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Gender Bias in Tax Systems

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Abstract

This paper examines the nature of gender bias in tax systems. Gender bias takes both explicit and implicit forms. Explicit gender bias is found in many personal income tax systems. Several countries, especially those in Western Europe, have undertaken to eliminate explicit gender bias in recent years. It is more difficult to identify implicit gender bias, since this depends in large part on value judgments as to desirable social and economic behavior. Implicit gender bias has also been a target for reform of tax systems in recent years.

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Summary

Tax systems reflect decisions that are influenced by social attitudes. This paper examines the gender bias that many tax systems exhibit as a result of these attitudes. Although gender bias may be present in any area of taxation, it is most commonly found in the personal income tax because the tax liability is established with respect to the income of an individual or household.

Gender bias in both its explicit and implicit form has been a target for reform in countries seeking to achieve a more gender-free system of taxation. Explicit gender bias, which depends largely on the language used in the tax code or tax regulations, is relatively easy to identify. Implicit gender bias is much more difficult to identify, as this depends in large part on value judgments about desirable social and economic behavior. Explicit gender discrimination in the personal income tax may be present in the rules governing the allocation of shared income (such as nonlabor income and income from a family business), the allocation of exemptions, deductions, and other tax preferences, and the setting of tax rates and legal responsibilities for paying the tax. Implicit gender bias often results from increasing marginal tax rates, which may discourage secondary workers in a household from working. Explicit gender bias is not typically found in taxes other than the personal income tax, but commodity taxes, trade taxes, and corporate income taxes may lead to implicit gender bias through changes in household consumption, household income, or patterns of industrial development.

The paper notes that Western European countries made a special effort to rid their tax codes of gender bias in recent years. Some developing countries are also moving in this direction, although explicit bias remains pervasive.

I. Introduction

In most countries, tax systems reflect a tapestry of decisions made over many years. These decisions have been influenced by a variety of factors, including social attitudes. As a result, many tax systems exhibit gender bias. In recent years, changing attitudes have induced many countries to reform their tax systems to reduce this bias. In the 1980s, for example, several Western European countries reformed their personal income tax systems to eliminate provisions of the law that explicitly discriminated against women. More generally, in industrialized countries, the personal income tax system based on joint filing has given rise to a longstanding discussion over how the income tax treats the incomes of secondary earners (generally assumed to be women) and the incentives the income tax has on their work, child bearing, and other behavior (Munnell, 1980; O'Neill, 1983; Briggs, 1985; Nelson, 1991; Feenberg and Rosen, 1995).

This paper attempts to broaden the examination of gender bias in tax systems beyond its usual confines. The focus has been primarily on the personal income tax, though gender bias may be present in other areas of taxation. The focus has also been largely on industrialized countries, though some of the most explicit gender bias today exists in the personal income taxes of some developing countries.

Tax systems encompass a wide variety of taxes including those on personal and corporate income, payroll, goods and services, foreign trade, wealth, and gifts and inheritances. The nature of gender bias is likely to differ from one tax to another. Gender bias is most likely to be present where the tax liability is established with respect to the income or wealth of an individual rather than with respect to the income of a legal entity or the sale and purchase of goods and services. Gender bias may also be present in the linkage between payments of tax and the receipt of benefits for social insurance programs.

Gender bias may take both explicit and implicit forms. Explicit forms are specific provisions of the law or regulations that identify and treat men and women differently. Implicit forms are provisions of the law and regulations that, because of typical social arrangements and economic behavior, tend to have different implications for men than for women. Although explicit discrimination is certainly intentional, implicit discrimination may be both inadvertent and intentional. Both explicit and implicit forms of discrimination have been targets for reform in countries seeking to achieve a more gender-free system of taxation, though the emphasis has varied depending on the country. It is relatively easy to identify explicit gender bias, since this depends largely on the language used in the tax code or tax regulations. It is much more difficult to identify implicit gender bias, since this depends in large part on value judgments as to desirable social and economic behavior. This is likely to vary quite considerably from one society to another and from one time period to another.

II. Personal Income Taxes

The personal income tax has been the principal focus of efforts to assess the importance of gender bias in tax systems. Explicit gender discrimination is more typically found in the personal income tax than other taxes because it applies to individuals or to other family units, such as married couples or the entire family, and therefore it more easily accommodates differential treatment of individuals according to gender. Explicit gender discrimination in the tax code may take several different forms. It is found, inter alia, in the rules governing the allocation of shared income (such as nonlabor income and income from a family business), the allocation of exemptions, deductions, and other tax preferences, as well as in the setting of tax rates, the responsibility for filing the tax return, and the responsibility for paying the tax (see Table 1). Implicit gender discrimination may often be most easily discerned with respect to the personal income tax since the tax directly affects labor supply and other behavior (see Table 1).

Table 1. Forms of Gender Bias Under Global Income Taxes

		<u>Explicit</u>	
	Joint Filing		Individual Filing
*	Allocation of tax preferences related to spouse	*	Allocation of nonlabor or business income
*	Responsibility for complying with the tax law	*	Allocation of tax preferences
		*	Rate structure
		<u>Implicit</u>	
	Joint Filing		Individual Filing
*	Progressive marginal tax rates and secondary earners	*	Allocation of nonlabor or business income
		*	Allocation of tax preferences

1. Schedular versus global income taxes

Gender discrimination may be embedded in any type of personal income tax. The type of discrimination tends, however, to differ depending on the

structure of the tax. Personal income taxes may be subdivided into two main types: schedular and global. Under a schedular income tax, the income tax liability is determined with respect to each source of income. Schedular income taxes paid by a taxpayer on different sources of income may, however, interact with each other in that the taxpayer may be able to deduct tax paid under one schedular tax from the tax liability paid under a schedular tax on another source of income and in other ways. Under a global income tax, income is aggregated and typically one schedule of tax rates applies to it. Global income taxes generally have schedular elements applying to income from certain sources, such as capital gains. Schedular income taxes are typically found in developing countries, particularly where the tax administration capacities are not well developed. Global income taxes are typically found in industrialized countries and increasingly in developing countries.

Explicit gender discrimination in a pure schedular income tax is not very common because the tax liability is established with respect to a particular source of income rather than a particular taxpayer. For instance, under a pure schedular tax, income from wages might be withheld from workers according to a rate schedule, income from interest income according to another rate schedule, and so on. It would typically be irrelevant whether this income was earned by a man or a woman, though this distinction, along with others, such as marital status, could be made. Many schedular income taxes do, however, contain elements that relate to personal characteristics of the taxpayer, such as deductions, credits, and so on. In this respect, these taxes might contain explicit gender bias in that the deductions could be linked to the gender of the taxpayer.

Global income taxes have, however, typically been the source of gender bias and hence the focus of efforts to eliminate such bias, particularly in industrialized nations. Global income taxes may be subdivided into two main types based on how taxpayers file their return: individual filing and joint filing. Many countries apply a personal income tax in which the individual is the filing unit, so that all individuals are responsible for filing a tax return should they have taxable income. Under an individual filing system, married individuals file a separate return based on their own labor earnings, and nonlabor earnings and exemptions or deductions for children and other purposes are allocated in some way determined by the law. Many industrialized countries and the majority of developing countries require individual filing for at least some sources of income. Schedular income taxes by their very nature require individual filing and many developing countries have preserved this method even upon adopting a global income tax. In contrast, most industrialized countries had joint filing at one time. Many have moved away from joint filing to individual filing, in part, as a means to reduce gender discrimination (e.g., the United Kingdom and several others in Europe). A few have moved from individual (or mixed) filing to joint filing (e.g., Portugal). Some countries require or give the option to married couples to file a joint tax return (e.g., Germany, the United States) and some require families to file a tax return as a unit (e.g., France).

2. Gender bias under a system of individual filing

In countries with a personal income tax in which the individual is the filing unit, gender bias may take several forms, including the allocation of nonlabor or business income, the allocation of tax preferences, and tax rates.

a. Gender bias in the allocation of nonlabor income

The allocation of nonlabor income is a common way in which explicit gender discrimination occurs. Typically, under a system of individual filing, for married couples, wage income is attributed to the worker, while nonlabor income poses a more complex problem since it must be allocated to one or the other spouse. There are several ways in which tax codes allocate this income that is gender neutral, such as attributing all of the income to the higher earner, allocating the income equally between the spouses, allowing couples to allocate the income in whatever way they choose, or allocating the income to the spouse who possesses legal ownership of the property, if it is not jointly held.

There are many tax codes that contain explicit gender bias in that they allocate all nonlabor income to the husband regardless of the circumstances. Many of these countries have derived their tax system from the English common law tradition in which all income earned by a married couple was assumed to be the property of the husband. This contrasts with the civil law tradition, more prevalent in Latin countries, in which income earned by a married couple during the course of their marriage was considered "community property" (i.e., the property of both spouses).

A clear example of this bias was found in the British tax system until its reform in 1990, which converted the tax code from a system of joint filing (with an option to filing separately if the wife earned labor income) to a system of mandatory individual filing. Prior to 1990, if the couple filed separately, all property income was attributed to the husband. This practice is still maintained today in many countries in all parts of the world, including Latin America, Asia, and Africa. In these countries, couples must file jointly, but in many cases, if the wife works, she may pay tax on her labor income separately while all nonlabor income is attributed to the husband. This concept of marital property has implications not only for tax systems, but also for other aspects of society as well that may integrally affect the well-being of women (and often their children). For instance, in the situation where a marriage ends in divorce or dissolves, this concept of marital property often leaves the women (and dependent children) at a distinct disadvantage in claiming a share of family property.

b. Gender bias in the allocation of family business income

As with nonlabor income, family business income is also in many countries attributed to the husband regardless of the role of the spouses in the business (e.g., Tanzania). In some countries, limitations are placed on

the allocation of income from a family business to an assisting spouse because, when the spouses are taxed separately, shifting the income to the spouse who pays tax at a lower marginal tax rate is one form of tax avoidance. Nevertheless, there are administrative solutions to this problem that do not require attributing all of the income of the business to the husband.

c. Gender bias in the allocation of tax preferences

The allocation of deductions, exemptions, and other tax preferences is another way in which explicit gender discrimination occurs in a system of individual filing. Typically, countries give exemptions or deductions for various purposes, including dependent children, a nonworking spouse, and so on. Under a system of individual filing, these exemptions and deductions must be allocated across spouses in some manner determined by the law. In some countries, the nature of the exemptions and deductions that taxpayers may claim varies by the gender of the taxpayer. This type of explicit discrimination was found in some European taxes based on individual filing, though, in recent years, most European tax systems have removed these distinctions. For example, in the Netherlands, until 1984, a married man was entitled to a larger tax-free allowance than a married woman. In some developing countries, bias in the allocation of deductions is still found. One form of discrimination is that a deduction is only available to a husband. For example, in Jordan, when a husband and wife file separately, certain deductions are available only to the husband and not to the wife; though these deductions and exemptions may be accorded in part or wholly to the wife under the husband's request or if she is the sole supporter of the family. Similarly, in Zimbabwe, a married man who is a sole earner is entitled to a special credit but a married woman is not eligible.

d. Gender bias in the rate structure

Another form of explicit gender discrimination is the practice of levying different rates on men and women, with a higher rate applied to married women (e.g., South Africa until 1995).

3. Gender bias under a system of joint filing

In countries with a personal income tax in which married couples are required (or are most likely) to file as a unit, explicit gender discrimination may also be found. Since the taxpaying unit is the couple, explicit discrimination is less frequently found than under a system of individual filing.

a. Gender bias in the allocation of tax preferences

One form of explicit discrimination is where certain tax preferences are available only to the husband. For instance, the income tax code could provide an allowance for a married man if he supports the household but not for a married woman.

b. Gender bias in the responsibility for complying with the law

Another form of explicit discrimination is that in some countries, filing on a joint basis must be submitted in the name of the husband so that a wife has no separate existence as a taxpayer. For example, the British income tax, until 1990, provided for the husband alone to file the joint tax return, as did the French, until 1983. Switzerland continues this practice today.

4. Gender bias against secondary workers

A system of joint filing with a progressive marginal rate schedule may discourage secondary workers because tax on the secondary income starts at the highest marginal tax rate of the primary income unlike under a system of individual filing, where the tax on the secondary income is unrelated to the marginal tax rate of the primary income. This so-called "marriage tax" under a system of joint filing has been typically viewed as applying to women. Other features of the tax code, such as deductions or credits for child care expenses, also interact with the progressivity of the marginal tax rate schedule to determine the ultimate tax liability and hence would also play a role in determining the nature of economic adjustments to the tax.

Discrimination against secondary workers is implicit, since it would apply equally to a husband, if he were the secondary earner. In some countries, today, a considerable number of wives earn more than their husbands (though undoubtedly this does not resolve the issue of who is the primary or secondary earner).

This type of implicit discrimination is also present in an income tax based on individual filing though not as a result of increasing marginal tax rates on labor income, since each individual is taxed on their own labor income. It may, however, be relevant with respect to nonlabor income or income from a business proprietorship or partnership and the allocation of exemptions and deductions.

Academic studies of income taxation have long taken differences in gender into account by explicitly considering the differences in the labor supply behavior of men and women and the implications of these differences for public policy. These studies have accumulated some evidence that the labor supply elasticity of married women, often assumed to be the secondary earner, is greater than the labor supply response of married men (Triest, 1990). The normative implication of this analysis is that to minimize the deadweight loss of the income tax, all else equal, married women should be taxed at a lower rate than other workers.

5. Reform around the globe

Table 2 presents some examples of reform of explicit gender bias in recent years. Some tax systems have moved to complete gender neutrality while others have only moved toward that goal.

Table 2. Examples of Reform of Gender Bias

-
- * France, 1983: moved from requiring only the husband to sign the family return to requiring both spouses to sign.
 - * Ireland, 1993: moved from joint filing in the name of the husband with an option for separate assessment on labor income for the wife to an option for wife to be "primary taxpayer."
 - * Malaysia, 1991: moved from a tax system in which the income of a married woman was attributed to her husband unless she elected for separate assessment to a system in which husbands and wives are treated as separate taxable units with an option for joint treatment.
 - * The Netherlands, 1984: moved from granting higher tax-free allowance to a married man than to a married woman to an equal-sized basic tax allowance.
 - * South Africa, 1995: moved from applying a higher rate schedule to single persons and married women than to married men to a unified schedule.
 - * The United Kingdom, 1990: moved from joint filing in the name of the husband with an option for separate assessment on labor income for the wife to individual filing.
-

a. Reform in continental Europe

In Europe, the issue of gender neutrality in tax systems rose to prominence in the 1980s. A 1984 report (European Communities, 1985a) examined whether European Community tax systems were neutral with respect to women's labor force participation. The main concern was that secondary earners faced a high marginal tax rate under a system of joint filing, which would create a disincentive for women to work. It concluded that there were several principal areas in which the existing European tax systems had an adverse effect upon married women's tax burdens, including the general system of aggregate (joint) taxation; the manner of granting allowances or tax reductions a priori to the husband; the lack of an allowance or deduction for the costs incurred in child-care and domestic help when a married couple both work outside the home; the inability of women to declare their own income for tax; the responsibility for the nonpayment of tax by

the other spouse; and limitations on the amount of income that can be paid to an "assisting wife" by a husband, by imposing either income limits or ceilings for tax exemptions. The report recommended a system of totally independent taxation as the preferable means of achieving equal treatment and, at the very least, allowing separate assessment as an option.

A Committee on Women's Rights of the European Parliament (European Communities, 1985b), reporting on the earlier study, concluded that European income tax systems should evolve to accomplish certain objectives including a mandatory system of independent taxation for husband and wife.

To some, the idea that gender neutrality in personal income taxation requires independent taxation of husband and wife might seem excessively radical. Certainly explicit discrimination can be eliminated without independent taxation of spouses. But whether the elimination of implicit discrimination requires independent taxation is debatable.

In contrast to the conclusions of the Committee, many commentators hold the view that the family is the preferable unit of taxation to the individual because of the nature of joint consumption within the household. They do not see any inherent conflict between gender equality and joint taxation. Pechman and Englehardt (1990) examine the treatment of the family under the income tax laws of industrialized countries and find that there are wide variations as well as areas of similarity. Presumably these differences reflect value judgments of the different societies in the way they view the family or they may simply reflect historical inertia.

In recent years, several European countries have reformed their tax systems to eliminate explicit gender discrimination. For instance, in France, only the husband was required to sign the tax return while the wife only signed if she earned income. This was changed in 1983 so that both were required to sign the return. In the Netherlands, the tax-free allowance of a married man was much higher than that of a married woman. This was changed in 1984 to an equal-sized basic tax allowance with supplemental allowances for singles, one-earner couples, and so on.

b. Reform in the United Kingdom and Ireland

The United Kingdom undertook a fundamental tax reform in 1990. Prior to 1990, the husband had the legal responsibility to submit the return. If the wife earned income and the couple opted for separate taxation, all nonlabor income was attributed to the husband. In 1990, the reform converted the income tax to full individual taxation.

The history of the British income tax offers an interesting perspective on the evolution of attitudes toward women. The income tax in the United Kingdom was first introduced in 1799 (Briggs, 1985). The attribution of a couple's income to the husband reflected the legal status of married women and property laws of the time. In 1894, 12 years after the enactment of the Married Women's Property Act in 1882, which allowed women to retain

management and control of their separate property and earnings, a tax provision was introduced that allowed a wife's earnings to qualify for the same tax reliefs as those of a single person, where the couple's combined income was less than £500. In 1918, a married man's allowance was introduced and increased in 1982 to 1.6 times a single person's allowance. As recently as the mid-1970s, the Inland Revenue corresponded only with husbands, refused to reply directly to married women who sent in letters, and mailed any repayment due on overwithheld taxes from married women's paychecks to their husbands (Briggs, 1985, p. 244). These practices led to criticism. The 1978 Finance Act gave married women the right to receive their own withholding repayments and the Inland Revenue began to reply directly to married women who had written to them.

These reforms were not, however, sufficient to silence the critics. Several noted committees and academics began to recommend radical reforms in the system of personal income taxation. Writing at that time, Kay and King (1980, p. 206) note, "The British system rests on the dependency principle. The wife's income is simply treated as if it were the husband's, and in recognition of the burden which she imposes on him he receives a specially enhanced personal allowance. Social pressures have led to two important modifications. A wife is entitled to a single personal allowance against her own earned income. A couple can opt for separate taxation of their earnings (but because they lose the married man's additional allowance it is rarely advantageous to do so)."

In 1988, the Government legislated, effective in 1990, that all taxpayers would file returns on an individual basis on both earnings and investment income. The "married man's" allowance for couples continued until 1993, when it was converted into a transferable allowance between the spouses.

Ireland has a personal income tax derived from the same tradition, and though it has evolved in the same direction as the British system in recent years, it has not yet achieved gender neutrality. When husband and wife are jointly assessed, the wife's income continues to be treated as the husband's. However, today, a wife "will be treated as the primary taxpayer if her total income exceeds that of her husband and the couple were either married after April 6, 1993 or have elected for this treatment." A husband who is jointly assessed continues to be entitled to the married man's allowance (International Bureau of Fiscal Documentation, 1995a, p. 33).

c. Reform in the United States

In contrast to the British income tax, the United States income tax has never contained any explicit gender discrimination (except at one time it contained a small difference in child care allowances). Nevertheless, over the years, the issue of the appropriate treatment of family income has frequently been the focus of debate and the tax code has changed over time in how it treats the couple vis-à-vis the individual.

In 1913, the United States enacted the personal income tax. Originally, the tax was based on individual filing, with a larger exemption for a married person than a single person. A problem arose in the application of the tax in that states differed in their treatment of marital property. In those states following the English common law tradition, a married man with a nonworking wife would file one return claiming the household's full income, while in those following the civil law tradition, the income was treated as "community property," in which each spouse had a legally defined interest. In community property states, the Supreme Court ruled that couples could split their joint income evenly and file two separate federal returns and pay tax at the lower rates. Some common law states began enacting community property laws to gain the same advantages for their residents.

After long legislative debate, in 1948, the Congress converted the tax system to a family basis, creating a new schedule for married couples filing jointly, with brackets that were twice the width of those for singles. This created a significant tax benefit for married couples with only one earner. In 1952, the Congress introduced another schedule for single heads of households with dependents, which was intermediate the schedule for filing jointly and single filing. In 1969, when single taxpayers were given a somewhat more favorable tax schedule compared to married couples, a fourth schedule was introduced for married couples filing separately, which was disadvantageous for couples in almost all cases. Since then, there have continued to be modifications in the relative burdens of the different schedules, with the introduction and eventual repeal of a two-earner deduction (Nelson, 1991).

Today, the United States tax code provides a clear advantage to a one-earner couple compared to a two-earner couple, and in some cases is advantageous to married couples compared to single taxpayers and in other cases is disadvantageous to them, depending on the split in the earnings of the spouses.

d. Reform in developing countries

Gender discrimination is evident in the tax systems of many developing countries. The most common form, found widely throughout the world, is to attribute the income of a married woman to her husband and to levy the tax in the husband's name for any nonschedular income taxes, though many allow separate assessment of a wife's employment income.

Reform has also been taking place in some developing countries. Until 1995, the South African tax system used different rate schedules for married persons, and for single persons and married women, with a higher rate applied to the category of single persons and married women. In 1995, these rates were unified.

In 1991, Malaysia moved from a tax system in which the income of a married woman was attributed to her husband unless she elected for separate

assessment to a system in which husbands and wives are treated as separate taxable units, though the wife's income is still reported on the husband's tax return and joint assessment is still allowed.

6. Social norms in developing countries

Some developing countries have explicit provisions in the income tax code that distinguish men from women so as to accommodate typical social arrangements or to encourage certain social behavior. To some, these provisions are not discriminatory but simply reflect prevailing societal norms, while to others, these practices help legitimize a role for women in society that is demeaning to them.

For instance, some developing countries have a tax unit based on the extended family since this is a typical social relationship. The "Hindu undivided family" consists of all male Hindus descended in the male line from a common ancestor, their wives, and unmarried daughters. The eldest male member generally controls the family. In India and other countries in Asia with a significant Hindu population, the Hindu undivided family may be the tax subject.

Several developing countries, particularly those influenced by the Muslim religion, have provisions in their tax code for multiple wives (although none have provisions for multiple husbands). For example, Niger employs an income tax system which provides a more generous tax treatment for the first wife than for succeeding wives.

Singapore has one of the most exotic income tax systems. It is unique in the nature of explicit gender differentiation it builds into the income tax in the form of child relief. A basic child relief is available. A married woman is permitted to elect separate assessment on all of her income. A married woman is entitled to additional allowances "if she has elected to be charged to tax in her own name and has passed at least three subjects in one sitting at the examinations for the General Certificate of Education or has obtained an equivalent or higher educational qualification." This allowance is also available to widows, divorcees, and married women living separately from their husbands. The allowances depend on the number of children and are a percentage of the mother's earned income. A rebate is given for the birth of a second or a subsequent child with the amount diminishing as the age of the mother increases for the second child (International Bureau of Fiscal Documentation, 1995b, pp. 73-75).

Pakistan appears to be unique among countries in explicitly discriminating in favor of women by allowing a basic exemption that is higher for a working woman than a man.

7. Legitimate grounds for gender bias

Are there legitimate grounds for discriminating between men and women in the tax code? It might be argued that the differences in average life expectancy between men and women provide a justification for distinguishing men and women in the tax code for some purposes. For instance, in the U.S. tax code, a deduction is allowed for charitable contributions that take the form of a contribution of property upon the death of the taxpayer though the taxpayer retains the use of that property and its income until the taxpayer's death. At the time of the contribution, the taxpayer is allowed to take a deduction for the present discounted value of that contribution, based upon the taxpayer's remaining life expectancy. For instance, a woman donating property at the age of 60 might have a life expectancy of 25 years while a man might have a life expectancy of 20 years, thus she would discount the donation over a 25-year horizon and he would over a 20-year horizon. Similar issues arise in relation to pension and annuity income. Typically, when this form of savings is given a tax deferral, taxpayers are required to draw upon pension and annuity income at a certain age to ensure that the government recoups some of the tax on this income. Men could be required to receive a larger proportion of the total value each year, starting with the age of receipt since their life expectancy is shorter. Differences in average life expectancy between men and women might also provide an argument in favor of applying different social security tax rates to men and women, providing different benefits for similar contribution histories, or linking tax payments to benefits with a different formula.

III. Commodity Taxes

Taxes on consumption are in quantitative terms a key part of the tax systems of most countries. In many industrialized nations and developing countries, these taxes have grown in importance in recent years (Tanzi, 1987; Stotsky, 1995). The extent to which they shift consumption (and labor supply) patterns could have potentially large gender implications.

Taxes on goods and services, such as the value-added tax (VAT), retail sales tax, and excise tax, tend not to show explicit gender bias in that the tax liability is established with respect to the purchase or production of a commodity. While it might be possible to introduce such bias by establishing a tax based on the purchase of a commodity only when a woman (or man) buys it, such discrimination does not appear to exist in practice. The same is true of taxes on foreign trade, such as customs duties. There does not appear to be any explicit gender bias in the application of foreign trade taxes. In practice, however, these taxes are not gender neutral and may possess certain implicit biases. This implicit bias has hardly been acknowledged. Although it is one of the oldest issues in public finance, the study of optimal commodity taxation has, for instance, ignored gender issues (Auerbach, 1985).

Palmer (1995) notes that it is possible to advance "gender equity" by adopting a VAT (or any other tax, for that matter) in place of fees on services that tend to benefit females most, such as primary education and health care; in essence this broadens the incidence of the cost of these services to the general taxpaying public away from the direct beneficiaries.

1. Broad-based commodity taxes

There are many ways in which implicit bias could manifest itself in a VAT or other broad-based consumption tax. One way is through the choice of coverage of the tax. Such taxes, though they are intended to tax a comprehensive definition of consumption, typically provide exemptions or reduced taxation on some forms of consumption. For instance, under a typical VAT, certain goods may be exempted and others zero-rated or taxed at a reduced rate. Similarly, under a retail sales tax, some goods may be exempted or taxed at a reduced rate. Tax preferences may also apply to certain purchasers or producers, such as nonprofit institutions or the government. The issue is whether this preferential treatment induces any implicit biases in these taxes.

2. Implicit bias through differential consumption

It is typically assumed that the incidence of a VAT or other broad-based consumption tax falls on the final consumer. As a consequence, any preferential treatment of a particular product or producer is shifted to the final consumer. It is thus appropriate to focus attention in determining the nature of implicit bias on how preferential treatment affects consumers (this would not be true for taxes where the incidence falls at least in part on the producer, such as the corporate income tax). Typically, preferential treatment is applied to those goods and services which are considered necessities, such as food and medical care, and to those goods and services that for administrative reasons are difficult to tax, such as many financial services.

Implicit biases may result from differential consumption patterns by men and women of these goods, though the exact nature of these implicit biases is difficult to establish. The issue is, in fact, more complicated since such goods are usually purchased within the context of a household that contains both men and women. The implicit bias results from the assumption that although men and women may share the same household, they derive utility from consumption separately. This is, of course, inconsistent with the established view of household decision making, which assumes that the household can be treated as a single utility maximizing agent. This concept for household utility maximization would suggest that there is no implicit bias since the benefits of consumption of the members of the household cannot be separated in the utility function and the breakdown between the different members is irrelevant. While perhaps necessary as a tool for simplifying theoretical and empirical work, this notion is clearly unrealistic as a description of household behavior.

While consumption of the different members of the household generally has some joint aspects, it also generally has some separable aspects. Household decision making behavior, which explicitly incorporates considerations of the composition and size of the household, has been studied in both theoretical and empirical contexts. In a theoretical context, recent research has posited models of bargaining within the household to arrive at optimal demand for commodities and labor supply (Chiappori, 1988). In an empirical context, various studies have estimated the effect that composition of the household has on spending and labor supply decisions (Deaton and Muellbauer, 1980; Blundell and Walker, 1982; Browning and others, 1994; Bourguignon and others, 1993; Manser, 1993; Thomas, 1993; Subramanian, 1996). These empirical studies are not uniform in their conclusions; nevertheless, they firmly establish that household composition does affect household spending and labor supply decisions and their responsiveness to income and price changes--in essence, elasticities depend on gender. These studies have not drawn any normative or positive implications for commodity taxation, though they have for labor income taxation.

Consider, for instance, if women's consumption of food and medical care were disproportionate to men's consumption. This would imply that a tax favoring these goods would contain an implicit bias against men. However, within the context of a household budget, this preferential taxation might induce a reallocation of resources within the household with different gender implications. Say that the purchase of household necessities is considered the domain of women and a certain share of household income is allocated for this purchase, then reduced taxation of such necessities could lead to an increase in the share of household income over which women have control. The shares, however, need not remain constant, in the face of a change in the tax regime. It could be that any gains from preferential taxation of a necessity result in an increase in the share of income devoted to nonnecessities. It would, therefore, be necessary to have an understanding of the nature of household decision making and how a change in the tax regime would induce a shift in consumption of the members of the household.

3. Implicit bias through differential application to taxpayers

Preferential treatment of particular consumers or producers under a VAT or other broad-based consumption tax also typically might imply gender nonneutralities, but as with preferential treatment of specific goods and services, these nonneutralities would be difficult to establish. For instance, if nonprofit institutions typically provide services that benefit the poor disproportionately and the poor disproportionately consist of female-headed households, then implicitly, preferential treatment of nonprofits would provide a bias toward women and children.

4. Selective commodity taxes

Excises or selective sales taxes typically apply to such goods as alcohol, tobacco, and petroleum products, and certain luxury goods, such as jewelry and automobiles. As with broad-based consumption, these taxes generally contain no explicit gender bias. Excises tend to have a more obvious implicit bias than broad-based consumption taxes. For instance, excise taxes are typically levied at a high rate on alcohol and tobacco, which are disproportionately consumed by men. Therefore, as with broad-based commodity taxes, excises might be viewed as having an implicit bias against men. Nevertheless, in the context of a household budget, these taxes would cause a change in the consumption of other goods as well, which could tend to reduce the gender bias against men. Suppose, for example, that the uncompensated price elasticity of alcohol consumption by men was zero. A tax imposed on alcohol would reduce the real income available to the household while not reducing alcohol consumption. If this alcohol were consumed primarily by men in the household, this tax would lead to a reduction in men's consumption of other commodities and in women's consumption of commodities. An understanding of the nature of household decision making is again vital to understanding the ultimate effects of these taxes.

IV. Trade Taxes

Taxes on foreign trade have elements of both the broad-based consumption and excise taxes in that they typically apply to a broader range of commodities than excises but typically apply many different rates to commodities and tax most heavily the same goods that are often taxed most heavily under the excise taxes. In this respect, they might also tend to have a gender bias against men, though the implicit bias would be harder to establish because they vary a lot more from one country to another and often have very complicated provisions with respect to rebates and preferential treatment of certain goods.

In many countries, import duties are a critical component of the tax system and clearly influence the pattern of economic development. One little studied issue is whether typical patterns of import duties tend to favor industries that primarily employ men or women. Import duties in industrialized countries that discriminate against imported manufactures of low-technology goods may tend to be biased against women because they often comprise a large share of factory workers in low-income countries. Import duties in developing countries might shift development in ways that favor or disfavor women.

V. Corporate Income Taxes

Corporate income taxes apply to legal entities and therefore they tend not to contain explicit gender bias. One would be hard-pressed to find a corporate income tax code that explicitly imposes differential taxation on a firm incorporated by women as opposed to men. It might, however, be possible to establish patterns of implicit bias, depending on the perceived incidence and behavioral effects of corporate income taxation. The incidence of the corporate income tax is, of course, a well-studied issue and the conclusions of this study remain ambiguous with respect to the overall incidence and behavioral effects of corporate income taxation, though the evidence suggests that these taxes are borne in part by the owners of capital and by consumers (Kotlikoff and Summers, 1987). There has been no attempt to tie these effects explicitly to gender. Preferential treatment of certain industries clearly affects industrial development and, as with trade duties, is likely to have a differential incidence on men and women.

VI. Conclusion

It is only recently that the field of public finance has fully acknowledged the importance of gender bias in public policies. Gender bias in tax systems is therefore a fruitful area of inquiry. Many nations have strived to eliminate both explicit and implicit gender bias in tax systems while others have made little progress. Variation in cultural norms will undoubtedly continue to lead to differences in views as to what constitutes discrimination and the need for change.

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