# TAXING THE "FAMILY" IN THE INDIVIDUAL INCOME TAX

James Alm and Mikhail I. Melnik Department of Economics Andrew Young School of Policy Studies Georgia State University

## Abstract

In this paper we examine international practices in the ways in which the individual income tax is applied to families, focusing upon country practices in OECD countries. We find that countries differ significantly in their taxation of the family, but that the dominant practice is the choice of the individual rather than the family as the unit of taxation. We also calculate the income tax consequences for "representative" taxpayers across these countries, and find that the differences in taxes between singles and married couples can often be quite large. We conclude that choosing the individual as the tax unit is likely to represent the most equitable approach to income taxation, especially given the increasing complexity of family units in modern societies.

# Introduction

Nearly all countries around the world attempt to impose an individual income tax. However, in administering such a tax, each country must decide exactly what constitutes an "individual"; that is, each country must choose the "unit of taxation" in the individual income tax. Traditionally, this choice has been seen as one between the family and the individual. In the former case, the incomes of all members of a family are aggregated, and the income tax (with all of its relevant provisions) is then imposed on total family income. In the latter case, each individual is taxed only on his or her own individual income, even if he or she is a member of a family unit in which other members have taxable income.

The choice between the family and individual as the unit of taxation is not clear-cut, and involves difficult tradeoffs between competing and worthwhile goals. These goals include the desire to treat families with equal incomes equally, to treat families and individuals equally, to ensure that taxes do not change with marriage (or divorce), and to impose taxes at progressive rates. With the dramatic increase in recent years of different family "types" — cohabiting but not legally married couples, extended families, same-sex couples, unrelated individuals living together — these issues have become even more complicated.

This paper examines the choices that different countries have made in choosing the unit of taxation, or what is often referred to as "taxing the family". We focus in particular on practices in Organisation for Economic Co-operation and Development (OECD) countries. present detailed information on the income tax systems in these countries, and we use this information to calculate the impact of taxes on different "representative" types of family units across OECD countries under income tax laws in 2002, in order to see whether we can learn from the comparative practice of taxing the family in the individual income tax. We find that countries differ significantly in their taxation of the family, but that the dominant practice is the choice of the individual rather than the family as the unit of taxation. We also find that the differences in taxes between singles and married couples can often be quite large. conclude that choosing the individual as the tax unit is likely to represent the most equitable approach to income taxation, especially given the increasing complexity of family units in modern societies.

In the next section we discuss some general issues in choosing the unit of taxation. We then focus on United States practices as a case study and the ways in which the U.S. has made different decisions over time in its taxation of the family. In the following section we examine the different treatments in OECD countries. The final section contains some concluding remarks.

# Some Principles and Goals in Taxing the Family

Countries have a variety of goals in choosing the structure of the individual income tax.

A basic goal of most all taxes is to achieve "equity" in taxation. Of course, defining equity is quite difficult.¹ One popular notion of equity is based upon the "ability-to-pay" principle of taxation, which states that taxpayers should pay taxes according to their ability to pay. This principle is often operationalized by introducing two additional criteria: "horizontal equity", which relates to the income tax treatment of taxpayers with equal incomes, and "vertical equity", which refers to the treatment of taxpayers with different levels of income. Consider the implications of both horizontal and vertical equity for the taxation of the family.

Horizontal equity requires that taxpayers who are equal in all relevant respects pay equal amounts of taxes. This notion may appear simple, but it is in fact deceptively simple. The difficulty lies in defining "equals". Equals can be thought of as married couples with equal family income (and identical characteristics), in which case horizontal equity requires that such families pay equal amounts of income taxes. However, suppose we define equals as any kind of household with equal income. Now things become much more complicated. A "household" can consist of a married couple, but it can also consist of a single individual, an unmarried cohabiting couple, a same-sex couple, an extended family, or even a group of unrelated individuals living together. Achieving horizontal equity requires that all of these households pay equal taxes if their incomes are equal.

If a married couple is seen as the relevant household type for defining equals, then achieving the goal of *Horizontal Equity Across Households* requires that married couples with equal incomes pay equal taxes. However, if a household is defined more broadly, then achieving this goal requires that any households with equal income pay the same amount of taxes. In particular, it requires what Berliant and Rothstein (2003) refer to as the additional and separate goal of *Equal Payments by Singles and Couples*. Of course, this goal can be broadened to apply to all household types.

As for the criteria of vertical equity, this requires that taxpayers with greater ability pay greater amounts of taxes, and so relates to the rate structure of the income tax. Even so, we cannot unambiguously determine whether vertical equity implies that there should be a progressive, a proportional, or a regressive rate structure; that is, we cannot say whether marginal (or average) tax rates should rise more than proportionately, proportionately, or less than proportionately to income (Musgrave, 1959). However, it is generally felt that a

progressive rate structure is best able to achieve vertical equity.<sup>2</sup> We refer to this as the *Progressivity* goal of taxation.

Still another goal in the individual income tax is *Marriage Neutrality*. This goal requires that a couple's combined tax liability remain unchanged with marriage, neither rising with marriage (a "marriage tax" or a "marriage penalty") nor falling with marriage (a "marriage subsidy" or a "marriage bonus"). For example, it is well documented that the U.S. individual income tax is not marriage neutral (Rosen, 1987; Feenberg and Rosen, 1995; U.S. General Accounting Office, 1996; Alm and Whittington, 1996; Congressional Budget Office, 1997; Bull, Holtzblatt, Nunns, and Rebilein, 1998; Dickert-Conlin and Houser, 1998; Whittington and Alm, 2001; Alm, Whittingon, and Fletcher, 2002). As discussed in more detail later, these studies indicate the presence of a large and variable marriage penalty – and marriage bonus – whose magnitude has changed over time. Other countries often have different experiences.

It is now well-known that no individual income tax can achieve the simultaneous goals of *Horizontal Equity Across Families*, *Equal Payments By Singles and Couples*, *Progressivity*, and *Marriage Neutrality* (Rosen, 1977; Berliant and Rothstein, 2003). To illustrate this more precisely, consider the following stylized example.

Suppose that the individual income tax consists of a constant marginal tax rate  $(b_i)$  and a lump-sum guarantee  $(a_i)$ , where i=(S,M) for Single and Married individuals. Suppose also that the tax Ts imposed on single individuals equals

$$T_S = -a_S + b_S Y_S$$

where  $Y_S$  is the income of the single individual, while the tax  $T_M$  on married couples equals

$$T_{\rm M} = -a_{\rm M} + b_{\rm M} (Y_{\rm M1} + Y_{\rm M2}).$$

where  $Y_{M1}$  is the income of one partner and  $Y_{M2}$  is the income of the other partner.

Marriage Neutrality requires that taxes do not change with marriage, which requires in turn that  $a_M = 2a_S$  and that  $b_M = b_S$ . Equal Payments By Singles and Couples requires that  $T_S = T_M$  when  $Y_S = Y_{M1}$ 

+  $Y_{M2}$ ; this imposes the conditions that  $a_M = a_S$  and that  $b_M = b_S$ . Horizontal Equity Across Families is met as long as married couples face the same lump-sum guarantee and marginal tax rate. Meeting all of these conditions is possible only if  $a_S = 0 = a_M$  and if  $b_S = b_M$ . However, Progressivity, at least defined in terms of average tax rates that increase with income, requires that  $a_S$  (and  $a_M$ ) be less than zero and that  $b_S$  (and  $b_M$ ) be greater than zero; that is, it is only possible to achieve the goals of Marriage Neutrality, Equal Payments By Singles and Couples, and Horizontal Equity Across Families if we are willing to sacrifice the goal of Progressivity. Put differently, no progressive tax system can simultaneously achieve all the other goals of the individual income tax.

Choosing the features of the individual income tax therefore requires that countries must face tradeoffs in their pursuit of worthwhile goals. The next two sections discuss the different choices that countries have made.

# The United States Practice of Taxing the Family

The individual income tax in the U.S. was established in 1913, and its treatment of the family has varied over time. In its early years, the basic unit of taxation was the individual, in which each individual was taxed on the basis of his or her income independently of marital status. Because the tax liability did not change much with marriage, the income tax largely achieved Marriage Neutrality, at the same time as marginal tax rates that increased with income generated Progressivity. However, the Revenue Act of 1948 changed the unit of taxation from the individual to the family. With the adoption of income splitting for married couples, couples were now allowed to aggregate and to divide in half their income for federal tax purposes. This change meant that couples with equal incomes paid equal taxes; that is, the income tax became consistent with the goal of Horizontal Equity Across Families. However, because of the progressive tax rates in the income tax, the change also meant that a couple's joint tax liability could fall when they married, so that the income tax was no longer characterized by Marriage Neutrality.

It was not until the Tax Reform Act of 1969 that a widespread and significant marriage penalty was created for many married couples, even though a potential marriage subsidy still existed for some couples. Since then, various tax and demographic changes have markedly affected the potential for a marriage penalty or subsidy, as well as the magnitude of each (Alm and Whittington, 1996; Congressional Budget Office, 1997).

The reason for the lack of marriage neutrality under current law is simple to explain. Married couples effectively split their income on tax returns. If two people marry and one of them has zero income, income splitting means that the individual with some income moves into a lower marginal tax bracket as a result of the marriage, so that the marriage reduces the combined tax burdens of the two partners. Conversely, when people with similar earnings marry, their combined income pushes the couple into higher tax brackets than they face as singles, and they pay correspondingly higher taxes with marriage.<sup>3</sup> Of course, the magnitude of the tax/subsidy depends upon an array of tax features, such as exemptions, deductions, and rate schedules, as well as the incomes and other characteristics of the partners.<sup>4</sup> Note, however, that the marriage tax/subsidy is not a statutory item in the tax code. Rather, it is a side effect of the current structure of the individual income tax, one that emerges because of the combination of progressive marginal tax rates and the family as the unit of taxation.

To illustrate marriage penalties and bonuses more precisely, consider the following hypothetical couples. Assume that in 2001 two people each have an annual income of \$30,000. Assume also that each uses one personal exemption of \$2,900 and that each takes the standard deduction of \$4,550. Each has an income tax liability of \$3,383, and their combined tax liabilities as singles total \$6,766. If they were to marry and use the standard deduction for married couples filing jointly (\$7,600) and two personal exemptions, then their married tax liability would be \$7,172. This hypothetical couple would pay \$406 more in federal income taxes as a married couple than they would as two single individuals. This difference in tax liability (\$406) is the so-called marriage penalty (or marriage tax), and demonstrates that the income tax is not marriage neutral.

It is also easy to construct examples in which combined taxes fall with marriage. If one person in this couple had most or, especially, all of the family income, then the couple would experience a reduced income tax liability – a marriage bonus or subsidy – as a result of marriage. For example, a single individual with income of \$60,000

would have a tax liability of \$11,198. If this individual were to marry someone with no income (and no income tax liability), then their taxes as a married couple would decline from \$11,198 to \$7,172, giving them a marriage subsidy of \$4,026.

Note that this example also illustrates the unequal treatment of individuals and couples. An individual with income of \$60,000 pays taxes of \$11,198; a married couple with the same income pays taxes of only \$7,172. A single individual therefore pays \$4,026 more in taxes than a married couple with equal income, a difference (the so-called "singles tax") that is necessarily equal in magnitude but of opposite sign to the marriage subsidy (Alm, Whittington, and Fletcher, 2002).

In general, the existence and magnitude of the marriage penalty depends on the distribution of income across the two partners because its calculation requires comparing taxes as single versus taxes as married. Dual income couples are most likely to incur a marriage penalty, especially if their incomes are similar and large. Single-earner couples are likely to gain a tax subsidy through marriage due to income splitting.

The magnitude of the marriage tax/subsidy in the U.S. can be quite large. For example, Alm and Whittington (1996) estimate that there is on average a marriage tax whose magnitude since 1969 has risen, fallen, and more recently risen, and in the last several years has averaged roughly \$400 (in real 1997 dollars). However, this overall average conceals a great deal of variation. The percentage of families that pay a penalty has risen since 1969, to nearly 60 percent in recent years; for these families the real average penalty has generally exceeded \$1000 for most of the last twenty years. On the other hand, for those families that receive a subsidy the average subsidy over this period has also typically exceeded \$1000, and the percentage of families receiving a subsidy has fallen over time to less than 30 percent. Feenberg and Rosen (1995) generate similar estimates, while calculations by the Congressional Budget Office (1997) suggest that a higher percentage of families receives a subsidy (51 percent) and a lower percentage pays a penalty (42 percent). Dickert-Conlin and Houser (1998) demonstrate that lower-income individuals are especially likely to face a marriage penalty, due to the interaction of transfers with the individual income tax. Recent changes in the income tax laws, especially the Economic and Growth Recovery Act of 2001 and the Jobs Growth and Tax Reconciliation Act of 2003 have reduced but not

eliminated the marriage penalty/bonus. In the longer run, the emergence of the Alternative Minimum Tax seems likely to contribute significantly to the marriage penalty/bonus.

As emphasized earlier, no progressive tax system can simultaneously ensure that couples with equal income pay equal taxes, that families and individuals with equal incomes pay equal taxes, and that a couple's joint tax liability does not change with marriage (Rosen, 1977). Whether by implicit or explicit choice, the U.S. has elected to focus more on the goal of equal treatment of married couples, with its designation of the family as the unit of taxation. By necessity, then, the U.S. has elected to allow individuals and families to be treated differently, and also to allow taxes to change with marriage. Other countries have made different choices, as we discuss next.

# International Practices in Taxing the Family

The Organisation of Economic Co-operation and Development (OECD) is comprised of 32 member countries. These countries have many common characteristics, but their income tax structure is not one of these. We have collected detailed information on the individual income tax systems for nearly all of these countries from a variety of sources, and Tables 1, 2, 3, and 4 summarize some of the main features of the individual income tax in these countries.<sup>5</sup> Although income taxation at the central government level is present in all of these countries, the structure of the income tax exhibits significant heterogeneity.

It should be noted that our discussion and our calculations are based on the income tax treatment of earned, or wage, income only; that is, we assume that income of the taxpayers consists only of wage income. The treatment of investment income introduces significant complications. For example, in most countries some shifting of capital gains or business income is permitted, although often such shifting appears to be to the disadvantage of the couple because the transfer of such income is permitted only when it is transferred to the spouse with the higher taxable income.

#### The Basic Structure of the Individual Income Tax

All OECD countries impose a progressive income tax. However, these income systems differ in several dimensions.

One source of heterogeneity is the degree of progressivity across countries, as shown by different levels of marginal tax rates (MTRs) in the tax code. Another source of heterogeneity is fiscal federalism in the assignment of income taxes. Countries that allow sub-national levels of government to impose a significant tax on incomes tend to have lower national income tax rates, in large part because of the sharing of the tax base across levels of government. For example, in Norway the highest marginal tax rate on income at the central government level is only 13.5 percent, while provincial governments impose even higher individual income taxes, often around 14.5 percent. In Finland, municipal income tax rates vary between 15.5 and 20 percent, and the highest national marginal tax rate on income is 35.5 percent. In contrast, neither Germany nor France employs income taxes at subnational levels, and the highest marginal tax rates on income at the national level in these countries are 48.50 and 49.58 percent, respectively.<sup>6</sup> Austria and Belgium, the nations with the highest upper income marginal tax rates (50 percent in each case), also exhibit this tendency. Austria has no provisions for any income taxes at the subnational level, and Belgium permits its municipalities to levy a small surcharge on the national income tax, between 0 and 8.5 percent.

Even aside from the level of marginal tax rates, the marginal tax rate structure itself exhibits significant variation (Tables 1 and 2). In several countries the tax code is relatively complex with a large number of marginal tax rate brackets, while other countries implement a much simpler system. Perhaps the most complex marginal tax rate structure is employed in Germany. Although the German rate structure has three formally defined non-zero marginal tax rate brackets, only the highest marginal tax rate bracket has a fixed single rate. The first two brackets implement non-fixed increasing rates with considerable variation. The largest number of marginal tax brackets is present in Luxemburg, where all non-zero rate brackets except for the highest bracket are increased by increments of only EUR 1,650. Iceland, Ireland, Norway, and Sweden employ the simplest structure of marginal tax rates, with only two non-zero marginal tax rate brackets.

		Personal '		rview of the Ma	8		9	1 0				
		Exemptions		MTR Structure								
	Value of US\$			Upper Income	First non-zero MTR Bracket		Highest Income Bracket					
COUNTRY	Local Currency 31 December 2002	Deductions	Credits	Level for zero-MTR Bracket	Income Range	MTR	Starting Income Level	MTR	Number of Non-zero MTR Brackets			
I	п	III	IV	V	VI	VII	VIII	IX	X			
AUSTRALIA	A\$ 1.707			6,000	6,000 - 20,000	17	60,000	47	4			
AUSTRIA	EUR 1.0446	132 2	1232 3	3,640	3,640 - 7,270	21	50,870	50	4			
BELGIUM	EUR 1.0446	5,570 4			0 - 6,480	25	29,740	50	5			
CANADA	CAN\$ 1.5796		1241		0 - 32,182	16	104,647	29	4			
CZECH REPUBLIC	CZK 30.141	38,040			0 - 109,200	15	331,200	32	4			
DENMARK	DKK 7.0822	35,600 5			0 - 198,000	5.5	295,300	26.5	3			
FINLAND	EUR 1.0446			11,600	11,600 - 14,400	12.5	55,200	35.5	5			
FRANCE	EUR 1.0446	6	7	4,191	4,191 - 8,242	7.05	47,131	49.58	6			
GERMANY	EUR 1.0446	1,044 8		7,235	7,236 - 9,251	19.96-23.02	55,007	48.5	3			
GREECE	EUR 1.0446			10,000	10,000 - 13,400	15	23,400	40	3			
HUNGARY	HUF 225.03		9		0 - 650,000	20	1,350,000	40	3			
ICELAND	ISK		312,024		0 - 3,980,000	25.75	3,980,000	32.75	2			
IRELAND $^{10}$	EUR 1.0446		1,520		0 - 28,000	20	28,000	42	2			
ITALY 11	EUR 1.0446	$3{,}000$ $^{12}$	$235^{13}$		0 - 15,000	23	70,000	45	5			
JAPAN	YUN 121.23	380,000 14	15		0 - 3,300,000	10	18,000,000	37	4			
KOREA, REPUBLIC	W 1,200.4	1,000,000			0 - 10,000,000	9	80,000,000	36	4			
LUXEMBURG	EUR 1.0446	600 16		9,750	9,750-11,400	8	34,500	38	16			
MEXICO	PS 10.3125	17	18		0 - 5,211.78	3	636,170	35	8			
NETHERLANDS	EUR 1.0446		1,766 19		0 - 15,883	1.7 20	49,464	52	4			
NEW ZEALAND	NZ\$ 1.90114				0 - 38,000	19.5	60,001	39	3			
NORWAY <sup>21</sup>	NOK 6.9657	22		340,700	340,700 - 872,000	13.5	872,000	19.5	2			
POLAND	PLZ 4.0512	$530.08$ $^{23}$			0 - 37,024	19	74,048	40	3			
PORTUGAL	EUR 1.0446		213.96		0 - 4,182.12	12	52,277	40	6			
SLOVAK REPUBLIC	SKK 40.036	38,760			0 - 90,000	10	564,000	38	5			
SPAIN	EUR 1.0446	$3,400^{24}$			0 - 4,000	15	45,000	45	5			
SWEDEN	SEK 8.4700	11,400 - 25,900		284,300	284,300 - 430,000	20	430,000	25	2			
SWITZERLAND	CHF 1.38210	25		12,800	12,800 - 27,800	0.77	664,300	11.5	10			
TURKEY	TL 1,634,501	540,000,000			0 - 5,000,000,000	15	120,000,000,000	40	6			
UNITED KINGDOM	€ 0.63	4,615			0 - 1,920	10	29,900	40	3			
UNITED STATES		$7,800^{26}$			0 - 6000	10	311,950	38.6	6			

<sup>&</sup>lt;sup>1</sup> All monetary values are entered in local currencies.

 $<sup>^{2}</sup>$  This is the  $standard\ deduction$  for expenses associated with income.

<sup>&</sup>lt;sup>3</sup> This includes the basic credit at its maximum value of EUR 887 available to all taxpayers with incomes less than EUR 35,421, the

employment tax credit of EUR 54 available to all taxpayers with earned income, and EUR 291, the traffic tax credit, also available to taxpayers with earned incomes. The basic credit is based on a number of different factors including the income and personal circumstances of the taxpayer, and is reduced to zero if the total taxable income exceeds EUR 35,421.

- <sup>4</sup> In addition to this *personal exemption*, the taxpayer is entitled to a *lump-sum deduction* for expenses incurred in earning income; the deduction is based on the income level of the taxpayer, and is capped at EUR 3,000. It is important to note that the *personal exemption* is computed based on the lowest marginal tax rate brackets, and the result is deducted from the tax liability, while the deduction is applied to the gross income before the computation of the tax.
- <sup>5</sup> Usually the *allowance* is converted to a tax credit at the lowest marginal tax rate of 5.5 percent.
- <sup>6</sup> Two personal deductions are available to French taxpayers, the *basic deduction* and the *supplementary deduction*. The *basic deduction* is the higher of the two amounts: actual substantiated expenses associated with employment or lump sum of 10 percent of the income net of social security contributions. The minimum balance for the *basic deduction* is EUR 370. In addition, the taxpayer can claim a *supplementary deduction* of 20 percent on the first EUR 113,900 of the income net of social security contributions and the *basic deduction*.
- <sup>7</sup> In addition to this deduction, French households are eligible to an *employment bonus* tax credit, which is available to low income households. The credit is computed as 4.4 percent of annual employment (or self-employment) income.
- <sup>8</sup> Employees are entitled to deduct any expenses incurred in earning income; if those expenses do not exceed EUR 1,044, a lump sum deduction of EUR 1,044 may be claimed.
- <sup>9</sup> An *employment credit* is available to all taxpayers with employment income, and is based on the salary of the taxpayer. Taxpayers with income levels of up to HUF 1.35 million are allowed a credit of 18 percent of their earnings with the limit of HUF 108,000. The credit is reduced by 18 percent of income in excess of HUF 1.35 million for taxpayers with incomes in excess of HUF 1.35 million, and is not available to taxpayers with incomes in excess of HUF 1.95 million.
- <sup>10</sup> Low-income taxpayers are exempt from income taxes. In 2002, the taxpayers with incomes less than EUR 5,210 (double for married couples filing jointly) were exempt from income taxes.
- <sup>11</sup> Italy has implemented a number of changes to its tax code effective starting with the 2003 tax year. All values reported in our tables are based on the new formulation of the tax code.
- <sup>12</sup> The deduction depends on the type of income earned. The *standard deduction* is of EUR 3,000. The deduction is increased to EUR 7,500 for employment income, to EUR 4,500 for professional income. Note that taxpayers with incomes in excess of EUR 26,000 are not eligible for any of the above listed deductions.
- This credit applies only to employment income. The credit is a function of the level of income, and decreases as the income level increases. The maximum level of the credit is EUR 235. The employment credit scheme was changed in 2003. Prior to 1 January 2003, the credit was a function of income, and ranged between EUR 51.65 and EUR 1,146.53. No employment credit is granted if the taxpayer's income exceeds EUR 52,000. An *income tax credit* of up to EUR 126 is available to taxpayers earning professional income.
- <sup>14</sup> In addition to the *personal allowance* of Y 380,000 for national tax purposes, the taxpayer who derives employment income can also deduct a *standard deduction* (earned income relief) depending on the income level (increasing with income level). Currently the earned income relief starts at Y 650,000.
- <sup>15</sup> Each taxpayer is eligible for a credit equal to 20 percent of the income tax liability; the credit is capped at Y 250,000.
- In addition to the allowance of EUR 600 available to all employees, employees are granted a deduction of EUR 540 aimed at compensating employees for expenses associated with earning income. Employees are also allowed to claim a deduction for commute costs; the deduction is based on the distance traveled between home and work, and the minimum deduction is set at EUR 396 per year for the first 4 km.
- <sup>17</sup> Employees are allowed to deduct an amount based on the minimum wage, for a number of different reasons. For instance, employees are allowed to deduct an amount equal to 30 days minimum wages if they receive a year-end bonus. Mexico employs no standard deductions or deductions based on business expenses associated with employment income.
- <sup>18</sup> A *salary employment credit* is allowed, and can be up to PS 1,157/month. In addition, a *low-income credit* is available, and is based on the income of the taxpayer, with the maximum limit on the credit of PS 36,654.96/year.

- <sup>19</sup> In addition, an employee can claim a credit (the *employment rebate*) of up to EUR 1,104.
- Note that the national social security tax rate for the first two income tax rate brackets consists of 31.2 percent, making the total marginal tax rate of the combined social security and income tax 32.9 percent for the first bracket.
- <sup>21</sup> We report in our tables statistics about the national income tax on gross income (*toppskatt til staten*). In addition, the income tax system of Norway includes the municipal and national income taxes, imposed at a flat rate of 28 percent (versus 10.35 percent for the national income tax). It is important to note that the combined municipal and national income tax is marriage neutral.
- <sup>22</sup> A minimum allowance of 2 percent of the base, with a minimum of NOK 4,000 and a maximum of NOK 45,700, can be deducted.
- <sup>23</sup> In addition to the *personal allowance*, employees are also allowed to claim a *standard deduction* of PLZ 1,199.52 against their employment income.
- <sup>24</sup> In addition to the *personal allowance*, taxpayers deriving employment income are also eligible for an *employment allowance* that ranges between EUR 2,400 and EUR 3,500 depending on the income level of the taxpayer.
- <sup>25</sup> Employers are also allowed to deduct expenses associated with generating income; the minimum deduction is of CHF 1,900.
- <sup>26</sup> This includes the *standard deduction* of \$4,750 for single taxpayers and a *personal allowance* of \$3,050.

Table 2. Notes on Basic Tax Exemptions and Marginal Tax Rate – Married Taxpayers <sup>1</sup>

COUNTRY	Deductions	Credits	Marginal Tax Rate Structure
I	П	Ш	IV
BELGIUM	EUR 4610 for each spouse		
DENMARK		If a spouse cannot fully utilize the personal tax credit (based on personal allowance), then the remainder is transferred to the other spouse.	If a spouse's income level is below DKK 198,000 (the threshold for the 6 percent tax rate addition), then the shortfall amount can be transferred to the other spouse.
FRANCE	Standard business deductions are doubled.		The tax rate structure is based on family circumstances, and different rates apply to single and married taxpayers. <sup>2</sup>
GERMANY			Income splitting is permitted, in which case the sizes of all tax brackets are double those of the single taxpayer, with the marginal tax rates remaining the same.
ICELAND			There is a two-rate structure. The threshold level for the second MTR bracket begins at ISK 3,980,000 for singles, and the threshold is doubled for married couples.
IRELAND		A personal credit available to single taxpayers is doubled for married couples filing jointly.	There are two MTR brackets. Single taxpayers move into the higher bracket at EUR $28,000$ , while married couples move at EUR $37,000-$ EUR $56,000.^3$
KOREA, REPUBLIC	The tax code is characterized by a large number of available deductions. Some deductions apply only to married couples.		
LUXEMBURG	The single taxpayer deduction is doubled for married couples.		For married couples filing jointly the rates are simply double those of a single taxpayer.
NORWAY			The upper band for the lowest MTR bracket is increased to 364,000.
POLAND			Joint filing with income splitting is permitted, in which case the aggregate income is equally divided and the single taxpayer rate structure applies.
PORTUGAL		The individual's tax credit is increased to 356.6 for each spouse.	
SWITZERLAND	7000 applies to the spouse with the lowest income.		The band for the first MTR bracket is raised to 24,900. In addition, a different MTR schedule is applied.
UNITED KINGDOM		£ 210 – the credit increases to £ 546 if one of the spouses is 65 or older, and to £ 553 if older than 74.	
UNITED STATES	The standard deduction for married couples filing jointly is \$7,950.		

- 14 This table is constructed only for those countries where income splitting is permitted, or where differences in basic tax exemptions between single and married individuals exist.
- <sup>2</sup> In addition, the tax benefits based on family circumstances are limited for households with high income levels.
- <sup>3</sup> Single-earner couples advance into the second marginal tax bracket at an income level of EUR 37,000, but couples where both spouses earn income are subject to a threshold that is equal to EUR 37,000 plus the lower of EUR 19,000 or the lower of the two incomes.

In addition to differences in the marginal tax rate structure, the basic personal exemptions/credits exhibit dramatic variation as well. Table 1 indicates the tax treatment of a single taxpayer with earned income only. The personal exemptions can take a variety of different forms: a deduction, an allowance, a personal tax credit, and/or a tax-exempt portion of income (e.g., a zero marginal tax rate bracket). All countries except New Zealand provide some form of tax exemption to their taxpayers, most commonly in the form of a personal allowance or an earned income tax exemption. In many instances more than one provision is available to the taxpayer. It should be noted that Table 1 provides a summary of exemptions available to a single non-disabled taxpayer with no dependents and earned income only; several other provisions are present for taxpayers who have children and who are disabled. Table 2 provides similar information for married taxpayers.

# The Treatment of Married Couples

There is clearly much heterogeneity in the marginal tax rate structure, the personal exemptions, and other tax deductions/credits that apply to taxpayers, whether single or married. This heterogeneity extends to the tax treatment of married couples as well. Table 3 lists the filing status permitted for married couples in OECD countries, and Table 4 lists some special provisions that apply mainly to single-earner couples.

Table	е З.	Filing	Status	and	Income	Treatment	t of M	arried	Coupl	$es^1$

COUNTRY	Filing Status?	Income Splitting?	COUNTRY	Filing Status?	Income Splitting?
I	II	III	I	II	III
AUSTRALIA	Single		KOREA, REPUBLIC	Single	
AUSTRIA	Single		LUXEMBURG	Joint	Yes
BELGIUM <sup>2</sup>	Joint	Yes <sup>3</sup>	MEXICO	Single	
CANADA	Single		NETHERLANDS	Single	
CZECH REPUBLIC	Single		NEW ZEALAND	Single	
DENMARK	Single		NORWAY	Single/Joint	
FINLAND	Single		POLAND	Single/Joint	Yes
FRANCE	Joint	Yes	PORTUGAL	Joint	Yes
GERMANY	Single/Joint	Yes	SLOVAK REPUBLIC	Single	
GREECE	Joint		SPAIN	Single/Joint	
HUNGARY	Single		SWEDEN	Single	
ICELAND <sup>4</sup>	Single/Joint	Yes	SWITZERLAND <sup>5</sup>	Joint	
IRELAND	Single/Joint	Yes	TURKEY	Single	
ITALY	Single		UNITED KINGDOM	Single	
JAPAN	Single		UNITED STATES	Joint 6	Yes

<sup>&</sup>lt;sup>1</sup> We assume throughout that there are no children or other dependents present in the household. We allow for single-income couples, but we assume that the dependant spouse is not disabled.

<sup>&</sup>lt;sup>2</sup> Joint filing by married couples is required; married taxpayers are taxed separately on their earned income, but income generated by other sources is aggregated and added to the spouse with the highest income.

<sup>&</sup>lt;sup>3</sup> Limited splitting of income is permitted; if the income of the spouse with the lowest income is less than 30 percent of that of the other spouse, the spouse with the highest income can transfer up to 30 percent of his income to the spouse with the lowest income. The transferred income cannot exceed EUR 8,030.

<sup>&</sup>lt;sup>4</sup> Married taxpayers have an option to file a joint assessment or a single person assessment. In the event the couple selects to proceed with a joint assessment, all personal allowances and tax brackets of a single taxpayer are exactly doubled.

<sup>&</sup>lt;sup>5</sup> At the current time, the tax treatment of married couples is being debated in Switzerland.

<sup>&</sup>lt;sup>6</sup> Married taxpayers in the U.S. may file a joint or a separate tax return. However, the separate return has one-half of the total standard deduction of a joint return, and the marginal rate brackets are set at one-half the increments of a joint return, so that there is typically no tax benefit to filing separately.

Table 4. Treatment of Single-earner Couples

	nt of Single-earner (	Earner Household Provision	าร
COUNTRY	Type of Provision	Size	Cutoff Level of Dependant Spouse's Income
AUSTRALIA <sup>1</sup>	Rebate	A\$ 1,489	A\$ 6,237
AUSTRIA	Credit	EUR 364	EUR 2,200
BELGIUM <sup>2</sup>	Income Splitting up to 30%		30% of Spouse Income
CANADA	Credit	CAN\$ 1,054	CAN\$ 7,756
CZECH REPUBLIC	Deduction	CZK 21,720	CZK 38,040
DENMARK	Allowance	DKK 35,600	DKK 35,600 <sup>3</sup>
FINLAND	Thowand	21111 00,000	21111 00,000
FRANCE	Income Splitting		
GERMANY	Income Splitting		
GREECE			
HUNGARY			
ICELAND	Credit <sup>4</sup>	Less than ISK 296,423	
IRELAND	Income Splitting	2000 (11411 1011 20 0, 120	
ITALY	Credit	EUR 42,223 – EUR 546,189	EUR 2,840.51
JAPAN	Allowance	Y 380,000 <sup>5</sup>	, , , , , , , , , , , , , , , , , , , ,
KOREA, REPUBLIC	Deduction	W 1,000,000	W 1,000,000
LUXEMBURG	Income Splitting	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
MEXICO	1 0		
NETHERLANDS			
NEW ZEALAND			
NORWAY 6			
POLAND	Income Splitting		
PORTUGAL	Income Splitting		
SLOVAK REPUBLIC	Allowance	SKK 12,000	SKK 38,760
SPAIN			
SWEDEN			
SWITZERLAND	Different MTR Schedule		
TURKEY			
UNITED KINGDOM			
UNITED STATES	Income Splitting 7		

<sup>&</sup>lt;sup>1</sup> In addition, in the event the income of the dependent spouse is under A\$ 10,800, the other spouse can make a contribution of up to A\$ 3,000 to the retirement savings account of the dependent spouse. The transfer amount is subject to abatement, and is cut off completely at the income level of A\$ 13,799.

<sup>&</sup>lt;sup>2</sup> See Table 3.

<sup>&</sup>lt;sup>3</sup> The personal allowance can be claimed as tax credit at the lowest tax bracket rate (5.5 percent), which is frequently done in practice. In addition to the

transfer of the personal allowance, the unused part is added to the threshold amount of the spouse if the income of a married person does not exceed DKK 198,000 (or the threshold for the 6 percent tax rate).

- <sup>4</sup> If the personal credit of ISK 312,024 is not fully utilized by a married taxpayer, 95 percent of the remainder of the credit can be transferred to the spouse. Single taxpayers with income levels exceeding ISK 3,980,000 pay an additional tax of 7 percent on the excess amount, and this threshold amount is doubled for married couples.
- <sup>5</sup> Taxpayers whose incomes do not exceed Y 10,000,000 are also eligible for a deduction of up to Y 380,000. The deduction is a function of the income level of the taxpayer, and is reduced as the income level increases.
- Taxpayers with supported dependents (including cohabitants) are also granted an allowance for their national and municipal income tax purposes of NOK 5,000. Norway employs a fixed combined national and municipal income tax rate of 28 percent, so that a spouse with a dependent spouse will have her tax liabilities reduced by up to NOK 1400 when it comes to national and municipal income taxes. Also, see Table 3.
- <sup>7</sup> Couples are also allowed to claim a personal exemption of \$3,050 for both spouses regardless of the employment status and income level of each spouse.

Of perhaps most importance, in most OECD countries the individual is the unit of taxation, and joint filing for couples is not permitted (Table 3). Joint filing is required in only seven countries (Belgium, France, Greece, Luxemburg, Portugal, Switzerland, and the United States), while six countries allow couples to select the filing status (Germany, Iceland, Ireland, Norway, Poland, and Spain). addition, there has been since 1970 a decided trend in OECD countries away from joint taxation and toward individual the individual as the unit of taxation. Since 1970 seven countries have moved to individual income taxation (Austria, Denmark, Finland, Italy, the Netherlands, Sweden, and the United Kingdom). There are now a total of 17 OECD countries that use only the individual as the unit of taxation, and, as noted, another six countries in which the taxpayer can choose between single or joint taxation. It is important to note that not every country that permits or requires joint filing allows joint assessment (e.g., income splitting between the spouses). For instance, Greece, Norway, and Spain all have provisions for joint filing, but income splitting does not apply; this means that joint filing is not meaningfully different than single filing, except when joint filing allows a couple to use different personal exemptions, a potentially important difference that will be discussed later. Income splitting is present in some form in only nine of the 32 OECD countries. In most countries that allow income splitting, the income of the spouses is simply aggregated, so that the tax system does not differentiate between households with equal combined incomes based on how the income is distributed within the couple. However, there are exceptions to this as well. For example, Belgium allows only limited income splitting, which applies only to those couples in which there is a significant differential between the spouses' incomes.

Income splitting in the presence of a progressive tax rate structure creates a tax benefit to couples when spouses earn different incomes, as evidenced quite clearly by the U.S. experience. Furthermore, the tax benefit is a function of the difference in those incomes and the marginal tax rate structure. For instance, Luxemburg has narrowly defined marginal tax rate brackets, and a relatively small differential can translate into a significant tax saving for a married couple versus two single taxpayers with similar incomes, as long as each spouse does not fall into the highest income bracket. In contrast, in Iceland and Ireland a much larger difference in incomes may have no impact on tax liability due to the marginal tax rate structure.

Tables 5a to 5d present our calculations on the effects on income

tax liabilities across households with different income levels and different allocations of incomes between spouses. The effects reported in columns III, V, VII, and IX of these tables represent the tax benefit (or cost) of marriage, computed as the difference between the combined tax liability of the two individuals if they file as singles versus their tax liability if they marry and file based on the permitted status in the country. A positive number indicates that singles pay more in taxes than married couples (e.g., a marriage bonus), while a negative number indicates the presence of a marriage penalty because taxes rise with marriage. Columns IV, VI, VIII, and X convert this difference into the fraction of the total income tax liability of the (married) household.

For simplicity, we divide households along two dimensions: the income level and the allocation (or the split) of that income between the We select four levels of aggregate household incomes, structured as a percentage of the average earnings in the country during 2002 calendar year; note that column II reports the average wage for each country as given on the OECD website. We choose four different levels of income, in order to assess the impact of the income tax at different points in the distribution of income: 50, 100, 200, and 400 percent of average earnings in the country. We also select four different types of households for the allocation of these income levels between the spouses: households where each spouse earns an equal amount (we refer to these as **Type I** households), households where 62.5 percent of all household income is earned by one spouse (Type II), households where one spouse earns 75 percent of the combined income of the couple (Type III), and households where all of the income is earned by one spouse (Type IV).

Table 5a. Change in Income Tax Liability with Marriage – 50 Percent of Average Earnings

Table 5a. Chang	ge in Income	Tax Lia	bility with	i Marria	ge – 50 Pe	ercent of	Average	Earning	S
	Average Earnings in		pe I , 25)		pe II 5, 18.75)		pe III 5, 12.5)		oe IV ), 0)
COUNTRY	2002 (local currency)	Net Amount	% of Total Household Tax Liability						
I	п	III	IV	v	VI	VII	VIII	IX	X
AUSTRALIA	45851	0		0	·	120	6.73	1489	84.19
AUSTRIA	23963	0		0		0		364	62.12
BELGIUM	31173	-480	-52.77	-256.36	-27.88	-235.82	-17.32	642.58	42.84
CANADA	38568	0		0		399	59.19	1054	133.34
CZECH REPUBLIC	206042	0		0		1052	15.00	3258	50.21
DENMARK	305306	0		0		0		1958	43.71
FINLAND	29126	0		0		0		0	
FRANCE <sup>1</sup>	21884	0		59.66		121.09		259.95	
GERMANY	33226								
GREECE	11575	0		0		0		0	
HUNGARY	1056835	0		0		0		0	
ICELAND	2277709	0		0		0		0	
IRELAND <sup>1</sup>	25330	0		63.12		379.75		1,013	
ITALY	21466	0		0		0		546.18	25.62
JAPAN	4254270	0		0		0		60800	449.72
KOREA, REPUBLIC	21653892	0		0		0		0	
LUXEMBURG 1	31363	0		0		31.29		548.41	
MEXICO	58812	0		0		0		0	
NETHERLANDS	30919	0		0		0		0	
NEW ZEALAND	39411	0		0		0		0	
NORWAY	291900	0		0		0		0	
POLAND	25396	0		0		154.83	17.27	100.72	4.56
PORTUGAL <sup>1</sup>	8325	67.58		98.23		160.67		285.54	
SLOVAK REPUBLIC	153696	0		927		1200	36.43	1200	46.00
SPAIN	16219	0		0		0		0	
SWEDEN	241766	0		0		0		0	
SWITZERLAND <sup>1</sup>	64231	20.91		41.37		72.28		83.47	157.03
TURKEY	9938274440	0		0		0		0	
UNITED KINGDOM	19708	62.4		154.38		210	123.38	210	29.50
UNITED STATES	32188	-155	-75.83	21.48	10.51	222.65	108.93	739.70	361.89

UNITED STATES | 32188 | -155 | -75.83 | 21.48 | 10.51 | 222.65 | 108.93 |  $^{1}$  No values can be entered in the percent columns because the family tax liability is zero.

 $\underline{\text{Table 5b. Change in Income Tax Liability with Marriage} - 100 \ \underline{\text{Percent of Average Earnings}}$ 

	Average Earnings in		rpe I ), 50)		pe II , 37.5)		e III , 25)		е IV 0, 0)
COUNTRY	2002 (local currency)	Net Amount	% of Total Household Tax Liability	Net Amount	% of Total Household Tax Liability	Net Amount	% of Total Household Tax Liability	Net Amount	% of Total Household Tax Liability
I	II	III	IV	V	VI	VII	VIII	IX	X
AUSTRALIA	45851	0		0		0		1489	17.22
AUSTRIA	23963	0		0		0		364	8.08
BELGIUM	31173	-576	-11.85	-624	-12.03	-672	-11.27	2054	31.99
CANADA	38568	0		0		0		1054	24.75
CZECH REPUBLIC	206042	0		0		0		4344	18.25
DENMARK	305306	0		0		0		8396.36	58.40
FINLAND	29126	0		0		0		0	
FRANCE	21884	0		197.78	38.04	471.48	90.69	1366.61	262.87
GERMANY	33226								
GREECE	11575	0		0		0		0	
HUNGARY	1056835	0		0		0		0	
ICELAND	2277709	0		54,544.79		127,858.55		274,486.07	
IRELAND	25330	0		0		253.5	12.51	1,520	75.02
ITALY	21466	0		0		0		496.6	8.69
JAPAN	4254270	0		0		0		60800	44.10
KOREA, REPUBLIC	21653892	0		0		0		90000	21.20
LUXEMBURG	31363	0		190.87	20.05	912.74	109.08	2944.57	285.11
MEXICO	58812	0		0		0		0	
NETHERLANDS	30919	0		0		0		0	
NEW ZEALAND	39411	0		0		0		0	
NORWAY	291900	0		0		0		0	
POLAND	25396	0		0		0		100.72	2.18
PORTUGAL	8325	285.28	100.00	305.7	106.96	326.51	114.24	782.05	273.64
SLOVAK REPUBLIC	153696	0		0		0		2400	20.71
SPAIN	16219	0		0		0		0	
SWEDEN	241766	0		0		0		0	
SWITZERLAND	64231	220.1	414.07	176.78	132.48	230.9	100.63	258.19	39.11
TURKEY	9938274440	0		0		0		0	
UNITED KINGDOM	19708	210	12.85	210	12.85	210	10.37	210	7.29
UNITED STATES	32188	-232.5	-10.96	-146.02	-6.89	55.15	2.60	1237.5	58.35

Table 5c. Change in Income Tax Liability with Marriage – 200 Percent of Average Earnings

Table Sc. Chang			pe I		pe II		e III		e IV
	Average		, 100)		5, 75)		0, 50)		0, 0)
COUNTRY	Earnings in 2002 (local currency)	Net Amount	% of Total Household Tax Liability						
I	II	III	IV	V	VI	VII	VIII	IX	X
AUSTRALIA	45851	0		0		0		1489	5.14
AUSTRIA	23963	0		0		0		364	2.39
BELGIUM	31173	-864	-4.85	-912	-5.09	-768	-4.12	3535	17.82
CANADA	38568	0		0		0		1054	7.95
CZECH REPUBLIC	206042	0		0		0		6950.4	9.50
DENMARK	305306	0		0		4,856.82	8.47	13838	15.92
FINLAND	29126	0		0		0		0	
FRANCE	21884	0		252.73	6.70	682.82	18.10	3459.18	91.68
GERMANY	33226								
GREECE	11575	0		0		0		0	
HUNGARY	1056835	0		0		0		0	
ICELAND	2277709	0		0		17,830.52	3.24	336702.06	59.64
IRELAND	25330	0		805.75	11.36	0		3500	34.66
ITALY	21466	0		0	0.00	0		496.6	3.14
JAPAN	4254270	0		0		0		109440	18.09
KOREA, REPUBLIC	21652892	45000	5.31	45000	5.10	45000	5.20	180000	4.89
LUXEMBURG	31363	0		699.61	8.79	2367.17	30.95	7969.83	102.60
MEXICO	58812	0		0		0		0	
NETHERLANDS	30919	0		0		0		0	
NEW ZEALAND	39411	0		0		0		0	
NORWAY	291900	0		0		3145.5	31.55	3145.5	10.60
POLAND	25396	0		0		0		1026.82	10.87
PORTUGAL	8325	285.28	15.42	293.45	15.86	461.98	24.44	1312.12	70.91
SLOVAK REPUBLIC	153696	0		0		0		3360	6.93
SPAIN	16219	0		0		0		0	
SWEDEN	241766	0		0		0		0	
SWITZERLAND	64231	466.09	34.01	920.96	66.35	1043.1	51.32	1398.9	31.66
TURKEY	9938274440	0		0		0		0	
UNITED KINGDOM	19708	210	3.52	210	3.52	250	3.45	210	2.60
UNITED STATES	32188	-577.62	-7.92	-93.42	-1.28	872.22	11.96	4273.50	58.59

 $\underline{\text{Table 5d. Change in Income Tax Liability with Marriage} - 400 \ \text{Percent of Average Earnings}}$ 

	Average		pe I , 200)		pe II , 150)		ole III ), 100)	Туре	
COUNTRY	Earnings in 2002 (local currency)	Net Amount	% of Total Household Tax Liability	Net Amount	% of Total Household Tax Liability	Net Amount	% of Total Household Tax Liability	Net Amount	% of Total Househol d Tax Liability
I	II	III	IV	V	VI	VII	VIII	IX	X
AUSTRALIA	45851	0		0		0		1,489	2.07
AUSTRIA	23963	0		0		0		364	0.94
BELGIUM	31173	-960	-2.01	-960	-2.01	-912	-1.89	3,535.00	6.93
CANADA	38568	0		0		0		1,054	3.03
CZECH REPUBLIC	206042	0		0		0		6,950.40	3.39
DENMARK	305306	0		0		0		13,838	5.50
FINLAND	29126	0		0		0		0	
FRANCE	21884	0		63.35	0.44	1223.45	8.46	7,149.00	49.42
GERMANY	33226								
GREECE	11575	0		0		0		0	
HUNGARY	1056835	0		0		0		0	
ICELAND	2277709	0		39440.55	2.19	119160	6.61	575,022.79	31.62
IRELAND	25330	0		0		0		3,500	11.16
ITALY	21466	0		0		0		422.23	1.15
JAPAN	4254270	0		0		0		108300	4.10
KOREA, REPUBLIC	21653892	90000	11.39	90000	10.50	90000	9.15	270000	1.90
LUXEMBURG	31363	0		0		5631.42	18.10	7870.19	24.82
MEXICO	58812	0		0		0		0	
NETHERLANDS	30919	0		0		0		0	
NEW ZEALAND	39411	0		0		0		0	
NORWAY	291900	0		0		0		3145.5	2.49
POLAND	25396	0		0		1505.08	6.82	7462.83	35.62
PORTUGAL	8325	285.27	4.72	604.83	10.01	1021.09	16.91	2783.73	46.10
SLOVAK REPUBLIC	153696	0		0		0		4560	3.12
SPAIN	16219	0		0		0		0	
SWEDEN	241766	0		0		0		0	
SWITZERLAND	64231	3469.04	42.43	2127.09	20.83	1377.67	10.45	1038.75	4.93
TURKEY	9938274440	0		0		0		0	
UNITED KINGDOM	19708	210	1.28	210	1.21	210	1.10	210	0.82
UNITED STATES	32188	-1542.06	-6.25	-1425.69	-5.78	-461.7	-1.87	5836.2	23.65

The income tax treatment of Type I households, in which there is an equal split of household income between the members, is perhaps the most interesting aspect of the differential treatment by the tax system. In countries where joint income assessment is not permitted and where there are no differences in personal exemptions due to marital status, Type I (and even Type II and Type III) households should not observe any benefits or penalties due to their marital status. This is largely evident from Tables 5a through 5d. In most all instances where the provisions for joint assessment exist, the marginal tax rate brackets faced by a single taxpayer are simply doubled for married couples (e.g., Luxemburg); equivalently, the combined income of the couple is divided by two, and then the single taxpayer rate structure is applied (e.g., Portugal). Under these circumstances the tax rate structure remains marriage-neutral for households of Type I. However, in some countries Type I households derive a marriage bonus/penalty from their marital One example of this practice is Switzerland, where the tax rate structure for married taxpayers is different from single taxpayers both in the size of the brackets and in the numbers of brackets and their rates. For single Swiss taxpayers there are ten non-zero marginal tax rate brackets and a zero rate bracket with a threshold level of income of CHF 12,700; married taxpavers face thirteen non-zero marginal tax rate brackets and a zero-rate bracket cut-off level set to CHF 24,800, slightly less than twice the level of the single taxpayer. The marginal tax rates are identical for the top bracket, but the sizes of the brackets for married taxpayers are not based on the tax brackets for single taxpayers.

Joint assessment is not the only provision that exists for married couples. Differences in personal exemptions and credits based on marital status can also create a marriage bonus/penalty for Type I households. This is evident in the tax codes of a number of countries. For example, in Belgium the size of the basic personal allowance is reduced for married taxpayers to EUR 4.610 relative to EUR 5.570 for single taxpayers. In Portugal the size of the tax credit is increased for a married taxpayer to EUR 356.60, from EUR 213.96 for single taxpayers. In Korea married female taxpayers in two-earner couples are granted an additional personal deduction of W 500,000. Couples in Switzerland with two earners get an additional allowance of CHFG 7,000 applied to the spouse with the lower income. The United Kingdom has one of the most well defined marriage benefits, although the size of the benefit is relatively small. U.K. taxpayers are granted a married couple allowance that is dependent on the age of the taxpayers, with taxpayers older than 74 deriving the largest allowance. The size of the allowance for couples with both spouses aged under 65 is £ 2,110. The allowance is then converted into a tax credit at a 10 percent rate, and it can be allocated between the spouses based on their own selection, with the possibility that only one spouse derives the entire credit, thereby making the provision completely independent of the distribution of income within the couple. It appears that such treatments are very limited. Instead, we tend to find in most OECD countries that the income tax treatment of couples with equal incomes is largely marriage neutral (subject to the exceptions that we have discussed).

Type II and Type III households derive income tax benefits in all countries where joint assessment/income splitting is permitted. The one exception is Belgium, where only limited income splitting is permitted and where the reduced personal allowance for married couples creates a marriage penalty for married taxpayers.

Another practice that is present in several countries is the transfer of unused personal exemptions between the spouses. This practice in a way mimics income splitting because it allows the couple to combine their personal exemptions. Examples of this practice include Denmark, where the unused portion of the personal deduction can be transferred to the spouse, and Iceland, where up to 95 percent of the unused personal credit can be applied to the tax return of the spouse.

In some instances the threshold on only some of the marginal tax rate brackets is increased for married taxpayers. For example, Norway increases the threshold for the lowest MTR bracket from NOK 340,700 to NOK 364,000.

As noted earlier, all OECD countries employ a progressive income tax structure at the central government level.<sup>8</sup> Due to the progressive rate structure, the benefits of income splitting generally exist for those households with significant variation in incomes. However, when spousal earnings place each of the spouses into the highest income bracket, these benefits of income splitting disappear. This is evident when one examines the effects on Type II households across Tables 5a to 5d. Households with combined earnings equal to 50 percent of the national average wage derive benefits of marriage in seven of the OECD countries, while households with combined earnings of 400 percent of the national average wage derive benefits in only six of the countries. The size of the benefit when measured as a percentage of total tax liability of the couple also declines with the income level of the couple, as is evident from the tables.

The effects of income splitting increase with the difference in incomes between the spouses, as shown by the differences between Type II and Type III households. To further illustrate this point we examine in more detail two very different approaches to income splitting: Belgium and the United States.

### The Special Cases of Belgium and the United States

Tables 6a and 6b calculate the effects on taxes for Belgium and the U.S for different households based on the income distribution within the household. Both countries impose a marriage penalty through several avenues. One is via personal allowances. In the U.S., a standard deduction for a married couple is \$7,950, which is only 84 percent of double the single taxpayer's deduction of \$4,750. This provision puts an effective penalty on taxpayers who chose to get married, as their decision to marry reduces their combined standard

deduction by \$1,550. In Belgium married taxpayers receive a combined deduction of EUR 9,220, which is about 83 percent of double the single taxpayer's deduction of EUR 5,570. However, the U.S. tax code requires aggregation of income of married couples, while the Belgian code permits limited transfer only if the earnings of one of the spouses do not exceed 30 percent of the earnings of the other spouse.

In the case of the U.S., there is also a different structure of marginal tax rate brackets that creates a marriage penalty: the size of the brackets for married couples is less than double the brackets of the single taxpayer. In addition to the reduction of the standard deduction, newlyweds will find themselves facing a different marginal tax rate structure with higher effective marginal tax rates. Although the marginal rates themselves remain the same, the sizes of the brackets are not the same for married versus single taxpayers, with the exception of the lowest and highest brackets. A single taxpayer moves into the third marginal tax rate bracket at the income level of \$28,400, while a married couple filing jointly advances into the third bracket at the income level of only \$47,450, only about 1.67 times (and not double) the level of the single taxpayer's threshold. Consequently, a couple that marries will experience an increase in marginal tax rates, as they advance more quickly into higher marginal brackets. It is interesting that the upper marginal tax rate bracket starts at the same income level of \$311,950 for single taxpayers and married couples filing jointly.

Table 6a. Marriage Tax Benefit in Belgium <sup>1</sup>

Table oa. Marriage rax Benefit in Belgium										
Fraction of the Couple's Total Income Earned by the Spouse	50%		100%		20	00%	400%			
with the Lower		% of Tax								
Income	Amount <sup>2</sup>	Liability <sup>3</sup>								
0	642.58	42.86	2054.76	31.99	3535.00	17.82	3535.00	6.93		
0.05	445.90	30.34	1500.30	23.82	3535.00	19.34	3535.00	7.38		
0.1	250.77	17.38	945.84	15.33	3535.00	21.14	4846.06	10.82		
0.15	80.41	5.68	382.14	6.31	544.91	2.90	5691.07	13.33		
0.2	-77.70	-5.59	-254.15	-4.23	-198.33	-1.06	-674.90	-1.39		
0.25	-235.82	-17.32	-672.00	-11.27	-768.00	-4.12	-912.00	-1.89		
0.3	-240.00	-20.32	-658.88	-11.69	-864.00	-4.73	-942.33	-1.96		
0.35	-240.00	-24.10	-624.00	-11.62	-898.88	-4.99	-960.00	-2.00		
0.4	-344.04	-37.61	-624.00	-12.15	-894.32	-5.01	-960.00	-2.01		
0.45	-480.00	-52.77	-671.19	-13.53	-864.00	-4.85	-960.00	-2.01		
0.5	-480.00	-52.77	-576.00	-11.85	-864.00	-4.85	-960.00	-2.01		

<sup>&</sup>lt;sup>1</sup> The average income for Belgium in 2002 was EUR 31,173.
<sup>2</sup> This is computed as the difference in tax liabilities of the couple filing as singles versus as married.

<sup>&</sup>lt;sup>3</sup> This is computed as percentage of the combined income tax liabilities of the couple if they file as married taxpayers.

Table 6b. Marriage Tax Benefit in the United States <sup>1</sup>

Fraction of the Couple's Total Income Earned by the Spouse	50%		100%		200		400%		
with the Lower Income	Amount <sup>2</sup>	% of Tax Liability <sup>3</sup>							
0	739.70	361.89	1237.50	58.35	4273.50	58.59	5836.5	23.65	
0.05	619.00	302.84	996.09	46.97	3404.42	46.67	3905.22	15.83	
0.1	498.29	243.78	754.68	35.59	2535.35	34.76	2481.46	10.06	
0.15	383.59	187.67	513.27	24.20	1851.91	25.39	1469.58	5.96	
0.2	303.12	148.30	271.86	12.82	1304.72	17.89	503.939	2.04	
0.25	222.65	108.93	55.15	2.60	872.22	11.96	-461.701	-1.87	
0.3	142.18	69.56	-25.32	-1.19	485.96	6.66	-1136.27	-4.60	
0.35	61.71	30.19	-105.79	-4.99	99.71	1.37	-1329.4	-5.39	
0.4	-18.76	-9.18	-186.26	-8.78	-286.55	-3.93	-1522.52	-6.17	
0.45	-99.23	-48.55	-232.50	-10.96	-577.62	-7.92	-1542.06	-6.25	
0.5	-155.00	<i>-75.83</i>	-232.50	-10.96	-577.62	-7.92	-1542.06	-6.25	

<sup>&</sup>lt;sup>1</sup> The average income for the United States in 2002 was \$32,188.

<sup>&</sup>lt;sup>2</sup> This is computed as the difference in tax liabilities of the couple filing as singles versus as married.

<sup>&</sup>lt;sup>3</sup> This is computed as percentage of the combined income tax liabilities of the couple if they file as married taxpayers.

As seen from Table 6a, the Belgian tax code provides a marriage bonus only to those couples where a significant income differential between the spouses exists, and effectively penalizes households where the spouses earn similar incomes. In contrast, the U.S. code (Table 6b) allows couples with much smaller variation in incomes to derive benefits from marriage. Interestingly, due to the structure of the marginal rate brackets in the U.S., households with different levels of combined taxable incomes experience marriage tax penalties at different levels of income distribution within the household.

Belgium imposes a penalty on married couples by reducing the size of the couple's personal deduction relative to that for single taxpayers. The Belgian tax code provides some relief to couples where one of the spouses earns less than 30 percent of the income of the other spouse, but this relief has no impact on households where both spouses earn equal or near-equal incomes. The tax impact of marriage on a couple where both earn taxable income of the national average wage (or EUR 31,173) is an increase in tax liability upon marriage of EUR 480, or 2.43 percent of the total tax liability of the married couple.

## One-earner Married Couples

Type IV households consist of couples where only one spouse earns all of the income in the household. In most OECD countries, these households face some special tax provisions that are aimed at reducing income tax liabilities. As noted earlier, Table 4 gives a summary of these provisions by country.

Income splitting/joint assessment is one of these provisions, but even in many of the countries with no provisions for joint assessment of income some provisions for a dependent spouse are often available. These provisions typically take the form either of an additional personal deduction based on family circumstances or of a tax credit. In most instances where these provisions exist, they allow the dependent spouse to earn up to a certain level of income for full tax benefits, and are then reduced as the earned income of the dependent spouse begins to increase. For example, Australia, Austria, Canada, Iceland, and Italy all use tax credits that permit a certain level of earned income by the dependent spouse; Iceland also allows spouses to transfer 95 percent of the unused portion of the personal credit. Countries that offer

deductions to couples with one income earner also allow some income to be earned by the dependent spouse before removing the tax benefit.

Some limited splitting of income is practiced in Belgium, where households in which one spouse earns less than 30 percent of the income of the other spouse are allowed to transfer taxable income from the spouse with the higher income as long as that transfer does not exceed the after-transfer income of the lower income spouse.

Interestingly, some countries put effective tax penalties on households with single earners. For example, the Swiss tax code contains a second-earner provision in the form of an allowance that is applied to the spouses with the lower income. Korea provides a deduction to women wage earners in married couples, which tends to have the same effect as a second-earner provision.

# Summary

Finland, Greece, Hungary, Mexico, the Netherlands, New Zealand, Spain, Sweden, and Turkey all have a marriage neutral tax structure. Spain permits joint filing, but not income splitting. In contrast, two countries (Belgium and the U.S.) often impose a marriage tax penalty on married couples, at least when the incomes of the spouses are largely similar. The marriage penalty largely arises due to the reduction in married tax exemptions (e.g., the standard deduction) relative to those of single filers, as well as to features in the tax rate structure of singles versus married taxpayers.

In general, the dominant practice of individual income taxation in OECD countries is to choose the individual rather than the family as the unit of taxation, and thereby to tax individuals on their own income even if they are married. As a result, the individual income tax is largely marriage neutral in these countries. This practice of taxing the individual is one that has tended to emerge in the last 30 years or so in these countries. Even so, there remains much diversity in how OECD countries choose to tax the family.

# Conclusions

What do we want an individual income tax to achieve?

It is certainly possible to eliminate (or to reduce) the marriage tax, and thereby make the income tax marriage neutral. And there are certainly are good reasons for doing so. There is little doubt that the existence of the marriage penalty (or the marriage bonus) introduces large, variable, and capricious inequities due to unequal tax treatment of taxpayers based solely on their marital status. Even aside from these inequities, there is increasing evidence that the marriage penalty/bonus distorts decisions in an array of dimensions. More fundamentally, the marriage penalty may weaken the family as a basic societal institution, thereby leading to a range of social problems.

However, it is worth remembering that the marriage penalty/bonus exists in any (progressive) income tax largely because of the decision to make the family the unit of taxation, and this decision is typically made because the goal of *Horizontal Equity Across Families* is put at the center of the income tax. Nevertheless, it is also worth remembering that there are other goals of an income tax, such as Equal Payments By Singles and Couples and Marriage Neutrality. Further, it is also worth remembering that there is today an enormous, and increasing, diversity of family structures in most all OECD countries. Fifty years ago, the "traditional family" was typically a single-earner household with a stay-at-home spouse. Now, two-earner families are the norm, cohabitation among opposite and same-sex couples is common, and non-marital and extra-legal joint living arrangements are widespread. These newer types of households are, by many definitions, a "family." However, they are treated very differently, and often much less favorably, than the traditional households once envisioned as the norm by the tax codes in many countries. A single individual can also be seen as a type of family, and singles are typically penalized, often quite heavily, by the income tax.

It may well be, as many argue, that the importance of the traditional family unit still justifies its favorable tax treatment. However, it may also be time to recognize that a diverse society can no longer treat one family structure so differently than others. Elimination of the family as the unit of taxation, and restoration of the individual as the unit, would eliminate the marriage tax/subsidy (and also eliminate the singles tax). This is the route that many OECD countries have chosen.

Still, it must be recognized that making the individual the unit of taxation is also not without problems. An important justification for the use of the family as the unit of taxation is the notion that families with equal family income should pay equal taxes. There is no question that making the individual the unit of taxation would violate this goal of Horizontal Equity Across Families. There are also significant administrative and compliance issues from individual taxation. How are itemized deductions split between partners? How is unearned (or capital) income split between partners? Who claims the tax benefits from children? How do the tax enforcement agencies verify the legitimacy of these declarations? What are the compliance costs of individual filing? Many other such issues naturally arise, and, as shown by our discussion of OECD country practices, the ways in which these issues are resolved vary greatly across countries.

There are no easy choices here. As emphasized throughout, no tax system can achieve simultaneously the goals of *Progressivity*, *Marriage Neutrality*, *Horizontal Equity Across Families*, and *Equal Payments By Singles and Couples*. More broadly, most all tax (and transfer) systems reflect an uneasy compromise between these and many other goals, such as raising revenue, minimizing marriage (and other) disincentives, helping low-income individuals and families, reducing administrative and compliance costs, supporting the family as a social institution, and the like. It is inevitable that these goals are often conflicting. Taxing the family requires facing these difficult tradeoffs directly.

# References

Alm, James, Stacy Dickert-Conlin, and Leslie A. Whittington. 1999. "The Marriage Tax." The Journal of Economic Perspectives. 13 (3): pp. 193-204.

Alm, James and Leslie A. Whittington. 1996. "The Rise and Fall and Rise... of the Marriage Tax." National Tax Journal. 49 (4): pp. 571-589.

Alm, James and Leslie A. Whittington. 1997. "Income Taxes and the Timing of Marital Decisions." Journal of Public Economics. 64 (2): pp. 219-240.

Alm, James and Leslie A. Whittington. 1999. "For Love or Money? The Impact of Income Taxes on Marriage." Economica. 66 (3): pp. 297-316.

Alm, James and Leslie A. Whittington. 2003. "Shacking Up or Shelling Out: Income Taxes, Marriage, and Cohabitation." Review of Economics of the Household. 1 (3): pp. 169-186.

Alm, James, Leslie A. Whittington, and Jason Fletcher. 2002. "Is There a 'Singles Tax'? The Relative Income Tax Treatment of Single Households." Public Budgeting & Finance. 22 (2): pp. 69-86.

Berliant, Marcus and Paul Rothstein. 2003. "Possibility, Impossibility, and History in the Origins of the Marriage Tax." National Tax Journal. 56 (2): pp. 303-317.

Blum, Walter J. and Harry Kalvin, Jr. 1953. The Uneasy Case for Progressive Taxation. Chicago, IL: The University of Chicago Press.

Bittker, Boris I. 1975. "Federal Income Taxation and the Family." Stanford Law Review. 27 (4): 1388-1463.

Bull, Nicholas, Janet Holtzblatt, James R. Nunns, and Robert Rebilein. 1998. "Assessing Marriage Penalties and Bonuses." U.S. Department of the Treasury Working Paper. Washington, D.C.: Office of Tax Analysis.

Congressional Budget Office. 1997. For Better or For Worse: Marriage and the Federal Income Tax. Washington, D.C.: Congress of the United States.

Dickert-Conlin, Stacy. 1999. "Taxes and Transfers: Their Effect on the Decision to End a Marriage." Journal of Public Economics. 73 (2): pp. 217-240.

Dickert-Conlin, Stacy and Scott Houser. 1998. "Taxes and Transfers: A New Look at the Marriage Penalty." National Tax Journal. 51 (2): pp. 175-217.

Feenberg, Daniel R. and Harvey S. Rosen. 1995. "Recent Developments in the Marriage Tax." National Tax Journal. 48 (4): pp. 91-101.

International Bureau of Fiscal Documentation. 2003. European Tax Handbook 2003. Amsterdam, the Netherlands: International Bureau of Fiscal Documentation.

Musgrave, Richard A. 1959. The Theory of Public Finance. New York, NY: McGraw-Hill Book Company.

Musgrave, Richard A. 1976. "ET, OT, and SBT." Journal of Public Economics. 6 (1): pp. 3-16.

Rosen, Harvey S. 1977. "Is It Time to Abandon Joint Filing?" National Tax Journal. 30 (4): pp. 423-428.

Rosen, Harvey S. 1987. "The Marriage Tax Is Down But Not Out." National Tax Journal. 40 (4): 567-575.

Sjoquist, David L. and Mary Beth Walker. 1995. "The Marriage Tax and the Rate and Timing of Marriage." National Tax Journal. 48 (4): pp. 547-558.

Steuerle, C. Eugene. 1999. "Valuing Marital Commitment: The Radical Restructuring of our Tax and Transfer Systems." The Responsive Community. 9 (2): 35-45.

U.S. General Accounting Office. 1996. Income Tax Treatment of Married and Single Individuals. GAO/GGD-96-175. Washington, D.C.

Whittington, Leslie A. and James Alm. 1997. "Till Death or Taxes Do Us Part: Income Taxes and the Divorce Decision." Journal of Human Resources. 32 (2): pp. 388-412.

Whittington, Leslie A. and James Alm. 2001. "Tax Reductions, Tax Changes, and the Marriage Penalty." National Tax Journal. 54 (3): pp. 455-472.

Whittington, Leslie A. and James Alm. 2003. "The Effects of Public Policy on Marital Status in the United States." In Marriage and the Economy – Theory and Evidence from Advanced Industrial Societies, Shoshana Grossbard-Shechtman, ed. New York, NY: Cambridge University Press, pp. 75-101.

## Notes

- <sup>1</sup> See Musgrave (1959, 1976) for classic analyses and discussions of the meaning of equity in taxation.
- <sup>2</sup> See Blum and Kalvin (1953) for a contrary view.
- <sup>3</sup> Separate filing for married couples does not typically give a tax advantage to the couple. Internal Revenue Service statistics show that in recent years over 95 percent of married couples file jointly.
- <sup>4</sup> There are numerous implicit penalties and subsidies imposed by government programs, only some of which are related to income taxation. The U.S. General Accounting Office (1996) identifies 1049 federal laws that involve marital status in some way. See Steuerle (1999) and Alm, Dickert-Conlin, and Whittington (1999) for detailed recent discussions of the tax treatment of the family in the U.S. See Bittker (1975) for an earlier but still relevant discussion.
- <sup>5</sup> We obtain country specific tax structure information from a variety of sources, including from the country's own tax collection agency's website, from the European Tax Handbook 2003 (2003), and from Individual Taxes 2003-2004: Worldwide Summaries, published by Pricewaterhouse Coopers. We relied most heavily upon the European Tax Handbook 2003 (2003) in instances where there were discrepancies in the details of the income tax.
- <sup>6</sup> Germany does allow business income taxation at the municipal level.
- For instance, a single taxpayer with taxable income between EUR 9,252 and EUR 55,007 will be subject to a marginal tax rate that varies between 23.02 and 48.5 percent, depending on the income of the taxpayer.
- <sup>8</sup> An exception is Switzerland, where the highest income tax bracket actually has a lower marginal tax rate than the preceding bracket.
- <sup>9</sup> For example, see Sjoquist and Walker (1996), Alm and Whittington (1997, 1999, 2003), Dickert-Conlin (1999), and Whittington and Alm (1997) for empirical evidence on marital decisions. For a more general survey of much of this literature, see Whittington and Alm (2003).