotel and restaurant sector (UNWTO and UN Women, 2011). Technology helps close these gender gaps by increasing training opportunities and helping entrepreneurs access the tourism market through online training and sales/marketing platforms. Moreover, tourism policies are becoming more gender-sensitive over time (UN Women, 2019).

The COVID-19 pandemic forced governments around the world to take strict measures in order to limit people’s mobility. These measures negatively affected most services, including tourism-related ones. According to the United Nations World Tourism Organization (UNWTO), international tourist arrivals could decline between 58 and 78 per cent in 2020, which
would translate into a loss of up to US$1 trillion in international tourism receipts (UNWTO, 2020). The World Travel & Tourism Council estimated that the pandemic put over 100 million jobs at risk worldwide (WTTC, 2020). Given the highly female-intensive nature of employment in tourism and women’s segregation in lower-skilled jobs, the pandemic is likely to hit women workers and entrepreneurs in tourism the hardest.

**Tourism sector in Central America**

In Central America, the tourism sector has played a significant role in the transformation process from a traditional agro-export economy to a more complex economic structure in which traditional and non-traditional agricultural exports, maquilas, tourism and remittances are dominant. The falling commodity prices and the new political economy of trade under DR-CAFTA played a role in this transformation in which the importance of services increased (Ferguson, 2010a). In particular, the rural agrarian sector producing for local and national markets faced intense competition from subsidized imports of agricultural goods. This in turn led to a shift of part of the rural workforce to maquila, construction, food industries, and tourism services (Cañada, 2010).

Tourism has been promoted as a new space for development policy and has become a significant component of donor support, national development policies, and poverty reduction strategies in the region (Ferguson, 2010b). However, partly because of the political instability and violence in the 1980s, tourism in Central America developed more slowly than in the Caribbean. It began to develop robustly in the late 1990s, with Costa Rica and Panama starting earlier than the rest of the countries in the region. There are also significant differences in the tourism structures across countries. In general, tourism structures were first started by big business (first foreign, then domestic). Even so, local small and medium-size business and community initiatives play an important role in tourism development, especially in Central America (Cañada, 2010).

For example, in Costa Rica, which is one of the most established tourism destinations in Central America, small and medium-sized enterprises (SMEs) make up to 80 per cent of the tourism sector. This small-scale nature of tourism does not necessarily mean low-value economic activities but rather covers a wide range of services from budget accommodation to luxury “boutique” travel options. Such a tourism model is appealing to niche markets, including adventure tourism, cultural tourism, nature tourism and archaeological tourism (Ferguson, 2010b). Moreover, the significant role of SMEs in tourism is in line with the poverty reduction goals in the region (Ferguson, 2010a). SMEs are the main way for people from low-income households to enter a market as self-employed individuals or employers and are therefore instrumental in fighting poverty. Given the easier access of women entrepreneurs to the economy via SMEs, such a tourism model is likely to better accommodate the design of gender-sensitive policy interventions in the tourism sector.

![Figure 18](image)

**Tourism receipts (in total exports) and expenditures (in total imports), 2018 (percentage share)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Tourism receipts (per cent of exports)</th>
<th>Tourism expenditures (per cent of imports)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>19.4</td>
<td>5.9</td>
</tr>
<tr>
<td>El Salvador</td>
<td>18.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Guatemala</td>
<td>11.6</td>
<td>5.3</td>
</tr>
<tr>
<td>Honduras</td>
<td>10.2</td>
<td>4.4</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>9.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Panama</td>
<td>4.5</td>
<td>7.6</td>
</tr>
<tr>
<td>LAC</td>
<td>5.8</td>
<td></td>
</tr>
</tbody>
</table>


Note: LAC: Latin America and the Caribbean.
Figure 18 shows tourism receipts and expenditures in the region. Tourism receipts constitute a significant share of total exports in all the Central American countries studied here, and they are well above the LAC average. There is evidence for Central America that tourism expansion has a positive effect on overall economic growth (Gunter et al., 2018; Amaghionyeodiwe, 2015).

Women in tourism in Central America

As presented in table 2 in section 2.2.1, the accommodation and food services sectors – a major component of tourism – have the highest female share of total employment among all sectors in El Salvador, Honduras, Nicaragua and Guatemala, and the second highest share in Costa Rica and Panama, following public administration and community, social and other services. Given its highly female-intensive employment structure, tourism has important gender implications in the region, as discussed below.

Tourism businesses rely on drawing from a pool of temporary labour, predominantly young and/or female, during the high season. Unstable working conditions, high turnover rates, long working hours, subcontracting, and casual work are among the common features of employment in tourism. The sector attracts both internal migration from neighbouring towns and immigration from nearby countries (e.g. from Nicaragua to Costa Rica) due to the perception of higher wages in comparison to agriculture (Ferguson, 2010b). Moreover, touristic resorts in the region often recruit top management and skilled labour such as chefs from Western Europe and the United States (Cabezas, 2008).

Women are mainly segregated into clerical and service worker jobs in tourism (UNWTO and UN Women, 2011). There is gender segregation even among tourism service workers. Men have access to better and higher-paying positions such as cooks, bartenders, servers, porters, guides, diving instructors, etc., while women mainly hold housekeeping positions (Cabezas, 2008; ECLAC, 2014) or at best work as waitresses or receptionists, as in Costa Rica (Ferguson, 2010b). Tourism development also leads to the sexualisation of labour for both men and women (Cabezas, 2008). The segregation of women in low-skilled positions is more evident for immigrant women, as in the case of Nicaraguan women in Costa Rica, who are more likely to be exploited by tourism businesses (Vandegrift, 2008). Contrary to general global trends, the gender wage gap in the accommodation and food services sector is larger than in the broader economy in Costa Rica, El Salvador, Honduras, and Panama (UNWTO and UN Women, 2019). Although women are highly segregated into low-skilled jobs as employees, they are more likely to be employers or entrepreneurs in the tourism sector than in other sectors of the economy (UNWTO and UN Women, 2011).

Overall, the tourism sector in Central America shares the common gender features observed in the global tourism sector in terms of labour market characteristics and women’s participation. Given the easier access of women to the tourism sector as entrepreneurs, however, tourism has considerable potential to support women’s economic empowerment if targeted policies are put in place.

It is important to formulate links between tourism and other sectors of the economy to increase the income-earning capacity of the population, especially in rural settings. Public policy can prove effective in expanding the tourism sector in this regard. For example, in Costa Rica the government has supported both conventional projects (urban hotels, beach hotels, cruises) and sustainable development projects (ecotourism, adventure tourism and rural tourism) through several policy tools. In the 1980s, the Costa Rican government supported nature and adventure activities directed toward the development of ecotourism; in the late 1990s, it introduced formal initiatives by local organizations, networks of non-governmental organizations, international agencies and government agencies to promote rural tourism and rural community-based tourism. Besides such tourism-focused policies, it is also important to upgrade traditional agricultural activities and/or complement them with rural tourism to support rural communities (Perez and Quiroz Estrada, 2017). Such policies can help both men and women in rural areas by expanding their income-earning opportunities.

Tourism’s role in poverty reduction is also critical in terms of countries’ development goals and tourism’s gender implications. The tourism sector involves the participation of many different service suppliers and benefits those in poor and remote areas as well. Indeed, there is empirical evidence for Costa Rica and Nicaragua that tourism has a stronger poverty alleviation effect than agriculture in terms of an economic sector’s role in fighting poverty (Vanegas et al., 2015), and especially in settings with low levels of economic development, as in the case of Nicaragua (Croes, 2014). These findings imply that the tourism sector also has the potential to reduce gender inequality via the poverty reduction channel. This is because poverty is more severely felt by women,
as discussed in box 1, and the poverty alleviation effect of the expansion of the tourism sector can benefit women to a greater extent than men.

Finally, gender norms and stereotypes form a barrier for women in the region and need to be addressed in tourism as in all sectors. Without addressing them, it will not be possible for women to reap the full benefits from tourism development.

4.4. Empirical analysis

Trade openness interacts with gender inequalities through multiple transmission channels, as discussed in Volume 1 (UNCTAD, 2014a). Module 2 explained in detail how trade policy affects labour market outcomes from a theoretical point of view. Briefly, trade liberalization affects the sectoral composition of production, which in turn affects the gender distribution of employment in the economy. International competition may also lower gender discrimination in employment and wages by rendering it costly. Finally, trade openness may induce technological upgrading in the domestic economy and reduce the need for physically demanding skills, which would help women find more employment opportunities than before. The complex nature of the trade and gender nexus shows that the actual impact of trade openness on gender inequalities is highly context-specific and cannot be generalized. This is why it is important to carry out case studies for each country and/or sectoral context.

This section presents a macroeconomic empirical analysis on how trade openness affects gendered employment patterns in the broad sectors of the economy using data for the six countries in Central America. The analysis consists of two parts. The first part follows a framework similar to that of Bussmann (2009). Specifically, the empirical analysis in the first part estimates the impact of trade openness, which is measured as the share of exports and imports in GDP, on the share of each broad sector (i.e. agriculture, industry, services) in total female employment of a country. In a second specification, trade openness is replaced with the shares of merchandise export and import shares in GDP. Merchandise exports and imports are then decomposed by trading partners in a third specification to examine the underlying factors.

Bussmann (2009) found that trade openness is associated with an increase in the share of women employed in the services sector in developed countries, while in developing countries trade openness has been correlated with an increase in the share of women working in the agricultural and industrial sectors. Further details about the econometric model and data sources are presented in Annex 2.

Table A.2.1 in Annex 2 presents the empirical findings for the first part of the macroeconomic empirical analysis. Overall, the magnitudes of estimated coefficients are relatively small, implying that trade openness measures have low economic significance in terms of their impact on women’s share of employment in each broad sector. According to these findings, trade openness has a positive relationship with the share of female employment in agriculture and industry. Specifically, a 10 percentage point increase in trade openness is associated with a 0.27 of a percentage point increase in agriculture’s share in total female employment, and with a 0.22 of a percentage point increase in industry’s share. In contrast, trade openness is negatively associated with the share of services in total female employment. These findings are in line with the findings in Bussmann (2009) for developing countries, as discussed above.

Next to be examined is the impact of merchandise export and merchandise import shares on the share of each broad sector in women’s total employment. The import share has a statistically significant and positive association with women’s share of employment in agriculture, while the impact of the export share is insignificant. Specifically, a 10 percentage point increase in the import share in GDP is associated with a 0.82 of a percentage point increase in agriculture’s share in total female employment. This may be reflecting the influence of two factors. On the one hand, women may be hired more as a source of competitive advantage to compete with cheap imports of agricultural final goods in the domestic market. On the other hand, it might also be the case that imports, mainly through imported inputs (raw materials and/or and intermediate goods), increase demand for women’s labour due to the complementary role that imported inputs play with labour in production.

The export share is positively associated with the share of the industrial sector in total female employment, while the import share does not have a statistically significant association. Specifically, a 10 percentage point increase in the export share is associated with a 0.91 of a percentage point increase in the industrial sector’s share of female employment. This may be due to an expansion of female-intensive sub-sectors such as garments, apparel, etc. as exports increase. No statistically significant relationship is found for export and import shares in the case of the services sector.
Next to be investigated is whether trading partners make any difference in terms of the impacts of merchandise export and import shares in GDP on female employment distribution across the broad sectors of the economy. Only exports to East Asia and the Pacific have a statistically significant and positive association with the share of the agricultural sector in women’s employment. The regionally disaggregated analysis reveals interesting results in the case of industry. The shares of exports to both high-income countries and to LAC in GDP have a statistically significant and positive association with women’s employment share in industry. The impact of exports to LAC is larger than that of high-income countries. Specifically, a 10 percentage point increase in the share of exports to LAC is associated with a 1.8 percentage point increase in the industrial sector’s share of female employment, while the same effect is 0.8 of a percentage point for high-income countries. In contrast, imports from East Asia and the Pacific as a share of GDP have a statistically significant and negative association with women’s employment share in industry. These findings imply that exports to markets in high-income countries and LAC help boost women’s employment in industry in Central America through the expansion of female-intensive activities. However, import competition from East Asia and the Pacific seems to be associated with job destruction in the industrial sector. This is likely to reflect the influence of the surge of cheap imports from Asian developing countries and especially China. In contrast, the services sector’s share in women’s employment has a positive and statistically significant association with imports from East Asia and the Pacific. That may be a reflection of the influence of job destruction in the industrial sector; women might be displaced to services, many of which are nontradable sectors.

The first part of the analysis focused on the impact of trade on women’s employment in each broad sector while ignoring the impact on male employment. The second part of the macroeconomic empirical analysis examines the impact of various trade openness measures on the gender employment gap in the Central American countries. The gender employment gap is measured as the ratio of female employment to male employment in each broad sector of the economy. Table A.2.2 in Annex 2 presents the empirical findings for the second part of the macroeconomic empirical analysis.

According to the findings from the second part, trade openness is negatively associated with the female-to-male employment ratio in agriculture. Hence, increased trade openness, mainly driven by the influence of the share of exports, tends to be more beneficial to men’s employment than women’s, resulting in a larger gender employment gap in agriculture. Trade openness has no statistically significant association with the gender employment gap in industry. However, looking at the individual effects of export and import shares reveals that the favourable effect of the export share on women’s employment relative to men’s is being cancelled out by an opposite effect of the import share. Trade openness is positively associated with the female-to-male employment ratio in services, driven by the impact of exports that outweighs the negative impact of imports.

However, the magnitudes of the estimated coefficients are very small in all sectors, implying that the statistically significant relationships are not economically significant. The same holds for the impact of export and import shares disaggregated by trading partners. Hence trade openness and its various components seem to have not affected the gender employment gap in Central America in economic terms. This may be because trade liberalization has similar effects on women’s and men’s employment across the broad sectors of the economy, or because positive effects of trade openness on women’s employment relative to men’s in certain sub-sectors might be balanced out by possible negative effects in other sub-sectors.

5. Main findings and policy recommendations

This module has applied the concepts covered in Volume 1 of UNCTAD’s teaching manual on gender and trade (UNCTAD, 2014a) to examine the trade and gender nexus in Central American countries – Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The region has gone through important changes in both political and economic terms since the 1990s. The Guatemala Peace Accords adopted in 1996 brought a durable process of peace following the armed conflicts of the previous era. The structural adjustment process, which was focused on macroeconomic balance, privatization and global economic integration, was the economic leg of this transformation process. The General Treaty on Central American Economic Integration that was signed in 1960 formed the basis of regional integration in Central America, and the SICA extended this cooperation further among its members.

Gender inequalities persist to different degrees in the Central American countries. The gender gap in adult literacy is quite low in the region. However, the gender gap in LFPR (i.e. the ratio of
and knowledge. However, only 20-25 per cent by easing their access to land, finance, markets in supporting women in the coffee value chain certification schemes play an important role in the coffee value chain. Producer organizations, cooperatives and division of labour in the coffee value chain, with the share of the services sector in women's employment, while it has a negative relationship with the share of the services sector in women's employment. However, the economic significance of these effects is low.

Section 4 of this module examined the gender implications of trade openness in the selected countries through both a review of case studies and a macroeconomic empirical model. The case studies were selected as three areas with important gender implications from each of the broad sectors of the economy: coffee agriculture, maquilas/EPZs in industry, and tourism in services. The macroeconomic empirical analysis found that trade openness is positively associated with the share of agriculture and industry in total female employment, while it has a negative relationship with the share of the services sector in women's employment. However, the economic significance of these effects is low.

Coffee is an important export cash crop, especially in Guatemala, Honduras and Nicaragua. There is a highly gender-segregated division of labour in the coffee value chain, with women concentrated at the lower end of the chain. Producer organizations, cooperatives and certification schemes play an important role in supporting women in the coffee value chain by easing their access to land, finance, markets and knowledge. However, only 20-25 per cent of smallholder farmers in Central America are members of a farmer organization. Costs of complying with certification and quality requirements are important inhibiting factors in the case of fair trade. Moreover, traditional gender roles in both productive and reproductive spheres constrain women's capacity to fully benefit from certification schemes. Smaller-scale and women-only settings can be more supportive in terms of organizational structure. In order to support women's participation in the coffee sector as producers, targeted policies need to be introduced or extended to ease supply-side constraints such as access to land and finance, which are disproportionately felt by women. It is also critical to facilitate membership in producer organizations given their proven benefits.

The maquila sector has become an engine of employment growth in the region, and is characterized by a feminized labour force and high occupational gender segregation. The main reason behind the feminization of labour in EPZs in the apparel and textile industry is the competitive advantage that female workers provide firms that are under increased international competition. In terms of working conditions, there is evidence of a wage premium for maquila employment in Honduras, El Salvador and Guatemala. Compared to outside firms, a smaller gender wage gap is found in maquilas in Honduras and a higher gender wage gap in Guatemala. Non-wage working conditions such as the right to organize can be adverse in maquilas, as documented for Guatemala and Honduras. Working hours also tend to be long. These findings imply that it is important to take into consideration issues on the quality of employment while supporting employment growth in the maquila sector. Ensuring the adequate implementation of labour laws is critical in this regard.

The tourism sector has played an important role in the economic transformation process in Central America, and bears important gender implications due to its significance as a source of employment for women. Among the Central American countries, Panama and Costa Rica have important shares of tourism receipts in total exports. Small-scale tourism, which covers a wide range of services from budget accommodation to luxury “boutique” travel options, is more common in Central American countries than in the Caribbean, where a mass tourism model prevails. This is important because a tourism model based on SMEs is more useful to serve the goals of gender equality, especially in the area of entrepreneurship.

In terms of wage workers, the tourism sector has a highly feminized workforce in the region, as is typical in other developing countries. However, those positions are mostly low-paying jobs such as housekeeping, while men have better access to higher-paying positions such as cooks, guides, etc. Despite this segregation as wage employees, women are more likely to be employers or entrepreneurs in the tourism sector than in other sectors of the economy. In this regard, tourism has considerable potential to support women's economic empowerment if targeted policies are put in place. One such policy option would be the formulation of links between tourism and other sectors of the economy to increase the income-earning capacity of the population, especially in rural areas.
In order to support women’s participation in export sectors and help them fully reap the benefits from trade integration, it is important to ease gendered supply-side constraints in each sector. Access to land is critical for women’s successful participation as producers in agriculture. In the case of coffee, land ownership and tenure security are also critical for their role in accessing credit, joining producer organizations, accessing technical training and productive resources, and exercising bargaining power in the household. Given the high degree of gender inequality in access to land, targeted tenure programmes need to be introduced as part of agricultural and trade policy in export cash crop sectors. It is also important to support women’s participation in producer organizations and certification schemes, as also discussed in section 4. Targeting the barriers to women’s full membership is especially critical in this regard.

Employment patterns in terms of work status and informality reflect the differences in countries’ GDP per capita. However, common to all Central American countries is that women are segregated into low-productivity sectors to a greater extent than men. These jobs are characterized by lower incomes, limited social security coverage, instability, and the absence of work contracts, which taken together translate into unequal distribution of income and gender inequality in income and wages. Active labour market policies such as vocational training programmes and employment offices, as well as demand-side policies including sectoral incentive programmes, can be instrumental to break this high degree of gendered labour market segmentation in the region. Such segmentation is common throughout all of LAC.

Besides sector-specific policies, gender equality needs to be considered as a cross-cutting issue in the design of trade policy both at the national and regional levels. This requires the introduction of targeted capacity-building policies and economy-wide policies to address gender inequalities in different domains of economic life, as discussed in section 3. It is also important to take steps to transform the traditional discriminatory norms in society even though this goal is a longer-term process. Gender-sensitive public policies need to consider both the paid and unpaid (or reproductive labour) spheres of the economy. Recognizing unpaid care work through the help of social welfare programmes such as parental leave, childcare support, etc. is necessary to make the work of women visible and support their participation in paid work on an equal basis with men.

With regard to trade, trade agreements should incorporate a gender perspective in the treatment of all issues they tackle, in addition to a specific chapter on gender and trade for gender-specific issues. Besides introducing a gender perspective in their trade policy, governments should systematically implement ex-ante and ex-post assessments of trade agreements. In this regard, UNCTAD (2017b) introduced the Trade and Gender Toolbox as an ex-ante gender impact assessment tool for trade agreements. Such analytical tools help identify the measures that need to be introduced to increase the expected benefits from trade and/or to address any adverse gender effect that may occur. Ex-post assessment would help identify any realized adverse effects and contribute to the development of compensatory measures such as training programmes for displaced workers, producer support programmes in export sectors, etc.

These assessment tools require the use of rich sex-disaggregated data on gender and trade-related issues. Governments need to further develop their capacity to collect quantitative gender statistics, and support qualitative studies on how gender relations influence economic outcomes in both productive and reproductive spheres of economic life. In this regard, UNCTAD (2019b) provides a review of both the available assessment frameworks and the data requirements for such analyses on gender and trade. In this way, governments can better design public policies and monitor the effectiveness of the policies already in place. National-level legal and policy measures directed toward gender equality need to be coordinated at the regional level to ensure that governments with less fiscal capacity are supported through regional funds, and that comparability is ensured across countries.

Finally, the economic impacts of the COVID-19 pandemic are felt heavily in the services sector and the informal sector, both of which are highly female-intensive in Central America. It is therefore necessary to develop gender-responsive policies while tackling the economic and social crisis driven by the pandemic in order to avoid the exacerbation of gender inequalities.

The immediate policy responses for wage workers include incentive programmes for job retention (e.g. wage subsidies and/or social security and other fiscal payment relief) and income support schemes (e.g. unemployment benefits), which should be extended to informal workers including domestic workers. Direct income support and cash transfers are needed to support own-account workers, many of whom are women. Measures to support SMEs, among which women hold a significant share, would
help prevent closures and bankruptcies. These measures include sectoral funds, social security and fiscal payment exemptions or deferrals, fast and subsidized loans, relaxation of regulations, and taxes on targeted sectors.

Besides these broad measures that would help women in different economic roles, governments could prioritize women-owned enterprises in public procurement. As a longer-term goal, infrastructure programmes that target specific sectors, delivery of public services, education and training programmes, capacity-building programmes to facilitate access to finance, production inputs and market information should all incorporate a gender perspective in order to address the specific constraints faced by women. Finally, policy instruments such as hotlines need to be introduced in the short term to help the victims of gender-based violence, which has increased in many countries during the pandemic. Enactment and full enforcement of laws against gender-based violence should become a priority as a longer-term solution.
Exercises and questions for discussions

1. What are the institutional origins of regional integration in the Central America region?

2. How do men and women compare in the Central American countries with respect to education outcomes and labour force participation?

3. What is the sectoral composition of employment for men and women in Central American countries? What are the implications of sectoral employment patterns for women’s empowerment in the region?

4. What is the major regional policy instrument to promote gender equality in Central America? How has it evolved over time?

5. How does trade structure in terms of product groups and trading partners compare across the Central American countries? Discuss briefly.

6. How could gender be mainstreamed in trade policy? To what extent is it achieved in the Central America region? Give specific examples in your answer.

7. What is the gender division of labour in the coffee value chain? What are the major constraints that women coffee producers face in Central America?

8. What role do producer organizations and certification schemes play in supporting the upgrading of women’s roles in the coffee value chain? What are the constraints that limit the capacity of certifications to create pathways to women’s empowerment?

9. How could Central American countries support women producers in the coffee value chain?

10. What are the wellbeing implications of EPZs for women in Central America over time? Discuss their different dimensions in your answer.

11. How have EPZs evolved over time in some of the countries in Central America? What does this change imply for women’s employment in the region?

12. What is the nature of the tourism model in Central America? What does it imply for women’s empowerment through tourism development?

13. What are the gender implications of the tourism sector globally and at the regional level in Central America?

14. What policies are needed to realize the full potential of tourism development for women’s empowerment?

15. Based on the findings of the macroeconomic empirical analysis, explain the relationship between trade openness and the female employment share in individual sectors (i.e. agriculture, industry, services). Discuss briefly.
**ANNEXES**

**Annex 1. Top export/import products and partners**

<table>
<thead>
<tr>
<th>Top export and import products at the HS 6-digit level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
</tr>
<tr>
<td>Top three export products</td>
</tr>
<tr>
<td>- Needles, catheters, cannulae and the like, not elsewhere specified (n.e.s.)</td>
</tr>
<tr>
<td>- Pineapples, fresh or dried</td>
</tr>
<tr>
<td>- Bananas, including plantains, fresh or dried</td>
</tr>
<tr>
<td>Top three import products</td>
</tr>
<tr>
<td>- Petroleum oils, etc. (excluding crude); preparation</td>
</tr>
<tr>
<td>- Other medicaments of mixed or unmixed products</td>
</tr>
<tr>
<td>- Transmission apparatus, for radio-telephony, television, etc. with reception apparatus</td>
</tr>
<tr>
<td>El Salvador</td>
</tr>
<tr>
<td>Top three export products</td>
</tr>
<tr>
<td>- T-shirts, singlets and other vests, of cotton</td>
</tr>
<tr>
<td>- Jerseys, pullovers, etc., of man-made fibres</td>
</tr>
<tr>
<td>- Electrical capacitors, fixed, tantalum, n.e.s.</td>
</tr>
<tr>
<td>Top three import products</td>
</tr>
<tr>
<td>- Petroleum oils, etc. (excluding crude); preparation</td>
</tr>
<tr>
<td>- Petroleum gases and other gaseous hydrocarbons</td>
</tr>
<tr>
<td>- T-shirts, singlets and other vests, of cotton</td>
</tr>
<tr>
<td>Guatemala</td>
</tr>
<tr>
<td>Top three export products</td>
</tr>
<tr>
<td>- Bananas, including plantains, fresh or dried</td>
</tr>
<tr>
<td>- Raw cane sugar, in solid form</td>
</tr>
<tr>
<td>- Coffee, not roasted or decaffeinated</td>
</tr>
<tr>
<td>Top three import products</td>
</tr>
<tr>
<td>- Petroleum oils, etc. (excluding crude); preparation</td>
</tr>
<tr>
<td>- Transmission apparatus, for radiotelephony, television, etc. with reception apparatus</td>
</tr>
<tr>
<td>- Other medicaments of mixed or unmixed products</td>
</tr>
<tr>
<td>Honduras</td>
</tr>
<tr>
<td>Top three export products</td>
</tr>
<tr>
<td>- Coffee, not roasted or decaffeinated</td>
</tr>
<tr>
<td>- Ignition wiring sets &amp; other wiring sets of a kind</td>
</tr>
<tr>
<td>- Frozen shrimps and prawns</td>
</tr>
<tr>
<td>Top three import products</td>
</tr>
<tr>
<td>- Petroleum oils, etc. (excluding crude); preparation</td>
</tr>
<tr>
<td>- Other medicaments of mixed or unmixed products</td>
</tr>
<tr>
<td>- Transmission apparatus, for radiotelephony, television, etc. with reception apparatus</td>
</tr>
<tr>
<td>Nicaragua</td>
</tr>
<tr>
<td>Top three export products</td>
</tr>
<tr>
<td>- Ignition wiring sets and other wiring sets of a kind</td>
</tr>
<tr>
<td>- T-shirts, singlets and other vests, of cotton</td>
</tr>
<tr>
<td>- Coffee, not roasted or decaffeinated</td>
</tr>
<tr>
<td>Top three import products</td>
</tr>
<tr>
<td>- Petroleum oils, etc. (excluding crude); preparation</td>
</tr>
<tr>
<td>- Petroleum oils and oils obtained from bituminous</td>
</tr>
<tr>
<td>- Weft knits or crocheted fabrics of cotton</td>
</tr>
<tr>
<td>Panama</td>
</tr>
<tr>
<td>Top three export products</td>
</tr>
<tr>
<td>- Other medicaments of mixed or unmixed products</td>
</tr>
<tr>
<td>- Sulphonamides</td>
</tr>
<tr>
<td>- Amino-acids and their esters, not &gt;1 oxygen function</td>
</tr>
<tr>
<td>Top three import products</td>
</tr>
<tr>
<td>- Other medicaments of mixed or unmixed products</td>
</tr>
<tr>
<td>- Sulphonamides</td>
</tr>
<tr>
<td>- Amino-acids and their esters, not &gt;1 oxygen function</td>
</tr>
</tbody>
</table>


Note: Data are for 2016 for Panama, for 2017 for Guatemala and Honduras, and for 2018 for Costa Rica, El Salvador and Nicaragua.

HS: Harmonized Commodity Description and Coding System.
Annex 2. Empirical Analysis

The following equation is estimated for each broad sector of the economy (i.e. agriculture, industry and services) using balanced panel data from six countries covered in this study for the period 1991–2018:

\[ \text{FES}_{it} = \beta_1 T_{Oi} + \sum_{j=1}^{3} \delta_j X_{ijs} + \varphi_t + u_{it}. \]

where \( \text{FES}_{it} \) the dependent variable, shows the female employment share in each broad sector for country \( i \) and time \( t \), \( T_{Oi} \), the main variable of interest, refers to trade openness and is defined as the share of total trade (exports and imports) in GDP. \( X_{ijs} \) represents each of the control variables. \( \varphi_t \) represents time-specific fixed effects to control for any shocks common to all countries that are unrelated to trade openness, its subcomponents, and other control variables. \( u_{it} \) represents the unobservable factors in the regressions.

In a second specification, trade openness is replaced with the merchandise export-to-GDP ratio (\( EO_i \)) and the merchandise import-to-GDP (\( IO_i \)) ratio to account for the direction of trade flows:

\[ \text{FES}_{it} = \beta_1 EO_{it} + \beta_2 IO_{it} + \sum_{j=1}^{3} \delta_j X_{ijs} + \varphi_t + u_{it}. \]

In a third specification, \( EO_i \) is replaced with merchandise export-to-GDP ratios distinguished by trading partners (\( EO^k_i \)), and \( IO_i \) is replaced with merchandise import-to-GDP ratios distinguished by trading partners (\( IO^k_i \)). \( k \) refers to high-income countries, Latin America and the Caribbean, and East Asia and the Pacific as three main trading partners. The equation takes the following form accounting for both the direction of trade flows and their destination/origin:

\[ \text{FES}_{it} = \sum_{k=1}^{3} \beta^k_1 EO^k_{it} + \sum_{k=1}^{3} \beta^k_2 IO^k_{it} + \sum_{j=1}^{3} \delta^k_j X_{ijs} + \varphi_t + u_{it}. \]

Control variables are introduced as follows: GDP per capita in constant 2010 United States dollars controls for the impact of economic development on the employment structure. The fertility rate accounts for the influence of domestic care work on women’s employment. Population size is introduced to reflect the size of the labour force as well as to check for the differences between small and large countries in terms of opening up their economies to trade.

The employment data are from International Labour Organization (ILO) statistics, and data for trade measures and control variables are from the World Bank’s World Development Indicators database.

The model is estimated using a fixed-effect panel data model that allows for controlling for country-specific characteristics such as religion, culture and other socio-economics factors. The model checks for heteroskedasticity, autocorrelation and cross-section dependence in the estimation stage. To obtain heteroskedasticity and autocorrelation robust standard errors, the Driscoll-Kraay methodology is adopted using the user-written command xtsc by Hoekstra (2007) in Stata.
### Macroeconomic analysis estimation results for the share of each broad sector in total female employment

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trade/GDP</strong></td>
<td>0.0273**</td>
<td>0.0219**</td>
<td>-0.0493**</td>
</tr>
<tr>
<td></td>
<td>(0.0135)</td>
<td>(0.00957)</td>
<td>(0.0161)</td>
</tr>
<tr>
<td><strong>Export/GDP</strong></td>
<td>-0.0254</td>
<td>0.0914**</td>
<td>-0.0646</td>
</tr>
<tr>
<td></td>
<td>(0.0406)</td>
<td>(0.0291)</td>
<td>(0.0620)</td>
</tr>
<tr>
<td><strong>Import/GDP</strong></td>
<td>0.0822*</td>
<td>-0.0328</td>
<td>-0.0509</td>
</tr>
<tr>
<td></td>
<td>(0.0331)</td>
<td>(0.0211)</td>
<td>(0.0463)</td>
</tr>
<tr>
<td><strong>Exports to high-income countries/GDP</strong></td>
<td>-0.0621</td>
<td>0.0808*</td>
<td>-0.0194</td>
</tr>
<tr>
<td></td>
<td>(0.0365)</td>
<td>(0.0330)</td>
<td>(0.0464)</td>
</tr>
<tr>
<td><strong>Exports to LAC/GDP</strong></td>
<td>0.160</td>
<td>0.182*</td>
<td>-0.338</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.0758)</td>
<td>(0.199)</td>
</tr>
<tr>
<td><strong>Exports to EAP/GDP</strong></td>
<td>0.492**</td>
<td>-0.278</td>
<td>-0.215</td>
</tr>
<tr>
<td></td>
<td>(0.171)</td>
<td>(0.175)</td>
<td>(0.235)</td>
</tr>
<tr>
<td><strong>Imports from high-income countries/GDP</strong></td>
<td>-0.00429</td>
<td>-0.0386</td>
<td>0.0438</td>
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<tr>
<td></td>
<td>(0.0347)</td>
<td>(0.0268)</td>
<td>(0.0309)</td>
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<tr>
<td><strong>Imports from LAC/GDP</strong></td>
<td>0.172</td>
<td>0.0152</td>
<td>-0.190</td>
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<tr>
<td></td>
<td>(0.0987)</td>
<td>(0.0661)</td>
<td>(0.0996)</td>
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<td><strong>Imports from EAP/GDP</strong></td>
<td>-0.0780</td>
<td>-0.288***</td>
<td>0.365**</td>
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<tr>
<td></td>
<td>(0.0912)</td>
<td>(0.0659)</td>
<td>(0.115)</td>
</tr>
<tr>
<td><strong>ln(GDP per capita, constant 2010 United States dollars)</strong></td>
<td>4.225**</td>
<td>3.597*</td>
<td>-1.467</td>
</tr>
<tr>
<td></td>
<td>(1.573)</td>
<td>(1.557)</td>
<td>(2.672)</td>
</tr>
<tr>
<td><strong>ln(population)</strong></td>
<td>9.893**</td>
<td>6.845*</td>
<td>-11.22**</td>
</tr>
<tr>
<td></td>
<td>(3.170)</td>
<td>(3.061)**</td>
<td>(4.004)</td>
</tr>
<tr>
<td><strong>Fertility</strong></td>
<td>3.589***</td>
<td>3.154***</td>
<td>-0.396</td>
</tr>
<tr>
<td></td>
<td>(0.306)</td>
<td>(0.302)</td>
<td>(0.518)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-193.7***</td>
<td>-140.1***</td>
<td>367.1***</td>
</tr>
<tr>
<td></td>
<td>(39.11)</td>
<td>(39.94)</td>
<td>(40.16)</td>
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<td><strong>R-squared</strong></td>
<td>0.368</td>
<td>0.415</td>
<td>0.708</td>
</tr>
<tr>
<td><strong>Number of observations</strong></td>
<td>163</td>
<td>163</td>
<td>163</td>
</tr>
</tbody>
</table>

Source: Calculations by the UNCTAD secretariat.

Note: Driscoll-Kraay standard errors in parentheses. *** Significant at the 1 per cent level. ** Significant at the 5 per cent level. * Significant at the 10 per cent level. LAC: Latin America and the Caribbean, EAP: East Asia and the Pacific.
<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade/GDP</td>
<td>-0.000416**</td>
<td>0.000486</td>
<td>0.00229**</td>
</tr>
<tr>
<td></td>
<td>(0.000157)</td>
<td>(0.000336)</td>
<td>(0.000827)</td>
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<tr>
<td>Export/GDP</td>
<td>-0.0079**</td>
<td>0.00388***</td>
<td>0.00809***</td>
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<tr>
<td></td>
<td>(0.000646)</td>
<td>(0.000676)</td>
<td>(0.00131)</td>
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<tr>
<td>Import/GDP</td>
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<td>-0.00300***</td>
<td>-0.00563***</td>
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<tr>
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<td>(0.00104)</td>
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<td>Exports to high-income</td>
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<td>0.00355**</td>
<td>0.0108**</td>
</tr>
<tr>
<td>countries/GDP</td>
<td></td>
<td>(0.000520)</td>
<td>(0.000970)</td>
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<td></td>
<td>(0.000336)</td>
<td>(0.000827)</td>
</tr>
<tr>
<td>Exports to LAC/GDP</td>
<td>0.00101</td>
<td>0.00334*</td>
<td>0.00198</td>
</tr>
<tr>
<td></td>
<td>(0.00126)</td>
<td>(0.00148)</td>
<td>(0.00346)</td>
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<td>Exports to EAP/GDP</td>
<td>0.00665**</td>
<td>-0.00233</td>
<td>0.0219</td>
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<tr>
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<td>(0.000225)</td>
<td>(0.000454)</td>
<td>(0.00136)</td>
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<tr>
<td>Imports from high-income</td>
<td>0.000742</td>
<td>-0.00310**</td>
<td>-0.00820***</td>
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<td>countries/GDP</td>
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<td>(0.000827)</td>
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<td>(0.00131)</td>
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<tr>
<td>Imports from EAP/GDP</td>
<td>-0.00549**</td>
<td>-0.00670*</td>
<td>0.0161*</td>
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<td>(0.00147)</td>
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<td>(0.00684)</td>
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<tr>
<td>Imports from LAC/GDP</td>
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<td>0.000550</td>
<td>0.0019</td>
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<tr>
<td></td>
<td>(0.000563)</td>
<td>(0.00119)</td>
<td>(0.00519)</td>
</tr>
<tr>
<td>ln(GDP per capita)</td>
<td>0.199***</td>
<td>0.206***</td>
<td>0.249***</td>
</tr>
<tr>
<td></td>
<td>(0.0243)</td>
<td>(0.0165)</td>
<td>(0.0223)</td>
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<td>ln(population)</td>
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<td>0.0893*</td>
<td>0.0462</td>
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<td></td>
<td>(0.0682)</td>
<td>(0.0431)</td>
<td>(0.0510)</td>
</tr>
<tr>
<td>Fertility</td>
<td>0.0354**</td>
<td>0.0494***</td>
<td>0.0375**</td>
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<tr>
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<td>(0.0107)</td>
<td>(0.00817)</td>
<td>(0.00940)</td>
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<tr>
<td>Constant</td>
<td>-2.449**</td>
<td>-3.095***</td>
<td>-2.715**</td>
</tr>
<tr>
<td></td>
<td>(0.949)</td>
<td>(0.615)</td>
<td>(0.685)</td>
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<tr>
<td>Number of observations</td>
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<td>162</td>
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<tr>
<td>R-squared</td>
<td>0.620</td>
<td>0.629</td>
<td>0.640</td>
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</table>

Source: Calculations by the UNCTAD secretariat.
Note: Driscoll-Kraay standard errors in parentheses. *** Significant at the 1 per cent level. ** Significant at the 5 per cent level.
* Significant at the 10 per cent level. LAC: Latin America and the Caribbean, EAP: East Asia and the Pacific.
Annex 3. Case Studies


Objective and background

This study examines the relationship between gender disparities and trade for the Dominican Republic–Central America Free Trade Agreement (DR-CAFTA) region and aims to determine whether increased trade creates more employment opportunities for women relative to men, and how trade affects gender wage gaps in Central America. The analysis uses microeconomic household data to answer these questions.

Given that the countries in the region have all engaged in a major trade agreement with the United States (DR-CAFTA), the findings of the analysis helps to identify possible complementary economic policy measures. This would enhance the expected favourable effects while compensating for any unfavourable outcome that trade openness may have on gender equality and household welfare.

Data and methodology

The study uses micro/individual-level data from all household and labor surveys available for the countries in the region from the early 1990s to the end of the first decade of the 2000s. The methodology adopted in the study is a two-stage estimation procedure. In the first stage, the authors calculate industry, skill wage premiums and employment propensities from wage and employment equations for male and female workers separately. Then, in a second stage, they regress them against trade-related variables to find out how trade openness affects gender gaps in the labor market.

The first-stage estimation on labor market participation is carried out using a multinomial logit model. The labor market participation decisions included in the model are unemployed/inactive, informal in agriculture, formal in agriculture, informal in manufacturing, formal in manufacturing, informal in services, and formal in services. The first-stage earning regression is based on a Mincerian-type wage equation that estimates the impact of including age, skill level, firm size, sector of activity, and interaction of skill and sector on the logarithm of monthly labour earnings in the principal occupation.

The second-stage estimation uses the ordinary least squares method and estimates the impact of trade measures on the intercept from both labour market participation and earnings equations, and the skill wage premium, sector wage premium and sector-specific skill wage premium from the earnings equation. The trade-related measures include own tariffs, faced tariffs, import penetration, export shares, and real exchange rates, and they are interacted with the gender measure to determine if the impact of trade differs between male and female workers.

Findings

The findings from the first-stage estimation on labour market participation show no association between trade openness and the labour market participation decision in the six categories studied. Hence, trade openness has no statistical relation with the observed changes in the gender composition of the labour force between formal and informal sectors and among economic activities. This is surprising given the employment shifts observed in the region since the CAFTA-DR was adopted, and therefore needs to be investigated further.

In contrast, the findings from the first-stage estimation on earnings show some relationship between trade openness and wage premiums, especially for skilled workers and tradable sector workers (i.e. agriculture and manufacturing). A reduction of 1 percentage point in the GDP share of imports from the United States increases the wages for male workers by approximately 0.95 per cent. A fall in own tariffs by 1 per cent increases the gender wage gap among skilled workers. A 1 per cent reduction in tariffs faced in the United States market increases wages by 1.13 per cent. However, trade does not seem to have a significant impact on skilled male and female workers in tradable sectors differently.

Overall, the study shows that trade openness has both equalizing and disequalizing effects on the gender wage gap for the countries covered in Central America. Trade openness as measured by import shares and tariffs faced in the United States has an equalizing effect on the gender wage gap. In contrast, trade openness measured by own tariffs (imposed against United States imports) is likely to worsen the gender wage gap. Hence, trade liberalization of own tariffs may induce an increase in the gender wage gap if not matched by reciprocal reductions in tariffs faced in the United States market.
A.3.2. Rafael E. De Hoyos, Maurizio Bussolo, and Oscar Núñez (2012): “Exports, Gender Wage Gaps, and Poverty in Honduras”

Objective and background

Honduras is a small low-income economy that has seen significant poverty reduction along with increased integration with international markets. The poverty rate fell from 61.5 per cent in 1991 to 47.5 per cent in 2006. This reduction occurred during a period of unstable and relatively low economic growth, with important changes in trade policy. Honduras greatly reduced tariff protection, introduced export-friendly tax incentives, and saw increased market access due to external shifts in trade regimes (e.g., unilateral trade preferences conceded by the United States under the Caribbean Basin Initiative). These developments all contributed to the establishment of a maquila industry. In light of these developments, this study aims to analyse the role of improved opportunities that women gain from increased international trade integration in explaining poverty reduction in Honduras. It also examines the wage implications of maquila employment.

Data and methodology

The study uses individual-level data from the Honduras Continuous Multi-Purpose Household Survey for 1991, 1995, 2001 and 2006. This period corresponds to both significant tariff reduction and strong maquila expansion. The expansion of the maquila sector leads to an increase in labour demand, especially for female labour, and is expected to lead to an increase in relative wages. The wage implications of the maquila boom are estimated using a wage equation. Wages are defined as a function of personal characteristics, gender wage premium, and the maquila wage premium. An interaction term between gender and maquila employment measures is introduced to capture the wage effects of the maquila sector that operate through gender. Specifically, the interaction term shows the difference in the gender wage gap between maquila and non-maquila sector workers.

Following Becker’s theory on the economics of discrimination (Becker, 1971), it is expected that international competition brought about by trade openness would lead to a fall in the gender wage gap, as firms would care more about a worker’s productivity than his or her gender. Hence, one would expect the gender wage gap to be smaller in maquila firms due to high international competition. In the estimated wage equation, the gender premium, the maquila premium and the interactive term are interpreted as shifts in wages compared to the control group of men employed outside the maquila sector. The model introduces year dummies as well as time-varying gender, maquila and interactive effects.

To examine the poverty effects of the maquila boom, the authors construct a distribution of hypothetical household per capita income. They simulate what the poverty ratio in Honduras would have been if the maquila industry did not pay a wage premium and what it would have been if all maquila jobs were eliminated. Through these counterfactuals, they illustrate the short-term poverty effect of income changes in the maquila sector.

Findings

According to the findings of the empirical analysis, women wage earners earn 27 per cent less than men in Honduras, controlling for the influence of differences in education, experience, industry of occupation and urban/rural residence. Maquila workers earn a conditional wage premium of 31 per cent over workers in non-maquila firms. This maquila wage premium did not increase as a result of the maquila boom, as captured by time-varying effects in the model.

Controlling for observable characteristics, female maquila workers earn 9.5 per cent more than male non-maquila workers and 38 per cent more than non-maquila female workers. The gender wage gap is 16.6 percentage points smaller than the gap observed in industries outside the maquila sector, hence the maquila boom had a gender-equalizing effect in Honduras.

The simulation exercise finds that poverty would have been 1.5 percentage points higher in Honduras if the maquila sector did not exist. It also finds that 0.35 of a percentage point of this decrease in poverty is attributable to the wage premium of maquila workers, 0.1 of a percentage point to the wage premium received by women in maquilas, and 1 percentage point to employment creation. Overall, the poverty effects of maquila expansion are rather small, which is mainly due to the limited share of maquila wages in total household income and the relatively lower poverty incidence among maquila workers.
REFERENCES


Endnotes

1 The teaching manual is comprised of Volume 1 (Unfolding the Links) (UNCTAD, 2014a) and Volume 2 (Empirical Analysis of the Trade and Gender Links) (UNCTAD, 2014b).

2 Belize is not included in this module, even though it is geographically part of the Central America region. This is mainly because the country has a very small population and economy compared to the rest of Central America. Throughout the module, the terms, “Central America,” “Central America region” and “Central American countries” refer to the six countries covered in this study.


4 Belize became a full member of SICA in 1998; the Dominican Republic first became an associate member in 2004 and then a full member in 2013. Mexico, Chile and Brazil are regional observers, and China, Spain, Germany and Japan are extra-regional observers.

5 DR-CFTA entered into force on 1 January 2009 for Costa Rica, on 1 March 2007 for the Dominican Republic, on 1 July 2006 for Guatemala, on 1 April 2006 for Belize became a full member of SICA in 1998; the Dominican Republic first became an associate member in 2004 and then a full member in 2013. Mexico, Chile and Brazil are regional observers, and China, Spain, Germany and Japan are extra-regional observers.

6 Endnotes


8 This classification is based on the World Bank’s Country Classification by Income (accessed on 10 March 2020). According to the World Bank’s calculations for 2018 using the World Bank Atlas method, high-income countries have a GNI per capita of US$51,536 or more, upper-middle-income countries have a GNI per capita between US$12,735 and US$12,735, and lower-middle income countries have a GNI per capita between US$1,026 and US$12,735.

9 The Gini coefficient is the most commonly used indicator of income inequality. It measures the extent to which income distribution among individuals or households in an economy deviates from a perfectly equitable distribution. A Gini index of 0 denotes perfect equality (i.e. everyone has the same level of income), while an index of 100 implies perfect inequality (i.e. one person has all the income). Hence the closer the index number is to 100, the higher the degree of inequality.

10 The poverty headcount ratio shows the share of population living below US$1.90 a day in 2011 purchasing power parity.

11 Based on the HDI country ranking for 2018. This composite measure of development is the geometric mean of three sub-indices relating to health, knowledge and living standards. The first is measured by life expectancy at birth; the second by life years of schooling and mean years of schooling; and the third by GNI per capita (UNDP, 2019).

12 Data are from World Bank’s World Development Indicators database (accessed on 18 May 2020).

13 Manufacturing statistics are based on data from the UNCTADSStat database (accessed on 24 June 2020).

14 The GII measures gender inequalities in the areas of reproductive health (measured by the maternal mortality ratio and adolescent birth rates); empowerment (measured by the proportion of parliamentary seats occupied by women and the proportion of adult women and men ages 25 and older with at least some secondary education); and economic status (measured by the labour force participation rate of female and male populations ages 15 and older). The closer the GII is to zero, the higher the degree of gender equality.

15 Exceptions are Guatemala and Honduras, where youth not in education or the labour force mainly live in rural areas.

16 Employment figures are based on household survey data, so they therefore cover both formal and informal employment.

17 In LAC, on average, the shares of services in total female and male employment were 40 percent and 45 percent, respectively, in 2017.

18 The agricultural holder is the civil or juridical person who makes the major decisions regarding resource use and exercises management control over the agricultural holding.

19 Land ownership and use figures are from the Food and Agriculture Organization’s Gender and Land Rights database (accessed on 10 March 2020). The same ratio was 15 percent in El Salvador in 2007 and 7 percent in Guatemala in 2003.

20 The LAC average was 32 percent in 2019.


22 Article 29, paragraph 1 states the following: “Any dispute between two or more States Parties concerning the interpretation or application of the present Convention which is not settled by negotiation shall, at the request of one of them, be submitted to arbitration. If within six months from the date of the request for arbitration the parties are unable to agree on the organization of the arbitration, any one of those parties may refer the dispute to the International Court of Justice by request in conformity with the Statute of the Court.” See https://www.ohchr.org/en/professionalinterest/pages/cedaw.aspx.

23 The United Nations General Assembly adopted a 21-article Optional Protocol to the CEDAW on 6 October 1999. El Salvador signed the Optional Protocol on 4 April 2001, Costa Rica ratified it on 20 September 2001, Guatemala ratified it on 9 May 2002, and Panama ratified it on 9 May 2001. By ratifying the Optional Protocol, a state recognizes the competence of CEDAW to receive and consider complaints from individuals or groups within its jurisdiction through the communications procedure and the inquiry procedure. The communications procedure gives individuals and groups of women the right to complain to the Committee on the Elimination of Discrimination against Women about violations of the convention. For its part, the inquiry procedure enables the committee to conduct inquiries into serious and systematic abuses of women’s human rights in countries that become parties to the Optional Protocol. See https://www.ohchr.org/Documents/HRBodies/CEDAW/OP_CEDAW_en.pdf.

24 See COMTRADE (2018) for detailed information on country-specific developments on gender equality.

25 Mobility examines whether or not women are treated on par with men while applying for a passport, travelling outside the country and home, and choosing where to live. Workplace refers to whether or not a woman can get a job in the same way as a man, the presence of the law mandating non-discrimination based on gender in employment, legislation on sexual harassment in employment, and criminal penalties or civil remedies for sexual harassment in employment. Pay is related to whether or not there is equal remuneration for work of equal value and equal working rights (i.e. same night hours, same jobs deemed hazardous, arduous or morally inappropriate, same industries). Marriage is about civil marital rights such as not being legally required to obey one’s husband, being able to become head of the household/family, being able to obtain a judgment of divorce, having the same rights to remarry, and the presence of domestic violence legislation. Parenthood concerns the availability of paid leave of at least 14 weeks for women, the full government coverage of benefits, the availability of paternity and parental leave, and the prohibition of dismissal of pregnant women. Entrepreneurship is based on the ability of a woman to legally sign a contract, register a business, and open a bank account in the same way as a man, as well as on the prohibition of discrimination by creditors on the basis of sex or gender. Assets is related to equal ownership rights of married men and women, equal inheritance rights of sons and daughters and of female and male
surviving spouses, equal administrative authority over assets during marriage, and the availability of a law providing for the valuation of non-monetary contributions. Pension looks at the equality of ages at which men and women can retire with full and partial benefits, the equality of the mandatory retirement age, and the availability of a law that provides explicit pension care credits for periods of childcare.

26 In El Salvador, Honduras and Panama, women do not have the same rights to remarry as men. In Guatemala, a woman cannot obtain a judgment of divorce in the same way as a man.

27 The TPRM periodically reviews the trade policies and practices of each WTO member. The WTO reviews and government reports by country are available at https://www.wto.org/english/tratop_e/tpr_e/tp_rep_e.htm#bycountry. As of 26 July 2020, the latest government reports include those by Costa Rica (WTO, 2019); El Salvador (WTO, 2016a); Guatemala (WTO, 2016b), Honduras (WTO, 2016c), Nicaragua (WTO, 2015) and Panama (WTO, 2014).

28 This refers to trade policy reviews prepared by the governments of the Central American countries.

29 According to the Lall (2000) classification, primary products refer to agriculture and mining products; resource-based manufactures refer to agro-based and other resource-based products; low-technology manufactures refer to textile, garment, footwear, etc.; medium-technology manufactures refer to automotive, process, and engineering products; high-technology manufactures refer to electronic and electrical, etc. products; and unclassified products refer to commodities and transactions not elsewhere specified.

30 The category of developing economies in Asia is broad, including, among other countries, China, India, the Republic of Korea, and Singapore.

31 The Café de Mujer code draws on existing standards including Fairtrade International (FLO), Organic and Utz in terms of quality, social, health and safety, environmental and economic aspects. Unlike those standards, however, it explicitly focuses on improving the position of women in the coffee value chain by recognizing their role in coffee production.

32 The main principle is that women must be owners or managers of the coffee farm that they work on. Most of the indicators focus on developing women’s skills and knowledge about land management and the coffee production process, as well as on targeting high illiteracy among women. A distinction is made between women with small plots of land and those with larger farms (more than 20 hectares) while applying criteria and indicators, and salaries are paid directly to women.

33 Tax exemptions include exemptions from export taxes, import taxes on inputs, profit and property taxes, direct taxes, and value-added taxes. Regulatory exemptions can include exemptions from foreign exchange controls, profit repatriation controls, and derogation of specific sections of labour laws such as working hours or minimum wages. Infrastructure incentives include specific streamlined government services (e.g. custom services, business registration, etc.), provision of more developed specific infrastructure for production, logistics and transportation (e.g. better roads, free or subsidized lease of land or industrial plants, etc.), and subsidised prices in public utilities such as electricity or water.

34 It is difficult to disentangle this from the gender effects of sectoral composition of EPZs (i.e. women are employed more because EPZs tend to concentrate in sectors that traditionally hire women).

35 It should be noted that the share of wearing apparel in total manufacturing employment is quite small in Costa Rica and Panama compared to the remainder of the countries. Hence even if the feminization of labour seems to be very high in these two countries, the relative significance of this sector for total employment is quite low.

36 As explained in Module 1, the principle of comparative advantage suggests that countries compete on relative unit costs. Accordingly, a country exports the goods and/or services it can produce at a relatively lower cost. According to the principle of absolute or competitive advantage, countries compete on absolute unit costs (rather than relative costs) and use different strategies such as unit cost reduction and price-cutting to outperform their competitors and gain market share.

37 Specifically in the ILO survey workers were asked, “Is sexual harassment a concern for workers in your factory?” They had the option of answering “No” or “Yes.” If the answer was “Yes,” they then chose a number of actions taken as a result of their sexual harassment concern: “Yes, discussed with co-workers,” “Yes, discussed with supervisor or manager,” “Yes, discussed with trade union representative,” “Yes, considered quitting,” “Yes, nearly caused a strike,” or “Yes, caused a strike.” They could also say that they did not know or did not want to answer.

38 However, for those who decide to participate, remittance-receiving workers had higher reservation wages (i.e. received higher wages) but a lower likelihood of getting social security benefits (due to the lower need for insurance).

39 The tourism multiplier effect refers to indirect and induced economic effects (i.e. secondary effects) stemming from tourism activity.

40 An overview of Bussman (2009) is provided in Volume II of UNCTAD’s teaching manual on trade and gender.
