

DOES WORK PAY IN SLOVENIA?

Primož DOLENC*

University of Primorska, Faculty for Management Koper
Ministry of Finance, The Treasury, Ljubljana

Preliminary communication**

UDK 338.22(497.4)
JEL O40

Milan VODOPIVEC*

University of Primorska, Faculty for Management, Koper
The World Bank, Washington D.C.

Abstract

Income transfers may generate work disincentives: if certain income payments are stopped when individuals (re)enter employment, this creates disincentives for taking employment – so called “unemployment trap”. To make work pay, several countries have introduced policies – financial incentives – which enhance employment opportunities for marginal groups in the labor market. Such policies increase in-work incomes and so improve work incentives for those receiving only out-of-work incomes. This paper tries to shed light on two questions, first being how does “making work pay” work in Slovenia, compared OECD countries, and the second, should Slovenia introduce earnings supplements or other in-work arrangements in tackling possible unemployment trap. According to international comparison Slovenia does not “step-out”, when we look at net replacement rates. Slovenia, however, has not introduced a single active labor programs that would stimulate directly and financially unemployed to join (official) employment, even though a lower paid job. In the paper we suggest the implementation of some kind of in-work arrangement at least for those, who are potentially less stimulated to reemploy.

Key words: economic policy, financial incentives to work, Slovenia, EU, OECD.

* The authors would like to thank the anonymus reviewers, for their constructive advice and comments they helped the paper to achieve a better protiling.

** Received: June 15, 2005.

Accepted: November 9, 2005.

1 Introduction

Income transfers may generate work disincentives: if certain income payments are stopped when individuals (re)enter employment, this creates disincentives for taking a job. This is the so called “unemployment trap.” According to OECD (2004a), such disincentives are indeed present for many persons with low potential wages, particularly if they have children or are second earners in the family.¹ While non-employment benefits (such as benefits from unemployment insurance or assistance) need to ensure income adequate consumption smoothing, setting such benefits at a too high level may trap families in a cycle of dependency, as taking a job brings little or no extra income. Another consequence of high non-employment benefits is an upward pressure on wages.

A tax burden on labor is also an important factor as it is of the most direct ways to influence the poverty and unemployment rate. When taxes on labor are introduced the tax wedge between labor costs paid by employer (gross wage) and net wage received by employee appears. According to OECD (2004b) tax wedge on labor is the difference between what employers pay out in wages and social security charges and what employees take home after tax, taken into account also social security deductions and cash benefits. OECD and IMF studies have shown that higher taxes on labor, including unemployment benefit contributions, significantly increase unemployment (see OECD, 2004 and IMF, 2003). The problem is indeed relevant for Slovenia – data shows that Slovenia has one of the highest tax burden on labor in EU, immediately after Belgium and Germany, respectively (Dolenc and Vodopivec, 2005).

To make work pay, several countries have introduced policies – financial incentives – which enhance employment opportunities for marginal groups in the labor market. These policies are aimed to increase in-work incomes and improve work incentives for those receiving only out-of-work incomes. In the European Employment Strategy ‘making work pay’ policies are a key issue for reducing benefit dependency and increasing labor market participation (De Lathouwer, 2004).

European Commission reports that many EU member states are committed to improve the combined impact of taxes and benefits on employment and their link with activation. There is also a more visible commitment to tackle the issue of working poor through in-work benefits and rises in minimum wages. Improving work incentives in benefit systems, including eligibility rules and related financial incentives are, however, less forcefully addressed (for details see European Commission, 2005).

This paper is a result of a preliminary study on the subject and as such tries to shed light on the following questions: 1. How does “making work pay” work in Slovenia, compared OECD countries? 2. What are possible solutions of an eventual unemployment trap problem in Slovenia?

The main findings of the paper are as follows. According to international comparison Slovenia does not “step-out”, when we look at financial incentives to return to employment. In tackling possible unemployment trap some OECD and EU countries have introduced earnings supplements to attract unemployed to re-activate; several policy measures

¹ Many other OECD studies deal with this problem, see e.g. OECD (1997, 1999a, 1999b)

are possible, all having their advantages and disadvantages. Slovenia, however, has not introduced a single active labor programs that would stimulate directly and financially unemployed to join (official) employment, even though a lower paid job. The problem is especially evident for some groups of unemployed (those who have children, etc.).

The paper is organized as follows. In the second chapter we present methodology and data sources. The third and fourth chapter deals with the subject in OECD area, whereas fifth and sixth chapter is concentrated on Slovenia and the comparison of Slovenian case with OECD examples. We then sum up and suggest some basic policy measures.

2 Methodology and data sources

2.1 Methodology

There are two possible (yet alternative) indicators, how to measure financial effect of re-employment or efficiency of “making work pay”. One – used e.g. by Immervoll and O’Donoghue (2003) or Vodopivec (1998) – is so called net replacement rate (*NRR*). *NRR* is defined as ratio of net income while out of work (y_{netA}) divided by net income while in work (y_{netB}), so:

$$NRR = \frac{y_{netA}}{y_{netB}} \quad (1)$$

If net replacement rate exceeds 100%, the unemployed person is not expected (at least not on short-term basis) to be encouraged to move from unemployment, because in-work earnings are smaller than out-of-work incomes or (alternatively) when moving to unemployment the incomes would increase and not (as usually) decrease.

Carone, Salomäki, Immervoll and Paturot (2003) for this purpose suggest an alternative indicator, marginal effective tax rate (*METR*). The concept of *METR* is not new, though; it was already mentioned in 1978 (see Meade, 1978) and later-on additionally explained by Brandford and Fullerton (1981).

There are three different *METR*s, but with respect to unemployment trap, we consider marginal effective tax rate for unemployed person ($METR_{UT}$). The parameter aims to measure the short-term financial incentives to move from unemployment (where out-of-work incomes are received) into paid employment and is defined as the rate at which taxes increase and benefits (mainly unemployment insurance benefits) decrease as an unemployed person takes up a job. The level of $METR_{UT}$ is subject to different family types and earnings before and after re-employment. Formally $METR_{UT}$ is computed as:²

$$METR_{UT} = 1 - \frac{\Delta y_{net}}{\Delta y_{gross}} \quad (2)$$

² Δy_{gross} are the additional pre-tax earnings when moving from unemployment and Δy_{net} is the change in net income obtained after taxes and benefits. The change in gross earnings between labor market status A (unemployed – y_{grossA}) and B (employed – y_{grossB}) is $\Delta y_{gross} = y_{grossB} - y_{grossA}$ and the net earnings change is $\Delta y_{net} = y_{netB} - y_{netA} = (y_{grossB} - t_B + b_B) - (y_{grossA} - t_A + b_A)$ where t denotes total taxes, b denotes total benefits and *net* refers to net (after tax and benefits) earnings

The parameter quantifies to what extent the tax-benefit system contributes to the unemployment trap in cases where unemployed person receives out-of-work incomes.

Although net replacement rate and marginal effective tax rate are connected with clear relationship (for details see OECD, 1998), there is a major conceptual difference between the two measures: METR is for the people that move from unemployment (having some earlier earnings that could determine unemployment benefits) to employment and NRR is used vice versa (from employment to unemployment).

2.2 Data sources

The analysis was based on two sources of data:

- For international comparison of *NRR* and *METR_{UT}* we used data from on-going joint European Commission/OECD project, aimed at monitoring the direct influence of tax and benefit instruments on household incomes. The data for year 2001 is presented by Carone et al. (2003).
- For calculations of *METR* and *NRR* in Slovenia the official government data on average, minimum and guaranteed wage and levels of unemployment and social assistance was used. The data was collected for the year 2004.

3 Overview of data – net replacement and marginal effective tax rates in OECD countries

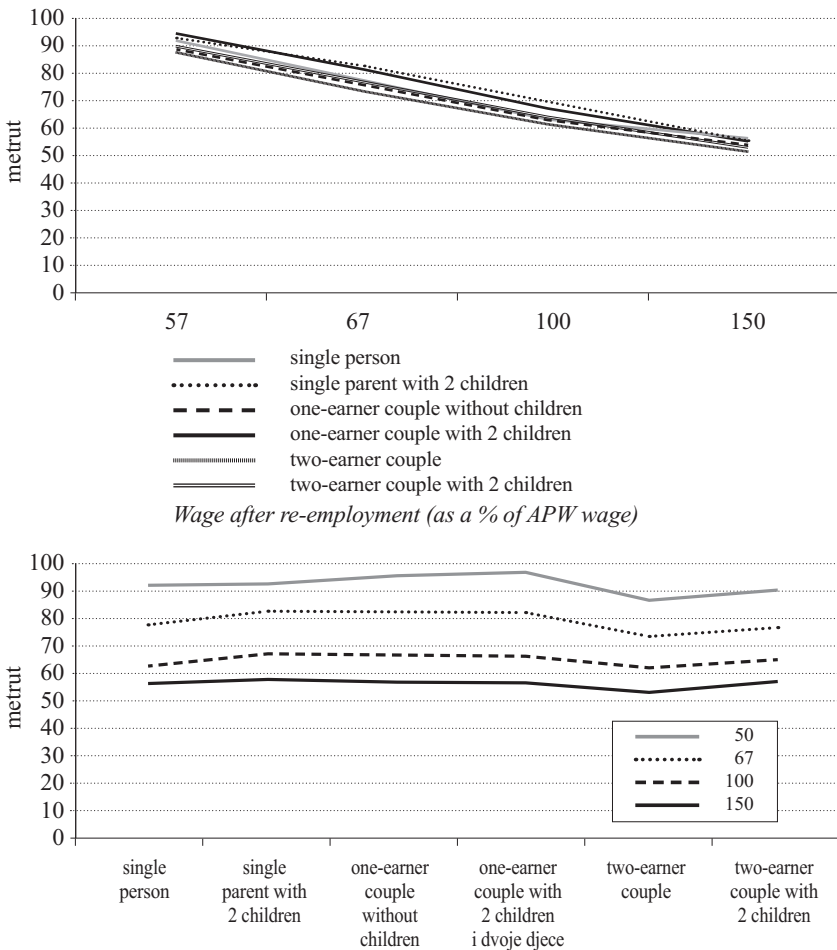
In most OECD countries unemployed persons receive (at least at the beginning of their unemployment) unemployment insurance benefits and – after the eligibility for unemployment insurance benefit expires³ – usually also unemployment assistance benefits. If they move from unemployment, they have some opportunity costs: they usually lose these benefits, they have to pay transportation costs, they receive wage – because those people are usually those with little work experience and/or low skills, they commonly receive minimum wage – but they have to pay personal income taxes, social security contributions etc. Therefore not all are unconditionally prepared to take the job (if available). The problem is especially evident for those who had high wage before unemployment (relatively to the offered wage, if moved from unemployment) because they usually receive relatively high unemployment insurance benefits. The level of net replacement rate and marginal effective tax rate for unemployed person is of course subject to different parameters: different family types and earnings before and after re-employment etc.

European and OECD countries have different tax systems and cope differently with unemployment. They also have different views on “making work pay” policy. However, some common conclusions could be drawn from results of joint European Commission/OECD project. These results (marginal effective tax rates for unemployed persons and net replacements rates) are presented in tables 1,2 and 3 and figures 1,2 and 3 (different types of families and employment levels after reemployment are taken into consideration).

³ The length is different in different countries. Unemployment insurance benefit and/or unemployment / social assistance benefit

How to explain $METR_{UT}$? $METR_{UT}$, close to – say – 90% means that short-term net financial reward for taking up a job is only 10% of gross earnings. If we look at numbers in table 1 and 2, $METR_{UT}$ is higher on average (at a certain level of previous work wage) if re-employment wage level is lower. This is logical. In most countries out-of-work incomes⁴ depend on previous wages. Unemployed with high previous wage usually receive a higher benefit, which makes re-employment less attractive, especially if offered low wage employment. Of course, family type plays an important role, too (see figure 1b and 2b).

Figure 1a and 1b Median unemployment trap indicator ($METR_{UT}$) for an unemployed person with previous work wage level of 67% of APW wage with respect to different family types and levels of wage after re-employment in 2002 (in %)



Source: Table 1

⁴ Table 1-3 also contain data for Slovenia, but table 5 offers a bit more detailed insight into the subject.

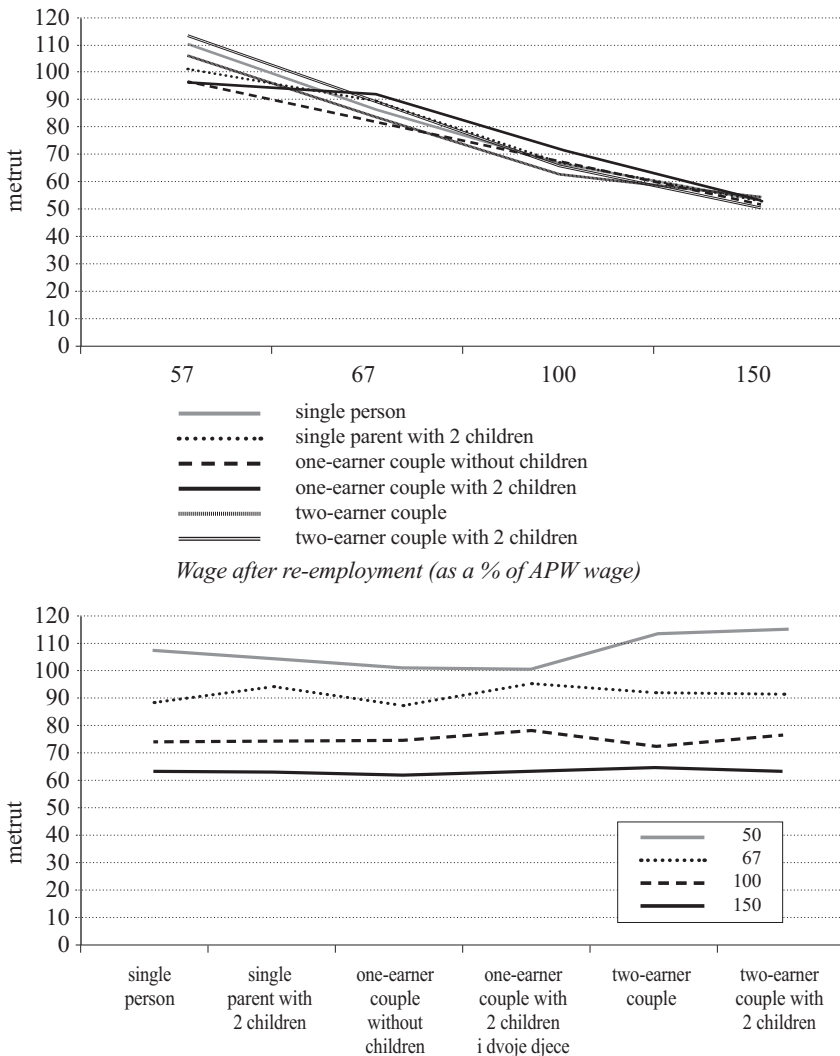
Table 1 Marginal effective tax rate for unemployed person with previous work wage level of 67% of average production worker (APW) wage with respect to different family types and levels of wage after re-employment (in different EU/OECD countries and Slovenia, and average and median for those countries) in 2002 (in %)

Family type	Single person			Single parent with 2 children			One-earner couple without children			One-earner couple with 2 children			Two-earner couple			Two-earner couple with 2 children								
	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150	50	67						
% of AWP (before employment)	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150				
Slovenia	83	75	64	57	75	72	65	58	88	81	67	57	84	79	65	56	81	79	75	68	67	65	62	57
Austria	88	75	64	57	99	84	69	61	100	86	71	62	100	86	71	62	80	69	60	54	86	74	63	56
Belgium	100	89	78	71	91	82	74	68	92	80	70	65	92	80	70	65	99	89	78	70	99	89	78	70
Czech Republic	80	67	54	46	94	80	67	57	92	79	64	53	92	79	64	53	76	63	51	44	77	65	55	46
Denmark	107	91	78	73	104	97	83	76	73	83	77	71	73	83	77	71	107	91	78	73	107	91	78	73
Finland	90	81	69	63	94	88	79	70	97	91	78	69	97	91	78	69	82	71	63	58	91	78	67	61
France	103	87	70	59	89	92	76	60	87	89	68	55	87	89	68	55	104	88	70	58	104	87	68	55
Germany	100	88	77	70	100	93	79	70	100	88	74	65	100	88	74	65	99	86	75	67	114	98	83	72
Greece	101	79	60	50	107	84	61	51	101	79	60	50	101	79	60	50	101	79	69	50	107	84	61	51
Hungary	84	75	64	61	89	71	61	59	84	75	64	61	84	75	64	61	84	73	62	60	84	73	62	60
Ireland	84	73	59	54	50	54	60	53	100	87	68	54	100	87	68	54	54	48	42	37	72	61	51	43
Italy	69	60	53	49	74	53	54	52	67	57	53	49	67	57	53	49	75	64	56	51	80	70	62	55
Japan	94	74	56	45	103	95	70	55	84	71	54	43	84	71	54	43	95	75	56	45	91	71	56	44
Luxembourg	107	88	71	63	104	89	64	57	102	107	79	63	102	107	79	63	102	83	66	57	115	89	68	58
Netherlands	93	85	72	60	92	87	75	62	96	91	77	63	96	91	77	63	89	78	67	57	89	78	67	57
Norway	89	75	62	57	96	87	79	67	101	83	67	59	101	83	67	59	89	75	62	57	94	78	64	59
Poland	111	88	67	55	77	72	63	52	77	72	65	51	77	72	65	51	114	91	68	54	111	86	65	52
Portugal	82	77	63	53	86	84	68	57	94	78	63	54	94	78	63	54	77	66	55	48	77	66	55	51
Slovak Republic	88	77	59	49	100	91	72	59	100	100	80	62	100	100	80	62	85	69	54	45	85	69	58	48
Spain	100	81	65	53	100	82	62	51	100	77	61	50	100	77	61	50	100	81	65	53	103	83	65	54
Sweden	105	87	70	62	103	91	80	69	100	98	78	67	100	98	78	67	105	87	70	62	105	87	70	62
Switzerland	115	95	71	58	100	92	69	58	100	95	71	57	100	95	71	57	108	88	68	56	109	88	68	56
United Kingdom	78	70	58	49	45	56	65	57	84	82	66	55	84	82	66	55	43	41	38	36	54	49	43	39
United States	85	71	57	51	59	63	58	49	83	75	60	50	83	75	60	50	85	71	57	48	83	69	56	47
Average	93.7	79.6	65.1	56.9	89.4	81.2	69.0	59.5	91.9	83.6	68.2	57.7	91.9	83.6	68.2	57.7	89.3	75.0	62.2	53.9	92.9	77.5	63.6	55.2
Median	93.0	79.0	64.0	57.0	94.0	84.0	69.0	57.0	96.0	83.0	68.0	57.0	96.0	83.0	68.0	57.0	89.0	75.0	63.0	57.0	91.0	78.0	64.0	55.0

Source: Carone et al. (2003); own calculations.

There are some countries and some wage/family type combinations, where $METR_{UT}$ jumps over 100%. Here the unemployed (at least on short-term basis and taken in mind only financial and not “personal” (personal pride, feeling of social importance...) effects) is not stimulated to take a job.

Figure 2a and 2b Median unemployment trap indicator ($METR_{UT}$) for an unemployed person with previous work wage level of 100% of APW wage with respect to different family types and levels of wage after re-employment in 2002 (in %)



Source: Table 2

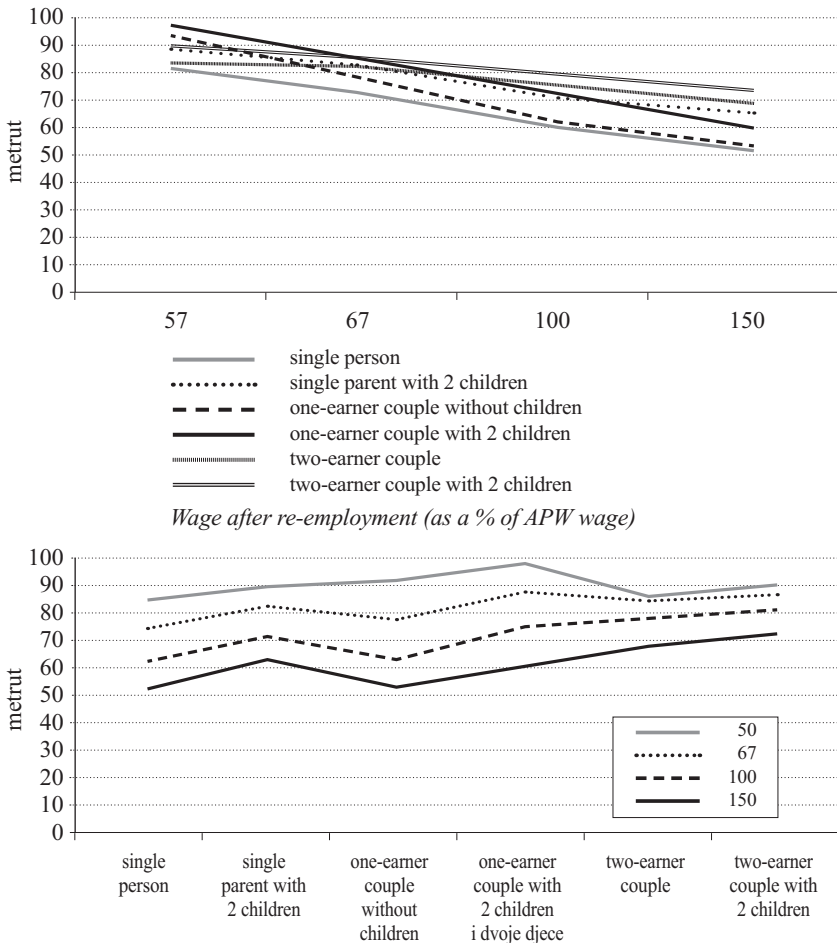
Table 2 Marginal effective tax rate for unemployed person with previous work wage level of 100% of average production worker (APW) wage with respect to different family types and levels of wage after re-employment (in different EU/OECD countries and Slovenia, and average and median for those countries) in 2002 (in %)

Family type	Single person			Single parent with 2 children			One-earner couple without children			One-earner couple with 2 children			Two-earner couple			Two-earner couple with 2 children								
	50	67	100	50	67	100	50	67	100	50	67	100	50	67	100	50	67	100						
% of AWP (after re-employment)	50	67	100	50	67	100	50	67	100	50	67	100	50	67	100	50	67	100	150					
Slovenia	97	85	72	62	86	81	72	62	98	89	72	60	90	86	74	62	97	93	85	75	80	77	72	64
Austria	96	81	68	60	106	89	73	63	100	86	71	62	100	97	78	67	101	85	70	61	107	89	73	63
Belgium	100	89	78	71	91	82	74	68	92	80	71	65	87	76	68	64	99	89	78	70	99	89	78	70
Czech Republic	97	80	62	52	94	80	68	57	95	81	66	54	100	96	77	63	100	81	63	52	97	80	65	53
Denmark	106	91	78	73	104	97	83	76	73	83	77	71	76	87	82	75	107	91	78	73	106	91	78	73
Finland	99	88	73	66	104	95	84	73	99	92	79	69	100	99	89	76	99	84	71	64	106	89	75	66
France	121	100	79	65	101	100	82	63	100	99	74	60	89	92	81	62	120	100	78	63	122	100	77	61
Germany	101	88	77	70	115	104	87	75	100	88	74	65	115	96	82	70	118	101	85	74	138	116	95	80
Greece	112	88	66	54	126	98	71	57	120	94	70	56	126	98	71	57	112	88	66	54	126	98	71	57
Hungary	84	75	64	61	89	71	61	59	84	75	64	61	89	71	61	59	84	73	62	60	84	73	62	60
Ireland	87	73	59	54	51	54	60	53	100	87	68	54	95	87	72	57	54	48	42	37	72	61	51	43
Italy	92	77	65	56	100	73	67	61	93	76	67	58	104	73	66	62	92	77	65	56	95	81	70	60
Japan	116	91	67	52	92	88	65	52	106	88	65	50	84	86	71	56	117	92	68	52	113	87	67	52
Luxembourg	114	115	89	75	154	126	89	73	118	119	87	69	113	112	89	68	139	111	85	69	155	119	88	71
Netherlands	110	98	81	65	104	97	81	66	102	96	81	65	102	96	82	66	115	97	80	65	115	97	80	65
Norway	117	95	76	67	113	99	88	73	117	95	76	65	109	99	78	66	117	95	76	67	122	99	78	68
Poland	141	110	81	65	107	94	78	62	107	94	80	61	67	64	63	60	114	113	83	64	141	108	80	62
Portugal	92	77	63	54	86	84	68	57	94	78	63	54	100	91	80	65	77	66	55	48	77	66	55	51
Slovak Republic	111	95	71	57	101	92	73	59	100	100	80	62	100	100	96	72	118	94	71	56	118	94	75	59
Spain	129	103	79	63	138	110	81	64	135	103	78	62	139	111	80	63	129	103	79	63	140	111	84	66
Sweden	134	109	85	72	123	106	90	76	114	109	85	72	104	103	86	73	134	109	85	72	134	109	85	72
Switzerland	143	113	84	67	145	126	92	71	124	113	84	65	134	125	92	70	134	107	81	65	150	118	89	70
United Kingdom	78	70	68	49	45	56	65	57	84	82	66	55	66	72	74	62	43	41	38	36	54	49	43	39
United States	108	88	69	59	68	70	63	52	100	88	69	57	68	69	64	53	108	88	69	56	108	87	68	55
Average	109.5	90.9	73.0	62.0	102.4	90.9	75.6	63.7	102.5	91.5	73.5	61.3	98.5	91.3	77.5	64.5	106.9	88.2	70.7	59.9	112.1	91.8	73.3	61.6
Median	107.6	88.8	73.4	63.1	103.5	93.8	74.0	63.1	100.0	88.3	73.9	61.7	100.0	95.5	78.2	63.6	112.0	91.2	70.7	63.1	112.8	91.2	74.9	61.5

Source: Carone et al. (2003); own calculations.

Similar conclusions as for marginal effective tax rates for unemployed persons can be drawn also for net replacement rates (table 3 and figure 3). On average and irrespectively the family type, net replacement rate is smaller for those with higher pre-unemployment wage; when moved to unemployment those with lowest pre-unemployment wage lose least (financially). On average (all countries and family type average) those with pre-unemployment wage at the level of 50% lose 10% of previous income, whereas those with pre-unemployment wage at the level of 150% lose almost 40% of previous income. Although paradoxically in some countries for some family types net replacement rate is more than 100%, which means that with loosing work people actually get higher incomes.

Figure 3a and 3b Median net replacement rates for unemployed persons moving to unemployment with respect to different family types and levels of wage after re-employment in 2002 (in %)



Source: Table 3

Table 3 Net replacement rates for employed persons moving to unemployment with respect to different family types and levels of wage before unemployment (in different EU/OECD countries and Slovenia, and average and median for those countries) in 2002 (in %)

Family type	Single person			Single parent with 2 children			One-earner couple without children			One-earner couple with 2 children			Two-earner couple			Two-earner couple with 2 children									
	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150					
	% of APW (after re-employment)	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150	50	67	100	150				
Slovenia	98.1	86	72.8	62.5	86.8	81.8	72	62.1	98.5	89.9	72.5	60.5	86.5	86.5	90.5	62.4	98.2	93.7	85.4	75.3	81.3	81.3	77.8	71.9	64
Austria	85	68	55	55	100	84	70	64	100	82	60	56	100	97	76	66	82	80	76	72	88	86	81	76	67
Belgium	82	83	63	46	84	79	63	48	81	73	55	41	80	74	58	45	95	91	78	63	96	92	80	67	70
Czech Republic	63	57	51	50	95	80	63	58	92	75	57	52	100	96	75	59	80	77	72	67	84	80	75	70	66
Denmark	92	85	60	45	94	96	76	61	71	86	63	47	71	84	75	58	96	93	77	64	96	93	78	66	70
Finland	83	74	61	48	92	89	82	67	97	88	69	54	100	99	85	65	84	81	75	66	90	86	80	70	83
France	94	83	71	70	86	92	78	70	82	87	67	69	79	85	78	69	96	92	82	79	96	92	83	79	91
Germany	100	81	61	62	100	92	82	78	100	85	63	51	100	84	78	70	93	90	85	80	98	99	96	91	76
Greece	101	76	58	58	108	81	66	65	101	76	63	63	108	81	66	65	101	88	75	72	103	91	80	76	63
Hungary	64	65	47	35	76	73	58	46	64	65	47	35	76	73	57	46	83	81	68	57	87	85	73	63	55
Ireland	87	69	50	38	70	65	59	45	113	87	64	45	97	90	72	53	79	71	59	47	88	80	68	55	62
Italy	47	50	52	39	55	54	60	49	48	50	56	43	58	57	62	52	79	77	71	59	83	81	76	62	73
Japan	74	70	60	60	88	83	60	60	83	67	59	58	89	87	68	59	90	86	77	73	88	84	78	73	91
Luxembourg	78	85	85	87	90	90	89	92	110	108	84	85	118	116	89	89	91	90	89	88	95	94	92	91	75
Netherlands	91	80	71	61	93	87	77	66	96	89	73	63	95	89	77	65	85	83	74	86	86	84	84	75	87
Norway	94	66	66	53	92	89	86	68	93	78	67	53	100	91	74	59	86	83	80	69	90	87	83	72	87
Poland	112	86	78	83	83	75	76	80	81	73	76	79	75	69	66	78	107	95	88	88	105	92	87	87	50
Portugal	89	68	47	32	85	80	56	38	92	70	48	33	100	90	73	51	86	76	62	48	87	77	63	50	69
Slovak Republic	79	72	64	47	100	92	72	56	100	100	75	52	100	100	96	69	84	81	78	64	86	84	83	69	78
Spain	77	78	74	52	84	81	79	66	75	76	75	53	84	81	78	66	90	89	85	68	94	90	89	78	72
Sweden	97	82	78	56	90	92	89	69	100	98	78	56	100	100	82	61	91	91	87	71	92	92	88	72	91
Switzerland	100	90	80	81	100	92	91	91	100	94	80	80	100	100	91	91	93	92	86	84	94	93	92	91	49
United Kingdom	76	64	45	31	66	65	62	46	84	78	56	39	78	76	71	53	71	63	53	42	79	72	60	49	63
United States	68	63	58	42	60	64	56	40	69	70	60	41	66	65	59	42	84	81	75	59	85	83	78	63	71.5
Average	84.0	73.7	62.4	53.5	86.6	81.5	71.7	61.9	88.3	80.7	65.0	54.3	90.2	86.3	74.2	62.2	88.1	84.0	76.6	67.6	90.9	86.9	80.3	71.5	72.0
Median	85.0	74.0	61.0	52.0	90.0	83.0	72.0	64.0	92.0	78.0	63.0	53.0	97.0	87.0	75.0	61.0	86.0	85.0	77.0	68.0	90.0	86.0	80.0	72.0	63

Source: Carone et al. (2003); own calculations.

It should be noted, however, that these figures are calculated on the first month of unemployment, therefore these figures should be viewed with caution. Carone et al. (2004) warn that computed figures represent only “upper-bound” as in many countries unemployment insurance benefits and/or unemployment/social assistance benefits are reduced or abolished over time. But still, if we take an example of currently unemployed person with previous wage level at 100% of APW wage and if he/she takes a comparable job (as before unemployment), he/she is effectively taxed away on average between 20-30% (different levels are because of different family types). Financial effect of taking full-time job is not significant; therefore some other mechanisms to attract reemployment should be taken into consideration.

4 Experience of OECD countries with “making-work-pay” policies

Why are policies to “make work pay” important in any country? On our opinion are such policies an effective tool to reduce unemployment in the economy with relatively low financial stake for the budget. Other policy measures aimed to lower unemployment might not be so effective. For example, empirical studies that tried to shed light on effects of tax reduction on general unemployment level in the economy came up with mixed results. Daveri’s cross country analysis (2001) showed that unemployment is not necessarily high/low in countries where labor tax rates are high/low. Further, within-country time correlation between labor taxes and unemployment is stronger for some countries (such as Germany, France, Spain, Italy) than for others (the US and UK). Similar was reported by Turvainen (1994): in the US and UK real wage resistance is low, so that taxes do not significantly affect labor costs and thus unemployment. Furthermore, Calmfors and Nymoen (1990) find only short-run impact of the tax wedge on wages in Denmark, Sweden and Norway, while Eriksson et al. (1990) find only weak long-run link between the tax wedge and wages for Finland. Prescott (2004) found that by reducing the effective marginal tax rate on labor and moving toward retirement systems with the property that benefits on margin increase proportionally to contributions. On the other hand Dolando et al. (1986), and Browne and McGettigan (1993) find that rise in tax wedge explains to some extent the increase in unemployment respectively for Spain and Ireland. In addition Andersen and Risager (1990) find significant effect of payroll taxes on wages in Denmark while Noghadam (1994) argues that a reduction in employers’ payroll taxes in France will reduce unemployment.

Therefore a very important policy measure are policies focused on the goal to “make work pay”, because they can be fairly focused on particular problems or groups of unemployed. But do policies to “make work pay” actually work? These policies often involve large amounts of financial resources to have a series of side effects throughout the economy. Pearson and Scarpetta (2000) argue that these policies have not only effects on employment, but also other effects. For example, policies that reduce the cost of low-skilled work lead to reductions in the prices charged by the employers of low-skilled labor for their output. Consumer demand for such goods and services could then rise in comparison with those produced with more highly skilled labor and the increased demand may give a further boost to demand for (and wages paid to) low-skilled work.

This is pointed out also by Phelps (2000) who argues that there are potentially important social and economic externalities associated with having a full-time job. A job is often good for individuals in terms of physical and mental health; raising self-esteem and well-being by making them feel more included in society. Bringing hitherto marginalized groups of society, including those who are active in undeclared working sphere into mainstream economic activities may generate beneficial outcomes for society as a whole. However, Pearson and Scarpetta (2000) find it is hard to find quantitative evidence of such effects and interpret them.

In spite of this fact, some empirical results are still applicable. Tax credit was introduced – for example – in the United States as *The Earned-Income Tax Credit (EITC) scheme* and in the United Kingdom as *The Working Families Tax Credit (WFTC)*. Under this program families with low-paid earner(s) and children can benefit from the credit so that marginal and average effective tax rates fell significantly, therefore their incentive to re-employ is higher. Hotz and Scholz (2000) found evidence that earned income tax credit in the United States promotes employment. Dilnot and McGrae (2000) made simulations for United Kingdom – they suggest that the expansion of the “make work pay” program will promote employment (10.000 to 100.000 people could find work). Similar results were found by Greenwood and Voyer (2000), and Fitoussi (2000) who estimated effects of “make work pay” policies for Canada and France, respectfully.

Complementary social benefits to work were introduced – for example – in Belgium (see De Lathouwer, 2004) as an answer to the necessity for the unemployed to gain work experience and the need to provide greater financial incentives to unemployed. The unemployed person who has taken up a low paid job (maybe also part-time job) receives unemployment benefit (direct cash transfer) as a wage subsidy. The system has proven to be very successful in Belgium because it attracted many unemployed to take a low paid and/or part-time job, for which they otherwise would not be interested. This is usually only one step into highly paid and/or full-time job.

Similar policy measures were introduced also in Canada; two financial incentive programs were introduced to encourage employment: *self-sufficiency project* and *earnings supplement project*. The first program makes generous payments directly to social assistance recipients who go to work full-time. The program was found to be very effective, as about a third of the long-term single-parent welfare recipients responded to the self-sufficiency project supplement offer by leaving welfare for full-time work (Greenwood and Voyer, 2000). The alternative program, earning supplement program, provides individuals with a “top-up” wage to supplement employment earnings for those with low-entry wages. This enables individuals to maintain a targeted income level. Participants must work for a set amount of time to qualify (e.g., 30 hours per week). Such programs are designed to provide a short period of enhanced income, based on the assumption that program participants will be in a better position to become self-sufficient when the supplement ends (for details see Card and Robins, 1996 and Mijanovich and Long, 1995). This program, as reported by Tattrie (1999), was not very successful. Only 41% of those who were asked to take a part in the study agreed to participate; of those, only 4.7% returned to work within 12 weeks, experienced an earnings loss and received a supplement payment. Tattrie supposes that the inefficiency of the program is due to reluctance

of unemployed to leave existing long-term employment relationships for new risky jobs for which they would receive a supplement for only a temporary period of time or difficulty in finding jobs.

Earnings supplements are used also in the United States, but here the instrument is combined with negative marginal tax rate or a marginal subsidy rate. The program provides strong work incentives for very low-wage or low-earnings workers. For them a supplement is added to their total earnings, and each additional dollar earned is supplemented as well. For workers above the maximum supplement point but below the poverty line, a supplement is also added to total earnings, but marginal earnings are subject to a tax rate (Haveman, 1996). Scholz (1995) estimated that the aggregate increase in hours generated by increased labor force participation was roughly 74 million hours yearly.

Another policy measure to create greater financial incentives for the unemployed and to make work more financial attractive in general are reductions of employee's social contributions or personal income tax reduction. In France low paid are entitled to exemption from family contributions and reduction of social security contribution (Pearson and Scarpetta, 2000). The rebate is proportional to the number of hours worked (so as not to unduly favor part-time job) and applicable for up to 1,3 times the minimum wage. Other tax exemptions are targeted to specific groups, including exemptions for part-time work, first-hires and youth employment, and exemptions related to skill training contracts and apprentices. Even high short-term financial cost of such program (0.6% of GDP) Malinvaud's simulation showed that in the long run this exemptions will contribute to the creation of about 350 000 jobs (Malinvaud, 1998 and Fitoussi, 2000)

5 Financial re-employment incentives in Slovenia – a descriptive analysis

In Slovenia the law gives unemployed workers the right to unemployment compensation, unemployment assistance, training and health and old-age insurance. Besides that needy individuals are eligible to social assistance programs. Characteristics of unemployment insurance and social assistance programs are listed in Table 4.

Table 5 shows net replacement rates in Slovenia for different family types and levels of wage before unemployment.⁵ Regarding the fact that unemployed are entitled to unemployment compensation at a level of 70% and 60% of wage before unemployment in first 3 months and after first 3 months, respectively, net replacement rates suit these figures. In most cases, net replacement rates are not far from 70% and 60%; the difference appears because we presumed that taxpayers try to take most of possible tax deductions.⁶ Those, however, who maintain their children and/or spouse, lose significantly less; net replacement rate is more than 90%. This is because the tax reduction is quite substantial in these cases. This fact is consistent with results reported by Vodopivec (1998). He stresses that for families with two or more children where both parents are unemployed, the effective tax rate on the employment of one of the parents – if the parent is a minimum-wage earner – is 100%. Under those circumstances employment of the parents has no effect on the disposable income of the family.

⁵ That is, it was assumed they all account for general tax deduction at the maximum level – 3% of tax base

⁶ Before unemployment.

Table 4 Unemployment and social assistance benefits in Slovenia

	Unemployment insurance		Social assistance
	Unemployment compensation	Unemployment assistance	Social assistance in cash ^a
Eligibility	<p>Several conditions:</p> <ul style="list-style-type: none"> • minimum contribution period of 9 months (for uninterrupted service) or 12 months (for interrupted service). • the person must register as unemployed within 30 days of the date of termination of employment. • the reason for termination of employment is either layoff or bankruptcy (quitters are thus disqualified). 	<p>Income-tested. If actual income per family member is below the threshold of 80 percent of the guaranteed wage.</p>	<p>Income-tested. The threshold income is, in terms of guaranteed wage,</p> <ul style="list-style-type: none"> • 100% for the first adult in the family, • 70% for second and other adults in the family, • 30% for a school-attending child below 18. <p>Property considered on ad-hoc basis by reducing the entitlement as calculated from incomes.</p> <p>Other provisions:</p> <ul style="list-style-type: none"> • for unemployed, registration at employment office required; • benefit can be conditioned by a contract specifying the actions to be taken by the recipient (such as health treatment, participation in public works). <p>Exceptions are permissible, at the discretion of the center for social work.</p>
Benefit level	70 percent in the first three months, 60 percent thereafter, of the average monthly wage in the last three months of employment.	80 percent of the guaranteed wage.	Difference between the income threshold and the income of the family (the sum of income of all family members plus assessed incomes from property). Payable monthly in cash, except in special circumstances when converted to coupons or reimbursement of bills.
Additional benefits	Participation in training, public works Pension and health insurance	Participation in training, public works Pension and health insurance	Housing subsidy, if recipient rents an apartment.
Duration of benefit	3 to 24 months, depending on years of service. Extendable for up to 3 years for people before pension able age. After employment of nine months, original terms for duration apply if the person reenters unemployment.	Maximum of 6 months.	Maximum of 6 months. Renewable.
Conditions for taking away the benefit after being awarded	If turning down a job offer, training or other active labor market programs. Maximum duration shortened for the period when casual earnings above 160 percent of the guaranteed wage.	Same as for unemployment compensation.	Not clear. Recipient must report changes of relevant circumstances

^a Social assistance as a supplementary source of income. There is also social assistance as the sole source of income, restricted to persons permanently unable to work and those above 60 without other income sources.

Source: Vodopivec (1998), Stanovnik, Čok and Stropnik (2004).

Table 5 Net replacement rates for employed persons moving to unemployment with respect to different family types and levels of wage before unemployment, Slovenia in 2004 (in %) ^a

	Type of household/family			
	Single adult without children	Single-parent family with 2 children	One-earner family with 2 children ^b	Two-earner family with 2 children ^{b, c}
A. Net replacement rates during the first 3 months of unemployment				
Minimum-wage earners	71	93	94	73
Average-wage earners	73	72	72	72
B. Net replacement rates during unemployment compensation after the first 3 months				
Minimum-wage earners	62	91	93	67
Average-wage earners	63	63	64	62
C. Net replacement rates during unemployment assistance				
Minimum-wage earners	44	37	30	42
Average-wage earners	20	18	18	19
D. Net replacement rates during social assistance				
Minimum-wage earners	45	72	81	56
Average-wage earners	20	36	48	25

Notes:

^a Net replacement rate is defined as the percent of net benefits received when breadwinners are unemployed, of wages earned when breadwinners work ("net" refers to disposable income – paid after taxes and contributions). It is assumed that all possible tax deductions are reported (general tax deduction at the level of 3% of tax base).

^b Both children are assumed to be between 15 and 18 years old.

^c Each adult "reports" one child as a tax deduction.

Source: Table 3, own calculations.

When the eligibility to receive unemployment compensation expires (or for those who were not applicable at all), the net replacement rate is significantly lower; about 38% and 64% for minimum-wage earners eligible to unemployment assistance and social security, respectively. Average-wage earners these net replacement rates are even lower, 19% and 32% for those eligible to unemployment assistance and social security, respectively. These results are similar to those reported by Vodopivec (1998) for Slovenia in 1996. He also finds that replacement rates under unemployment insurance are generally higher than those under social assistance.

Although we find that for selected groups of people net replacement rates are all below 100%, these results have to be viewed with caution. It is evident that workers with maintained children and/or spouse do not loose much during the period they re-

ceive unemployment compensation. It is expected they would not be unconditionally prepared to take again the job, if they received, say, 10% more income. This group of people is probably the most exposed to unemployment trap. Similar would be for highly paid workers, who would probably not be interested to take a low paid job until receiving unemployment compensation. With this respect, Van Ours and Vodopivec (2004) find empirical evidence for Slovenia that there are differences between gender in the probability of reemployment. Males with at least one dependent family member are more likely exit from unemployment after unemployment benefits expire. On the other hand, females are less likely to exit from unemployment – they are more likely to stay unemployed.

6 A comparative analysis of financial re-employment incentives in Slovenia and OECD

In the previous chapter we analyzed the reemployment incentives in Slovenia, but purely descriptive analysis does not offer a thorough overview of the subject. This chapter is a comparative analysis of reemployment incentives in Slovenia and OECD.

Tables 1 to 3 contain not only data for OECD countries, but also comparative data for Slovenia (in bold). On the first sight these results show that Slovenia does not “step-out” when compared to OECD countries. In Slovenia average net replacement rate for average-wage earners and minimum-wage earners are fairly similar, 92% and 75%, respectively (see section 3 for comparison).

As for marginal effective tax rate is concerned regardless the previous work wage level, the marginal effective tax rate for reemployment wage at the level of 100% of average production worker wage in OECD (average of all members) and Slovenia is very close (about 66% for unemployed person with previous work wage level of 67% of average production worker and 74% for unemployed person with previous work wage level of 100% of average production worker). For reemployment wage at the level of minimum wage, the marginal effective tax rate is significantly lower in Slovenia, though (for 12 to 14 % pts.).

On the other hand, sole comparison with OECD average could be misleading – OECD is a group of different and is a way hardly comparative countries. Therefore it may be worthwhile to compare the study results with those countries that are most similar to Slovenia. Hungary – for example – is also a transition country, which entered EU in 2004 and has similar unemployment rate as Slovenia, roughly fewer than 6% (see Dolenc and Vodopivec, 2005). When looking at net replacement rate, Slovenia has – on average – significantly higher net replacement rate – overall average is 15% pts. higher as in Hungary, so one could interpret this result that in Hungary financial incentives to reemploy are higher than in Slovenia causing higher employment rate and lower unemployment rate. As marginal effective rate is concerned, average earners in Hungary are financially more stimulated to take a (comparative to before unemployment) job, whereas below-average earners have similar stimulus as in Slovenia. Hungary – however – has lower employment rate, but this is probably due to other, structural factors rather than net replacement rate. Dolenc and Vodopivec (2005) found in their analysis of tax wedge on labor that although Hungary and Slovenia have similar

tax policies concerning labor taxation and also have similar unemployment rate (according to ILO classification) their employment rates differ significantly.

Slovenia is often compared to Ireland as well, because of the size and openness of the economy and other factors. In fact, Slovenia and Ireland are fairly similar with respect to employment rate (they both have employment rate at the level of approximately 65%), but Ireland has somewhat lower unemployment rate (approximately 4.3%) – see Dolenc and Vodopivec (2005). As financial aspects of reemployment incentives are concerned in Ireland unemployed get lower unemployment support on average than in Slovenia, because they lose more than 30% of what they have earned prior to the unemployment. They are also more financially stimulated to take again the job, because they earn on average 37% more than they received as unemployed (concrete figures are of course subject to family type and wage level before and after unemployment). In spite of this differences unemployment rate (and employment rate) – as mentioned – is not really that much different in Slovenia compared to Ireland.

Another comparison is interesting in this regard – a comparison to Austria. Slovenia and Austria have fairly similar figures when we take into consideration financial incentives to re-employ, either net replacement rate or marginal effective tax rate. Overall average net replacement rate in Austria is 77% (2% pts. lower than in Slovenia), whereas average marginal effective tax rate is 74% and 81% for 67% APW worker and 100% APW worker, respectively. Austria has, however, lower unemployment rate and higher employment rate.

These results show that when analyzing financial incentives to work a simple cross-country analysis would not be enough because there are several other factors influencing the labor market (the level of shadow economy, willingness to work, flexibility of workers to take half time job, etc.). It is – however – evident, that Slovenia does not “step-out” in financial incentives to work, especially if compared to similar economies in the region.

7 Conclusions and some policy considerations

We showed above that European and OECD countries have different tax systems and cope differently with unemployment. There are some countries and some wage/family type combinations, where unemployment trap indicator or net replacement rate jumps over 100%. Here the unemployed are not stimulated to take a job.⁷

Compared to OECD countries Slovenia does not “stick-out” when reemployment incentives are concerned. We find, however, that there are some groups of unemployed who are potentially less stimulated to reemploy. For unemployed with dependent family members and low-income potential net replacement rate is fairly high (almost 100%). Results of Van Ours and Vodopivec (2004) about differences between gender in the probability of reemployment are applicable here: also in Slovenia women may be more stimulated to stay at home.

⁷ At least on a short-term basis and bearing in mind only financial and not affective (personal pride, feeling of social importance...) factors.

How to improve (re)employment incentives in Slovenia? Our country has introduced active labor market programs to increase employment opportunities for unemployed, especially marginal groups (young inexperienced people, elderly people, etc.). This program, however, does not include one direct financial incentive for unemployed (for example, a earnings supplement) to directly attract people with high replacement rate to join employment. Therefore Slovenia could consider introducing some sort of “in-work” arrangements that increase net income from low paid work such as most of continental welfare states have done in the nineties. Social benefits to work have proven to be a success in Belgium, where unemployed with low wage potential (and high marginal effective tax rate) became stimulated to take any kind of work, even though less paid. Similar arrangement – earning supplements – have proved to be successful in the US and UK. Empirical results for different European countries and the US have shown that such measures would have some positive effects on employment, and the earnings and incomes of poor families, and at the same time would probably cause at little or no net increase in the cost of government transfers.

For Slovenia this could have another significant effect: it could lower the rate of undeclared economy, which is a vast problem in Slovenia as pointed out by Nastav (2004), and Nastav and Bojncic (2005). It is often so that “unemployed” in Slovenia receive unemployment benefits as long as possible, but work unofficially at the same time – in such way they have two positive financial effects: first, they receive unemployment benefits that could be relative high if pre-unemployment wage was high, and second, they receive higher wage on their undeclared work, because they do not pay taxes. This topic, regardless the fact that is closely connected to the issue discussed in this paper, is a relatively unresearched issue in Slovenia and is therefore left for further research.

REFERENCES

Andersen, T. and Risager, O., 1990. “Wage Formation in Denmark” in: L. Calmfors, ed. *Wage Formation and Macroeconomic Policy in the Nordic Countries*. Oxford: Oxford University Press, 137-181.

Browne, F. and McGettigan, D., 1993. “Another look at the Causes of Irish Unemployment”. *Technical Paper*, 1/RT/1993. Dublin: Central Bank of Ireland.

Calmfors, L. and Nymoan, R., 1990. “Real Wage Adjustment and Employment Policies in the Nordic Countries”. *Economic Policy*, (11), 397-448.

Card, D. and Robins, P., 1996. *Do Financial Incentives Encourage Welfare Recipients to Work? Initial 18 Month Findings from the Self-Sufficiency Project*. Ottawa: Social Research and Demonstration Corporation.

Carone, G. [et al.], 2003. “Indicators of Unemployment and Low-Wage Traps (Marginal Effective Tax Rates on Labour)”. *Economic papers*, No. 197. Brussels: European Commission.

Carone, G. [et al.], 2004. *Indicators of Unemployment and Low-Wage Traps (Marginal Effective Tax Rates on Employment Incomes)*. Paris: OECD.

Daveri, F., 2001. "Labor taxes and unemployment. A survey of the aggregate evidence". *Working paper*, No. 18. Moncalieri: Center for Research on Pensions and Welfare Policies.

De Lathouwer, L., 2004. *Making work pay, making transitions flexible. The case of Belgium in a comparative perspective.* Antwerpen: CSB.

Dilnot, A. and McGrae, J., 2000. "The family credit system and the working families tax credit in the United Kingdom *OECD Economic Studies*, No. 31. Paris: OECD.

Dolado, J. J., Malo de Molina, J. L. and Zabala, A., 1986. "Spanish Industrial Unemployment: Some Explanatory Factors". *Economica*, (53), 313-334.

Dolenc, P. and Vodopivec, M., 2005. "Porezni klin u Sloveniji: medunarodna usporedba i preporuke za ekonomsku politiku". *Financijska teorija i praksa*, 29 (3), forthcoming.

Eriksson, T., Suvanto, A. and Vartia, P., 1990. "Wage Formation in Finland" in: L. Calmfors, ed. *Wage Formation and Macroeconomic Policy in the Nordic Countries.* Oxford: Oxford University Press, 189-235.

European Commission, 2005. *Draft Joint European Commission Report 2004/2005.* Brussels: Council of the European Union.

Fitoussi, J.-P., 2000. "Payroll tax reductions for the low paid". *OECD Economic Studies*, No. 31. Paris: OECD.

Greenwood, J. and Voyer, J.-P., 2000. "Experimental evidence on the use of earnings supplements as a strategy to "make work pay"". *OECD Economic Studies* No. 31.

Haveman, R. 1996. "Reducing poverty while increasing employment: a primer on alternative strategies and a blueprint". *OECD Economic Studies*, No. 26. Paris: OECD.

Hotz, V. J. and Scholz, J. K., 2000. "Not Perfect, But Still Pretty Good: The Etc And Other Policies To Support the Us Low-Wage Labour Market". *OECD Economic Studies*, No. 31. Paris: OECD.

IMF, 2003. *World Economic Outlook, April.* Washington, DC: International Monetary Fund.

Immervoll, H. and O'Donoghue, C., 2003. "Employment Transitions in 13 European Countries. Levels, Distributions and Determining Factors of Net Replacement Rates". *CESIFO Working Paper*, No. 1091. Munich: Center for Economic Studies.

Malinvaud, E., 1998. Les cotisations sociales à la charge des employeurs: analyse économique [online]. Available from: [<http://lesrapports.ladocumentationfrancaise.fr/BRP/984001443/0000.pdf#search='Malinvaud%20analyse'>].

Meade, J. E., 1978. *The Structure and Reform of Direct Taxation.* London: George Allen & Unwin.

Mijanovich, T. and Long, D., 1995. *Creating an Alternative to Welfare: First-Year Findings on the Implementation, Welfare Impacts, and Costs of the Self-Sufficiency Project.* Ottawa: Social Research and Demonstration Corporation.

Nastav, B. and Bojnec, Š., 2005. *Shadow Economy in Slovenia.* Proceedings of the 6th International Conference of the Faculty of Management

Nastav, B., 2004. *Measuring welfare's components: work.* Ljubljana: Statistično društvo Slovenije.

Noghadam, R., 1994. "Why is unemployment in France So High?" *IMF Working Paper* WP/94/58. Washington, D.C.: International Monetary Fund.

OECD, 1997. *Implementing the OECD jobs strategy: making work pay.* Paris: OECD.

OECD, 1998. *Employment Outlook.* Paris: OECD.

OECD, 1999a. *Benefits systems and work incentives.* Paris: OECD.

OECD, 1999b. *Implementing the OECD Jobs Strategy: Assessing performance and policy.* Paris: OECD.

OECD, 2004a. *Benefits and Wages.* Paris: OECD.

OECD, 2004b. *Taxing Wages 2002/2003.* Paris: OECD.

Pearson, M. and Scarpetta, S., 2000. "An overview: What do we know about policies to make work pay?" *OECD Economic Studies*, No. 31. Paris: OECD.

Phelps, E. S., 2000. "The Importance of Inclusion and the Power of Job Subsidies to Increase It". *OECD Economic Studies*, No. 31. Paris: OECD.

Prescott, E. C., 2004. "Why Do Americans Work So Much More Than Europeans". *Federal Reserve Bank of Minneapolis Quarterly Review*, (28), 2-13.

Scholz, J. K., 1995. *Testimony before the committee on ways and means.* U.S. Congress. 15 June, mimeo.

Stanovnik, T., Čok, M. and Stropnik, N., 2004. *Denarna socialna pomoč v Sloveniji.* Ljubljana: Institute for Economic Research.

Tattrie, D., 1999. *A Financial Incentive to Encourage Employment Among Repeat Users of Employment Insurance: The Earnings Supplement Project.* Ottawa: Social Research and Demonstration Corporation.

Turvainen, T., 1994. *Real wage Resistance and Unemployment: Multivariate Analysis of Cointegrating Relations in 10 OECD Economies.* Paris: OECD.

Van Ours, J. and Vodopivec, M., 2004. "How Changes in Benefits Entitlement Affect Job-Finding: Lessons from the Slovenian "Experiment"". *IZA Discussion Paper*, No. 1181.

Vodopivec, M., 1998. "Transition from cash benefits to work: The case of Slovenia". *Empirical Economics*, (23), 173-202.

Vodopivec, M., 2004. "Učinki spremembe zakona o zavarovanju za brezposelnost". *IB Revija*, (1-2), 77-107.