

Varazdin Development and Entrepreneurship Agency
in cooperation with
University North



Editors:
Ivica Filipovic, Goran Kozina, Fran Galetic

Economic and Social Development

8th International Scientific Conference on Economic and Social Development
and 4th Eastern European ESD Conference: Building Resilient Economy



Book of Proceedings

Zagreb, 19 December 2014

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IMPACT OF TAX POLICY ON EMPLOYMENT AND INTERNATIONAL COMPETITIVENESS OF THE REPUBLIC OF CROATIA

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ABSTRACT

This paper conducts analysis and comparisons of tax policies implemented in the Republic of Croatia and the European Union, in order to establish the impact of tax policy on employment and competitiveness, and thus the general economic situation. Conducted research leads to several conclusions and insights of which some are listed. It turned out that the sustainability of the central government budget depends on the tax inflows of value added tax and excise duties. In Croatia, income tax does not have an important function in encouraging individual economic decisions, as it has, for example, corporate income tax, but however that Croatia does not tax most income from capital, so it can be concluded that the Croatian system of income taxation of the individual income is consumption-oriented and in that part its role in attracting foreign capital can be considered positive. Furthermore, studies have shown that a tax rates of employment in Croatia (contributions on and from salaries, income tax) is disproportionately high to the debit of capital, compared to the OECD countries, and as a result of the high tax rates, there is increased unemployment and expansion of the underground economy. This leads to the loss of government revenue, and loss of competitiveness in international trade.

Keywords: competitiveness, tax policy, tax wedge, taxation, employment

1. INTRODUCTION

Fiscal policy involves the management of taxes and dues similar taxes and public consumption. Public consumption has directly affects on the level of gross domestic product, as well as taxation that also affects on the size of the gross domestic product with larger or smaller income taxation, which affects on the increase or decrease in consumption of the population or economic activity of enterprises. Also, taxes affect on the price level of goods and services, investments, etc., which directly affect on the level of economic activity in the country. State budget in economic development since the time of the Great Economic Crisis takes a clear role in anticyclic regulating effective demand, in line with the dominant Keynesian school of economic thought.

Beside the stabilization of cyclical movements, other arguments for state regulation of aggregate demand apropos interventionism are found in the protection of market competition, rectification effects of externalities, the regulation of social and structural inequalities. The importance of the role of government in the economy is presented by the share of public expenditure in GDP, which since the end of the World War II until the mid-nineties is

constantly growing. Increases in government spending and / or reducing taxes are the instrument of the revival of economic activity, while the expansive fiscal policy has the task to act on increases in production, employment and incomes.

2. BASIC CHARACTERISTICS OF TAX POLICY IN CROATIA

In the phases of peak economic activity, when excessive aggregate demand is threatened by inflation, implemented restrictive fiscal policy in measures is used to reduce public spending and tax increases, which have the task to slow down economic activity.

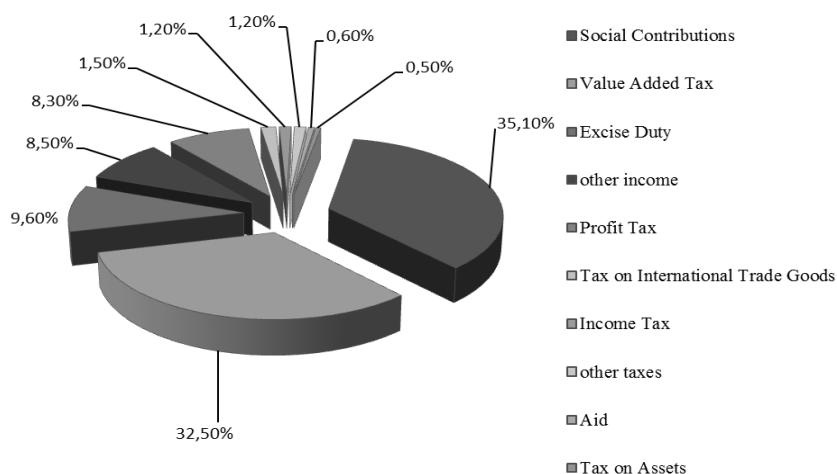
Positive effects of increased public expenditure to revive economic activity is lacking, if there is only a redistribution of income and increasing employment in the public sector. Following a stabilization program in Croatia in October 1993, fiscal policy was emphatically restrictive, so that the nominal exchange rate as a fundamental anchor stabilization could successfully achieve the goal of disinflation. Fiscal adjustment policy had the goal to reduce or eliminate the fiscal deficit, a fundamental premise of this implementation was the belief that the monetization of the deficit of the general or consolidated government was the underlying cause of inflation. The reduction of the fiscal deficit in Croatia caused a significant reduction in aggregate demand on the expenditure side of the accounts of GDP, and increase the tax burden on companies and households on the revenue side of the account GDP. Restrictive fiscal policy is carried out in terms of the expansion of government expenditure and revenue. Some economists conclude that in the period from 1992 to 1994, there was no need for borrowing on behalf of the state budget, and that all the imbalances were generated in extra-budgetary funds (Anušić et al., 1995, p. 79). The main reason for uneven loading and differences in deficit general and central government lies in insufficient charging of extra budgetary funds. Under the conditions of the underdeveloped capital markets and unfavorable ratio of working and inactive population, pension, social and health funds can't generate significant revenues. In 1994, there has been significant surplus of the state budget, which is caused not only by tax reform, but also the effect of the inverse Olivera-Tanzi effect in terms of disinflation after the introduction of the stabilization program. At the same time, the state borrowed from domestic or foreign commercial banks, with unfavorable conditions (Družić, 2004, p. 116). The largest increase in the tax burden was in 1998 after the introduction of value added tax (VAT). The marginal tax rate (absolute increase in taxes relative to an absolute increase in GDP) shows that the allocation for taxes from GDP growth increased from 31.8% in 1994 to 37.7% in 1995, after falling to 22.8% in 1996, increased to 70.6% in 1998. A similar trend shows the tax elasticity (the percentage change in the tax rate divided by the percentage change in GDP), whose value, higher than unit, points to faster growth in tax revenues than the growth rate of GDP. Since 2000 decreased revenues from the provision of import due for accession to the World Trade Organization (WTO) (Družić, 2004, p. 120). In Croatia, the revenues from direct taxes are significantly lower than in developed countries, and the share of consumption taxes are among the highest in the world, as shown in Figure 1. In the structure of tax revenues per unit bounce the revenue from consumption taxes, especially of value added tax while the relatively low share of taxes is on labor income, compared to the average structure of tax revenues in OECD countries. This relation of tax revenue is not the result of a very low income taxes, but the economic structure of the Republic of Croatia characterized by relatively low total mass of labor income, with relatively high compulsory contributions.

Table 1. Revenues of Croatian State Budget for 2009 (own processing, Croatian Ministry of Finance, Time Series, Consolidated Central Government - January 2010, retrieved 6/30/2012. from www.mfin.hr)

	u 000 HRK	%
Total Income of the State Budget	114.068.572	100%
Tax Revenues	63.678.926	55,8%
Taxes on Goods and Services	49.238.277	43,2%
- of which VAT	37.050.354	32,5%
- of which Excise Duty	10.998.910	9,6%
- Tax on Assets	532.297	0,5%
- Profit Tax	9.439.858	8,3%
- Income Tax	1.399.411	1,2%
- Tax on International Trade Goods	1.721.164	1,5%
-other taxes	1.347.920	1,2%
Social contributions	39.994.739	35,1%
Aid	651.199	0,6%
Other income	9.743.709	8,5%

Especially, there is a high proportion of tax revenues from value-added tax (32.5% in the recession, 2009) and excise duties (9.6%), so the sustainability of the central government depends greatly on these two taxes. For example in 2002, 71% (Družić, 2004, p. 126) of collected tax revenues was from the VAT accounted on imported goods. As the delivery of export goods is exempt from paying VAT, and the fiscal deficit at a constant high level after 1994, easily one can conclude that the reduction of the fiscal deficit, with the current high commitments to social transfers, as well as the national debt, depends on funding state budget from the assets of revenues from VAT. Since most commercial goods originate from imports, the conclusion is that the Croatian Government, with the intention of raising money for public consumption, has no interest in reducing the high imports and balance of payments.

Figure 1: Structure of the Consolidated Central Government Revenues in the Republic of Croatia, 2009. (own processing of the author according to the Ministry of Finance of the Republic of Croatia, time-series data, Consolidated Central Government - January 2010,



Income tax profits are also an item in which Croatia is deviating significantly from the EU-15 countries. There are reasons, from the fiscal point of view, that this rate does not change, because it increase and decrease of these rates would encourage capital outflow abroad or discourage foreign investment, and some authors (Družić, 2007, p. 11) propose a tax exemption on reinvested profits. Beside the fact that this would reduce outflow of capital abroad, it would simultaneously reduce unproductive use of realized profit, directing it into production and improving competitiveness.

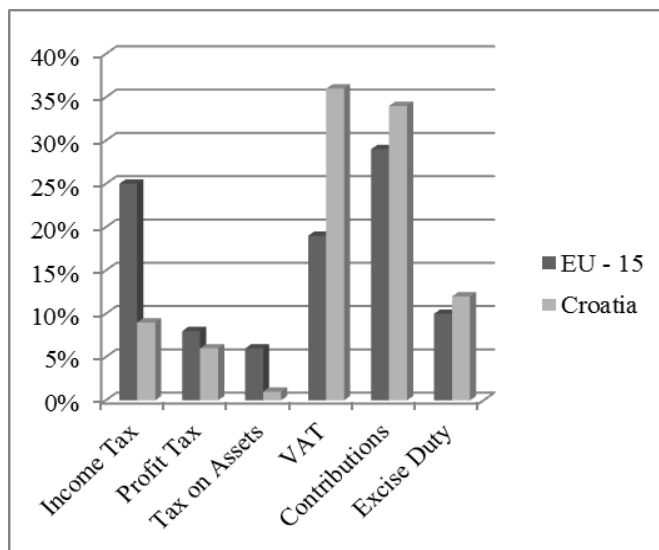


Figure 2: Comparative structure of tax revenues of EU-15 and Croatia for 2005 as a percentage of total taxes (Kesner - Škreb, M. (2007) *What about taxes in Croatia? The tax burden, taxation of income, profits and assets* [online]. Newsletter no. 10, Zagreb: Institute of public Finance, 30.6.2011. of <http://www.ijf.hr/newsletter/PDF/news10h.pdf>, p. 3)

3. TAX CHARGE ON LABOR

In Croatia, income tax is not a strong contributing factor in encouraging individual economic decisions, such as profit tax, the rates of which are low. Some forms of the capital income are not taxable, such as interest and capital gains. Croatian system of income taxation of individuals is consumer-oriented, so its role in building competitiveness and attracting foreign capital could be considered positive in this regard (Šimovic, 2008, p. 170). The amount of income tax should be viewed together with contributions from salaries and wages, i.e. the share of income tax and social security contributions in total labor costs. The tax wedge (Šeparović, 2009, p. 463) is the difference between gross labor costs for the employer and the net wages received by employees, i.e. gross labor costs is reduced by mandatory contributions and statutory taxes paid by employer and employee, and is formed as a result of labor taxation. Some research has shown that income tax and contributions rarely have an impact on investment decisions, so it is not usual to built investment incentives in these tax forms (Šimovic, 2008, p. 167). In terms of building competitiveness, it is important to emphasize that these tax forms have an affect on the amount of labor cost, however, as an incentive for investment it can reduce the proportion of tax paid by the employer.

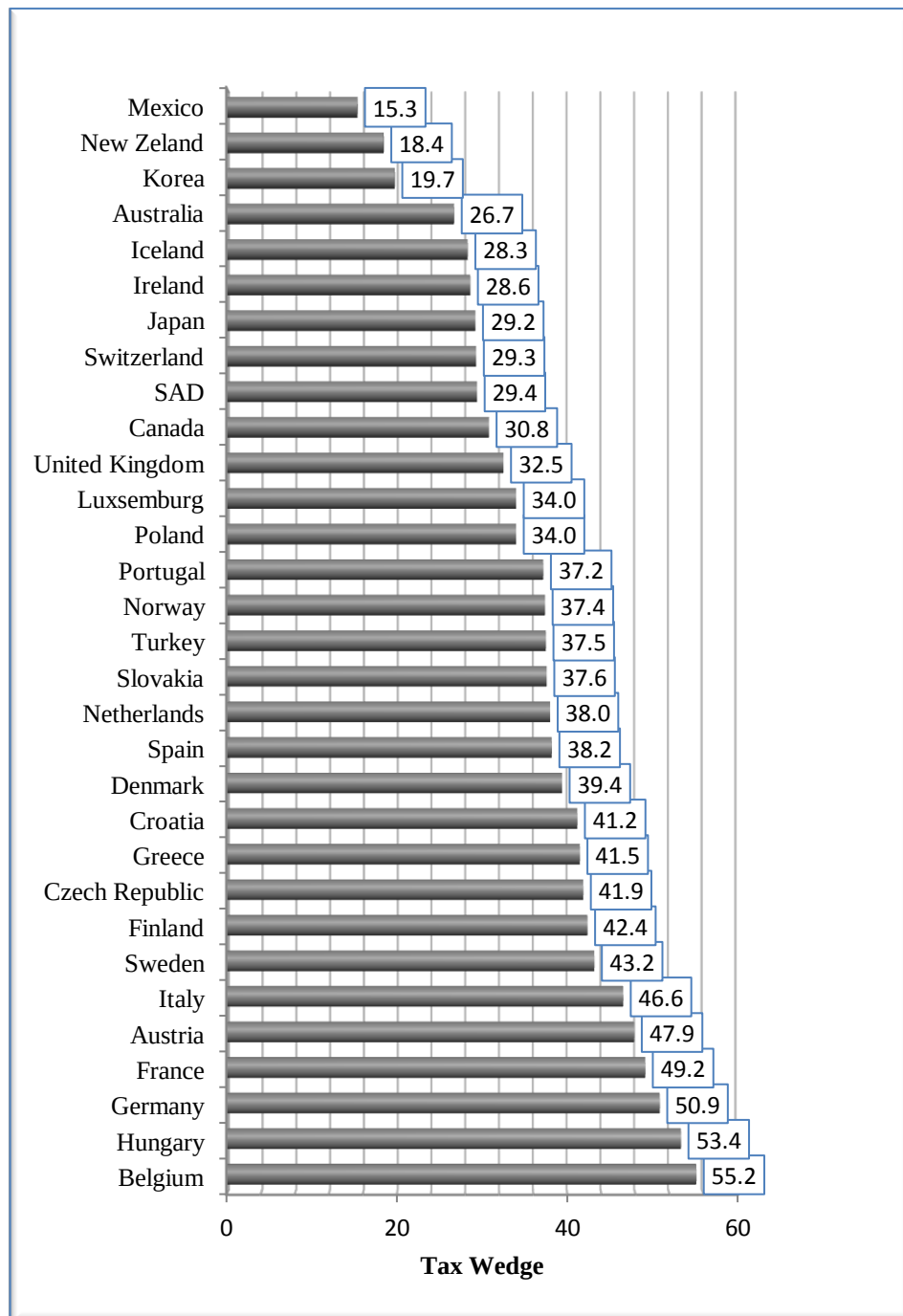


Figure 3: The Tax Wedge (single, without children, average wages) in OECD Countries and Croatia for 2009 (own processing, OECD (2010), *Taxing Wages, Main Results 2009*, table 01(online) from http://www.oecd.org/document/6/0,3343,en_2649_34533_449934781111,00.html#table_01)

In Croatia this applies to contributions on wages paid by the employer (Šimovic, 2008, p. 167). Compared with OECD countries, it is evident that the tax charge on labor in Croatia (contributions on and from salaries, income tax) is disproportionately high to the debit of capital, well above the standards of OECD countries, as shown in table 2 and figure 3, although in the last decades, there have been significant reductions in relation to the nineties.

Table 2: Comparison of the tax wedge in the OECD countries and in Croatia in 2009 (percent of labor costs for the average wage, single, no children) (own processing OECD (2010), Taxing Wages, Main Results 2009, table 01 (online) iz http://www.oecd.org/document/6/0,3343,en_2649_34533_44993478_1_1_1_1,00.html#table_01)

u %	Tax Wedge	Tax Wedge Annual Change
Belgium	55,2	-0,54
Hungary	53,4	-0,72
Germany	50,9	-0,57
France	49,2	-0,05
Austria	47,9	-0,91
Italy	46,6	-0,03
Sweden	43,2	-1,65
Finland	42,4	-1,39
Czech Republic	41,9	-1,55
Greece	41,5	-0,06
Croatia	41,2	1,23
Denmark	39,4	-1,28
Spain	38,2	0,19
Netherlands	38,0	-0,96
Slovakia	37,6	-1,17
Turkey	37,5	-2,29
Norway	37,4	-0,12
Portugal	37,2	-0,07
Poland	34,0	-0,52
Luxsemburg	34,0	-1,16
United Kingdom	32,5	-0,34
Canada	30,8	-0,5
SAD	29,4	0,22
Switzerland	29,3	0,09
Japan	29,2	-0,26
Ireland	28,6	1,54
Iceland	28,3	0,03
Australia	26,7	-0,21
Korea	19,7	-0,27
New Zeland	18,4	-2,66
Mexico	15,3	0,21

So, in 1994. the tax wedge was higher (Šeparović, 2009, p. 475) than 50%, in 1997. about 45% and in 2005. It was 39.5%. Nevertheless, the tax wedge in Croatia is still rather large and there should be worked on reducing it. The tax wedge in Croatia in 2009 amounted to 41.2% of total labor costs, which means an increase of 1.23% in reference to 2008. In the same time the average of OECD countries reached 36,3%.

As a result of cancellation of „crisis-tax“ and increase of some tax-reductions, the tax-wedge in 2012 decreased to 38,8%. The consequences of such high tax charge labor is in increasing unemployment and the expansion of the underground economy, and thus the loss of

government revenue, and the loss of competitiveness in international trade. With increases in the tax wedge, there is an increase in the cost of labor and this indirectly affects the unemployment rate.

From the data in the table, it is evident that range of the tax wedge in the OECD countries is very different. The lowest tax wedge is in Mexico, 15.3%, and the highest Belgium, 55.2%. All countries, including Croatia, have a progressive tax wedge, which means, that, with the increases in income, there are increases in the tax wedge (Šeparović, 2009, p. 468). In this way, employees with lower incomes are shielded, and the higher tax burden is transferred to the economically superior employees, with higher incomes.

Analyses (Šeparović, 2009, p. 472) places Croatia in the group with moderately high tax wedge, together with Japan, USA, Switzerland, Canada, United Kingdom, Luxembourg, Norway, Portugal, Slovakia, Spain, Denmark and Greece. However, from the same analysis, it is evident that the range of the middle class is 29.2 to 42.5%, and it is evident that Croatia is at the upper level of this range and bordering on the category of higher tax wedge countries.

4. COMPARISON OF THE STRUCTURE OF THE TAX-WEDGE IN CROATIA WITH OECD-COUNTRIES

Tax obligations and mandatory contributions are different for different types of tax-payers. They depend on the level of salary of the employee, the geographic location of the employees place of residence place of living and the number of supported members, which influence the personal deduction of the taxpayer. For the sake of the analysis, an „average employee“ in Croatia is defined as a single, without supported family-members, with his salary as the only source of income, without additional life-, health- or pension insurance and with residence in Zagreb. The highest expenses, as can be seen, are the mandatory contributions of the employee, followed by the mandatory contributions of the employer and the smallest part are local taxes and income-tax. Given that local taxes and income-tax are paid by the employee, the majority of the burden is carried by the employees. From figure 4. can be read, that the relative share of income-tax in total labor-cost is about 10% (data from Ministry of Finance Republic of Croatia, from <http://www.mfin.hr/hr/novosti/porez-na-dohodak-porezno-opterecenje-2009-08-25-16-00-12>) and therefore in Croatia, relatively lower than the average of OECD countries, where it is 13,2%.

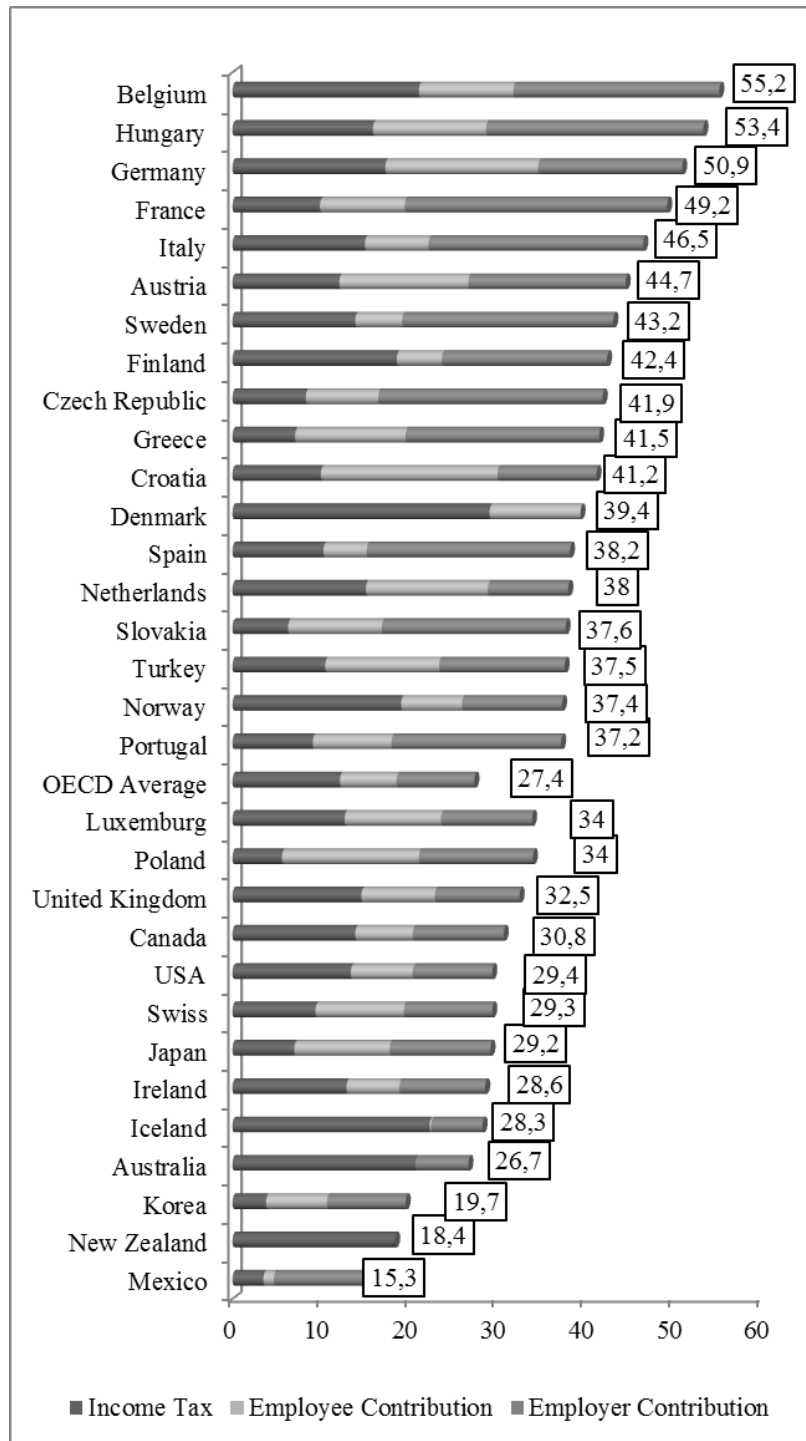


Figure 4: Tax-wedge, Income Tax, Contributions of Employees and Employers as Percentage (%) of labor cost, in OECD countries and Croatia, for 2009. (single, no children, average salary) (OECD (2010), Taxing Wages, Main Results 2009 iz http://www.oecd.org/document/6/0,3343,en_2649_34533_44993478_1_1_1_1,00.html#table_02)

At the same time the share of mandatory contributions which are paid by the employee is significantly different from the OECD average: in Croatia it was nearly 20% in fiscal 2009, while the average for OECD countries was on the level of 8,5% in the same fiscal period. The

share of mandatory contributions which are paid by the employer was slightly lower in Croatia, 11,2 %, while it was 14,6% in OECD countries. So looking at the structure of the tax-wedge, in Croatia the burden of the employee is higher than in OECD countries, while the burden for the employer is slightly lower than in EOCED countries. This stresses the question, whether it is better to burden the employer or to burden the employee. If the burden is carried by the employees, it can have differing effects.

The de-stimulating effects of progression are known, like the effect of substituting labor by leisure. The negative effect on labor-offer can be increased at low income in interaction with various levies with various social transfers and benefits (Blažić, 2006, pg. 121). Employees with small salaries and low educational levels are affected most by high unemployment rates. Therefore some members of the EU (Austria, Belgium, France, Greece, the Netherlands, Spain and Great Britain), in the mid 1990-ies focused on these groups and decreased the tax-wedge for them (Joumard, 2001, pg. 100), to animate their employment. If the burden is carried by the employer and not the employee, that might motivate the employer to substitute labor by capital, reduce production and to re-allocate production in other countries with lower labor-costs (Šeparović, 2009, str. 472).

Further, it is considered that levies which are formally carried by the employer, which is contributions of the employer, have an extra negative effect on demand of labor-force. Namely, employees contributions decrease salary after tax, on which gross-salary can slowly react (in a sense of increasing them – meaning shifting the burden to the employer - or not), while increase of employers contributions directly increase the cost of labor-force (OECD, 2001, pg. 27, from www.oecd.org/ctp/taxpolicystudies).

So both the exclusive burdening of the employer or the employee have negative impact, so there should be found a balance in burdening them. In favor of the thesis of high and growing pressure on labor, which makes it non-competitive compared with surrounding countries, goes the facts that gross salaries in the period from 2003 to 2009 grew by an annual rate of 9,14%, while net salaries in the same period grew by an average rate of 2,02%.

5. TAX-WEDGE AND UNEMPLOYMENT RATE

Concerning level of tax-burden of labor, Croatia finds itself somewhere in the middle when compared to the OECD countries, but with a very high unemployment rate. The average tax-wedge of OECD countries is 36,3%, while in Croatia it is slightly above average, 41,2%, so we can conclude, that Croatia has a relatively high tax-wedge. Until now analysis (Šeparović, 2009, pg. 468) has shown a significant correlation between tax-wedge and unemployment rate, which is shown by the graph tax-wedge and unemployment, picture 5 and table 3.

Table 3: Comparison of tax-wedge (average labor cost for average salary in OECD countries and Croatia and unemployment rate for 2009 (single, no children, average salary (OECD, Taxing Wages, Main Results 2009 (http://www.oecd.org/document/6/0,3343,en_2649_34533_44993478_1_1_1_1,00.html#table_01) and OECD Main Economic Indicators - Country Comparison Tables (http://www.oecd.org/statisticsdata/0,3381,en_2649_37443_1_119656_1_1_37443,00.html), HZZ, monthly statistical bulletin 2 /2010

<i>in %</i>	Tax-wedge	Registered unemployment rate
Australia	26,7	5,6
Austria	47,9	4,8
Belgium	55,2	7,9
Czech Republic	41,9	6,7
Denmark	39,4	6,0
Finland	42,4	8,2
France	49,2	9,5
Greece	41,5	9,5
Croatia	41,2	14,9
Ireland	28,6	11,9
Iceland	28,3	7,2
Italy	46,6	7,7
Japan	29,2	5,1
Canada	30,8	8,3
Korea	19,7	3,6
Luxembourg	34,0	5,4
Hungary	53,4	10,0
Mexico	15,3	5,5
Netherlands	38,0	3,4
Norway	37,4	3,1
New Zealand	18,4	6,1
Germany	50,9	7,5
Poland	34,0	8,2
Portugal	37,2	9,6
USA	29,4	9,3
Slovakia	37,6	12,0
Spain	38,2	18,0
Sweden	43,2	8,3
Switzerland	29,3	4,4
Turkey	37,5	12,6
United kingdom	32,5	9,3
OECD average	36,3	8,3
Average of highest seven	...	8,0
EU average	...	8,9
EU countries within OECD	41,0	9,2
Euro-zone	42,5	9,4

However, looking at the unemployment rate, the situation in Croatia is worrisome. Namely, the range of unemployment rate in OECD countries is from 3,1% (for Norway) to 18,0 % (for Spain); the average is 8%.

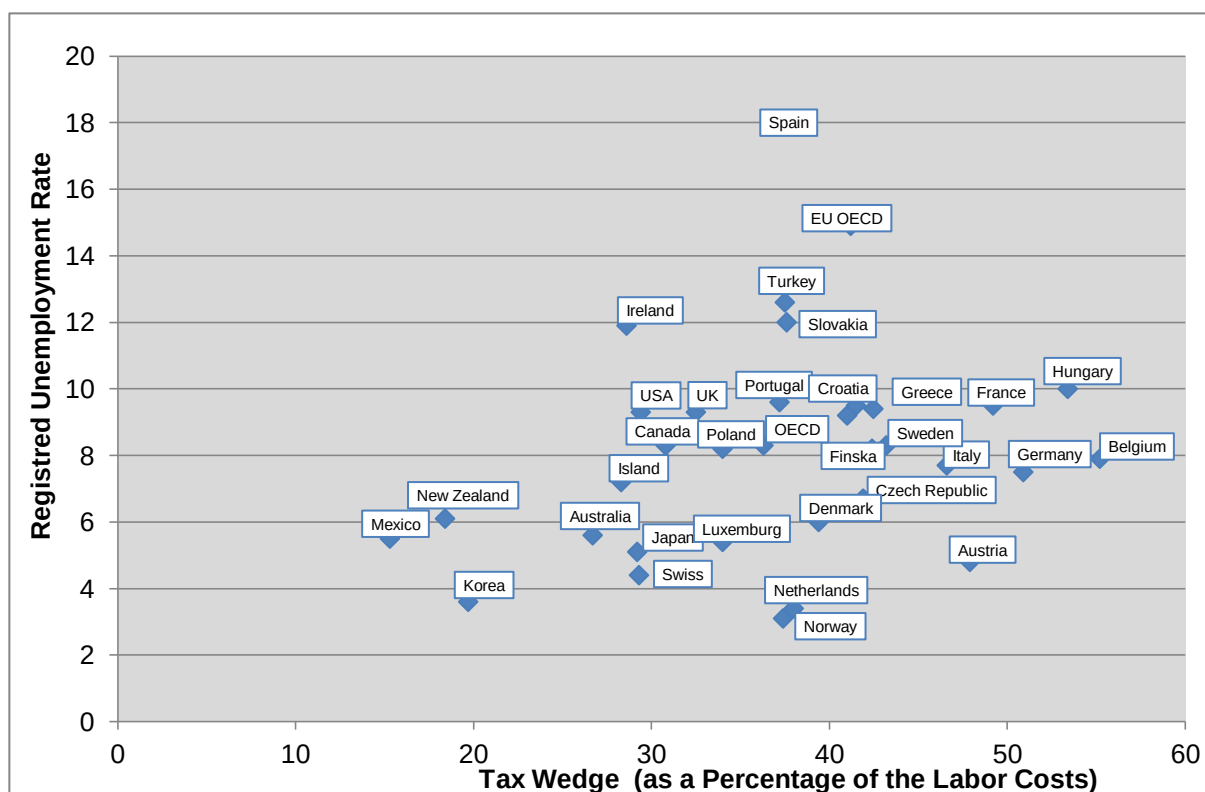


Figure 5.: Comparison of Tax-Wedge (Percentage of the Labor Cost for Average salary) in OECD Countries and Croatia and Unemployment Rates for 2009 (OECD (2010), Taxing Wages, Main Results 2009 (online) at http://www.oecd.org/document/6/0,3343,en_2649_34533_44993478_1_1_1_1,00.html#table_01 (28.5.2010) i OECD (2010) MainEconomicIndicators- CountryComparisonTables (online), at http://www.oecd.org/statisticsdata/0,3h381,en_2649_37443_1_119656_1_1_37443,00.htm (http://www.oecd.org/statisticsdata/0,3h381,en_2649_37443_1_119656_1_1_37443,00.html) and HZZ Monthly Statistical Bulletin 2 / 2010 at www.hzz.hr)

The registered unemployment rate for 2009 (annual average) due to data from state-owned statistical Institute in Croatia was 14,9%, and only Spain, the that was hit most severely by recession in this group of countries, shows a higher rate than Croatia. So, although the tax-wedge in Croatia is slightly higher than the average, the unemployment rate is far higher than in OECD countries. Members of the EU, which are also members of OECD, have on average relatively higher tax-wedge than the total OECD average. Croatia has a slightly lower tax-wedge than the EU members. Research of the European Commission shows that the members of EU4 as from the year 2000 are working on decreasing the tax-wedge, which actually decreased until the year 2005, when the tax wedge stopped decreasing (according to data of European Commission from 2008). Further analysis by the same author has shown that Croatia with a tax-wedge of 41,1% and unemployment rate of 14,8% is most similar to Greece, Turkey and Slovakia. These are countries which have a bigger tax-wedge than Croatia (41,5; 37,5; 37,6), but a lower unemployment rate than Croatia (9,5; 12,6; 12,0). Although they have a lower unemployment rate than Croatia, these are countries with relatively higher unemployment rate than the average of OECD countries. On figure 5 we can see the deviation of Croatia in relation to other countries as per relationship of tax-wedge and unemployment rate, or the linear trend (Majić, p. 122).

6. CONCLUSIVE CONSIDERATION

Based on the performed research one can conclude that Croatia is a country with a high tax-wedge and a high unemployment rate. A fact that imposes himself as an obstacle to consider that conclusion as final, is the big difference between surveyed (DZS, 2009, at www.dzs.hr) unemployment, which was 9,1% in 2009, and registered unemployment of 14,9%. Finally it is important that in Croatia the biggest part of the tax-wedge are the mandatory contributions for social insurance, while the share of income tax in the total labor cost is relatively low. From the aspect of labor cost, the tax burden is relatively high, and like that it is a negative factor in building competitiveness.

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