End of previous Forum article

M. Fink, J. Janová, D. Nerudová, J. Pavel, M. Schratzenstaller, F. Sindermann-Sinkiewicz and M. Spielauer*

(Gender-differentiated) Effects of Changes in Personal Income Taxation

The design of tax systems has a considerable impact on the personal distribution of income and wealth at the household and the individual level. Due to gender-differentiated socio-economic conditions, taxation may affect men and women differently.[1] One of the most important areas of taxation is the personal income tax, which may have a gender-differentiated effect on work incentives and influence the distribution of paid and unpaid work between men and women. The paper presents an overview of the microsimulation results for selected provisions of the personal income tax system done with EUROMOD (a tax-benefit microsimulation model for the European Union) for six selected Member States: Germany, Austria, Spain, Czech Republic, United Kingdom and Sweden.

Personal income tax provisions and impact dimensions

Our microsimulation analyses focus on several personal income tax provisions which not only influence the (gender-differentiated) distribution of income but also impact work incentives and the (related) distribution of paid and unpaid work among men and women. These provisions include the pro-

1 A. Gunnarsson, M. Schratzenstaller, U. Spangenberg: Gender Equality and Taxation in the European Union. Study for the FEMM Committee in the European Parliament, Brussels 2017, European Parliament provides an overview of the relevant taxation areas and the status quo in the EU from a gender perspective.

gressivity of the personal income tax schedule, the system of household taxation and the design of child-related tax relief.

During the last few decades, the progressivity of personal income taxation has been eroded throughout the EU.[2] Six Member States apply a flat income tax and almost all others have dualised their income tax systems by introducing proportional and relatively low tax rates for (parts of) capital income. Labour and other incomes are still subject to progressive income tax schedules, whereby progressivity has been reduced by a long-term trend of cutting top income tax rates. Very generally, higher incomes benefit more from such a dualisation of income taxation. Men on average benefit more than women: due to their generally higher income levels and because capital incomes contribute a comparatively higher share to their incomes.[3]

Another gender-relevant trend is the individualisation of the personal income tax systems. Joint income taxation is less and less common in the EU.[4] This development has made personal income tax systems more employment-friendly

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2 A. G u n n a r s s o n et al., op. cit.
3 See Bach for differences in income levels and structures between men and women for the example of Germany. S. B a c h : Geschlechtsbezogene Verteilungswirkungen der Einkommensbesteuerung in Deutschland, in: U. Spangenberg, M. Wersig: (eds.): Geschlechtergerechtigkeit steuern – Perspektivenwechsel im Steuersystem, Berlin 2013, Edition Sigma, pp. 57-82.
4 See D. M e u l d e r s : Taxation des revenues et employ des femmes en Europe. TMTEESS, Ministère du Travail, de l'Emploi et de l'Économie sociale et solidaire. Imposition individuelle et emploi, Luxembourg 2016, Éditions d'Letzebuerger Land.

Marian Fink, Austrian Institute of Economic Research, Vienna, Austria.

Jitka Janová, Mendel University Brno, Czech Republic.

Danuše Nerudová, Mendel University Brno, Czech Republic.

Jan Pavel, University of Economics Prague, Czech Republic.

Margit Schratzenstaller, Austrian Institute of Economic Research, Vienna, Austria.

Friedrich Sindermann-Sinkiewicz, Parliamentary Budget Office, Vienna, Austria.

Martin Spielauer, Austrian Institute of Economic Research, Vienna, Austria.

for women as there is ample empirical evidence that joint income taxation impairs work incentives for women.[5] However, most individualised income tax systems – with Sweden and Finland as the exceptions in the EU28 – provide tax relief for couples in which one partner has no or only negligible earnings, thus re-introducing incentives for a traditional division of labour within the household.

The design of child-related tax relief is relevant from a general distributional point of view as well as from a gender perspective. A tax allowance, which reduces the tax liability by decreasing the tax base, provides increasing tax relief in the case of a progressive income tax schedule. A (wastable) tax credit that can be deducted from the tax liability avoids this degressive effect. It provides uniform tax relief independent of taxable income in absolute terms. In contrast to direct cash transfers, both instruments do not provide tax relief to low-income tax units. Non-wastable tax credits as applied e.g. in the Czech Republic and Austria avoid this problem. From a gender perspective, child tax credits are more favourable than child tax allowances with regard to distributional aspects as women earn less on average compared to men.

Excluding the Czech Republic, all Member States in the observed group applied a progressive income tax schedule in 2016, which is the base year for the microsimulations. The Czech Republic introduced a flat income tax in 2008. Individual taxation is predominant in the observed group. The exception is Germany, which uses a joint taxation system with full income splitting. In Spain, married couples can opt for joint taxation, which implies an increased basic allowance but does not involve income splitting. The Czech Republic and Austria apply individual taxation, granting a tax relief to sole earners; the UK offers some (means-tested) tax relief for sole earner couples. Only Sweden has a strictly individualised personal income tax system.

While Austria, the UK, the Czech Republic and Spain offer tax credits for children, Sweden does not grant any tax relief for children. The Austrian child tax credit is de facto designed as a universal child benefit paid in addition to another child cash benefit; the Czech tax credit is non-wastable; and in the UK, the child tax credit is means-tested. Germany applies a combination of a universal child benefit paid as cash transfer to low and medium income households and a tax allowance for higher incomes. In addition to the child tax credit, Austrian families receive child cash benefits and can make use of a (low) child tax allowance.

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5 See A. G u n n a r s s o n et al., op. cit., European Parliament for a brief overview of relevant empirical analyses based on different methodological approaches.

Table 1

Scenarios for EUROMOD microsimulations for six selected EU Member States

Country	System of household taxation	Child-related tax relief	Design of income tax schedule
Germany	Replacing joint taxation of spouses (income splitting) with individual taxation, maintaining budget neutrality by a proportional decrease in all income tax rates (IT)	Scenario a: Replacing the child benefit with a child tax credit, which is scaled up to maintain budget neutrality (ChC)	Replacing the progressive tax schedule with a flat tax, keeping the basic tax allowance and all tax credits, maintaining budget neutrality by adjusting the tax rate (FT)
		Scenario b: Replacing the child benefit with a child tax allowance, which is scaled up to maintain budget neutrality (ChA)	
Austria	Replacing individual taxation of spouses with joint taxation (income splitting), maintaining budget neutrality by a proportional increase of all income tax rates (JT)	Scenario a: Replacing the child tax credit (de facto cash benefit) with a child tax allowance, which is scaled up to maintain budget neutrality (ChA)	Replacing the progressive tax schedule with a flat tax, keeping the basic tax allowance and all tax credits, maintaining budget neutrality by adjusting the tax rate (FT)
		Scenario b: Budget neutral replacement of the child allowance with a new child tax credit (ChC)	
Spain	Replacing individual taxation of spouses with joint taxation (income splitting), maintaining budget neutrality by a proportional increase of all income tax rates (JT)	Budget neutral replacement of the family tax credit for children with a tax allowance (ChA)	Replacing the progressive tax schedule with a flat tax, keeping the basic tax allowance and all tax credits, maintaining budget neutrality by adjusting the tax rate (FT)
Sweden	Replacing individual taxation of spouses with joint taxation (income splitting), maintaining budget neutrality by a proportional increase of all income tax rates (JT)	Scenario a: Replacing the child benefit with a child tax credit, which is scaled up to maintain budget neutrality (ChC)	Replacing the progressive tax schedule with a flat tax, keeping the basic tax deduction and all tax credits, maintaining budget neutrality by adjusting the tax rate (FT)
		Scenario b: Replacing the child benefit with a child tax allowance, which is scaled up to maintain budget neutrality (ChA)	
United Kingdom	Replacing individual taxation of spouses with joint taxation (income splitting), maintaining budget neutrality by a proportional increase of all income tax rates (JT)	Scenario a: Replacing the child tax credit (means-tested benefit) with a child allowance, which is scaled up to maintain budget neutrality (ChA)	Replacing the progressive tax schedule with a flat tax, keeping the basic tax allowance and all tax credits, maintaining budget neutrality by adjusting the tax rate (FT)
		Scenario b: Replacing the child tax credit (means-tested benefit) with a non-refundable tax credit, which is scaled down to maintain budget neutrality (ChC)	
Czech Republic	Abolishing the tax credit for a husband or wife with low earnings, maintaining budget neutrality by increasing the child tax credit (RMETR)	Transforming the child tax credit into a child allowance, which is scaled up proportionally to maintain budget neutrality (ChA)	Scenario a: Replacing the flat tax with a progressive tax schedule, maintaining budget neutrality (PT)
			Scenario b: Replacing the flat tax with a progressive tax schedule with the option for joint taxation of spouses (income splitting), maintaining budget neutrality (JT)

N o t e: Abbreviations denoting the scenarios in parenthesis.

S o u r c e: Authors' representation.

Microsimulation analyses

The results presented here were obtained using the tax-benefit microsimulation model EUROMOD.[6] Several scenarios were simulated for each of the six EU Member States. The first scenario, referred to as the Baseline (BL), represents the respective tax and benefits system of the policy year 2016. The other scenarios aim to assess different impacts of personal income tax elements assumed to be especially important from a distributional and gender

perspective by modifying the system of household taxation (individual versus joint taxation), the design of the tax schedule (progressive versus flat) and the design of child benefits (tax credits versus tax allowances versus cash transfers, respectively). In all simulations, budget neutrality is maintained to eliminate effects induced by changing the budgetary means available for a specific policy measure. Table 1 provides an overview of the scenarios simulated.

Individual taxation (and tax relief for sole and principal earner couples, where applicable) is replaced by joint taxation (scenarios denoted as JT) with income splitting according to the German model for Austria, Spain, Sweden, the United

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6   H. Sutherland, F. Figari: EUROMOD: The European Union Tax-benefit Microsimulation Model, in: International Journal of Microsimulation, Vol. 6, No. 1, 2013, pp. 4-26.

Kingdom and the Czech Republic. For the Czech Republic, the income tax schedule was simultaneously switched from a flat to a progressive tax. An additional scenario denoted as RMETR is simulated for the Czech Republic in which the sole earner tax credit is abolished and the child tax credit is increased to maintain budget neutrality. For Germany, the existing income splitting system is replaced by an individual income tax system (IT). To maintain budget neutrality, all income tax rates are adjusted proportionally: downwards for Germany, upwards for all other countries.

The various child-related benefits instruments are used in differing designs and to a varying extent in the countries analysed. The scenarios aim at identifying the differing impact of child tax credits (ChC), child tax allowances (ChA) and child-related cash transfers. For those countries relying solely (Sweden) or primarily (Germany) on a child cash benefit, we apply two alternative scenarios each: the replacement of the existing child cash benefit by a child tax credit and by a child tax allowance. For the UK, a first scenario substitutes the existing means-tested child tax credit by a non-refundable child tax credit, while a second one replaces it by a child tax allowance. For Austria, the existing child tax credit is replaced by a child tax allowance in a first scenario; a second scenario substitutes the existing child tax allowance with a new child tax credit. For both the Czech Republic and Spain, the current child tax credit is replaced by a child tax allowance.

The progressive income tax schedule is replaced by a flat schedule maintaining existing tax exemptions for Austria, Spain, Sweden, the UK and Germany (denoted as FT), and the inverse for the Czech Republic (PT). To maintain budget neutrality, the flat income tax rate is adjusted accordingly.

Results

The microsimulations focus on horizontal distributional effects of the simulated reforms differentiated across different household types and on their gender effects. We consider distributional impacts as well as work incentives for second earners, who are mainly women whose labour supply is relatively responsive to (tax-induced) variations in net wages.[7]

7 See the extensive literature surveys provided by C. Meghir, D. Phillips: Labour Supply and Taxes, in: J. Mirrlees, S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles, J. Poterba (eds.): Dimensions of Tax Design, in: The Mirrlees Review, Oxford 2010, Oxford University Press, pp. 202-274; O. Bargain, A. Peichl: Steady-State Labor Supply Elasticities: A Survey, IZA Discussion Paper No. 7698, 2013; O. Bargain, K. Orsini, A. Peichl: Comparing Labour Supply Elasticities in Europe and the United States – New Results, in: The Journal of Human Resources, Vol. 49, No. 3, 2014, pp. 723-838; A. Bick, N. Fuchs-Schündeln: Taxation and Labor Supply of Married Couples Across Countries: A Macroeconomic Analysis, IZA Discussion Paper No. 10504, 2017.

The effects presented here are aggregate effects and do not offer any differentiations across socio-economic characteristics such as, for example, age, income levels, number of children or a migration background.

Effects on poverty and inequality

Table 2 contains the changes of estimated at-risk-of-poverty rates for the individual scenarios in percentage points compared to the baseline scenario. The changes in Gini coefficients measuring income inequality are depicted in Table 3.

Overall, the simulations suggest that the changes in the income tax system – from a flat tax to a progressive income tax system and vice versa – have negligible effects on poverty. For the lowest income groups, it is primarily the basic allowance that determines their tax burdens (which is maintained in the simulations), while the tax rate matters to a far lower extent.

The Gini coefficient increases as a consequence of the introduction of a flat tax in all countries considered, indicating an increase in income inequality that results from a general decrease in the progressivity of income tax systems; however, depending on the progressivity of the current income tax schedules, the extent to which it increases may vary greatly. The increase is more pronounced in Austria and Germany, where income tax schedules are rather progressive, while it is moderate in Spain and the UK and almost zero in Sweden. The re-introduction of a progressive income tax schedule in the Czech Republic decreases the Gini coefficient moderately and thus reduces income inequality.

The impact of substituting the existing systems of individual taxation for a joint taxation system with income splitting has little effect on poverty. As low-income households have low to no taxable incomes, their overall tax burden is hardly affected by the system of household taxation.

Introducing individual taxation in Germany slightly increases the estimated overall poverty rate. This increase is driven by a relatively large increase in the poverty rate of households in which only one of the spouses earns an active income – as these are the greatest beneficiaries of joint taxation. The Gini coefficients at the household level indicate an overall decrease in income inequality in all five countries currently applying a system of individual taxation. Conversely, applying a system of individual taxation in Germany slightly increases income inequality. Within households, income inequality is likely to decrease, benefiting second earners (mostly women); how-

Table 2
Changes of at-risk-of-poverty rates for the simulated scenarios, change to baseline in percentage points

Poverty						
Country	AT	CZ	DE	ES	SE	UK
			in %			
BL	13.19	9.46	13.67	22.18	13.64	15.17
		Change to base in percentage points				
FT	-0.38	-	-0.25	-0.32	-0.04	-0.64
PT	-	0.26	-	-	-	-
JT	0.43	0.46	-	-0.03	0.11	-0.17
IT	-	-	0.45	-	-	-
ChA	1.42	1.18	1.72	-0.05	0.73	5.74
ChC	0.00	-	2.02	-	0.73	5.98
RMETR	-	-0.24	-	-	-	-

N o t e : Abbreviations for different scenarios: BL baseline, PT progressive tax rate, FT flat tax rate, JT joint taxation, IT individual taxation, ChA child tax allowance scenario, ChC child tax credit scenario, RMETR reduced marginal effective tax rate scenario.

S o u r c e : Authors' calculations based on EUROMOD simulations.

Table 3
Changes of Gini coefficients for the simulated scenarios, change to baseline in percentage points

Gini coefficient						
Country	AT	CZ	DE	ES	SE	UK
			in %			
BL	24.99	24.48	26.38	33.88	23.54	31.25
		Change to base in percentage points				
FT	1.54	-	1.71	0.53	0.01	1.04
PT	-	-1.01	-	-	-	-
JT	-0.69	-1.44	-	-0.13	-0.11	-0.28
IT	-	-	0.23	-	-	-
ChA	0.25	0.47	0.57	0.05	0.28	1.92
ChC	-0.02	-	0.43	-	0.21	1.78
RMETR	-	0.02	-	-	-	-

N o t e : Abbreviations for different scenarios: BL baseline, PT progressive tax rate, FT flat tax rate, JT joint taxation, IT individual taxation, ChA child tax allowance scenario, ChC child tax credit scenario, RMETR reduced marginal effective tax rate scenario.

S o u r c e : Authors' calculations based on EUROMOD simulations.

ever, our simulations do not allow for any conclusions in this respect.[8]

Generally, our simulations show the expected distributional effects of the various child benefits. Most pronounced are the changes in at-risk-of-poverty rates, while the Gini coefficients are only slightly affected. The extent of the effects crucially depends on the current design of income taxation (in particular the degree of progressivity of the income tax schedule), on the absolute levels of (tax-related) child benefits and the design of the system of child benefits, which makes the effects' extent less comparable across countries. However, the simulations provide insights into the general direction of the expected impact of different changes within the system of child benefits.

Replacing a child cash benefit with tax-related child benefits, as in the scenarios simulated for Sweden and Germany, increases poverty and income inequality. The simulations for Austria demonstrate, in a similar vein, that abolishing the existing child tax credit (which is a de facto

cash benefit) and increasing the tax allowance for children would significantly raise poverty and slightly increase income inequality; while the replacement of the existing child allowance by a child tax credit has almost no effect due to its very low level. Transforming the non-wastable child tax credit into a child allowance in the Czech Republic increases poverty and income inequality. In Spain, the overall effect of replacing the family tax credit for children with a tax allowance on poverty and inequality is negligible.

Replacing the means-tested child tax credit (which is a de facto means-tested cash benefit) with a child allowance or a non-refundable child tax credit would considerably raise poverty and income inequality in the UK. Both reforms benefit primarily the upper half of the income distribution. The increase of inequality is higher in the case of the child allowance as the tax credit primarily strengthens the (upper) middle part of the income distribution, while the tax allowance has the strongest effect on incomes at the top of the distribution. The choice between a child tax allowance and a non-refundable child tax credit does not significantly affect poverty rates.

For Sweden, the simulation suggests that replacing a universal child benefit with a child tax allowance increases inequality even more than substituting it for a child tax credit, as higher incomes benefit more from a child tax

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8 S. B a c h , op. cit., shows that the German income splitting leads to higher effective tax burdens for women compared to men in most income groups; its substitution by individual taxation would decrease the tax burden for women and increase the tax burden for men, thus strengthening the progressivity of income taxation on an individual level.

allowance due to their higher marginal tax rates. A similar result is found for Germany.

Gender aspects

Gender-differentiated distributional effects

EUROMOD is based on the household as a standard unit, thus assuming that all individuals in a household are pooling resources and are equally affected by policy measures: an assumption that does not hold in reality.[9] The distributional impact of changes in tax and benefit policies may differ between men and women within a household and certain household types in which women or men are over or under-represented (e.g. households consisting of lone parents – typically lone mothers) may be affected disproportionately by specific measures. To identify gender-differentiated distributional effects, Avram, Popova and Rastrigina suggest a two-pronged strategy: a decomposition approach and distributional analyses focusing on certain household types in which men or women are over or underrepresented.[10] The scope of our analyses allows for the pursuit of the second approach only, i.e. to analyse the distributional impact of the various scenarios on specific household types that are particularly interesting from a gender perspective. Specifically, it is possible to simulate distributional effects for one-person households, i.e. single men and women as well as lone mothers and fathers, also differentiating between one-person households where the adult is actively employed versus households where they are inactive. Moreover, it is possible to identify the distributional effects of two-person households with both different constellations regarding the main income contributor (male or female) and differentiating between households with and without children. These analyses only allow comparisons between different household types (i.e. whether a specific policy measure affects specific household types more or less than others). As with all methods based on households and resource pooling, analyses of intra-household distributional effects are not possible.

To determine whether a given household type benefits overall from a simulated reform, we look at the changes of the aggregate tax burden (i.e. whether it is decreased or increased by the reform), compared to changes in aggregate transfer payments received by this household type. A given household type is a winner if its overall tax burden is reduced and the reduction is not or only par-

tially compensated by a decrease in transfer payments received, and vice versa. For the sake of simplicity, we do not present the detailed amounts for all household types here, but only highlight the winning and losing household types. This simplification comes at the cost of neglecting quantitative (gender-differentiated) effects: as this approach does not inform about the relative size of the gains or losses affecting individual household types, it cannot provide insight into the possible (gender) differences regarding the extent of gains or losses. In the following, we present the simulated effects of changing the system of household taxation in the countries looking at income distribution and work incentives from a gender perspective.

Introducing joint taxation with income splitting benefits couple households with one active income contributor in Austria, the UK, Sweden (with the exception of households with female active income contributors with children) and Spain regardless of the existence of children and regardless of whether the active income contributor is male or female (see Table 4). Conversely, couple households with one active income contributor lose in Germany as a result of the introduction of individual taxation, regardless of the existence of children. The only exception is households with female active contributors without children, who benefit from the reduction of income tax rates. In a similar vein, all single households (with and without children, active and inactive) gain from the lowering of income tax rates that the introduction of individual taxation would allow in a budget neutral scenario.

Single men and women as well as lone fathers and mothers face losses in the joint taxation scenario, in which single person households suffer from the increase in tax rates in Austria, Spain and the UK. Again, the impact of the introduction of income splitting has minimal overall and gender-differentiated effects in Sweden.

Not taking into account the intra-household perspective and the magnitude of change, the gender differentiated effects of substituting individual taxation for joint taxation with income splitting are almost non-existent in couple households with one active income contributor.

Impact on work incentives

In addition to its re-distributive effect, by altering gross incomes the tax benefit system also affects the (dis)incentive to work. This leads to potential labour supply reactions especially for those less attached to the labour market, i.e. the second earners who are predominantly women. In order to analyse the incentive to work of the tax benefit systems of the six EU Member States and the vari-

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9 S. A v r a m, D. P o p o v a, O. R a s t r i g i n a: Accounting for Gender Differences in the Distributional Effects of Tax and Benefit Policy Changes, EUROMOD Working Paper No. 7/16, 2016.

10 Ibid.

Table 4
Winning and losing household types for simulated change in system of household taxation

Household type	Austria (JT)	Spain (JT)	Sweden (JT)	UK (JT)	Czech Republic (JT)	Czech Republic (RMETR)	Germany (IT)
2-adult household with female active income contributor, without children	+	-	+	+	+	-	+
2-adult household with male active income contributor, without children	+	+	+	+	+	-	-
Active single woman	-	-	-	-	-	0	+
Active single man	-	-	-	-	-	0	+
Inactive single woman	-	-	-	-	+	0	+
Inactive single man	-	-	-	-	+	0	+
2-adult household with female active income contributor with children	+*	+	-	+	-*	-*	-
2-adult household with male active income contributor with children	+	+	+	+	-	-	-
Active lone mother	-	-	-	-	-	+	+
Active lone father	-*	-*	-	-	-	+	+
Inactive lone mother	-*	-	0*	0	0	0	+
Inactive lone father	x	x	+*	-*	x	x	x

N o t e: "+" winner, "-" loser, "0" no effect; "*" interpret with caution due to small sample size, "x""data not published due to unreliable survey estimates as a result of less than 20 reporting households. JT joint tax rate scenario, RMETR reduced marginal effective tax rate scenario.

S o u r c e: Authors' representation based on EUROMOD simulations.

ous scenarios, we use two indicators: the marginal effective tax rate (METR) and the participation tax rate (PTR).[11]

The METR measures the extent to which taxes, social insurance contributions and benefits affect the financial gain from work when the labour supply increases at the intensive margin. The higher the METR, the less financially rewarding it is to expand working hours for individuals already in employment. The PTR measures how transitioning from non-employment to employment affects a household's disposable income. It thereby influences the decision to enter the labour market or not.

Both indicators are subject to assumptions about the level of increase in individual gross earnings. When calculating the METR, we assume an increase in earnings of 10%. For the PTR, the gross earnings of inactive individuals are set to two-thirds of the mean active income. We further assume year round employment.

The analysis focuses on households where a woman is either a second earner or inactive. Figures 1 and 2 give an overview of the estimated distributions of METRs for female second earners and PTRs for inactive women in the baseline scenario as well as in the system of household taxation scenario.

In the baseline scenario, METRs for second earners on average are highest for Germany (a result of the income splitting system) at 48%. In the other five countries, average METRs for second earners range between 22% (Spain) and 36% (Austria). The mean PTR is highest in Austria and Germany (37%). In Sweden, the Czech Republic and the UK, it ranges between 29% and 35%; it is by far at the lowest level in Spain (18%).

The introduction of a joint taxation system with income splitting in Austria, Spain, Sweden and the UK increases the mean METR for female second earners and thus decreases work incentives on average. In the Czech Republic, for which the income splitting was implemented jointly with a progressive tax schedule, the average METR slightly increases compared to the baseline (+3 percentage points) and significantly increases compared to the progressive tax scenario (+19 percentage points).

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11 See for these indicators also O. R a s t r i g i n a, A. V e r a s h c h a g i n a: Secondary Earners and Fiscal Policies in Europe, Luxembourg 2015, Publication Office of the European Union.

Figure 1
Distribution of Marginal Effective Tax Rates (METR) for female second earners, 2016

METR in %

75th-25th Percentile   × median   — mean
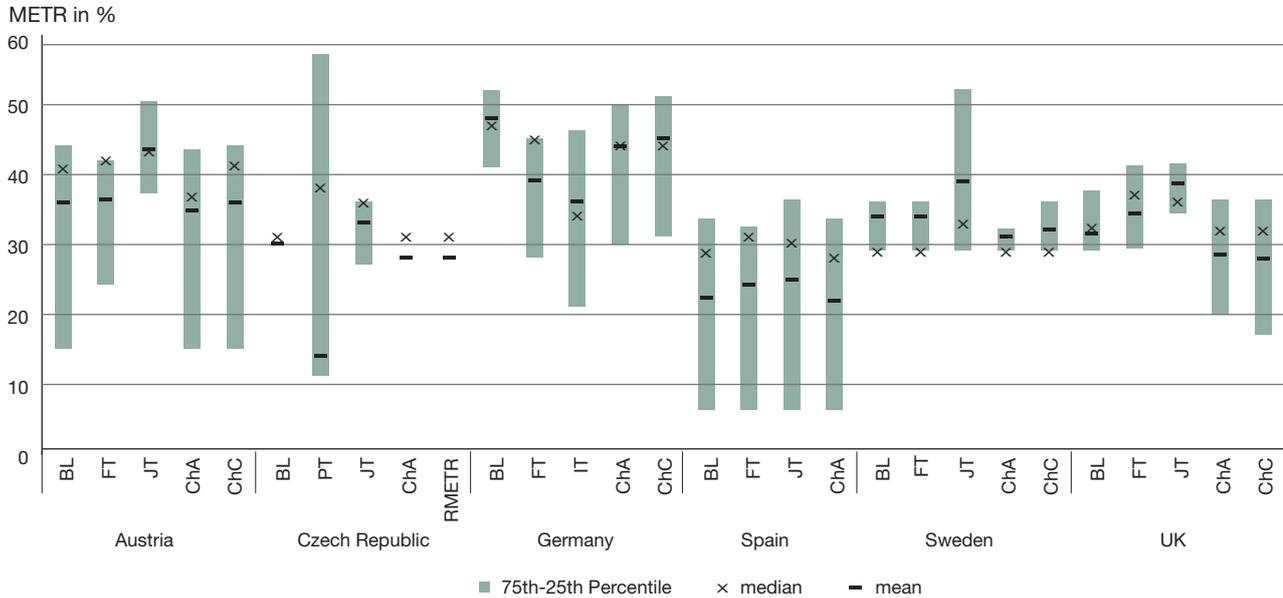
S o u r c e : Authors' calculations based on EUROMOD simulations.

Figure 2
Distribution of Participation Tax Rates (PTR) for inactive women, 2016

PTR in %

75th-25th Percentile   × median   — mean
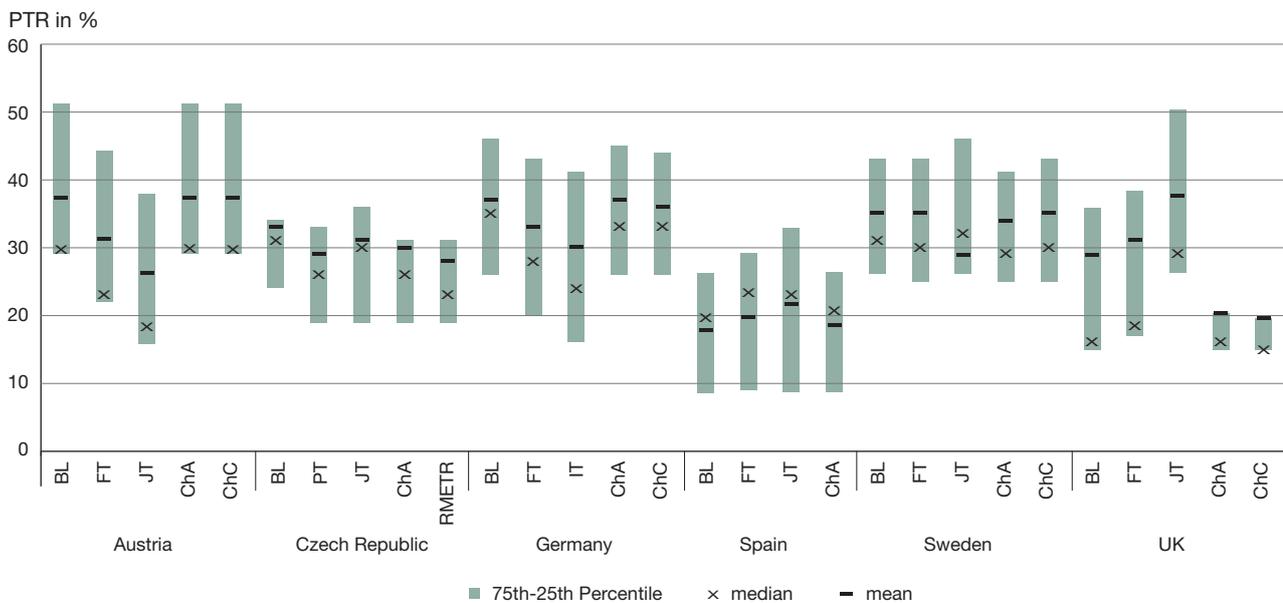
S o u r c e : Authors' calculations based on EUROMOD simulations.

Replacing the German income splitting system with individual taxation results is a sizeable improvement in work incentives. The mean (-12 percentage points) and median (-13 percentage points) METR decrease considerably.

The substitution of the system of individual taxation by joint taxation with income splitting considerably reduces the average PTR for inactive women in Austria; a moderate reduction is observable in Sweden and a slight one in the Czech

Republic. It results in an increase, however, in Spain (moderate) and the UK (considerable). Overall, therefore, the effects are not as clear as those on METR, indicating a deterioration of work incentives for inactive women for Spain (slightly) and the UK, but improvements in Austria, Sweden and the Czech Republic. Substituting the current income splitting system in Germany by individual taxation reduces the average PTR for inactive women, thus improving incentives for inactive women to enter the labour market.

Conclusions

Our simulations show that the design of income tax schedules, systems of household taxation and (tax-related) child benefits has non-negligible effects on income distribution and on work incentives in general – particularly from a gender perspective – in the six EU Member States considered. General tendencies and effects can be identified although the effects differ for some household types across countries and depending on the concrete design of the tax benefit system and the interactions between tax and benefit provisions that cannot be captured in our simulation exercise.

The introduction of a flat tax hardly impacts poverty but increases income inequality. Gender-differentiated effects are less clear-cut and their extent differs across countries.

In general, a flat tax benefits couple households with a male active income contributor, while households with female active income contributors lose. Rather pronounced gender differences are also found between active lone mothers and fathers. While in almost all countries active lone mothers lose from the introduction of a flat tax, active lone fathers are winners.

Replacing individual taxation with a joint taxation system with income splitting has only small effects on poverty but decreases income inequality on a household level. It benefits couple households with one active income contributor in almost all countries, regardless of the existence of children and regardless of the gender of the active income contributor. Gender-differentiated effects are almost non-existent in childless couple households with one active income contributor. They are a little more pronounced in the presence of children, due to larger income differences between spouses in these households.

Replacing an existing child benefit granted as a cash transfer by tax-related child benefits raises poverty and income inequality. Moreover, the inequality- and poverty-increasing effect of a child tax allowance would be higher compared to a child tax credit. Gender-differentiated effects are not clear-cut, however, and require deeper analyses.