

Appendix 1. Theoretical Framework

Following Immervoll et al. (2007) and Saez et al. (2012) we set up a theoretical framework where heterogeneous taxpayers take decisions on labour and pay taxes. Individuals take decisions about whether to work or not, which reflects the presence of fixed costs related to working (i.e. the extensive margin). Conditional on this decision, the number of hours worked is chosen (i.e. the intensive margin). Individuals thus face a nonlinear tax schedule from zero to positive income tax rate depending on their decision to work and on the number of hours worked. Changes in the tax system alter both the net-of-tax wage rate and, consequently, the opportunity cost of working (through the labour/leisure decision). Building on this simple framework we derive analytical expressions in which the changes in government tax revenues reflects the potential changes in labour supply and thus allows to gauge the relative magnitude on the behavioural vs. mechanical effect of a given change in tax expenditure and corresponding change in effective taxation.

Let us assume that the total population N is divided into i groups according to their skill level, which in turn determines their pre-tax wage. Each group has N_i individuals that earn the same exogenous wage rate w_i . Individuals within each group may differ in the fixed cost of working such that they may also differ in their extensive responses. Preferences are represented by the following additively separable utility function:

$$u_i(c, l, q), \tag{A.1}$$

where c is consumption, l labour and q the fixed cost of working. The partial derivative of (A.1) with respect to c is positive while the partial derivatives with respect to l and q are negative, conditional on labour participation. The budget constraint is given by:

$$c = w_i l - T(w_i l, z), \quad (\text{A.2})$$

where $T(w_i l, z)$ represents the net taxes paid by the individual of group i ; the parameter z is just a way to denote the tax reforms considered below. When the individual does not work ($l=0$), the above tax function becomes $-T_0(0, z)$, that is, the welfare benefit received by those who do not work. In such case, the budget constraint is $c_0 = -T_0(0, z)$.

Plugging (A.2) into (A.1) and maximising the new expression gives the optimal labour supply

$$l_i((1 - \tau_i)w_i) = l_i(W_i), \quad (\text{A.3})$$

where W_i is the net-of-tax wage rate. As usual in the literature, we ignore income effects on labour supply in order to simplify the analysis and in absence of a general consensus in the literature about the size of such as income effects (see Blundell and MaCurdy, 1999, for a survey), which in many cases is simply insignificant.

A key variable in this analysis is the elasticity of labour supply with respect to the net-of-tax wage rate. In absence of income effects, the uncompensated and compensated elasticities can be considered as being identical, such that we have:

$$\varepsilon_i = \frac{\partial l_i}{\partial W_i} \frac{W_i}{l_i}. \quad (\text{A.4})$$

In relation to the extensive response, we first need to define the critical value of the fixed cost q that determines whether the individual enters the labour market or not. In terms of utility levels, the necessary condition to supply a strictly positive number of hours of work is given by:

$$u_i(w_i l - T(w_i l, z), l, q_i) > u_i(-T(0, z)), \quad (\text{A.5})$$

which implicitly defines an upper-bound value for q_i , denoted by \bar{q}_i . Provided that the individual cost of working q_i is below \bar{q}_i , the labour supply will be strictly positive. Let the fixed cost q_i be distributed across the individuals belonging to group i following the distribution function $F_i(q)$, with $f_i(q)$ as density function. Hence, $F_i(\bar{q}_i)$ is the proportion of individuals who choose to work because their q_i is below \bar{q}_i . The total employment in group i is then given by $E_i \equiv N_i F_i(\bar{q}_i)$.

In line with Saez (2002), let the extensive elasticity for each individual of group i be defined as:

$$\eta_i = \frac{\partial F_i}{\partial (c_i - c_0)} \frac{(c_i - c_0)}{F_i} = \frac{f_i(\bar{q}_i)(c_i - c_0)}{F_i(\bar{q}_i)}. \quad (\text{A.6})$$

The variable η_i represents the percentage change in the number of workers in group i as result of a one-percentage change in the difference in consumption when working and not working are compared.

At this point, the mechanical effect of a tax reform (given by a change in the personal tax expenditures in our case) can be defined as:

$$dM = \sum_{i=1}^I \left[\frac{\partial T_i}{\partial z} F_i N_i + \frac{\partial T_0}{\partial z} (1 - F_i) N_i \right]. \quad (\text{A.7})$$

The first term refers to the change in the tax revenues by modifying personal tax expenditures in the case of employed individuals while the second term is the effect of the tax reform on the benefits received by non-working individuals.

The behavioural effect, on the other hand, takes into consideration the effect of changes in the labour supply (intensive response) and in the decision on participation in labour market (extensive response) on the tax revenues after the tax reform. Analytically this can be expressed by the following expressions:

$$dB = \sum_{i=1}^I \left[\tau_i d(w_i l_i) E_i + (T_i - T_0) \frac{dF_i}{dz} N_i \right]. \quad (\text{A.8})$$

The first term of (A.8) is the behavioural effect related in the intensive response while the second term represents the behavioural effect in the extensive response. After differentiating totally the labour income and some algebraic manipulations using (A.4), we arrive at the following expression of the first term of (A.8): $\sum_{i=1}^I \left[-\frac{\tau_i}{1-\tau_i} d\tau_i E_i w_i l_i \varepsilon_i \right]$, where the usual assumption that there is no incidence effect of changes in labour supply on pre-tax wage rate ($dw=0$) has been used.

As mentioned above, the second term of (A.8) refers to the behavioural effect related to the extensive response. Denoting by $a_i = \frac{T(w_i l_i) - T(0)}{w_i l_i}$ the participation tax rate, a more

comprehensive expression of this second term can be obtained: $\sum_{i=1}^I \left[-\frac{a_i}{1-a_i} \frac{\partial(T_i - T_0)}{\partial z} \eta_i E_i \right]$,

where the expression (A.2) –and its equivalent when $l=0$ –, the elasticity (6), $dw=0$ and the envelope theorem have been used. Hence the total behavioural effect of expression (A.8) can be rewritten as:

$$dB = \sum_{i=1}^I \left[-\frac{\tau_i}{1-\tau_i} d\tau_i E_i w_i l_i \varepsilon_i - \frac{a_i}{1-a_i} \frac{\partial(T_i - T_0)}{\partial z} \eta_i E_i \right]. \quad (\text{A.9})$$

Finally, adding expression (A.7) and (A.9), we obtain the total change in the personal income tax revenues:

$$dR = dM + dB = \sum_{i=1}^I \left[\frac{\partial T_i}{\partial z} E_i + \frac{\partial T_0}{\partial z} (N_i - E_i) - \frac{\tau_i}{1-\tau_i} d\tau_i E_i w_i l_i \varepsilon_i - \frac{a_i}{1-a_i} \frac{\partial(T_i - T_0)}{\partial z} \eta_i E_i \right], \quad (\text{A.10})$$

where terms among brackets are, respectively, the intensive mechanical effect, the extensive mechanical effect, the intensive behavioural effect and the extensive behavioural effect.

Appendix 2. Work-related Tax Expenditures in Five EU Countries

The main features of the work-related tax expenditures in our sample of countries are described in this section. The reference year for the tax rules is 2010.

France

The Employment Bonus (Prime pour l'emploi – PPE) is an individual tax credit established in order to encourage the return to employment and improve earnings from working.

The amount depends on:

- The earned income (employee and self-employment)
- The tax unit income
- The number of hours worked

To be eligible for the PPE, the household “*Revenu Brut Global*”, must be under:

PPE	2010 € per year
Single person	16251
Couple	32498
Increase for each dependent child	4490

The PPE is also based on the individual earned income, corresponding to employment income and self-employment income. For part-time workers, this earned income is converted to full-time equivalent. The credit is equal to 7.7 percent of the annual employment or self-employment income earned when not exceeding the minimum wage (€12,475), increased by €36 for each dependent person (double for the first child of a single, divorced or widowed person). If the earned income exceeds this amount, the credit is 17 percent of the difference between the earned income and the ceiling (€17,451 or 26,572, for a single, divorced or

widowed person with one child or more; or for a married person with a non-working spouse). The credit is assessed by the tax authorities and is aggregated at the household level. If the total tax credits exceed the household's income tax liability, the excess is refunded.

Spain

Work-related tax incentives (*Reducción por rendimientos del trabajo, prolongación de la actividad laboral y movilidad geográfica y personas con discapacidad que obtengan rendimientos del trabajo como trabajadores activos*) are granted through an income related non-refundable tax allowance for taxpayers who receive employment income. The amount of the allowance diminishes as the level of net employment income increases, and varies between €2,652 and €4,080.

The allowance, which cannot exceed total net employment income, is doubled for employees who accept an employment in a different city or who are older than 65. Further provisions are applicable in case of disabled taxpayers. In the case of joint taxation, and even if both partners have incomes from work, the allowance is only applicable once.

United Kingdom

The working tax credit (WTC) is an income-tested refundable tax credit, calculated on the basis of the previous tax year's annual income. WTC contains a number of elements depending on family composition (basic, couple and lone parent element), health (disability and severe disability element), number of hours worked (30 hour element) and age of the claimant (50+ element).

The eligibility conditions for working adults are:

- working at least 30 hours per week and aged above 24 years old,
- working at least 16 hours per week and have a dependent child or
- working at least 16 hours per week and disabled.

The different elements are as follows:

WTC	2009/10
	£ per year
Basic element	1890
Lone parent element	1860
Couple element	1860
30 hours element	775
Disability element	2530
Severe disability element	1075
Max eligible childcare expenditure, 1 child (per week)	175
Max eligible childcare expenditure, 2+ (per week)	300
Proportion of eligible childcare cost covered	80%

Hungary

The Employee Tax Credit is a refundable tax credit for low income individuals. It amounts to 17 percent of wage income earned, subject to a monthly maximum credit of HUF 15,100 (€ 55). That implies that the tax credit can be fully exploited if the annual wage earnings are lower than HUF 3,188,000 (€ 11,572). The tax credit tapers off in the income range HUF 3,188,000-4,698,000 (€ 17,054), when the reduction is equal to 12 percent of the income exceeding HUF 3,188,000 (€ 11,572). No tax credit is available for those earning more than HUF 4,698,000 (€ 17,054). Eligibility does not depend on family (e.g., number of children) characteristics. Note: the tax credit was abolished as of 2013.

Slovakia

The employee tax credit was introduced in January 2009. Entitled are employees who have worked at least 6 months during the year and have annual earnings of at least 6 minimum wages (with the minimum wage standing at € 307.7 per month in 2010). Eligibility is conditional on receiving only employment income. If annual earnings are lower than 12 minimum wages, the tax credit amounts to 19 percent of the difference between the basic tax allowance (equal to 22.5 * the minimum subsistence level, fixed at € 185.19 per months in

2010) and the minimum wage less social insurance contributions. If annual earnings are higher than 12 minimum wages, the tax credit amounts to 19 percent of the difference between the individual basic tax allowance and taxable income. The tax credit becomes zero when taxable income is equal to the basic tax allowance. The tax credit is refundable.

Appendix 3. Detailed Country-specific Results

Table A-1 France: decomposition of the impact of a 1% decrease in work-related tax credit on labour tax revenue (€ million)

Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.07	0.15	-0.09	-0.02	-0.06
2	0.19	0.23	-0.04	-0.04	0.01
3	0.05	0.06	-0.01	-0.01	0.00
4	0.02	0.16	-0.14	-0.15	0.01
5	0.03	0.07	-0.04	-0.04	0.00
6	0.02	0.05	-0.03	-0.03	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	0.39	0.73	-0.34	-0.29	-0.05

Scenario 2					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	-0.10	0.15	-0.25	-0.19	-0.06
2	0.07	0.23	-0.15	-0.16	0.01
3	0.02	0.06	-0.05	-0.05	0.00
4	0.00	0.16	-0.16	-0.16	0.01
5	0.02	0.07	-0.05	-0.04	0.00
6	0.02	0.05	-0.03	-0.03	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	0.05	0.73	-0.68	-0.63	-0.05

Table A-2 Spain: decomposition of the impact of a 1% decrease in work-related tax allowance on labour tax revenue

(€million)

Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.45	0.82	-0.38	-0.25	-0.12
2	3.11	5.41	-2.30	-2.01	-0.29
3	4.02	5.39	-1.38	-1.71	0.33
4	2.80	4.04	-1.24	-1.21	-0.02
5	3.04	4.27	-1.23	-1.19	-0.03
6	3.54	5.23	-1.70	-1.48	-0.22
7	3.93	5.27	-1.34	-1.31	-0.02
8	4.08	5.41	-1.33	-1.33	0.00
9	4.02	5.65	-1.63	-1.28	-0.35
10	5.75	7.16	-1.40	-1.35	-0.05
total	34.73	48.65	-13.92	-13.14	-0.78

Scenario 2					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.38	0.82	-0.45	-0.32	-0.12
2	2.63	5.41	-2.78	-2.49	-0.29
3	3.85	5.39	-1.55	-1.88	0.33
4	2.67	4.04	-1.37	-1.35	-0.02
5	3.06	4.27	-1.20	-1.17	-0.03
6	3.57	5.23	-1.66	-1.44	-0.22
7	4.14	5.27	-1.13	-1.11	-0.02
8	4.33	5.41	-1.08	-1.08	0.00
9	4.64	5.65	-1.01	-0.66	-0.35
10	6.40	7.16	-0.76	-0.71	-0.05
total	35.67	48.65	-12.99	-12.20	-0.78

Table A-3 UK: decomposition of the impact of a 1% decrease in work-related tax credit on labour tax revenue (€ million)

Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	4.14	5.12	-0.99	-0.97	-0.02
2	1.69	2.28	-0.58	-0.57	-0.01
3	0.86	1.14	-0.28	-0.27	-0.01
4	0.17	0.28	-0.10	-0.10	0.00
5	0.15	0.21	-0.06	-0.06	0.00
6	0.02	0.02	0.00	0.00	0.00
7	0.08	0.09	-0.01	-0.01	0.00
8	0.01	0.01	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	7.12	9.14	-2.02	-1.98	-0.04
Scenario 2					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	3.65	5.12	-1.48	-1.46	-0.02
2	1.49	2.28	-0.78	-0.77	-0.01
3	0.78	1.14	-0.37	-0.36	-0.01
4	0.17	0.28	-0.11	-0.11	0.00
5	0.15	0.21	-0.06	-0.06	0.00
6	0.02	0.02	-0.01	-0.01	0.00
7	0.08	0.09	-0.01	-0.01	0.00
8	0.01	0.01	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	6.33	9.14	-2.81	-2.77	-0.04

Table A-4 Hungary: decomposition of the impact of a 1% decrease in work-related tax credit on labour tax revenue

(€million)

Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.51	0.85	-0.35	-0.35	0.00
2	0.43	0.78	-0.35	-0.35	0.00
3	0.68	1.00	-0.32	-0.32	0.00
4	0.78	1.01	-0.24	-0.24	0.00
5	0.75	1.02	-0.27	-0.27	0.00
6	0.71	0.96	-0.24	-0.24	0.00
7	0.90	1.12	-0.22	-0.22	0.00
8	0.84	1.04	-0.20	-0.20	0.00
9	0.82	0.96	-0.14	-0.16	0.02
10	0.16	0.18	-0.02	-0.02	0.00
total	6.59	8.93	-2.34	-2.36	0.02
Scenario 2					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.17	0.85	-0.68	-0.68	0.00
2	-0.04	0.78	-0.82	-0.82	0.00
3	0.39	1.00	-0.61	-0.61	0.00
4	0.50	1.01	-0.51	-0.51	0.00
5	0.59	1.02	-0.43	-0.43	0.00
6	0.58	0.96	-0.38	-0.38	0.00
7	0.87	1.12	-0.26	-0.26	0.00
8	0.80	1.04	-0.24	-0.24	0.00
9	0.87	0.96	-0.09	-0.11	0.02
10	0.17	0.18	-0.02	-0.02	0.00
total	4.89	8.93	-4.04	-4.06	0.02

Table A-5 Slovakia: decomposition of the impact of a 1% decrease in work-related tax credit on labour tax revenue

(€million)

Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.05	0.13	-0.08	-0.09	0.00
2	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	0.05	0.13	-0.08	-0.09	0.00

Scenario 2					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	-0.13	0.13	-0.26	-0.26	0.00
2	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	-0.13	0.13	-0.26	-0.26	0.00

Table A-6 France: decomposition of the impact of a 1 euro decrease in work-related tax credit on labour tax revenue

(€million)

Scenario 3: elasticities as in Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.38	0.40	-0.02	-0.06	0.04
2	0.49	1.45	-0.97	-0.25	-0.72
3	0.80	1.03	-0.23	-0.23	0.00
4	0.11	0.64	-0.53	-0.49	-0.04
5	0.36	0.98	-0.63	-0.59	-0.04
6	0.49	1.41	-0.91	-0.92	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	2.63	5.92	-3.29	-2.54	-0.75

Scenario 4: country-invariant elasticities (elasticities from Scenario 1 averaged across countries)					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.36	0.40	-0.05	-0.11	0.06
2	-0.07	1.45	-1.52	-0.45	-1.07
3	0.68	1.03	-0.35	-0.35	0.00
4	0.07	0.64	-0.57	-0.51	-0.06
5	0.32	0.98	-0.66	-0.61	-0.06
6	0.49	1.41	-0.92	-0.93	0.01
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	1.84	5.92	-4.08	-2.96	-1.12

Table A-7 Spain: decomposition of the impact of a 1 euro decrease in work-related tax allowance on labour tax revenue (€million)

Scenario 3: elasticities as in Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.60	1.23	-0.62	-0.46	-0.17
2	1.93	2.71	-0.78	-0.96	0.18
3	1.35	1.98	-0.63	-0.62	-0.01
4	1.49	2.15	-0.66	-0.66	-0.01
5	1.25	1.84	-0.59	-0.52	-0.07
6	1.69	2.38	-0.69	-0.65	-0.03
7	1.77	2.34	-0.57	-0.56	-0.01
8	1.83	2.44	-0.61	-0.60	-0.01
9	1.84	2.59	-0.75	-0.59	-0.16
10	2.53	3.18	-0.65	-0.63	-0.03
total	16.28	22.84	-6.56	-6.25	-0.31

Scenario 4: country-invariant elasticities (elasticities from Scenario 1 averaged across countries)					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.83	1.23	-0.40	-0.32	-0.07
2	2.14	2.71	-0.57	-0.64	0.08
3	1.58	1.98	-0.40	-0.40	0.00
4	1.77	2.15	-0.38	-0.37	0.00
5	1.52	1.84	-0.32	-0.29	-0.03
6	2.00	2.38	-0.38	-0.37	-0.01
7	2.02	2.34	-0.31	-0.31	0.00
8	2.10	2.44	-0.33	-0.33	0.00
9	2.22	2.59	-0.37	-0.31	-0.06
10	2.83	3.18	-0.35	-0.34	-0.01
total	19.03	22.84	-3.80	-3.68	-0.12

Table A-8 UK: decomposition of the impact of a 1 euro decrease in work-related tax credit on labour tax revenue (€ million)

Scenario 3: elasticities as in Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	1.49	1.81	-0.32	-0.33	0.00
2	1.09	1.35	-0.26	-0.26	0.00
3	0.87	1.04	-0.17	-0.17	0.00
4	0.29	0.34	-0.05	-0.05	0.00
5	0.06	0.07	-0.01	-0.01	0.00
6	0.02	0.02	0.00	0.00	0.00
7	0.04	0.04	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	3.86	4.68	-0.83	-0.82	0.00

Scenario 4: country-invariant elasticities (elasticities from Scenario 1 averaged across countries)					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	1.42	1.81	-0.39	-0.28	-0.12
2	1.19	1.35	-0.16	-0.23	0.07
3	0.87	1.04	-0.17	-0.15	-0.02
4	0.16	0.34	-0.18	-0.05	-0.14
5	0.01	0.07	-0.06	-0.01	-0.04
6	0.00	0.02	-0.02	0.00	-0.01
7	0.04	0.04	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	3.70	4.68	-0.98	-0.72	-0.26

Table A-9 Hungary: decomposition of the impact of a 1 euro decrease in work-related tax credit on labour tax revenue (€million)

Scenario 3: elasticities as in Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.57	1.71	-1.14	-1.13	-0.01
2	0.42	1.33	-0.91	-0.95	0.04
3	0.83	1.62	-0.79	-0.78	-0.01
4	0.97	1.69	-0.72	-0.71	-0.01
5	1.08	1.69	-0.60	-0.59	-0.01
6	1.09	1.63	-0.54	-0.54	0.00
7	1.44	1.80	-0.36	-0.36	0.00
8	1.36	1.69	-0.33	-0.33	0.00
9	1.62	1.80	-0.18	-0.18	0.00
10	0.72	0.81	-0.09	-0.09	0.00
total	10.10	15.75	-5.66	-5.66	0.00

Scenario 4: country-invariant elasticities (elasticities from Scenario 1 averaged across countries)					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.96	1.71	-0.75	-0.72	-0.03
2	1.08	1.33	-0.25	-0.39	0.13
3	1.08	1.62	-0.54	-0.51	-0.03
4	1.20	1.69	-0.49	-0.46	-0.02
5	1.14	1.69	-0.55	-0.49	-0.06
6	1.15	1.63	-0.47	-0.46	-0.01
7	1.39	1.80	-0.41	-0.42	0.01
8	1.30	1.69	-0.39	-0.39	0.00
9	1.44	1.80	-0.36	-0.36	0.00
10	0.66	0.81	-0.14	-0.14	0.00
total	11.41	15.75	-4.34	-4.33	-0.01

Table A-10 Slovakia: decomposition of the impact of a 1 euro decrease in work-related tax credit on labour tax revenue (€million)

Scenario 3: elasticities as in Scenario 1					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	-1.42	1.39	-2.81	-2.83	0.02
2	-0.02	0.01	-0.03	-0.03	0.00
3	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	-1.44	1.40	-2.84	-2.86	0.02

Scenario 4: country-invariant elasticities (elasticities from Scenario 1 averaged across countries)					
decile	total	mechanical	behavioural_total	behavioural_extensive	behavioural_intensive
1	0.31	1.39	-1.08	-1.16	0.08
2	0.00	0.01	-0.01	-0.01	0.00
3	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00
total	0.31	1.40	-1.09	-1.17	0.08