

# Making the Invisible Visible: Applying a Gender Perspective To Strengthen Tax Policy in Latin America and the Caribbean

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# MAKING THE INVISIBLE, VISIBLE

Applying a Gender Perspective to Strengthen  
Tax Policy in **Latin America and the Caribbean**



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Karen Astudillo, Vicente Fretes Cibils, Carola Pessino, and Darío Rossignolo

# **MAKING THE INVISIBLE, VISIBLE**

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We dedicate this technical note to the memory of our former colleague Luiz Villela, who initially led the project on gender equality and taxation in Latin America and the Caribbean.

## ABSTRACT \*

Countries in the region have made efforts to ensure that fiscal policies do not cause biases toward women. However, depending on where the tax burden falls, taxes do create gender biases. This technical note has two purposes. First, it provides evidence of how women's economic participation, care responsibilities, and consumption patterns enter into a country's tax systems, generating invisible biases. Second, it summarizes the main lessons learned through cross-country comparisons that analyze the impact of direct and indirect taxes on gender equality, the progressivity of the tax systems using both income and expenditure as welfare measures, and the impact of tax systems and tax reforms on households depending on their composition and across the income distribution. The note also provides policy recommendations and good practices that will add to the region's efforts to strengthen fiscal policy taking a gender perspective into account. There is no unique approach to achieving gender equity only through gender-sensitive fiscal policies; rather, the path to change will likely be highly dependent on the balance struck between differing political and economic factors and interests. However, should Latin American and the Caribbean countries take on this challenge, not only could they generate more revenue in the future, but the changes should contribute to sustained and inclusive growth, with greater gender equality.

**Codes JEL:** H22, H24, J16

**Keywords:** tax, tax benefit, tax burden, tax system, tax law, taxation, incidence

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\* This technical note was developed based on individual country cases authored by: Dario Rossignolo (Argentina), Catherine Mata, Luis Angel Oviedo, and Juan Diego Trejos (Costa Rica); Christie Tamoya and Dhanraj Thakur (Jamaica); Francisco Cota González (Mexico); Laura Calderon and Janina Leon (Perú); and Marisa Bucheli and Cecilia Oliveri (Uruguay).

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## INTRODUCTION

**G**ender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous, and sustainable world.<sup>1</sup>

Empowering women and promoting gender equality are crucial to accelerating sustainable development because of their multiplier effect across all other development areas. Improving gender equality promotes poverty reduction, boosts growth and productivity, ensures that institutions are more representative, and translates into better outcome for future generations. Achieving gender equality could increase human capital wealth by 21.7 percent globally and total wealth by 14 percent (World Bank, 2022).

Gender inequality is driven by underlying and embedded systemic attitudinal barriers that keep delivering the same gender-unequal outcomes. Tax systems, for example, are gender biased because they are designed in a context that mirrors prevailing social norms about the roles of men and women, which in turn affect where and how much to work, as well as consumption patterns (Stotsky, 1996). Men are still far more likely than women to participate in the labor force, to have formal employment, to hold higher-quality jobs, and to work in higher-paying sectors. Women are more likely to perform caregiving or unpaid work, particularly given COVID-19-induced school closures and confinement measures. This leads to their possible permanent exit from the labor market. They are also more likely to be engaged in informal work and other forms of employment

(e.g., self-employment in small subsistence businesses or domestic work) that may exclude them from formal social protection measures targeted to workers, and to be overrepresented in the hardest hit occupations, such as retail, travel, leisure, and hospitality. (World Bank, 2021).

Since the mid-1980s, some governments in developed nations have structured some spending and taxation interventions in ways to advance gender equality. For example, in some advanced economies seeking to increase women's labor force participation, the income tax system is structured to avoid penalizing secondary earners (typically assumed to be women). As of 2018, at least 80 countries had used gender-responsive fiscal policy interventions to reduce gender inequality. These types of interventions, however, are relatively infrequent in Latin America and the Caribbean (LAC). In most countries, the public institutions responsible for implementing gender policies have created specific gender budget programs and have engaged in gender-sensitive budgeting.<sup>2</sup> Budgets are the main tool to allocate resources, as well as a key determinant of the standards and qualities of public policy formulation. Because of the complexity of budget decision making, it is difficult to ascertain the results of specific policies or programs from gender budgeting endeavors or the reallocation of resources those initiatives entailed. In the post-pandemic period, the region must include a gender focus in its recovery.

1 Sustainable Development Goal #5.

2 In Argentina, Dominican Republic, Guatemala, Mexico, and Uruguay, for example.

Fiscal policies—including taxes—have significant implications for reducing existing gender gaps. However, gender imbalances, particularly in tax systems, have often been overlooked in policy discussions. Evidence has shown that there is no unique approach to incorporate gender in fiscal policies and

instruments, and the path to reform will likely be context-specific and highly dependent on the balance struck between differing political and economic factors and interests. However, this is a challenge that if adeptly addressed could contribute to sustained and inclusive growth.

## REVAMPING TAX POLICY: A MISSED OPPORTUNITY IN IMPROVING GENDER EQUALITY

In the last two decades, many LAC countries have undertaken fiscal consolidation initiatives, including tax reforms that have increased fiscal revenue as a percentage of gross domestic product (GDP) (Corbacho, Fretes Cibils, and Lora, 2013; ECLAC, 2013; IDB and OECD, 2017).<sup>3</sup> In the six countries analyzed in this technical note, tax revenue as a percentage of GDP is highest in Uruguay at 29 percent, followed by Argentina and Jamaica at 28.6 percent, Costa Rica at 23.6 percent, Peru at 16.6 percent, and Mexico at 16.5 percent.<sup>4</sup>

The value-added tax (VAT) has played a major role in increasing fiscal revenue in the region by extending the tax base to intermediate and final services and by increasing the overall tax rate in many countries. In 2019, VAT revenues were the main source of tax revenues in the region, averaging 27.7 percent of total tax revenues. This is an increase of 12.3 percentage points since 1990.<sup>5</sup> As a percentage of GDP, VAT revenues reached 6 percent in 2019, an increase of 4.2 percentage points since 1990.<sup>6</sup> Many countries in the region rely on the VAT as their largest source of tax revenue. The share of VAT is highest in Peru at 38.5 percent, followed by Jamaica at 33 percent and Mexico at 24.3 percent,

which is close to the average for Organisation of Economic Co-operation and Development (OECD) member countries. The region is less reliant on personal income tax (PIT), which accounted for 9.2 percent of total tax revenues in 2019 despite reforms aimed at increasing the tax base.

The region still has room to increase revenue, and several countries are far from reaching their revenue potential in normal times. Once the pandemic and its consequences are under control, increasing revenue could have a significant impact on the design and implementation of redistribution policies, including closing gender gaps. Expenditure policies in the region could also play a major role in redistribution, and this could be complemented by more progressive tax policies (Lustig, 2017; IDB and OECD, 2017).

Progress is needed to create tax systems that increase gender equality. Gender impacts tax systems because tax laws and regulations tend to be designed in a context that mirrors prevailing social norms about gender roles. Preferences such as where to work, childcare and eldercare arrangements, and consumption patterns have tax implications that affects men and differently

<sup>3</sup> According to the OECD, tax collection in LAC increased from 15.5 to 22.8 percent between 1990 and 2017. Most tax revenues come from indirect taxes. Value-added tax revenues as a percentage of GDP in the region increased 3.7 percentage points, while income tax revenues increased by 2.8 percent.

<sup>4</sup> OECD et al. (2021), Revenue Statistics in LAC, 2021, OECD Publishing, Paris, <https://doi.org/10.1787/96ce5287-en-es>.

<sup>5</sup> Idem.

<sup>6</sup> Idem.

(Grown and Valodia, 2010). In this context, tax systems are indeed biased. There are two types of biases in tax law: explicit and implicit (Stotsky, 1996). Explicit bias is present when the tax law identifies and treats women and men differently (ECLAC, 2021a), whereas implicit bias is present when the tax law or regulations treat women

and men similarly but have an unequal outcome when applied (ECLAC, 2021a). Explicit bias is generally easier to identify because it is written into the legal framework. In contrast, implicit bias is harder to uncover because it requires an in-depth analysis on how the tax system is affecting women and men differently (Table 1).

**Table 1.** Country Examples. Types of Explicit and Implicit Bias in Direct Taxes

Criterion	Explicit bias
Allocation of non-labor income, family business income	Income from joint property must be reported on husband's tax returns. However, women could face a lower tax burden because income earned from property is reported only on the husband's return (Argentina).
Criterion	Implicit bias
Allocation of tax preferences, credits, exemptions, and deductions	<ul style="list-style-type: none"> <li>Professional exemptions and deductions benefit professionals and workers in formal employment. Men are more likely to be in this category (Argentina, Mexico) except in Jamaica.</li> <li>Tax credits or deductions for a spouse are more likely to benefit two-parent households (Argentina, Costa Rica).</li> <li>Tax credits for children are only available to one parent (Costa Rica, Uruguay).</li> <li>Exemptions for interest or dividend payments benefit men because they are more likely to own financial assets (Argentina, Peru).</li> <li>Tax credits/deductions for mortgage payments and real estate taxes (Uruguay), and deductions for mortgage interest payments (Mexico) benefit men because they are more likely to own property.</li> </ul>
Tax burden	Female breadwinner households with children bear the largest burden (Jamaica).

Sources: Background country papers (unpublished); Dario Rossignolo (Argentina); Juan Diego Trejos and Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

Gender norms and values impact women's participation in the labor force, income, burden of unpaid work, and ownership of assets. They result in gender differences in consumption, income, employment, and asset ownership and increase women's vulnerability to poverty. As a result of these gender differences, direct and indirect taxes are likely have different implications for men and women.

Very few empirical studies have analyzed the impact of taxation on gender equity. One of the first was Figari et al. (2007), who assessed the

impact of taxes and benefits on gender equity in nine countries in the European Union. They found that tax systems in Austria, Finland, the Netherlands, and the United Kingdom, where the systems are based on individual tax returns, are more equitable than those in France, Germany, and Portugal, which have tax systems based on joint tax returns.

Taxation systems have important implications for gender equity (Figari et al., 2007; Huber, 2006). Effective tax collection is a necessary though not sufficient condition

for the amelioration of gender-based poverty and inequality. Low aggregate tax collection has implications for gender equity because it prevents the establishment of programs that can counteract the market distribution of income, which generally disadvantages women.

Barnett and Grown (2004) outline four stylized facts about gender differences in economic activity that are useful for understanding the impact of taxation on men and women that are likely to cause implicit gender bias: (1) gender differences in paid employment, including formal/informal employment, wages, and occupational segregation; (2) women's work in the unpaid care economy; (3) gender differences in consumption expenditure; and (4) gender differences in property rights and asset ownership.

For example, under an individual income tax filing system, employment profiles for women make them less likely to bear a large share of the direct tax burden if the system has progressive tax rates (Figari et al., 2007; Grown, 2010). First, women enter and exit the labor force more frequently than men, and they are more likely to be in part-time and seasonal jobs. Second, women's income is on average lower than men's. Third, women more often work in informal employment, which generally excludes them from the income tax net because they earn too little, or because they choose not to file tax returns (Grown, 2010). However, under a joint income tax filing system, implicit gender bias can result because an increasing tax rate for secondary workers in the household (who are usually women) may discourage them from entering the labor force. Further, the system of deductions and exemptions for business expenses, mortgage interest payments, and dividend payments are more likely to reduce the tax burdens of men than women because a higher proportion of men are employed in formal jobs and own financial and physical property (Stotsky, 1997).

Implicit bias also exists in other taxes. With respect to sales taxes, different rates are applied to different commodities. If women are less likely to purchase the types of goods subject to higher indirect taxes, the incidence of indirect taxes is lower than for men. This creates a certain implicit gender bias, according to Stotsky (1997). Similarly, for taxes on international trade, because these taxes are also impersonal, rarely does one find explicit gender bias. But there are implicit biases built into the definition of the tax base, the structure of tax rates, and other features of the tax system (Stotsky, 1997).

Elson (2006) argues that while Stotsky's definition of gender bias provides a useful framework, it implies that tax systems that treat women and men differently are biased, while systems that treat them the same are non-biased. However, in treating women and men the same, gender equality would not be achieved in the presence of discrimination against women and prevailing gender roles and responsibilities (Elson, 2006). By applying the principles of the Convention for the Elimination of All Forms of Discrimination Against Women (CEDAW) to taxation, Elson (2006) therefore argues that different treatment for different groups is justified to overcome discrimination and achieve substantive equity. This calls for a justification to include the gender dimension in tax incidence analysis. A gender analysis of taxation would examine the content of tax laws and tax rules, the burden or incidence of taxes, and the behavioral responses to tax changes.

This technical note is concerned with equity, and how taxation affects decisions through behavioral changes, such as, decisions to enter/exit the labor market. It suggests that the efficiency side should also be addressed. The problem of optimal taxation within a household implies a multidimensional screening in which there is heterogeneity in the skills and tastes of each spouse, and therefore asymmetry as

to whom the tax burden falls upon. Standard basic principles of optimal taxation are that the government should apply lower taxes to the goods that have a more elastic supply—that is, the inverse elasticity rule (Ramsey, 1927).

Because the labor supply of married women<sup>7</sup> is more elastic than that of men, optimal taxation theory suggests that tax rates on labor income should be lower for women than for men (Alesina and Ichino, 2007; Triest, 1990). However, when the income of the secondary earner (usually women) is added to that of the first earner (usually men) to file taxes jointly, it is not gender neutral. Joint filing of two incomes with progressive taxation conflicts with optimal taxation: the secondary earner's income is taxed at an effectively higher marginal rate, implying implicit gender bias. Consequently, one of the most straightforward effects on efficiency refers to the effects of joint taxation on labor supply. The choice of the taxable unit, whether by household or individual, also has implications on efficiency because it influences the marginal tax rate of the unit and therefore the decision to work.

The efficiency of gender-based taxation hinges on different elasticities of the labor supply between men and women. If women's incomes are taxed at a lower rate than men's, then gender-based taxation can lead to substantial welfare, GDP, and employment gains because it minimizes the aggregate social loss from labor market distortions. Numerical simulations confirm these results. They are robust to perturbations in the modeling framework and to extensions of the model that consider cross-elasticities, heterogeneous households, and household production. There are inefficiencies within the household in the allocation of time and the impact that taxes may have. When analyzed from the perspective of cooperative bargaining or relational contracts, time inefficiency is low and the marginal direct tax rate for women should be lower than for men (Apps and Rees, 2011). Meier and Rainer (2015) find that under non-cooperation within the household, the marginal tax rate for each member within the household should be equal. All this depends on the structure of home production and the externalities across inputs.

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<sup>7</sup> This is less true for single women.

## EMPIRICAL EVIDENCE

There are several studies that attempt to calculate the effect of taxation on gender equity. Grown and Valodia (2010) present case studies on eight advanced and developing countries (Argentina, Ghana, India, Mexico, Morocco, South Africa, Uganda, and the United Kingdom). They develop a harmonized analysis for direct taxes (focused on the personal income tax) in which statutory tax incidence is analyzed, and for indirect taxes, in which economic incidence is analyzed following the methodology discussed in this paper. The case studies examine the ways in which these taxes result in explicit and implicit biases. The authors find that explicit biases in direct taxes exist in Argentina, India, and Morocco, and implicit biases occur in all countries (Grown, 2010).

Regarding indirect taxes, the case studies in Grown and Valodia (2010) focus on the VAT and excise and fuel taxes. The studies classify households into gender types according to household members' employment status and the sex composition of the household. Grown and Komatsu (2010) show that the effect of indirect taxes is generally greater for male-breadwinner households and dual-earner households than for female-breadwinner households and households where no one is employed (non-employed). For instance, male-breadwinner households face the largest burden of total indirect taxes, the VAT, and excise taxes in Ghana, Mexico, South Africa, and Uganda. Dual-earner households bear the heaviest burden from the VAT in Argentina, Mexico, Morocco, and the United Kingdom. With respect to demerit goods, the gendered pattern of expenditure means that

the burden of taxes on alcohol and tobacco falls on male-breadwinner households in all countries. However, when the incidence analysis is disaggregated by commodity, a more nuanced picture emerges. The study finds that implicit biases may exist in some commodities that meet basic needs and reduce women's unpaid work. The poorest female-breadwinner households bear the impact of taxes on food most heavily in India, South Africa, and the United Kingdom, and they bear the greatest impact of taxes on children's clothing in Ghana, South Africa, and Uganda. Further, households with more women than men generally bear the largest burden from taxes on utilities.

Lahey (2015) presents the results of an assessment of the taxation system of Alberta, Canada, with an emphasis on the impact of recent tax reforms on gender equity. Tax cuts (detaxation) designed to permanently restructure the provincial revenue system have adversely affected women and low-income men to fund tax breaks for corporations and high-income individuals. This has brought about significant reductions in the progressivity of the province's taxation system. The study analyzes the impact of compensatory measures, such as adding PIT rates and tax credits to make the fiscal structure more gender equitable. An increase in indirect taxes would worsen the inequities of Alberta's taxation system.

Daniels (2008) uses a standard benefit incidence analysis to assess the impact of tariff reductions in South Africa in 1995, 2000, and 2004. The study finds that male-headed households bear a larger share of the burden of tariffs than female-headed households. For both

male- and female-headed households, the share of the tariff burden is greater than their share of total expenditure.

Siddiqui (2009) introduces a gender dimension in a computable generalized equilibrium model to assess the impact of

Pakistan's trade liberalization. The study finds that trade liberalization increases women's employment in unskilled jobs, particularly in the textile sector. However, in poor households, the gender income gap worsens, and women are poorer than before trade liberalization.



## METHODOLOGY TO ADDRESS GENDER BIAS IN TAXATION

This section describes two methodological aspects that apply to both direct and indirect taxes: choice of welfare indicator and classification of households by gender type. A study on the economic incidence of taxes considers taxpayers who experience a decline in their welfare resulting from the imposition of a tax. Therefore, the first step in such a study is to define the welfare indicator that ranks individuals or households.

Traditional studies order the unit of analysis (individuals or households) by their current household income. However, according to the life-cycle hypothesis and the permanent income hypothesis, while current income fluctuates over time, expenditures are relatively more constant. Expenditures give a better picture of the households' long-term welfare because households engage in expenditure smoothing over time (Younger et al., 1999). Ranking by current income could lead to biased results if an individual is placed in a low-income stratum when that individual had only suffered a temporary negative shock. This bias is eliminated if individuals or households are ranked by permanent income.

Difficulties in estimating income profiles arise because results depend on the shape of the lifetime earnings profile (Fullerton and Rogers, 1993; 1994). This suggests that the best proxy variable for that profile, current consumption, should be used instead. Consequently, ranking individuals or households by current income or consumption should produce different

results, with the first one leading to a more unequal distribution than the second. In the literature on incidence analysis, both income and consumption have been used as the basic welfare indicator.

Two approaches have been used in the literature to account for the impact of taxes: accounting as a first-round effects approach, and second-round behavioral approaches. The incidence analysis performed in this study uses the accounting approach, which ignores possible behavioral responses by agents as taxes may modify their behavior, including decisions to entering/exiting the labor supply, and hence how much tax they pay. Accounting approaches are limited to first-round effects and do not consider second-round effects because the difficulties in identifying the behavioral responses make it complex and complicated to integrate them into the analysis (Sahn and Younger, 2003).

In addition, there are two approaches to estimating the incidence effect of taxes: partial equilibrium and general equilibrium models. Although the first approach ignores second-round effects that would arise after a change in taxes and limits these effects to the market in which these tax changes occurred, a partial equilibrium model can be more easily computed, while providing useful information on the impact of taxes on income and consumption.

This study assesses equity in two aspects. Vertical equity addresses tax incidence by looking at households at different income levels, while horizontal equity assesses tax incidence by looking at different groups at the same income

level, mainly, as in this case, broken down by a gender dimension.

Taxes are levied on the income sources side and on the uses of this income, that is, on the consumption side. The total tax burden would combine the burden on both sides. Analyses of tax incidence are concerned with the share of taxes paid by different groups (Sahn and Younger, 2003). Consequently, it is necessary to have a variable that defines the groups, and an estimate of the taxes paid by each group, in a context in which “taxes paid” stands for the loss in income through income sources or uses mentioned before.

It is theoretically accepted that the statutory incidence of the tax (on those who have the legal responsibility to pay the tax to the government) is not the same as the economic incidence of the tax, that is, those whose purchasing power declines because of the tax. Typically, it is assumed that indirect taxes on goods are shifted entirely to consumers. This is a standard result if markets are competitive and the taxes apply to final sales (or value added) only (Sahn and Younger, 2003)—that is, consumer demand is inelastic. The tax burden generated from direct taxes, on the other hand, is shifted backward onto the income source by means of reducing disposable income for income earners, resulting from inelastic labor supply. Taxes, however, are not paid according to the letter of the law, both because of tax evasion and the fact that many transactions in developing countries occur in informal markets.

In some cases, taxes may not be directly observed in surveys, so they may have to be assessed indirectly. According to Bourguignon and da Silva (2003), indirect methods involve applying official income tax schedules or imputing indirect taxes paid through observed spending, which is consistent with the partial equilibrium literature. The most common source of these data is the household income and

expenditure survey. So, instead of assigning the effective tax collection, the statutory rates on each of the expenditure items in the national household expenditure survey are considered for indirect taxes.

The key variable for analyzing taxes borne by every quintile and household category is the tax burden. To account for the differences in income and consumption patterns, two welfare indicators have been considered: income and consumption. Typically, the burden of direct taxes and transfers is calculated using income, while for the burden of indirect taxes some authors recommend using consumption (Lustig and Higgins, 2013). The tax burden is the ratio of taxes over income before taxes, in per capita terms, and taxes over consumption expenditure after taxes. Consequently, the tax ratios borne by each household are estimated.

The methodology for this study considers two variables for the analysis: tax as a percentage of per capita expenditure (post-tax expenditure) and tax as a percentage of per capita income (before taxes). A tax is progressive if as income (expenditure) rises, the tax burden should rise as a percentage of income (expenditure). That is, a progressive tax is one in which upper-income families pay a larger share of their incomes in tax than do families with lower incomes. A regressive tax, by contrast, is one where the average tax rate falls as income rises (the social security tax is an example in many countries, due to the cap on the wage base subject to tax). The regressivity of taxation would be mitigated, however, when ordering individuals by per capita consumption expenditure rather than by per capita income.

In the empirical application, expenditure includes consumption expenses reported at the household level, but excludes home-produced goods, remittances, donations, direct taxes, investments, pension contributions, savings, repayments on loans, gifts given to other households, net losses of self-employment,

and house value for homeowners. Per capita expenditure is calculated by dividing expenditure by the household size.<sup>8</sup>

For the ranking of households by per capita income, we estimate gross (or market) income, which includes labor and non-labor income of household members, including public pensions and public transfers.<sup>9</sup> For salaried workers, income reported in the household surveys is net income, which is income after social security contributions have been withheld.

Therefore, gross income is calculated as follows:

$$\text{Gross income} = \text{net income} / (1 - \text{tax rate})$$

where tax rate is the rate of social security contributions for employers and employees.

Per capita income is calculated by dividing gross income by the number of household members, and households are then ordered into per capita gross income quintiles.

## Classification of Households into Gender Type Groups

Given that household surveys only provide household-level expenditure and not individual expenditure, it is not possible to conduct an intra-household analysis. Therefore, it is necessary to classify households into groups that serve as proxies for the underlying gender relationship (Grown, 2010). Consistent with Grown and Valodia (2010), households are categorized into two types of groups. The first group classifies households according to the members' employment status, which is a proxy for bargaining power. These classifications are: (1) Male-breadwinner households: At least one employed man and no employed woman in the household; (2) Female-breadwinner households: At least one employed woman and no employed man in the household; (3) Dual-earner households: At least one employed woman and one employed man in the household; and (4) non-employed households: No one employed in the household.

It is hypothesized here that a woman who is employed is likely to have greater decision-making power in allocating household expenditures

than a woman who is not. This could result in consuming more goods that substitute for or reduce a women's workload (Grown and Komatsu, 2010). It is expected that the tax incidence reflects the differences in consumption bundles according to the employment patterns of household members.

In addition, households are grouped according to the proportion of their adult women and men members, defined as those who are 18 or over. These groupings are as follows: (1) Male-dominated households: More adult men than adult women; (2) Female-dominated households: More adult women than adult men; and (3) Equal-number households: Same number of adult men as adult women.

Categorization of households into sex composition is a proxy for the gender relations that could impact the consumption patterns of women and men. For both household classifications, the tax burden was calculated for households with children and without children.

8 There was a discussion about whether adult equivalence scales would be a better measure of welfare from a gender perspective. However, it was decided that the per capita measure was less arbitrary than any equivalence scale method. See Grown and Komatsu (2010) for more details.

9 Public transfers and pensions were included because of their importance especially for those whose only source of income is pension income. Otherwise, they would be paying taxes, while they earn no income. Note, however, that public transfers will be excluded for the calculation of income tax; see the section entitled "Calculation of Indirect Tax Incidence."

The goal of tax incidence analysis is to determine the proportion of before-tax income paid by different groups. However, incidence by whether the household is headed by a woman,

or a man is not analyzed because the definition of headship is not uniform across countries, making it difficult to conduct a cross-country analysis.<sup>10</sup>

## Incidence Analysis of Direct and Indirect Taxes on Inequality and Gender Equality

### Direct Taxes

Table 2 provides an overview of explicit and implicit gender biases in direct taxes in six countries. There is one instance of explicit gender bias—this is the case for Argentina. The tax code stipulates that non-labor income from property jointly owned by a married couple must be filed in the husband's tax returns unless the wife is the sole owner, the assets have been legally separated, or the wife legally manages the property. This constitutes an explicit bias because men are treated as owners of joint property unless women can legally prove otherwise.

Implicit biases are found in all countries in the study. There are four examples of how the allocation of exemptions, deductions, and tax credits in PITs could cause an implicit gender bias due to gender differences in employment, ownership of assets, and social arrangements. First, deductions or exemptions for professional expenses, available in Argentina and Mexico, are more likely to benefit men because they predominate in the category of professionals and formal workers. Jamaica is an exception because, while it exempts allowances related to housing, motor vehicles, telephone use, credit cards, and stock option for employees, women in that country are more likely to be employed in the formal sector, so they are in a better position to benefit from these exemptions. Second, tax

credits for a spouse would lower the PIT burden of a married couple, which discriminates against single-parent households with an equivalent income in Costa Rica and Argentina. Because women are more likely to be single parents than men, this constitutes an implicit gender bias.<sup>11</sup> Third, interest or dividend payments are exempt from the PIT in Argentina and Peru, which could create an implicit gender bias because men are more likely than women to own financial assets. Fourth, tax credits for mortgage payments and real estate taxes can be applied in Uruguay, and mortgage interest payments can be deducted in Mexico. These tend to benefit men more than women because men are more likely to own property.

The gender implications of assigning tax credits for children in the countries in this study are unclear. In Costa Rica, even though income tax follows an individual filing system, with family-only assigned tax credits (C 16,080 equivalent to US\$44) per child in 2013. If both parents are taxpayers, it is unclear who would claim the tax credit. Consequently, the impact of the credits from a gender perspective is ambiguous. Similarly, in Uruguay, tax credits (13 BPC per child, and 26 BPC in the case of a disabled child) were given to families. In a two-parent household, one parent can claim 100 percent of

<sup>10</sup> See Grown (2010) for a detailed discussion.

<sup>11</sup> A third of all households in Costa Rica are female headed.

the credit, or each parent can claim 50 percent of the credit. However, it is unclear how this affects the incidence analysis by gender. In other countries, the assignment of tax deductions, exemptions, or credits for children has been a source of explicit gender bias because they are available to husbands but not wives, as is the case in Jordan, Morocco, and Zimbabwe (Barnett and Grown, 2004; Grown, 2010). The incidence analysis of direct taxes reveals that there are implicit gender biases in the PIT in Jamaica.

All countries in the study follow an individual filing system, which tends to be more gender-equitable than joint filing because it avoids the higher effective tax rate on secondary earners (Grown, 2010; Stotsky, 1997). However, the allocation of tax preferences, exemptions, and deductions can cause implicit gender biases. These findings are consistent with those in Grown and Valodia (2010).<sup>12</sup>

**Table 2.** Key Deductions, Tax Credits, and Exemptions in Personal Income Taxes, Excluding Deductions for Spouses and Children

Countries	Deductions/Tax Credits	Exemptions
Argentina	Deductions only available to self-employed (high-income) workers and workers in formal employment. Deductions for interest on debt, premiums for life insurance, gifts to certain institutions.	Minimum annual income threshold of less than AR\$15,000 (for the self-employed and wage earners). Income from labor-related awards and seniority compensation but excludes losses to women dismissed for pregnancy. Interest payments or dividends from financial institutions or governments.
Costa Rica	None	Minimum annual income threshold of less than 714,000 colones.
Jamaica	Deductions for compulsory contributions to National Insurance Scheme, National Housing Trust, Human Employment Resource Training Fund, and pension schemes. Business expenses.	Minimum threshold exemption for annual income of J\$1,000,272 (since July 1, 2016). Threshold increases by J\$80,000 for persons over 65 years old and by J\$80,000 for pensioners. Employment-related meals, uniforms, housing, motor vehicles, telephone use, credit cards, and stock options for employees.
Mexico	Deductions for professional expenses, goods and raw materials for businesses, medical and funeral costs, charitable donations, mortgage interest payments, medical insurance payments, contribution to retirement fund, school transportation (if compulsory).	Overtime pays, social security payments, insurance indemnities or compensation, work-related travel expenses, pensions, educational scholarship, severance payments, inheritance, income from agricultural activities, forestry and fisheries (up to 660,000 pesos annually), royalties, work benefits (day care, sports, etc.) if provided by employer.
Peru	None	Interest payments or dividends from financial institutions or governments; pension income.
Uruguay	Tax credits for mortgage payments, social security contributions, real estate taxes, rent, and bad debts.	Minimum exemption thresholds for annual labor income of 84 BPC for individual filing, 96 BPC for couples earning less than 12 months of minimum wage and 168 BPC for couples earning more than 12 months' minimum wage. Minimum exemption thresholds for annual pension income of 96 BPC.

Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

<sup>12</sup> For a detailed discussion on how the direct tax systems create explicit and gender biases in the previous study, see Grown (2010) and Grown and Komatsu (2010).

## Implications for Gender Equity of Direct Taxes

What are the implications for gender equity of direct taxes? One instance of explicit gender bias is found in the treatment of non-labor income arising from joint property in Argentina, where this income must be filed in the husband's tax returns unless the wife can legally prove otherwise.

In all countries, implicit gender bias can arise from deductions or exemptions for professional expenses, interest payments, dividends, mortgage interest payments, and real estate taxes. They are more likely to benefit male taxpayers because of the gender difference in employment and asset ownership patterns and in social arrangements. Recommendations to broaden the personal income tax base by reducing or limiting deductions for professional expenses, interest payments, or mortgage interest payments, or by assigning dividend payments and capital gains as taxable income, would help reduce implicit gender bias and be in line with gender equity objectives.

In the incidence analysis, because the burden of direct taxes falls more heavily on male-breadwinner households in the top quintile in Argentina and Mexico and falls on male-breadwinner and dual-earner households in the richest quintile equally in Uruguay, it can be concluded that direct taxes are not implicitly gender-biased in the rate structure, because they do not reinforce existing gender roles and inequalities in these three countries. In Peru, the burden falls on male-breadwinner households, but it is the middle quintile that bears the heaviest burden; hence, the system is not vertically equitable.

What about Jamaica and Costa Rica? In Jamaica, female-breadwinner households bear a larger burden than male-breadwinner and dual earner households, and almost half of all households in that country are female-headed.

Because most female-headed households have a single parent with no partner, they often must outsource domestic work, including childcare, whereas male-breadwinner households have a male parent with a spouse who is more likely to produce home goods and services that are tax-free. Due to the differences in social arrangements between women and men, direct taxes reinforce or exacerbate existing gender inequalities, and therefore there are implicit gender biases in direct taxes in Jamaica.

In Costa Rica, female-breadwinner households with children in the richest quintile face the largest burden of total direct taxes, followed by dual-earner and male-breadwinner households. The result is driven by the burden of social security contributions, which is larger than that of the PIT. Women in the highest quintile are more likely to hold formal sector jobs and earn a higher income, leading to a larger contribution to social security than men. It is difficult to assess the gender equity implications in Costa Rica. On the one hand, the direct tax system is implicitly gender-biased because a third of all households are female-headed. Women are more likely to rely on outsourcing housework by purchasing goods and services, which are taxable, unlike male-breadwinner households. However, this analysis takes a static point of view. If one were to consider the lifecycle effects of incidence, social security contributions result in higher benefits at a later stage in life, and women in the highest quintile are more likely to benefit from pension benefits than men. Further, in poorer quintiles, female-breadwinner households with children bear a lower tax burden than male-breadwinner or dual-earner households. Therefore, there is little evidence of gender bias in Costa Rica's direct tax rate structure.

## Incidence Analysis of Indirect Taxes

As shown in Figure 1,<sup>13</sup> there is a wide range of general VAT rates established in the six countries. Uruguay and Argentina have the highest general rates at 22 and 21 percent, respectively. Costa Rica has the lowest rate (for sales tax) at 13 percent, while the rates for Jamaica, Peru, and Mexico range between 16 and 18 percent.

**Figure 1.** General Value Added Tax Rate

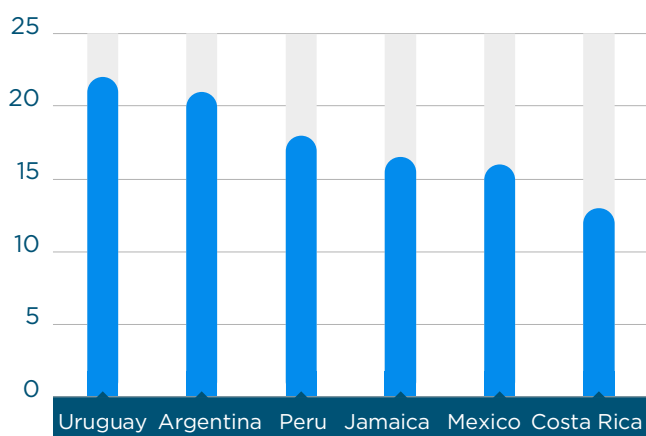


Table 3 shows that countries also have varying levels of VAT exemptions, zero-ratings, and reduced rates, which affect progressivity. Mexico has the most extensive list, with exemptions for medical and educational services, papers, and passenger transportation, and zero-ratings for food, medicine, exports, and agricultural and fishing services. In Costa Rica and Jamaica, exemptions are applied to medicine and education services. As for certain basic food items, Costa Rica and Jamaica give exemptions, while Argentina and Uruguay set lower rates. In addition, in Uruguay, meat cuts, milk, kerosene, and gasoline are zero-rated. Peru provides the least VAT exemptions, only zero-rating exports.

**13** Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (México); Janina Leon and Laura Calderon (Perú); and Marisa Bucheli and Cecilia Olivieri (Uruguay).



**Table 3.** VAT Zero-ratings, Exceptions, and Reduced Rates

	Argentina	Costa Rica	Jamaica	Mexico	Peru	Uruguay
<b>Zero-rating</b>	Exports		Certain agricultural produce, goods supplied for airline operations, goods for approved research and development	Exports, all food (except yogurt and fruit juice), medicine, drinking water, wholesale trade of gold and silver, fishing, and agricultural services	Exports	Milk, meat cuts, water, housing rent, kerosene, gasoline, papers and culture and education
<b>Exceptions</b>	Papers, brochures, milk without additives	Basic food, agricultural inputs, medicine, papers, professional services	Fruit and vegetables, basic food items, medicine, medical and educational services, school uniforms, solar water heaters, fertilizers, and insecticide	Medical and education services, non-profit activities, papers and magazines, residential and land buildings, passenger transportation, lottery		
<b>Reduced rate</b>	Bread with wheat flour not previously packaged, meat, fruits, and vegetables	Electricity	Tourism and related services			Basis food, bread, medicine, medical services, tourism, and public transportation

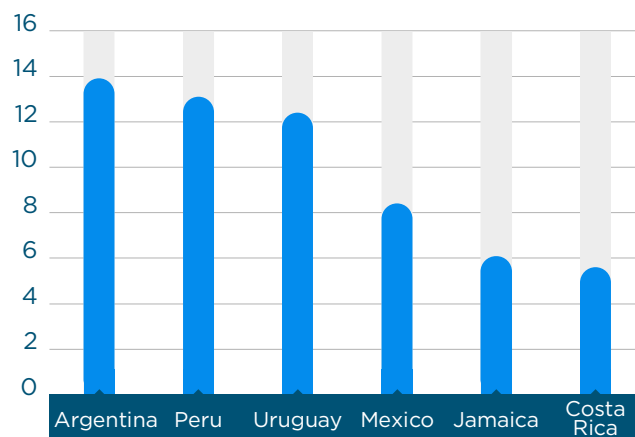
Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).



## Indirect Taxes – Vertical Equity

Recent studies have shown the VAT to be regressive against income, but only mildly so, and at times progressive in terms of consumption (Bird and Gendron, 2007; Corbacho, Fretes Cibils, and Lora, 2013). The present study is generally consistent with these findings. Table 4 presents the progressivity of indirect taxes when consumption is used as a welfare measure (in the left columns) and when the tax burden is measured as a percentage of income (right columns). When the burden is calculated as tax over consumption, the VAT is progressive in Costa Rica, Jamaica, and Mexico. In these countries, the VAT burden (as a percentage of consumption) is smaller than in other countries, ranging from 5 to 8 percent, as seen in Figure 2.<sup>14</sup> The VAT is proportional across income quintiles in Uruguay and regressive in Argentina. The tax burden is U-shaped in Peru, where the VAT is regressive between the two poorest quintiles but is progressive between quintiles three and five. In these countries, the VAT tax burden is larger, at 12 percent in Uruguay, 13 percent in Peru, and 14 percent in Argentina.

Figure 2. Value-added Tax Incidence (%)



Total indirect taxes—which are an average of the VAT, excise tax, and fuel taxes—are progressive in Costa Rica, Jamaica, and Mexico, while they are proportional across quintiles in Argentina and Uruguay.<sup>15</sup> In Peru, the burden of total indirect taxes is U-shaped, like the VAT. In Jamaica, the progressivity of indirect taxes is driven by the progressivity of the VAT and fuel tax, while in Costa Rica the progressivity of the VAT (or sales tax) and excise tax drives the progressivity of indirect taxes. The excise tax is proportional in Peru, and it is proportional for the lower three quintiles and progressive for the top two quintiles in Jamaica. In Argentina and Uruguay, the excise tax is regressive. The fuel tax is progressive in all countries, except for Costa Rica, where it is proportional.

<sup>14</sup> Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (México); Janina Leon and Laura Calderon (Perú); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

<sup>15</sup> In Argentina, the analysis includes the provincial turnover tax, which is an important source of revenue for subnational governments.

When the tax burden is measured as a percentage of income, total indirect taxes, the VAT, and the excise tax are regressive in all countries except for Jamaica, where they are proportional. Fuel taxes are proportional in Argentina, Jamaica, and Uruguay and are regressive in Costa Rica and Peru. It is therefore clear that indirect taxes become more regressive when income is used as a welfare measure, consistent with previous studies.

**Table 4.** Progressivity/Regressivity of Indirect Taxes

	Using Consumption as Welfare Measure				Using Income as Welfare Measure			
	Total Indirect Taxes	Value-Added Tax	Excise Tax	Fuel Tax	Total Indirect Taxes	Value-Added Tax	Excise Tax	Fuel Tax
<b>Progressive</b>	Costa Rica, Jamaica, Mexico	Costa Rica, Jamaica, Mexico	Costa Rica	Argentina, Jamaica, Uruguay, Peru				
<b>Proportional</b>	Argentina, Uruguay	Uruguay	Jamaica, Mexico, Peru	Costa Rica	Jamaica	Jamaica	Jamaica, Mexico <sup>3</sup>	Argentina, Jamaica, Uruguay
<b>Regressive</b>	Peru	Argentina, Peru <sup>1</sup>	Argentina, Uruguay		Argentina, Costa Rica, Mexico, Peru, Uruguay	Argentina, Costa Rica, Mexico, Peru, Uruguay	Argentina, Costa Rica, Peru, Uruguay	Costa Rica, Peru

Notes: (1) In Peru, the burden of total indirect taxes and the VAT is U-shaped. They are mildly progressive in quintiles three, four, and five, and are regressive between quintiles one and two. (2) In Jamaica, excise taxes are proportional for the first three quintiles and are progressive in quintiles four and five. (3) In Mexico, the middle quintile bears the largest burden of the excise tax. (4) In Peru, the fuel tax is regressive in the first two quintiles.

Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

## Indirect Tax Burden by Gender Household Types

Table 5 presents a summary of the types of gendered households that bear the largest burden of indirect taxes using consumption as a welfare measure in the columns on the left and income as a welfare measure in the columns on the right.

When consumption is used as a welfare measure, male-breadwinner households and dual-earner households bear the largest burden of total indirect taxes. The tax burden falls on male-breadwinner households in Jamaica and Peru, and it falls equally on male-breadwinner and dual-earner households in Argentina and Uruguay. Dual-earner households bear the largest burden in Costa Rica. In Mexico, a quarter of non-employed households belong to the richest quintiles, and the indirect tax burden falls most heavily on non-employed households due to the progressivity of these taxes. When disaggregated by the sex composition of households, the indirect tax burden falls on male-dominated households for all countries and on equal-number households in Uruguay. These results are generally consistent with the findings of Grown and Valodia (2010).<sup>16</sup> These incidence patterns are similar for VAT and excise taxes except in Peru, where the burden of the VAT falls on female-breadwinner households due to the regressivity of that tax. For the fuel tax, the burden generally falls on dual-earner households

except in Costa Rica and Peru, where it falls on male-breadwinner households.

When income is used as a welfare variable, total indirect taxes are regressive, and female-breadwinner, female-dominated, and non-employed households generally face the highest indirect tax burden because these household types are, by and large, distributed in the lower-income quintiles. Non-employed households in Argentina, Costa Rica, Mexico, and Uruguay, and female-breadwinner households in Peru and Uruguay, face the heaviest total indirect tax burden.<sup>17</sup> Disaggregating households by sex composition, the tax burden is borne by female-dominated households in Argentina, Costa Rica, and Uruguay, and by equal-number households in Mexico and Peru. Only in Jamaica do male-dominated households bear the heaviest total indirect tax burden, and unlike in other countries, indirect taxes there are proportional. The burden of the VAT exhibits a pattern like that of total indirect taxes, while that of the excise tax is different. The excise tax burden falls on male-breadwinner households in Argentina, Jamaica, Peru, and Uruguay, and by sex composition, the excise tax burden falls on male-dominated households in all countries. This is because goods that are excise-bearing, such as alcohol and tobacco, are disproportionately consumed by men.

<sup>16</sup> Grown and Valodia (2010) used consumption as a welfare measure but did not analyze income as a welfare measure due to the lack of income data in some of the countries in the study.

<sup>17</sup> In Uruguay, female-breadwinner households and non-employed households bear the largest burden of indirect taxes.

**Table 5.** Incidence of Total Indirect Taxes by Household Type

Using Consumption as Welfare Measure					Using Income as Welfare Measure			
Incidence Falls Most Heavily on:	Total indirect taxes	VAT	Excise Tax	Fuel Tax	Total Indirect Taxes	VAT	Excise Tax	Fuel Tax
<b>By household employment</b>								
<b>Male-breadwinner households</b>	Argentina, Jamaica, Peru, Uruguay	Argentina, Jamaica, Uruguay	Argentina, Jamaica, Mexico, Peru, Uruguay	Costa Rica, Peru	Jamaica	Jamaica	Argentina, Jamaica, Peru, Uruguay	Peru
<b>Female-breadwinner households</b>		Peru			Peru, Uruguay	Peru		Jamaica
<b>Dual-earner households</b>	Argentina, Costa Rica, Uruguay	Costa Rica, Uruguay	Costa Rica, Uruguay	Argentina, Costa Rica, Jamaica, Uruguay				Argentina, Jamaica, Uruguay
<b>Non-employed households</b>	Mexico	Mexico			Argentina, Costa Rica, Mexico, Uruguay	Argentina, Costa Rica, Mexico, Uruguay	Costa Rica, Mexico	Costa Rica
<b>By sex composition</b>								
<b>Male-dominated households</b>	Argentina, Costa Rica, Jamaica, Mexico, Peru, Uruguay	Argentina, Costa Rica, Jamaica, Mexico, Peru, Uruguay <sup>1</sup>	Argentina, Costa Rica, Jamaica, Mexico, Peru, Uruguay	Argentina, Costa Rica, Peru	Jamaica	Jamaica	Argentina, Costa Rica, Jamaica, Mexico, Peru, Uruguay	Argentina
<b>Female-dominated households</b>		Peru, Uruguay <sup>1</sup>			Argentina, Costa Rica, Uruguay	Argentina, Costa Rica, Uruguay		Costa Rica
<b>Equal-number households</b>	Uruguay	Mexico, Uruguay <sup>1</sup>		Jamaica, Uruguay	Mexico, Peru	Mexico, Peru		Jamaica, Peru, Uruguay

Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

## Tax on Expenditure Analysis

### Tax on Food

The analysis reveals that taxes on food expenditure are regressive even when consumption is used as a welfare measure, and that the burden of such taxes generally falls on poorer female-breadwinner or non-employed households. In Jamaica, Peru, and Uruguay, poorer female-breadwinner households bear most of the burden of food taxes, while in Argentina, the burden is borne by the poorest non-employed households, nearly half of whom (44 percent) are female-dominated. Non-employed households in the middle quintile disproportionately bear the food tax burden in Costa Rica and Mexico. The results change little by disaggregating basic food into processed and unprocessed—the burden tends to fall on the poorer non-employed or female-breadwinner households.

Because the size of the burden of food taxes varies by country and by household type and quintile, Table 6 shows the groups that face the largest burden of food taxes (as a percentage of consumption). The tax burden is smallest in Mexico (less than 1 percent), where there is a wide range of zero-ratings on basic and non-basic foods. This is followed by Jamaica and Costa Rica at around 1 percent; basic food is exempted in both countries. The largest burden is found in Argentina, where the poorest non-employed households face a tax burden of 10.9 percent. Similarly, the tax burden in Peru and Uruguay is large for the poorest female-breadwinner households at 6 and 4.1 percent, respectively.

**Table 6.** Largest Food Tax Burdens by Household Group as a Percentage of Per Capita Consumption

Country	Household Group	Food Tax Burden (%)
Mexico	Third quintile non employed	0.4
Jamaica	Poorest female-breadwinner	1.0
Costa Rica	Third quintile non-employed	1.2
Uruguay	Poorest female breadwinner	4.1
Peru	Second quintile female bread winner	6.0
Argentina	Poorest non-employed	10.9

Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

### Tax on Meals Out

Richer households are more likely to eat meals out, and the richest dual-earner households bear the highest burden of the tax on expenditure on meals out in Argentina and Uruguay. Because women and men work in these households, they are more likely to outsource cooking, as it saves time. Richer

male-breadwinner households in Costa Rica and Jamaica, and richer non-employed households in Mexico and Peru, bear the largest burden of taxes on meals out. By sex composition, the richest male-dominated households bear the largest burden of taxes on meals out in all countries.

## Tax on Children’s Clothing

Taxes on children’s clothing expenditure show a regressive pattern, although the burden is generally small, ranging from 0.1 percent of consumption in Costa Rica to 1 percent in Argentina. This tax is disproportionately borne by poorer female-breadwinner households in Argentina and Uruguay and by the poorest dual-earner households in Jamaica, Mexico, and Peru. It falls on the poorest male-breadwinner households in Costa Rica. When women are engaged in paid work, purchasing children’s clothing saves women’s time.

Tax on Housing, Water, Gas, Electricity, and Fuel for Household Use

Access to water, gas, and electricity has important implications for women’s workload

and time because women are socially assigned the role of providing water and sources of energy in the household. Female-dominated households generally bear the largest burden of taxes on housing and utilities for water, gas, and electricity, although there are differences in the progressivity of these taxes. They are regressive in Argentina, Costa Rica, Peru, and Uruguay, where the poorest female-dominated households and non-employed households (most of which are female-dominated) disproportionately bear the burden. The size of the burden faced by the poorest non-employed households varies from 3.7 percent of consumption in Uruguay to 1.5 percent in Costa Rica (Table 7).

**Table 7.** Largest Burden of Taxes on Housing and Utilities Expenditure by Household Group as a Percentage of Consumption

Country	Household Group	Housing and utilities tax burden (%)
Uruguay	Poorest non-employed	3.7
Argentina	Poorest non-employed	2.9
Peru	Poorest non-employed	2.3
Mexico	4th Quintile non-employed	1.6
Costa Rica	Poorest non-employed	1.5
Jamaica	4th Quintile non-employed	1.4

Sources: Background country papers (unpublished): Dario Rossignolo (Argentina); Juan Diego Trejos y Catherine Mata (Costa Rica); Christie Tamoya and Thakur Dhanarai (Jamaica); Francisco X. Cota-Gonzalez and Dario Rossignolo (Mexico); Janina Leon and Laura Calderon (Peru); and Marisa Bucheli and Cecilia Olivieri (Uruguay).

In Jamaica and Mexico, the burden of taxes on housing and utilities falls on richer non-employed and female-dominated households. Poorer female-dominated households seem to opt for a cheaper source of energy, namely fuel for household use. The burden of taxes on fuel falls on poorer female dominated households in both countries. These results suggest that in Argentina, Costa Rica, and Uruguay, poor female-

dominated households pay the taxes on housing and utilities (water, gas, electricity) despite their high costs, as these services save time and reduce workload, while in Jamaica and Mexico, these services are only affordable by richer households. Instead, poor female-dominated households in these latter countries use cheaper sources of fuel for their households.

## Tax on Personal Care Items

Like food, personal care items are necessities, and the burden of taxes on them generally falls most heavily on female-dominated households. The burden of taxes on personal care goods falls most heavily on the poorest non-employed

and female-dominated households in Argentina, Peru, and Uruguay, and on the richest female-breadwinner households in Costa Rica. It falls on the poorest male-breadwinner households in Jamaica and Mexico.

## Tax on Domestic and Household Services and Tax on Medical Services

Domestic and household services serve as important substitutes for women's unpaid work. The burden of taxes on these services falls on the richest non-employed households in Argentina, Mexico, Peru, and Uruguay, while it falls on middle-quintile male-breadwinner households in Jamaica. The burden of taxes on medical expenses falls on the richest non-

employed households in Argentina, Mexico, and Uruguay, and on the richest female-breadwinner households in Peru. By sex composition, the tax burden falls most heavily on the richest female-dominated households in Argentina, Peru, and Uruguay and on the richest equal-number households in Mexico.<sup>18</sup>

## Tax on Transportation

The burden of taxes on transportation exhibits a gendered pattern. Taxes on collective forms of transportation are borne most heavily, and with varying degrees of regressivity, by female-breadwinner households in the fourth quintile in Jamaica, the middle quintiles in Costa Rica and Uruguay, and the poorest quintile in Argentina. The heaviest burden of such taxes falls on the poorest dual-earner households in Costa Rica, Mexico, and Peru.<sup>19</sup> When disaggregated by sex composition, the gender pattern becomes more apparent. Female-dominated households in the poorest to middle-income quintiles bear the heaviest burden of these taxes in all countries.

In contrast, the burden of taxes on private transport is borne by the richest dual-earner households in Argentina, Costa Rica, Peru,

and Uruguay, the richest male-breadwinner households in Peru, and the richest non-employed households in Jamaica and Mexico. The burden of taxes on fuel for transport falls on the richest male-breadwinner and dual-earner households. An exception is Jamaica, where the burden of the tax on fuel for transport falls on the poorest female-breadwinner households due to the cascading effects of fuel in public transport. Access to private transportation saves time, and for women in dual-earner households, this is particularly important because they have to engage in paid work and perform domestic chores. Poorer women in female-dominated households have no choice but to use public transportation.

<sup>18</sup> In Costa Rica and Jamaica, the tax burden is negligible due to exemptions on medicine and medical services.

<sup>19</sup> In Costa Rica, the tax burden falls equally on the poorest dual-earner and female-breadwinner households in the second quintile.

## Tax on Alcohol and Tobacco

As expected, for taxes on alcohol and tobacco, male-breadwinner households bear the highest burden, with varying levels of regressivity—the richest quintile in Costa Rica, Mexico, Peru, and Uruguay, the middle quintile in Jamaica, and the poorest quintile in Peru. This tax is borne most heavily by middle-quintile dual-earner households in Argentina. Tobacco is generally more regressive, so the tax burden on tobacco falls on the poorest male-breadwinner households in Argentina, Peru, and Uruguay and on the poorest dual-earner households in Argentina and Costa Rica. Male-breadwinner households in the middle quintile bear the largest burden in Mexico. An exception is Jamaica, where the burden of the tobacco tax falls most heavily on the richest female-breadwinner households. The burden of taxes on recreation falls mostly on the richest dual-earner households, except in Jamaica and Peru, where it is borne by the richest male-breadwinner households.

These results suggest that implicit gender biases may be present in indirect taxes on goods that reinforce existing gender inequalities, particularly those that meet basic needs, reduce women's workloads, and save women's time spent on unpaid work. Poor female-dominated households are generally found to bear a larger burden of taxes on food, housing and utilities, personal care items, and public transportation. Rich female-dominated or non-employed households generally bear a larger burden of taxes on medical services and domestic and household services. The burden of taxes on private transportation, fuel for transportation, and meals out generally falls on rich dual-earner and male-breadwinner households. The burden of taxes on alcohol and tobacco falls most heavily on male-dominated households, with varying degrees of regressivity.



## POLICY SIMULATIONS FROM INCIDENCE ANALYSIS: TOOL KIT FOR PRACTITIONERS

**T**his section provides a toolkit for practitioners by showing simulations in the country studies estimate the impact of changes in the direct and indirect tax systems on gender equity and vertical equity. Where possible, when changes proposed result in loss of revenue, other changes are proposed to offset the revenue loss. Exceptions are found in cases where the simulations are conducted for

actual reforms that were recently implemented or are under discussion in the country.

It should be noted that these simulations are a theoretical exercise. Any policy recommendations for tax reform would have to be accompanied by efforts to improve administrative capacity and logistical arrangements to collect taxes. Further, because the exercises use a partial equilibrium framework, they do not consider behavioral responses to tax changes.

### Direct Taxes

For direct taxes, the consequences of broadening the tax base of the PIT in Costa Rica are examined, while those of reducing the tax base in Argentina are discussed. The Peru study reviews changes in direct taxes, which include changing the PIT tax brackets and increasing the tax rate on dividend income. The Uruguay study assesses the impact of increasing the size of tax credits for children.

The Costa Rica study simulates the change from a schedule to a global income tax system, while maintaining individual filing. In the simulation, income from labor, profits from business, and capital income are taxed under one global system instead of each facing its own rules and rates. The authors find that it reduces the PIT exemption threshold and increases tax rates, especially at higher income brackets. The simulation increases the population in the tax net by lowering the minimum exemption

threshold, but the threshold is sufficiently high so that the poorest households do not pay PIT. The second and third quintiles, which were previously exempt from PIT, now must pay tax. The tax burden rises for quintiles between two and five, and the percentage increase in the tax burden is higher among the upper-income quintiles. As a result, the simulation tends to increase the progressivity of the PIT. There was no change in the household type that bore the highest burden, with dual-earner households continuing to bear the largest burden of direct taxes. Female-breadwinner households experience the largest percentage increase in PIT burden, even though they face the lowest tax burden after the simulation (except for none-employed households) at 3.6 percent of gross income.

The Argentina study simulates the effects of the direct tax reforms the government carried out in 2013. These include increasing the

deductions for PIT, increasing the tax brackets for the monotributo, increasing payments for social security contributions for independent workers, and raising the maximum income threshold for social security contributions for formal workers. These changes reduce the overall PIT burden (about a 10 to 15 percent drop in the tax burden for the richest quintile, depending on household type) and reduce the size of the population in the PIT tax net to be even smaller than the base scenario. The PIT burden consequently falls almost entirely on the top two quintiles. Female-breadwinner households experience the largest overall drop in tax burden, by more than 9 percent (except for non-employed households, whose tax burdens are very small under the base scenario). Male-breadwinner households with children in the richest quintile continue to bear the largest burden, and they face the smallest drop in the PIT burden because they earn the most. Because of the changes in social security contributions, the fourth quintile sees a rise in its tax burden, while the richest quintile benefits from a drop in its tax burden. The overall system of direct taxes tends to be less progressive.

The Peru study simulates the effects of some direct tax reforms. The first, on labor income, increases the number of tax brackets from three

to five and reduces the level of income needed to reach the maximum tax bracket. The second increases the marginal tax rate for dividend income from 4.1 to 6.8 percent. The authors find that these changes have negligible effects on income distribution and gender equity.

The simulation in the Uruguay study increases the amount of tax credits for each child under the PIT. These credits are available only for labor income earners and on a household basis. Although the tax credits can be claimed 100 percent by one spouse, or 50 percent for each spouse, the simulation assumes that only the heads of household claim the credits. The simulation reveals that the tax burden declines across quintiles, benefitting the middle quintiles the most. This is because the poorest quintiles tend to fall below the PIT tax net, while for richer quintiles, labor income is not as important. The overall difference in the tax burden is statistically significant, but the magnitude of the decrease is small at only 0.05 percent. By household employment status, male-breadwinner and dual-earner households are more likely to benefit from this change than female-breadwinner households because they earn a higher percentage of tax-bearing incomes sources.

## Indirect Taxes

In the simulation of indirect taxes, four country studies (Costa Rica, Jamaica, Mexico, and Uruguay) examine the impact of broadening the tax base by removing exemptions or the zero-rating of the VAT, while in Argentina lower rates and new exemptions are introduced in order to reduce the regressivity of the system. Even though the main principles of the simulations are similar between the first four countries, because they increase the VAT base the effects on both vertical equity and gender equity are quite different.

The Jamaica study simulates the removal of exemptions on goods currently exempted under the VAT (such as basic food and medicine) by applying the standard VAT rate (of 16.5 percent) in the first scenario, and by reducing the overall VAT rate by 2 percent in the second scenario. These simulations are chosen because these reforms were under discussion in Jamaica. The overall progressivity of the VAT disappears, and the tax becomes proportional to mildly regressive, with the biggest increase in burden

felt by the poor. Female-dominated households across all quintiles, whether by employment type or sex composition, experience the largest increase.

The Costa Rica study simulates the removal of sales tax exemptions (except for health and education) but maintains the same tax rate of 13 percent. As in the case in Jamaica, the simulation shows that the progressivity of the sales tax (by consumption) disappears, and it becomes proportional. The poorest quintile and non-employed households experience the largest tax burden increase. By sex composition, female-dominated households are subject to the biggest percentage increase in tax burden. However, male-breadwinner households without children and dual-earner households with children in the richest quintile continue to bear the largest tax burden. Similarly, the heaviest burden continues to fall on male-dominated households without children.

The Mexico study simulates a removal of the zero-rating on food and exemptions on medicine and applies the standard VAT rate of 16 percent in three stages: in the first stage on non-basic food items such as pizzas, carnitas, T-bone steaks, shrimps, salmon, and capers; in the second stage on non-basic food and medicine; and in the third stage on non-basic food, medicine, and basic food. The result of the simulation in each stage causes the VAT to become more regressive, especially under the third scenario when the zero-rating is removed from basic food. The first quintile experiences the largest hike in its VAT burden. However, the difference in the VAT burden between female- and male-breadwinner households remains almost the same in every stage of the simulation.

Like the simulation in the study on Jamaica, the Uruguay study simulates a removal of the VAT zero-rating and a reduction in the standard VAT rate by about 9 percent (from 23 to 14.3 percent), then applies it to all products and

services. However, Uruguay's results stand in contrast to the previous three countries. The simulation shows that the tax burden for the richest quintile increases, while it falls for the lower quintiles, benefitting the middle quintiles the most. The rich experience an increase in the tax burden because of the removal of the zero-rating on education and gasoline and the rate hike on medicine and medical services. By household employment status, the tax burden increases for non-employed households, but it falls for male-breadwinner and dual-earner households and remains the same for female-breadwinner households. For non-employed households, the middle quintiles experience an increase in the tax burden due to their heavy consumption of medical services, which are currently set at a reduced rate. The Uruguay results reveal that the zero-rating and reduced rates benefit the rich significantly more than the poor. This is likely because while the poor pay a higher percentage of VAT relative to income, the rich consume more of all goods—a phenomenon that Corbacho, Fretes Cibils, and Lora (2013, 169) refer to as “inclusion errors.” It is hard for a tax to distinguish between what the poor consume and what the rich consume.

The simulation in the study on Argentina is different from the above four countries in that it attempts to reduce the regressivity of the system by cutting rates and introducing new exemptions, while at the same time maintaining revenue neutrality. It does so by cutting tax rates for food items that constituted a high proportion of the poor's consumption bundle and by introducing exemptions for a selected food basket that constitutes what is considered a minimum diet, for public transportation, and for children's clothing. It does this because of the regressivity of these taxes. To compensate for the loss in revenue, the simulation increases excise taxes on demerit goods and luxury goods such as household appliances, luxury items (cars and

boats), electronic goods, tobacco, and alcohol. The simulation causes a more progressive indirect tax system—from a regressive to a proportional system, using consumption as the welfare measure. While it reduces the tax burden

for female-dominated households, it increases the burden for other household types. Male-breadwinner households continue to have the highest tax burden.

## THE EFFECTS OF COVID-19 ON GENDER INEQUALITY AND THEIR IMPLICATIONS FOR INHERENT TAX BIASES

**T**he economic crisis resulting from the COVID-19 pandemic (pandemic crisis) has generated an effect deeply damaging in most households across countries. However, the crisis has affected men and women differently, given that men and women differ in several ways. Indeed, female employment profiles, their discontinuous employment patterns, lower income, and pre-eminence in informal jobs have strongly determined the effects of the pandemic on women.

First, women enter and exit the job market more frequently than men. This implies that their participation in the labor force is more discontinuous than men, and they are more likely to enroll in part-time and seasonal jobs while, in contrast, men tend to be employed in full-time jobs. The labor supply is higher and more stable for men than women. This situation is not, however, homogeneous for all levels of income. In general, the participation of lower-income women in the labor force is substantially lower for women than for men, implying that the gender gap is greater for lower income levels. The presence of minors in the household continues to be one of the factors that, to a certain extent, prevent women to participate more fully in the labor market. This is exacerbated in lower income households.

Second, women's income is lower than men's when considering all sources of income. The income gap is, however, lower than that in the

formal market where men are more prominent. This is also explained by the fact that women have more unstable employment, greater presence in the informal market, and a higher unemployment rate. There remains a wage gap as women have lower wages than their male colleagues for equivalent activities, *ceteris paribus*.

Third, by working in informal sectors, women are excluded from the social safety net, including health services from formal employment, resulting in lower-quality employment. Informal employment includes small-scale, family ventures, temporary contract work carried out in different homes, and domestic work for third parties.

Women are consequently overrepresented in part-time, informal, unskilled, and domestic jobs. In addition, they tend to be over-represented in health care service activities and unpaid care activities, including care of children, spending significant time at home, and facing an increased risk of domestic violence.

The above explains the income gap for paid work. This gap results from the combination of different types of discrimination such as the one just described (e.g., lower participation in the formal labor market, unstable and temporary jobs, higher unemployment, and underemployment). This adds to the fact that women work fewer hours at paid jobs as they are responsible of domestic chores and child care. In addition to having fewer job opportunities than

men, women continue to be overrepresented in jobs of lower quality and qualification, such as domestic services, while men are more concentrated in activities such as construction and manufacturing industry.

The gender gap in labor force participation between men and women puts decades of progress at risk to achieve greater parity for women in formal or entrepreneurial jobs. As the costs in terms of human lives increase due to the pandemic, the challenge for governments is increasing, especially when the effects are evaluated in terms of gender equality.

In LAC, data collected by the IDB's COVID-19 Labor Observatory indicate that more than 30 million jobs were lost during the pandemic and that, as in the United States, women have lost more jobs than men and are taking longer to recover them. Internationally, due to the pandemic, women's jobs are 1.8 times more vulnerable than men's. Although women account only for about 40 percent of total employment, they experienced about 55 percent of total job losses.

Women's participation in the labor force is proportionally higher in some of the sectors most affected by the pandemic, such as food, hospitality, and tourism. This means that women have borne a greater economic impact of the pandemic, especially those at the lower end of the income distribution, exacerbating gender inequalities.

It is interesting to see the evolution of the labor market for women and men during the most critical months of the pandemic. In Paraguay, for example, between June and August 2020, 10 percent of women had lost their jobs compared to February 2020, while only 3 percent of men lost their jobs. In Chile, the percentage of loss of male employment was 20 percent, while 25 percent of women lost their jobs. In Lima, the decline in employment was equally detrimental for men and women in the period

February-June 2020 (almost 60 percent of jobs lost for both groups), but women have regained their employment at a slower rate. In December 2020, job losses were 11 percent for men and 15 percent for women compared to February 2020.

In addition, the pandemic control measures adopted by governments, such as lockdowns, had detrimental effects on gender equality. There has been a disproportionate impact of these containment policies on women and girls, as significant numbers of women exited the labor market when the pandemic broke out, while men's participation in the workforce changed much less. Consequently, the characteristics of the jobs where women tend to work make them more susceptible to the consequences of the pandemic.

Women already had a lower participation in the labor market before the pandemic in relation to men. Thus, they are more likely to reduce their hours of work or stop working temporarily or permanently in a crisis.

Simultaneously, there is a disproportionate burden of responsibilities falling on women during this pandemic crisis. This is closely linked to the increased non-remunerated domestic and caring chores that they are more likely to perform. Due to school closings and lockdowns, household chores increased, including meal preparation, house cleaning, shopping, and caring for minor children (whose challenges vary depending on the age of the minors), people with disabilities, and the elderly, in addition to managing children's education at home. These phenomena have impacts not only on the material well-being of women but also on their physical and psychological well-being. Given the uncertainty about the future, many women consider retiring from the workforce or reducing their working hours. In general, professional women tend to have greater participation in the labor market due to their higher educational level. Among those who have the option of

teleworking, women in the region make less productive use of technology and the internet. However, they are having difficulty working without interruption, especially those with small children and without a family support network. Global closures and school closures have turned paid work into unpaid care work, where women were already performing around 76 percent of the total hours of unpaid work and care prior to quarantine. The inequities of pre-existing gender roles has led to more women leaving their paid jobs or activities because they cannot handle the extra load.

The year 2020 and the COVID-19 pandemic have revealed the importance of education and equitable training. While many countries have made significant progress in the improvement of human capital in recent years, the pandemic endangers the narrowing of the gender gap. The transition to distance learning due to school closures caused by COVID-19 represent challenges for connectivity and access to education. As girls tend to have less technical skills and less Internet access, this may prevent them from acquiring the skills and knowledge necessary for the labor market.

Gender gaps in education and training translate into fewer women than men in the workforce, and this inequality has existed for decades both globally as well as regionally. Around the world, out of every three men who work, there are only two women. However, these proportions vary significantly among regions. Out of 100 men in the workforce there are: 30 women in South Asia and the Middle East and North Africa, 76 women in East Asia and the Pacific and Europe and Central Asia, and 85 women in sub-Saharan Africa (closer to gender parity).

Moreover, evidence from previous crises points to increases in school dropouts, gender and domestic violence, teenage pregnancies, child care, food insecurity, and more poverty.

These adverse effects lead to a “loss of learning” caused by the interruption of schooling and training, the reduction of future lifetime earnings, and changes in job profiles that will leave girls and young women less prepared to be home providers on equal terms. This generates higher rates of job loss for women and access to credit for women-owned businesses.

The economic recovery that the region is experiencing is not sufficient to reverse the main features of economic inequality of gender, expressed mainly in the labor market. Because of their lower participation in the labor market, women are more economically vulnerable than men. When they are in single-parent households, they are even more vulnerable.

There are also other reasons for this outcome. First, women are overrepresented in service sectors that require high physical proximity. Second, women spend triple the time on domestic and unpaid work that men spend. Before the pandemic, in LAC countries, women spent between 22 and 42 hours per week on domestic and care activities (ECLAC, 2020). Third, women face gaps in digital skills and technology use, both critical conditions for improving the quality of employment.

The most recent report from the IDB’s COVID-19 Labor Observatory shows that total employment (formal and informal) of women declined more and recovered more slowly in Bolivia, Chile, Colombia, Mexico, Paraguay, and Peru. In the case of Bolivia and Paraguay, male employment has returned to the pre-crisis level, but female employment has not yet returned to its previous levels. However, in relation to formal employment, women lost fewer jobs than men in three countries where data are available (El Salvador, Mexico, and the Dominican Republic). Despite a recovery trend, the total job loss was around 16 million by the end of 2020. In June 2020, the region experienced the largest drop in registered employment since the start of the

pandemic, exceeding 14 percent of employment (more than 31 million people). However, during the second half of 2020, employment began to recover, closing out 2020 with a 7 percent loss compared to pre-pandemic levels.

There are also differences in consumption patterns in different types of households.

Women tend to spend a greater proportion of their income on food, education and health, and items that enhance the well-being and abilities of children. These consumption patterns significantly affect the incidence of taxes on equity in general, and on gender equity in particular.



## **POLICY RECOMMENDATIONS**

### FOR LATIN AMERICA AND THE CARIBBEAN TO MAKE THE INVISIBLE VISIBLE

**T**his technical note found evidence that, for most countries, the tax burden of both direct and indirect taxation affects women more than men. In the case of Argentina, there is an explicit gender bias that is specifically reflected in the provisions of tax legislation, in particular in the nature of asset ownership.

Regarding implicit bias, this study showed empirical evidence for Argentina, Mexico, Costa Rica, Peru, and Uruguay. There are implicit biases in tax preferences, tax credits, and tax exemptions that generate a greater impact on gender inequality.

The burden of direct taxes, when analyzed by type of employment, has fallen mainly on dual-earner households. The analysis by sex composition indicates that the tax burden is higher on households with equal numbers of women and men. There are some exceptions, however, such as for Peru and Mexico, where the burden has fallen more on women than men.

Based on the analysis of tax gaps by income quintiles, the study concludes that direct taxation is progressive. The study also found that the tax burden has a greater impact on male-breadwinner than female-breadwinner households, particularly in the highest income quintiles. Personal income taxes had a greater impact on male-breadwinner households, and in

a manner similar to the case of payroll taxes, PITs are not very progressive because their effect is greatest on the lowest income quintiles.

The study explains gender inequality by the differences in the social arrangements between men and women. It concludes that tax structures have reinforced gender inequality in Jamaica and Costa Rica. However, for the rest of the countries in the study, the tax burden has fallen more on men.

The tax burden of indirect taxes, for which consumption was used as a welfare measure, mainly affects male-dominated or dual-earner households. In contrast, when income was used as a welfare measure, indirect taxes were regressive. The study found that the burden of indirect taxes falls mainly on female-breadwinner, female-dominated, and non-employed households in the lowest income quintiles. The study also found implicit gender biases in indirect taxes for goods that meet basic needs and reduce women's workload, most notably for food, housing, and utilities, taxes that carry a sizable tax burden in some of the countries.

In addition to recommendations for each of the six country-cases presented in the subsequent investigations, the study provides the following general policy recommendations to reduce inequality and gender biases.

## Direct Taxes

**Broaden the tax base of the personal income tax** to foster more gender equality. Broadening the tax base of the PIT is likely to reduce implicit gender biases and increase the progressivity of this tax and is therefore consistent with gender equity objectives. Implicit gender biases may be present in the treatment of deductions, tax credits and exemptions for professional expenses, mortgage interest payments, real estate taxes, interest payments, and dividends due to the gender differences in ownership of physical and financial assets, employment patterns, and social arrangements. These tend to benefit higher income earners and wealthier taxpayers who are most likely to be men.

**Deepen the progressivity of direct taxes to reduce inequality.** Reducing the PIT avoidance and evasion through improving tax administration and collection, and considering reduction of payroll taxes (i.e., social security contributions) will increase the progressivity of direct taxes. These combined tax administration and policy actions will contribute to improve

equality, and benefit female workers that predominate in the lower- to middle-income quintiles—hence improving gender equality.

**Analyze exemptions and/or tax credits for children.** Exemptions or tax credits for children may produce unexpected results in terms of gender and vertical equity, depending on the composition and income distribution of the households. The exemptions are expected to reduce the disproportionate tax burden faced by female breadwinners in richer households because these households tend to have more dependent children than male-breadwinner households. However, further analysis is needed to assess how the exemptions for children may effectively affect vertical equity.

**Make tax codes more gender friendly.** An individual filing system is better for gender equity than joint filing tax schemes. Therefore, there is scope for policymakers to ensure and design tax reforms to correct the gender biases that may be generated in tax codes, simplify tax filing systems, and facilitate individual tax filings.

## Indirect Taxes

**Ensure that indirect taxes are effectively progressive.** Conducting frequent incident analysis using income and consumption as welfare measures can provide the basis for identifying and designing well-focused policies and programs for direct transfers and compensations. Therefore, ensuring that indirect taxes effectively do not affect disproportionately to low-income households, and particularly to low-income female breadwinner households and female dominated households.

**Apply a fiscal policy mix that includes indirect taxes with cash transfers.** Implementing a fiscal policy mix can lead to favorable outcomes for equity and gender equality. One such combination is to broaden the tax base of the VAT, accompanied by a personalized-VAT (P-VAT) and/or expenditure policies that target the vulnerable population to reduce gender inequality. Broadening the tax base can be done by reducing exemptions and applying a uniform tax rate to simplify and increase tax collection. P- VAT credits and/

or transfers should be targeted to female-breadwinner households with children in the lower income quintiles.

Despite the obstacles to improve gender equality, it is essential to recognize the importance of fiscal policies in LAC. There is no unique approach, and the path to change will likely be context-specific and highly dependent

on the balance struck between differing political and economic factors and interests. However, should LAC countries take on this challenge, not only could more revenue be generated in the future, but the changes should contribute to sustained and inclusive growth, with greater gender equality.

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