

# Reform of Income Splitting for Married Couples: Only Individual Taxation Significantly Increases Working Incentives

by Stefan Bach, Johannes Geyer, Peter Haan, and Katharina Wrohlich

The joint taxation of married couples in Germany with full income splitting is still a major hindrance to the participation of married women in the labor market. In their current financial proposals, the SPD (Social Democratic Party) is calling for income splitting for married couples to be replaced by individual taxation with maintenance deductions, in accordance with existing schemes for divorced spouses. Simulations implemented by DIW Berlin show that such a reform would only have limited effects on distribution and labor supply. Pure individual taxation, however, would not only lead to significant additional tax revenue but would also considerably increase the number of married women participating in the labor market. If politicians take the goal of greater integration of married women in the labor market seriously, then the current income splitting for married couples would have to be replaced by individuation taxation.

In the political and economic debate, income splitting for married couples is deemed as an important reason for the relatively low participation of married women in the labor market in Germany. Joint taxation may result in higher marginal tax rates for secondary wage earners depending on the spouse's income.<sup>1</sup> From a social or family policy point of view, there is often criticism that income splitting for married couples does not support households with children but rather just marriages and should therefore be reconsidered.<sup>2</sup> DIW Berlin has already shown in previous studies that the introduction of individual taxation for married couples would lead to greater effects on female labor supply (see box).<sup>3</sup>

## Alternatives to Income Splitting for Married Couples

In contrast to Germany, many other countries (the UK, Sweden, The Netherlands, Spain, Portugal and Austria) have abolished joint taxation for married couples in favor of individual taxation. In these countries, there are, at the most, moderate tax deductions for non-earning spouses or tax credits.<sup>4</sup>

<sup>1</sup> See Steiner, V. and K. Wrohlich, "Household Taxation, Income Splitting and Labor Supply Incentives. A Microsimulation Study for Germany," CESifo Economic Studies 50 (3), (2004): 541-568; and Steiner, V. and K. Wrohlich, "Die Wirkung ausgewählter familienpolitischer Instrumente auf das Arbeitsangebot von Eltern. Expertise für den Familienbericht im Auftrag der Bundesregierung," DIW Berlin: Politikberatung Kompakt no. 16. (Berlin: 2006).

<sup>2</sup> Some years ago, income splitting for families in Germany was discussed as an alternative to income splitting for married couples. See Steiner, V. and K. Wrohlich, "Familiensplitting begünstigt einkommensstarke Familien, geringe Auswirkungen auf das Arbeitsangebot," Wochenbericht des DIW Berlin no. 31 (2006).

<sup>3</sup> Steiner and Wrohlich, "Household Taxation"; Dearing, H., H. Hofer, C. Lietz, R. Winter-Ebmer, and K. Wrohlich, "Why are mothers working longer hours in Austria than in Germany? A comparative microsimulation analysis," Fiscal Studies, 28 (4), (2007): 463-495.

<sup>4</sup> See Dingeldey, I., "Das deutsche System der Ehegattenbesteuerung im europäischen Vergleich," WSI Mitteilungen 3/2002, (2005): 154-160; OECD "Taxing Working Families: A Distributional Analysis," OECD Tax Policy Study No. 12. (Paris: 2005).

Box

### The Effect of Income Splitting for Married Couples<sup>1</sup>

In Germany, married couples are taxed using the income splitting method. In the case of joint taxation, the entire taxable income of both spouses is halved, the resulting attributable income tax calculated, and then the tax payable is doubled. This regulation ensures that the tax liability of a married couple is irrespective of the distribution of income within the household. This results in an equal tax liability for households with equal incomes. Using a progressive tax rate results in a "splitting advantage" over unmarried couples with the same household income. The reason for this is that using the splitting system, two basic allowances are taken into account for each married couple. This also applies even if one spouse has made no taxable income. Secondly, by fictitiously halving taxable income, the progression of the income tax is reduced. The splitting advantage is greater, the higher the household income and the greater the difference between the individual incomes of the spouses. The maximum splitting advantage under the tax rate in 2005 was around EUR 8,000. This was achieved with a taxable annual income of more than EUR 100,000. Due to the introduction of the wealth tax in 2007, the maximum splitting advantage

for married couples with taxable incomes of over EUR 250,000 continued to rise and now has a maximum of about EUR 15,000 per annum for incomes of over EUR 500,000. The splitting advantage decreases rapidly when the other spouse increasingly contributes to household income and disappears when both spouses have the same income.<sup>2</sup>

The splitting procedure, in the strict sense, only refers to income tax rates for the joint taxation of married couples. In addition, there are additional benefits to determining the taxable income of spouses jointly rather than individually, particularly for expenses of a provident nature, savings allowances, and lump sums. Furthermore, spouses can offset profits and losses against one another. These benefits also cease to exist in individual taxation.

<sup>2</sup> For a detailed explanation of the effects of income splitting for married couples on tax revenue and distribution, see Bach, S., H. Buslei, D. Svindland, H. Baumgartner, J. Platt, and D. Teichmann, "Untersuchungen zu den Wirkungen der gegenwärtigen Ehegattenbesteuerung auf Grundlage von fortgeschriebenen Einzeldaten der Einkommensteuerstatistik," Projektbericht 2 zur Forschungskooperation „Mikrosimulation“ mit dem Bundesministerium der Finanzen: (DIW Berlin, 2003). 70.; Bach, S. and H. Buslei, "Fiskalische Wirkungen einer Reform der Ehegattenbesteuerung," Wochenbericht des DIW Berlin no. 22. (2003).

<sup>1</sup> Steiner and Wrohlich, "Familiensplitting."

However, the abolition of joint taxation for married couples using income splitting and the introduction of individual taxation are viewed critically in Germany from a constitutional standpoint.<sup>5</sup> An adjudication by the Federal Constitutional Court concluded that single-earner, married couples must be granted at least twice the basic allowance in order to keep the joint subsistence minimum of married couples tax-free. Without further regulations, married couples would be worse off than divorced spouses in taxation terms. Under current law, divorced spouses who pay their former partners maintenance may deduct these maintenance payments from their taxable income up to a maximum of EUR 13,806 per annum.

The divorced spouse receiving the maintenance must then be taxed on these maintenance payments as income.

This form of taxation for divorced spouses may also be referred to as "limited de facto splitting." The introduction of such limited de facto splitting instead of income splitting for married couples has been proposed in the past by various political players. During the SPD/Green coalition negotiations in 2002, for example, it was discussed whether spouses ought to be able to transfer a maximum of EUR 20,000 to each other so that income differentials of EUR 40,000 could still be offset.<sup>6</sup>

<sup>5</sup> See overview outlines in Vollmer, F. Das Ehegattensplitting: Eine verfassungsrechtliche Untersuchung der Einkommensbesteuerung von Eheleuten. Baden-Baden. 1998; Spangenberg, U. "Neuorientierung der Ehebesteuerung: Ehegattensplitting und Lohnsteuerverfahren," (Hans-Böckler-Stiftung, Arbeitspapier, 2005): 106.

<sup>6</sup> See also studies by DIW Berlin showing that the labor supply effects of such a reform would be minimal compared to individual taxation, Steiner and Wrohlich (2004).

**Current Proposal by the SPD**

In its new financial policy plan, the SPD is currently proposing to introduce “individual taxation with maintenance deductions” for future marriages. This alternative corresponds to the limited de facto splitting described above: the higher-income spouse can, as is currently possible for divorced spouses, transfer a maximum income of EUR 13,806 per annum to the lower-income spouse. This means that a difference in income of up to EUR 27,612 can be offset. All married couples where the difference in income between the spouses is less than this amount are therefore not affected by this reform. For all other couples, the limit of transmissible income for the splitting advantage would be capped at a maximum of EUR 5,100 per annum.

Figures 1 and 2 show the variation of the splitting advantage depending on the taxable income of the household and the distribution of income between spouses. Figure 1 illustrates the tax savings achievable with current income splitting for married couples compared to individual taxation. Couples in which one partner earns 100 percent of the total taxable income benefit most from income splitting. For such households, the splitting advantage increases until a top tax rate of 42 percent is achieved. After this point, the advantage remains constant up to a taxable income of EUR 250,000, after which it continues to increase due to the wealth tax (top tax rate of 45 percent) until it reaches the maximum value of over EUR 15,000 per annum. Figure 2 shows the tax savings possible with the SPD’s proposal compared to individual taxation. The individual taxation proposal with deductions for maintenance still affords significant splitting advantages.

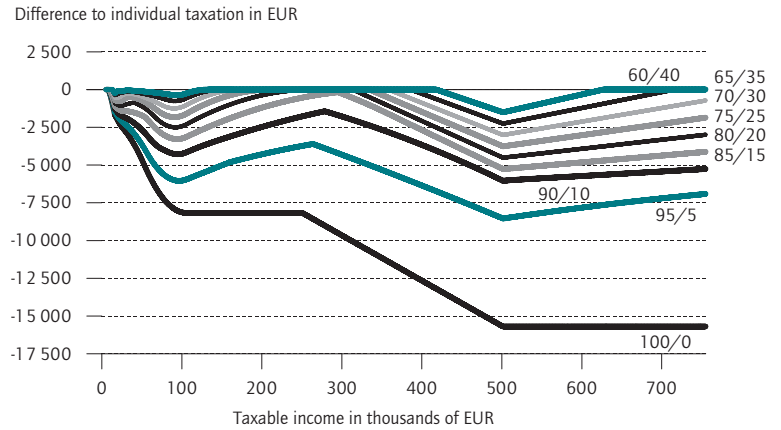
**Empirical Analysis of Individual Taxation with and without Maintenance Deductions**

DIW Berlin has empirically examined the effect of individual taxation with maintenance deductions proposed by the SPD and compared its effects on distribution and labor supply with those expected from the introduction of pure individual taxation. In contrast to the SPD’s proposal, however, we have assumed that this reform would apply to all marriages and not just for future marriages. In the short term, limiting the proposal to future marriages only would lead to virtually no change in the status quo.

For the empirical analysis, we used a microsimulation model with behavioral adaptation. In addition to a detailed depiction of the German tax and transfer system, the Tax-Benefit Microsimulation Model, STSM, includes

Figure 1

**Splitting Advantage with Income Tax Rate 2008**



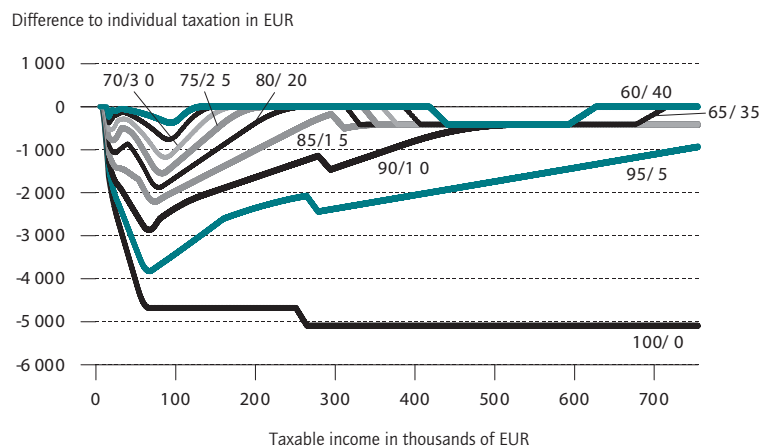
Source: Calculations by DIW Berlin with the Tax-Benefit Microsimulation Model (STSM).

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The splitting advantage is greatest for single-wage-earner married couples.

Figure 2

**Splitting Advantage with SPD’s Proposal**



Source: Calculations by DIW Berlin with the tax-benefit microsimulation model (STSM).

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There are still splitting advantages with the SPD’s proposal.

a micro-econometrically estimated labor supply model of private households in Germany.<sup>7</sup> The database for this is the German Socio-Economic Panel Study (SOEP).<sup>8</sup> We based our analysis on SOEP data from 2009 (v26).

The STSM can be used to calculate net income per household under the current legal framework of income splitting for married couples (status quo) and for the reform alternatives i) individual taxation with maintenance deductions and ii) individual taxation from SOEP data. Consequently, we can quantify the income effects of the reforms. For the analysis, we initially assumed that the behavior of households does not change with the introduction of the reform. In addition to income changes (“first-round effects”), the STSM and econometric behavior estimation can also be used to simulate and quantify the labor supply effects on married women and men induced by the respective reform (“second round” effects). The first round effects are calculated for

all married households. We only estimate second round effects for married couples where both partners are potentially dependently employed, that is, not in training, self-employment or retirement.

In the analyses, we disregard additional adjustment reactions by households, in particular, different design options in the distribution of income between spouses. These play an important role for recipients of profit and asset income. However, such designs usually only have limited weighting because spouses have to give up ownership of the relevant assets, which may also incur gift tax, and tax offices may prohibit fraudulent contracts. Such distributions of income can actually reduce the additional revenue from a tax reform significantly.<sup>9</sup> But for the analysis considered here, they are not of significant importance because they are only relevant in few households.

### Significant Income Effects from Individual Taxation

Table 1 shows the changes in net household income in EUR per month resulting from the introduction of individual taxation compared to the current situation with income splitting for married couples. Table 2 outlines the corresponding effects on net household income when individual taxation with maintenance deductions is applied. By definition, tax revenue from both reforms is higher than with income splitting for married couples. Therefore, net household income is also lower. In the following, we have assumed that additional revenue is not to be used for reductions in other taxes or increases in state benefits.

On average, net household income decreases by EUR 119 per month with individual taxation (Table 1). Married couples where only one spouse earns an income lose EUR 232 per month. They are therefore significantly more affected than double-earning couples who have to suffer an average loss of only EUR 86. Married couples in Western Germany benefit significantly more from income splitting for married couples than those in Eastern Germany: On average, married couples in Western Germany lose EUR 134 per month through individual taxation, while in the East it is only EUR 50. This is due to the fact that there are more double-earning couples in the East; also, average incomes in the East are still lower than in the West. Furthermore, Table 1 shows that, in case of a transition to individual taxation, losses in net household income increase with higher incomes: mar-

<sup>7</sup> Steiner V, K. Wrohlich, P. Haan, and J. Geyer, (2008): “Documentation of the Tax-Benefit Microsimulation Model STSM: Version 2008,” DIW Data Documentation No. 31. The model has already been used by DIW in other studies to analyze the effects of potential tax reforms on labor market behavior.

<sup>8</sup> The SOEP is an annual representative survey of private households in Germany conducted by the DIW Berlin in cooperation with the fieldwork organization Infratest Sozialforschung. Wagner, G., J. Göbel, P. Krause, R. Pischner, and I. Sieber, “Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland—Eine Einführung (für neue Datennutzer) mit einem Ausblick (für erfahrene Nutzer),” *AStA Wirtschafts- und Sozialstatistisches Archiv* 2 (4), (2008): 301-328.

Table 1

#### Effects of Individual Taxation on Net Household Income

Taxable income <sup>1</sup> in EUR		Married couples total	Single wage earners	Double wage earners	Western Germany	Eastern Germany
Change compared to income splitting for married couples per month in EUR						
up to	25 000	34	70	48	39	18
below						
25 000	– 30 000	155	199	56	163	108
30 000	– 40 000	151	212	68	161	98
40 000	– 50 000	181	277	92	204	68
50 000	– 75 000	166	349	76	178	91
75 000	– 100 000	260	432	139	275	111
100 000	and more	208	315	105	214	106
<b>Total</b>		<b>119</b>	<b>232</b>	<b>86</b>	<b>134</b>	<b>50</b>

<sup>1</sup> Calculated on an annual basis.

Source: Calculations by DIW Berlin with the Tax-Benefit Microsimulation Model (STSM).

Individual taxation leads to high taxes, especially in single-earner marriages with high incomes.

<sup>9</sup> Bach and Buslei, „Fiskalische Wirkungen.“

ried couples with an income of less than EUR 25,000 per annum would only lose EUR 34 per month, while married couples with an average income of over EUR 100,000 would lose EUR 208.

The income effects of the introduction of individual taxation with maintenance deductions are significantly less (Table 2). On average, net household income decreases by only about EUR 25 per month. The differences between individual household groups are, however, similar to the introduction of individual taxation. Single earners (EUR 59 per month) and households in Western Germany (EUR 29 per month) are significantly more affected than double earners (EUR 14) and households in Eastern Germany (EUR 8).

### The Labor Supply Effects of Individual Taxation Are Significantly Greater

Before we show the results of the empirical analysis of labor supply effects from both reforms, we will first outline the changes in working incentives for women, using graphs. Figure 3 shows the net household income for a family with two children, depending on the hours worked by the wife with a medium and high hourly wage.

The upper part of Figure 3 shows the net income of a married couple with a median wage: the man earns EUR 16.00 per hour, the woman EUR 12.30. We assume that the man is in full-time employment. For this couple, there is no change with a transition from the status quo to individual taxation with maintenance deductions. The difference in the taxable income of both spouses is actually less than EUR 27,600, in the event that the woman is not in employment, so this household is not subject to any additional taxation burden and, therefore, there is no change in the working incentive. A transition to individual taxation would, however, have significant implications for this household. On the one hand, in this scenario it loses income of EUR 250 per month if the woman only works for a few hours. On the other hand, the “budget line” becomes significantly steeper: for every hour the wife works more, the greater the income the household gets compared to the current system of income splitting for married couples. This increases the working incentive. Moreover, the kink in the budget line, which is caused by the EUR 400 mini-job limit, is reduced. Income below the mini-job limit is tax-free and all income above this threshold is taxable. Therefore, not only does social security apply from this limit, but also income tax. The resulting kink in the budget line implies that a household just below the mini-job threshold has more income than a household that lies just above the threshold. In the case of indi-

Table 2

### Effects of Individual Taxation with Maintenance Deductions on Net Household Income

Taxable income <sup>1</sup> in EUR		Married couples total	Single wage earners	Double wage earners	Western Germany	Eastern Germany
Change compared to income splitting for married couples per month in EUR						
up to	25 000	2	9	6	2	1
below						
25 000	– 30 000	21	32	8	23	13
30 000	– 40 000	22	36	8	23	15
40 000	– 50 000	29	54	10	33	11
50 000	– 75 000	39	102	9	42	18
75 000	– 100 000	95	182	37	100	36
100 000	and more	92	159	35	95	40
<b>Total</b>		<b>25</b>	<b>59</b>	<b>14</b>	<b>29</b>	<b>8</b>

<sup>1</sup> Calculated on an annual basis.

Source: Calculations by DIW Berlin with the Tax-Benefit Microsimulation Model (STSM).

Individual taxation with maintenance deductions only leads to minimal effects on income.

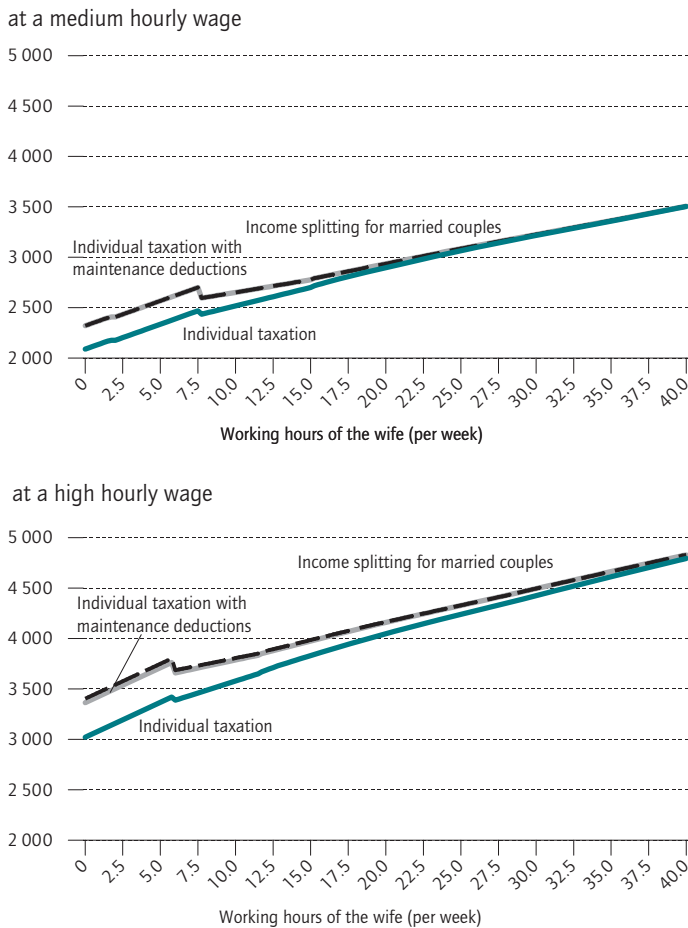
dual taxation, the kink largely disappears so that part-time employment above the mini-job threshold becomes more attractive.

The lower part of Figure 3 shows the same scenario for a married couple with high wages. We have assumed that the man has a gross hourly wage of EUR 26.10 which corresponds to the 90-percent percentile of the distribution of hourly wages for men. For the woman, we assume an hourly rate of EUR 15.20, which corresponds to the 75-percent percentile of the distribution of hourly wages for women. A transition to individual taxation with maintenance deductions has little impact on the budget line for such wages. The income in this case is slightly lower than income in the status quo. A transition to pure individual taxation would result in a far greater impact on working incentives. As in the case of the married couple with a medium income, the kink at the mini-job threshold is also reduced and the steepness of the budget line right of this point increases.

The figure demonstrates that labor supply effects can be expected from both reform alternatives: since individual taxation with maintenance deductions has very little impact on the working incentive, no appreciable labor effects would be achieved by its introduction. In contrast, a transition to pure individual taxation would massively alter the working incentive in such a way that this reform would significantly increase labor supply.

Figure 3

**Net Household Income in EUR per Month Related to the Number of Working Hours of the Wife**



Note: The figure above shows the net household income for a married couple with median wages of EUR16.00 per hour for the man and EUR 12.30 per hour for the woman. In the lower figure, wages of EUR 26.10 per hour for men and EUR 15.20 per hour for the woman are assumed.

Source: Calculations by DIW Berlin with the Tax-Benefit Microsimulation Model (STSM).

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The SPD's proposal only leads to a minor impact on income even if wages are high.

Table 3 outlines the estimated labor supply effects on individual taxation and on individual taxation with maintenance deductions. They are significantly higher with individual taxation than for individual taxation with maintenance deductions. The latter increases the participation rate of married women in our population of around 73 percent by about 0.7 percentage points and increases the average hours of work carried out by these women at around 20 hours per week by about 2.4 percent. For men, we find hardly any labor supply effects in this case.

According to our calculations, there would be significant consequences for both men and women if they were taxed individually. The participation rate of women would increase by about 2.4 percentage points, while for men this figure would decrease by about 0.3 percentage points. The average working hours of women would increase by about 7.4 percent and decrease by 1.5 percent for men.<sup>10</sup> The large difference between men and women can be explained by the lower labor supply elasticities among men. In general, this means that labor supply for men would change significantly less than for women if there was a change in income.

An increase in working hours and participation rates among women is more prevalent in Western Germany. However, the female labor supply in Eastern Germany only changes minimally. Again, the reason for this is that there are significantly more double-earner couples in Eastern Germany and that income inequalities between spouses in Eastern Germany are lower than in Western Germany.

**Conclusion**

The empirical analysis of the labor supply effects of the SPD's proposal to introduce individual taxation with maintenance deductions shows that anticipated changes in the participation of married women in employment are low. This is because, due to maintenance deductions, differences in income up to EUR 27,612 can continue to be offset between the spouses.

In contrast, a transition to individual taxation would have significantly greater effects on the labor supply of married women. We find an appreciable increase in both the participation rate and the average hours worked. This shows that the current taxation of spouses has strongly negative consequences on the working incentive for married women.

According to our calculations, the introduction of individual taxation for income tax would generate annual tax revenues (including the solidarity surcharge) of about EUR 27 billion, which is still more than ten percent of income tax revenue and about 1.1 percent of gross domestic product. The additional revenues are almost five times as high as those of individual taxation with maintenance deductions (approximately EUR 5.5 billion per

<sup>10</sup> An earlier study by DIW Berlin calculated higher labor supply effects for the transition from income splitting for married couples to individual taxation (Steiner and Wrohlich, "Household Taxation"). This study was based on SOEP data from 2002. At that time, the participation rates and average hours worked by women were significantly lower. This explains the lower effects in the current study.

annum). This additional revenue could be used for fiscal consolidation, as well as to reduce tax progression in the lower income brackets, to reduce other taxes and duties, or for increased state benefits.

If the economic goal is to better integrate married women into the labor market and, therefore, contribute to the long-term demographic development of the potential labor force, then conflicting incentives in the tax and benefits systems should be systematically removed. The plan proposed by the SPD for reforming joint taxation for married couples would only make a very minor contribution to this. In particular, this is true if the reform—in contrast to our calculations—only applies to future marriages. Constitutional objections to individual taxation should not be given too much weight. By international comparison, there are many countries with completely or largely individual income taxation which give no or only minimal benefits to spouses with no income of their own.

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Table 3

The Labor Supply Effects of Alternative Reform Proposals

	Women		Men	
	Individual taxation	Individual taxation with maintenance deductions	Individual taxation	Individual taxation with maintenance deductions
	Change in the participation rate (in percentage points)			
All couples	2.37	0.73	-0.27	-0.02
West	2.83	0.87	-0.33	-0.03
East	0.76	0.22	-0.06	0.00
	Change in average working hours (in percent)			
All couples	7.38	2.44	-1.50	-0.22
West	8.65	2.89	-1.82	-0.29
East	2.89	0.86	-0.38	0.00

Source: Calculations by DIW Berlin with the Tax-Benefit Microsimulation Model (STSM).

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The effects of individual taxation on labor supply are especially significant among women in Western Germany.



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