# **Economic causes of unemployment**

# Vlastimil Beran, Jiřina Krajčová, Viola Šebestíková

VŠB – Technical University, Faculty of Economics, Department of Economics, Department of Accounting Sokolská 33 Ostrava 1, 701 21 Czech Republic

e-mail: vlastimil.beran@vsb.cz

#### **Abstract**

This paper focuses on introduce to existing discoveries in the Student Project Grant competition called The natural person income tax optimization due to implementation the tax bonus of taxpayer leading to a reduction of unemployment. The social system generosity in the Czech Republic is discouraging the low-income population to exempt from social security benefits. Economic indicator which can quantify this issue is called the METR (EP). The METR tell the person if it is convenient "to become employed" or remain unemployed from economic point of view. The decision to work leads to increasing employment income but also causes reduction of social security benefits in adequate proportion.

Keywords: benefit, household, tax, unemployment, wage

JEL codes: H21, H24, J22

#### 1. Introduction

This paper deals with one of many factors that lead to unemployment. It focuses on presentation of contemporary knowledge provided by the Student Grant Competition project called: The natural person income tax optimization due to implementation the tax bonus of taxpayer leading to a reduction of unemployment.

Unemployment is a problem afflicting developed countries. Each country faces unemployment in different way. Some countries are more and others less successful. The fact remains that it is a problem of their particular economies. The danger coming from unemployment threatens both unemployed person and the state.

The aim is to find out whether unemployment in the Czech Republic is due to voluntary choice of unemployed to remain in the state of unemployment, because the economic aspect of it can be advantageous for the unemployed. In the Czech Republic the social system is considered very generous and a people's willingness to work is very low. An unemployed person does not have to look for work in this case because it has a higher income from social benefits and unemployment benefit as suggested in Kubátová (2000).

We will use the analysis of marginal effective tax rates – METR(EP), that is used to optimize the system of social benefits by organizations like OECD and European Commission. In the Czech Republic there has been a change of social security benefits since 2001 several times - in the parameters for obtaining benefits as well as in their values.

The first chapter provides a theoretical basis. The second chapter explains the logic of METR(EP) analysis. The third chapter summarizes the calculations and results. Our findings will be summarized in conclusion.

### 2. The problem of unemployment

Unemployment is a big problem. It affects individuals in particular and at various levels – economic<sup>1</sup>, social and psychological<sup>2</sup>, political<sup>3</sup>. Unemployment also crucially impacts the state's economy by increasing transfer payments (social benefits, unemployment benefits) and also can result in increased government spending on security due to the growth of social tension that grows at a the time of increased unemployment. Increased government spending leads to the growth of government deficit. According to Tabellini (1989) unemployed persons carry the repayment to future generations - intergenerational funding.

The Czech Republic faces unemployment since its foundation in 1993. Its value increases in times of recession, while during the boom it declines. However, this is related to the overall quantity of unemployment. Really serious problem is structural unemployment. It has a long-term character and people with disabilities are often not incorporated into the labour process.

The aim of our project is to determine whether these problem people are employable. The question is if such a person wants to be employed. As mentioned above, these people would lose income from social benefits and unemployment benefits if they would start to work. Bearing in mind, that the structurally unemployed do not usually find a job opportunity in their field of activity by reason of its demise or limiting absorption more employees.

The problem is caused by people moving from the primary labour market<sup>4</sup> to the secondary labour market<sup>5</sup>. The secondary labour market brings a reduction of income because the work there is not that well appreciated in terms of payment. Unemployed person often has to accept wages at the minimum wage level. In this case there is a risk that social benefits and unemployment benefits are the same or only slightly lower than the minimum wage. It is clear that such a situation discourages the unemployed person form finding a job.

Government introduces an active employment policy to the labour market. They try to provide requalification courses the unemployed to obtain qualification in another field of activity. That moves him from the secondary labour market back to the primary labour market. It increases the likelihood of the unemployed to get a higher income. An unemployed person is trying to keep the new place and the government does not have to continue to pay social benefits and unemployment benefits. We will not evaluate the effectiveness of requalification process in the Czech Republic.

Against those claims stand the advantages of remaining in the unemployed state with nearly the same amount of income. Among these advantages are keeping the leisure time<sup>6</sup>, opportunities to earn some money illegally and unpaid direct taxes. Of course there is a loss of staff morale and discipline and the loss of expertise and obsolescence of practical skills. Such unemployed one becomes less employable. This is kind of a spiral shaped problem that is constantly growing. It represents a personal tragedy for the individuals in the future of which they are not aware at the moment.

To discover the employment interest the METR(EP) analysis is used. The chapter explains the logic of this analysis.

38

<sup>&</sup>lt;sup>1</sup> Household budgets have to change due to a reduction of income.

<sup>&</sup>lt;sup>2</sup> An unemployed person drives itself to stress, or it is influenced by environment. The person starts to doubt itself alone.

<sup>&</sup>lt;sup>3</sup> An unemployed person often re-thinks their voting preferences.

<sup>&</sup>lt;sup>4</sup> People on this labour market are highly qualified and experienced.

<sup>&</sup>lt;sup>5</sup> People on this labour market are uneducated and with no experience.

<sup>&</sup>lt;sup>6</sup> The leisure time represents entire unemployed person's time.

Tables and figures should be numbered and references to them must be in the text. Acceptable labeling for a table is Table 1 and Figure 1 for a figure. The title of the table or figure is placed above and the source below the table or figure. The text should be composed in such a manner that there are not a greater number figures or tables on a single page. Tables and figures in landscape format are not acceptable.

## 3. Marginal effective tax rate for employed person

It is used for the analysis of any promotional effects of tax and benefit system on the labour supply. It represents an enormous change of view on the labour market from the average individual to microeconomic foundations. This method began to be used by the OECD and the European Union to calculate various types of families in society.

The formula of METR(EP) is as follows:

$$METR(EP) = 1 - \frac{\Delta NEI}{\Delta GEI}$$
 (1)

where  $\Delta NEI$  = change in net income and  $\Delta GEI$  = change in gross income.

Pavel and Vítek (2005) suggest change in net income is defined as a function of change in gross earned income, the marginal tax rate including contribution to social and health insurance paid by the employee and the rate of decreasing the value of social benefits. The indicator is affected by the change in gross income, taxes and social benefits. Taxes include personal income tax and contribution to social and health insurance paid by employee. Social benefits relevant for the calculation are only those which are derived from the amount of income of the taxpayer or his family.

The calculation of METR(EP) can be decomposed to the sum of individual marginal rates of income or component of payment of individual benefits:

$$METR(EP) = \frac{\Delta IT + \Delta SSC_{EE} - \Delta HB - \Delta CHB - \Delta SB - \Delta SA}{\Delta GEI}$$
(2)

where IT = natural persons income tax, SSCE = contributions to social and health insurance paid by employee, HB = housing benefit, CHB = children benefit, SB = social benefit, SA = social benefit of social necessity, GEI = gross wage.

The resulting value of METR(EP) represents how many percent taxpayer effectively pays if his gross income increases by one unit according to Pavel (2005). In a system where social benefits are constructed as the difference between after tax income and the subsistence minimum, the rate reduction benefit is 100 %, which means that these benefits are reduced by the same amount by which increased the earned income after tax. Therefore, if the value of METR(EP) exceeds 1, the increase in gross income represents reduction in net income as it was seen also in Czech study (Jahoda, 2004). In this case it would be irrational to increase labour supply and the taxpayer gets into the poverty trap (Deleeck et al., 1992).

Prior the calculations it must be clearly defined the aimed group like the individual, the family household. Only particular groups (types) will be observed: an individual who works (i.e. 1 + 0 + 0); a household with two adults, where one does not work (i.e. 1 + 1 + 0); a two-adult household where both adults are working (i.e. 2 + 0 + 0); a family with two children, where one of the adults does not work (i.e. 1 + 1 + 2); a family with two children, where both adults are working (i.e. 2 + 0 + 2) e.g. in Czech book (Prušvic And Přibyl, 2006). There are more combinations of individual types of households, but these cases we were most interested in, because they represent the limits of other marginal cases.

In the case of the net income calculation possible bonuses, discounts on taxes and tax-deductible items have to be counted; that are enacted in the given year and the household is entitled to them. Social benefits are taken in an amount to be valid in December of the given year<sup>7</sup>. The housing benefit was selected as 35% of average net wages minus the discount for the taxpayer (other items are not reflected). All households are living in rental apartments and the total rent is considered. This amount was determined on the basis of empirical data for the city in the range from 10000 to 49999 inhabitants. Children in households are between 6 to 10 years old. For older children, both parents cannot be on maternity leave and children are not able to take care of themselves. The unemployed is not entitled to unemployment benefits because it belongs to a long-term unemployed. He only receives social security benefits.

In this article, calculations are only for the year of 2010. In the whole our project deals with calculations and the results for the years of 2001 to 2011.

The following text we will be focused on METR(EP) calculations and our findings.

## 4. Calculations

METR(EP) takes account of several variables. On the one hand, those are rewards for work on the other hand those are transfers.

The first variable is the gross income that can be obtained at the Czech Statistical Office. The second variable is the net income that calculated based on the gross wage in a standard way as mentioned by Šubrt (2010). We calculate the gross wage social insurance (6,5 %) and health insurance (4,5 %) – rounded up to the nearest crown. We add the social and health insurance paid by employer (34 %) to the gross wage suggested in Ženíšková (2010). The tax base is rounded up to the nearest hundred. From that base we subtract the tax credit CZK 2070,-. If the respective taxpayer has 2 children, we also subtract a discount for children CZK 1934,-, that the taxpayer can claim from gross income of CZK 4000,-. An individual living alone in a household pays a tax from CZK 10500,-. In households where both partners work and do not have children, the individual pays taxes also from CZK 10500,-. Household where only one adult works, and have two children, pays tax from CZK 20000,-. In the case of households where both work and have two children, a discount on the child uses individual with 100% of average income and the latter is paying taxes from an income of CZK 10500,-. The resulting net wage we obtain by subtracting the social security and health insurance paid by employee and assessed taxes from the gross wage

Transfers, applied in the calculations, belong to the standard social benefits. Those transfers include housing benefit, child benefit, social benefit, the benefit in material poverty – allowance for living, the housing supplement in material poverty according to Břeská (2010). They are not influenced by the health of any household member, or necessary care for a household member. The formula for benefits calculations is created by the Ministry of Labour and Social Affairs, including the criteria for obtaining.

The housing benefit is calculated as follows:

$$HB = NH - (over SM * 0,3)$$
(3)

where HB = housing benefit, NH = normative housing costs, over SM = amount over the subsistence minimum.

Subsistence minimum for individuals is CZK 3126,-. For a two-member household that is CZK 5480,-. For a four-member household that is CZK 9400,-. Normative cost is set from tables. If it

-

<sup>&</sup>lt;sup>7</sup> It has happened several times in the past that social benefits have changed during the calendar year and not always from the beginning.

is greater than the actual cost of housing, then is calculated from the actual costs. This benefit is paid from CZK 50,- and more.

Child benefit pays up to 2,4 times the subsistence minimum. For a four-member household, as mentioned above, it is CZK 9400,-. If net income is CZK 22560,-, so the household is entitled to an allowance in the amount of CZK 610,- per child. Our model household can receive CZK 1220,-.

Social benefit is calculated as follows:

$$SB = SM \ 2CH - \left(\frac{SM \ 2CH * over \ SM}{SM * 1.6}\right) \tag{4}$$

where SB = social benefit, SM 2CH = subsistence minimum for two children, over SM = amount over subsistence minimum, SM = subsistence minimum.

Subsistence minimum for two children is CZK 3920,-. This benefit can claim only households with children. This benefit is paid again from CZK 50,- and more.

The benefit in material poverty - allowance for living is calculated as follows:

$$BMP = ((0.7 * NW + CHB) - (0.3 * (0.7 * NW + CHB)) + SB) - SM$$
 (5)

where BMP = the benefit in material poverty - allowance for living, NW = net wage, CHB = Child benefit, SB = social benefit, SM = subsistence minimum.

If the household has no children, child benefit and social benefit is not included in the formula. The subsistence minimum is counted for the number of household members.

Housing supplement in material poverty is calculated as follows:

$$HSMP = (NW + HB + CHB + SB + BMP) - HC - SM$$
 (6)

where HSMP = Housing supplement in material poverty, NW = net wage, HB = housing benefit, CHB = child benefit, SB = social benefit, BMP = benefit in material poverty - allowance for living, HC = housing costs, SM = subsistence minimum.

It is the sum of net income and all benefits that household can claim, minus the costs of living (if actual costs are less than set the table) and the subsistence minimum.

All the calculated benefits we have to sum up. Now we obtain transfer's part of the numerator of the formula (1) and (2), thus we can calculate the value of METR(EP).

## 4.1. Interpretation of results

Results of METR(EP) are can be interpreted in two forms: as a percentage and index. In our case, the resulting index will be in the interval  $(0,\infty)^8$ . The fundamental interval is (0,1). A value of 1 represents the point where is not convenient to work (Pavel, 2009). Different authors (Immervoll, 2002) state that the value of demotivation is between 0,6 and 0,8. But there are also those who already consider a limit of demotivation from 0,3 to 0,5 stated in Haveman (1996). According to Immervoll et al. (2004) the lower METR(EP) indicator becomes, the greater should be the willingness of people to work.

-

<sup>&</sup>lt;sup>8</sup> Infinity is only a hypothetical example. In reality, the result will move in lower values.

For clarity reasons, METR(EP) values are placed in tables and figures. The tables are made for an easy navigation and comparison in the same style. For better overview of the METR(EP) indicator development always follow the figure table. Figures have also the same scale for easier comparison. Only in one case, the scale will be different because of the outlier.

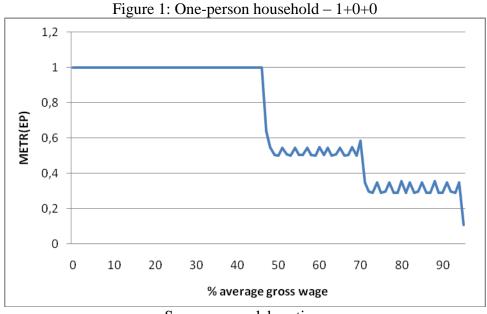
In following tables we can find the value of gross wages, net wages, net income and METR(EP) for four levels of gross income listed in percentage. These are 0 %, 33 %, 66 % and 100 %. Some values were rounded off, e.g. 33 % of average gross wage in CZK 8000,-. In the Czech Republic the minimum wage is CZK 8000,- and in it has an important role the economy<sup>9</sup>. This is due to the fact that the average gross wage in 2010 was CZK 23797,-, but we consider 1 % as CZK 250,-as seen in Jahoda (2006).

The first type of observed households is 1+0+0. It represents an individual who have never worked before and starts to work. Table 1 shows the absolute amount of each type of income. Net income is higher than the gross income up to CZK 15000,-.

Table 1: One-person household -1+0+0

The second secon				
Percent of gross	Gross wage	Net wage (CZK)	Net income	METR(EP)
wage (%)	(CZK)		(CZK)	(index)
0	0	0	11454	1
33	8000	7120	11454	1
66	15750	12907	13344	0,544
100	23797	18464	18464	0,106383

Source: own elaboration.



Source: own elaboration.

As mentioned above, in the figure we can see that from 48 % of the average gross wage there is a rapid decline in the METR(EP) value. The first decline is caused by the loss of benefit in material poverty - allowance for living. The second decline is caused by loss housing supplement in material poverty. METR(EP) fell from value of 1 to 0,544, then to 0,348 and ends up at the level of 0,106383. One-person household with growing gross wage loses entitlement to social benefits and from 48 % of average gross wage, it is convenient to work, because it's net income will grow relatively.

<sup>&</sup>lt;sup>9</sup> An impact of minimum wages is controversial, but it holds the protection role in the economy.

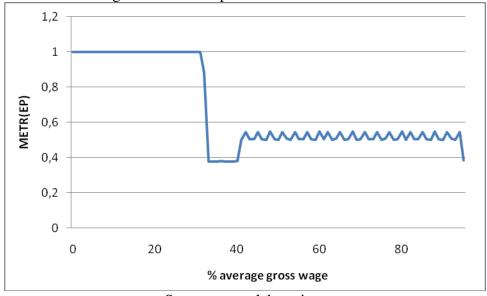
The second type of monitored households is 1+1+0. It represents a two-person household where the first adult is unemployed and the latter adult begins work. Absolute values of gross wages and net wages are the same as in the Table 1. They differ in net income, which is increased by social benefits for the unemployed adult.

Table 2: The two-person household -1+1+0

Percent of gross	Gross wage	Net wage (CZK)	Net income	METR(EP)
wage (%)	(CZK)	_	(CZK)	(index)
0	0	0	11454	1
33	8000	7120	11454	1
66	15750	12907	15379	0,544
100	23797	18464	19269	0,3829787

Source: own elaboration.

Figure 2: The two-person household -1+1+0



Source: own elaboration.

From the table 2 we can see that from 33 % of average gross wage the value of METR(EP) is decreasing. This drop is partly caused by the loss of benefit in material poverty - allowance for living and also the housing supplementary in material poverty. Housing benefit marginally contributes too. In the figure at 42 % of average gross wages point, there occurs a break. The reason is that the benefit begins to decline at much slower rate. So there is no such a large decline after the benefit gets into this point. Therefore, the METR(EP) value is not decreasing, but there is a kind of jump up. At first the METR(EP) reached a value of 1, then 0,376, and in the end its volatility was between 0,504 to 0,544. For the two-person household we can declare that at the level of 33 % of average gross wage it is convenient to for the working man to work.

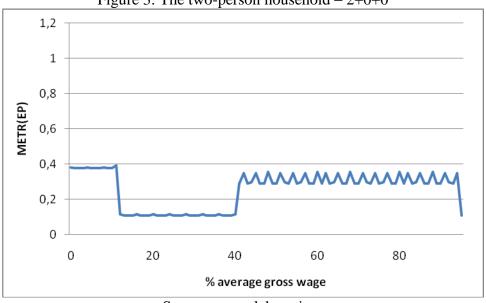
The third type of monitored households is 2+0+0. This represents two-person household, where they both work. The first adult works and earns 100 % of average gross wage. The latter adult starts to work. At 0 % of average gross wage they have 100 % of average gross wage of one-person household. At 100 % of average gross wage they have twice average gross wage.

Table 3: The two-person household -2+0+0

Percent of gross	Gross wage	Net wage (CZK)	Net income	METR(EP)
wage (%)	(CZK)		(CZK)	(index)
0	23797	18464	19269	0,38
33	31750	25584	25584	0,108
66	39500	31371	31371	0,348
100	47594	36928	36928	0,106383

Source: own elaboration.

Figure 3: The two-person household -2+0+0



Source: own elaboration.

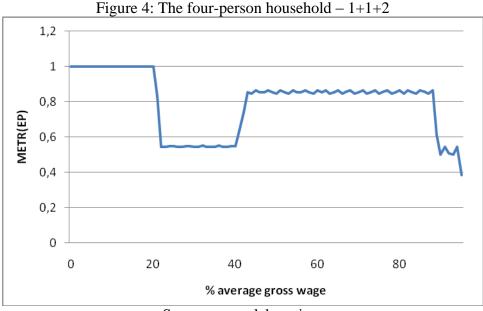
In this figure the METR(EP) value is the lowest of all. Such a household is always motivated to work and not to rely on benefits. It is not economically advantageous. Household would thus reach a much smaller income. METR(EP) value is 0,38 for 14 % of average gross wage, 0,108 for up to 42% average gross wage. As from 43 % of average gross wage the value is between 0,288 and 0,348. The final value is 0,106383. The first drop occurs when the entitlement to one benefit, which the household receives - housing benefit is reduced. The following increase of METR(EP) from 43 % of the gross average wage is due to a reduction of net income earned for every additional CZK 250,- of gross wage.

The fourth type of observed households is 1+1+2. This household has 4 members: 2 children, first adult is unemployed, and the latter adult has increasing gross wage. The situation of this household is similar to that of household 1+1+0. The household is entitled to additional benefits - child benefit, social benefit.

Table 4: The four-person household -1+1+2

Percent of gross	Gross wage	Net wage (CZK)	Net income	METR(EP)
wage (%)	(CZK)		(CZK)	(index)
0	0	0	17728	1
33	8000	7120	18906	0,544
66	15750	12907	20805	0,864
100	23797	18464	22473	0,3829787

Source: own elaboration.



Source: own elaboration.

In this figure the METR(EP) value are on average the highest of all. The explanation is in the social system that supports families with children<sup>10</sup> most. METR(EP) value ranges from 1 to 22 % of average gross wage. Then it decreases to the level of 0,544, at 43 % of average gross wage it grows up to 0,856. The final value is 0,3829787. The first drop is caused by loss of housing supplement in material poverty. The next drop up is due to the stable growth of gross wages and very low increase in net income. Schneider and Jelínek (2001) consider similar approach. This is due to an accelerated reduction in entitlement to social benefits. In this type of household it is difficult to determine whether it pays off to work. From an economic point of view we are moving inside an uncertain interval.

The last type of observed households is 2+0+2. This household has again four members: two children, the first adult with earnings of 100 % and the latter adult with increasing gross wage. Considered situation of this household is similar to the household of 2+0+0 type. The average gross wage is developing at same rate. The difference occurs when the net wage is due to the entitlement discount on the child and net income is due to entitlement to social benefits, as in the case of 1+1+2.

Table 5: The four-person household -2+0+2

Percent of gross	Gross wage	Net wage (CZK)	Net income	METR(EP)
wage (%)	(CZK)		(CZK)	(index)
0	23797	20398	23827	0,38
33	31750	27518	27591	0,376
66	39500	33305	33305	0,348
100	47594	38862	38862	0,106383

Source: own elaboration.

\_

 $<sup>^{10}</sup>$  Household with one working adult and two children would be even more social benefits.

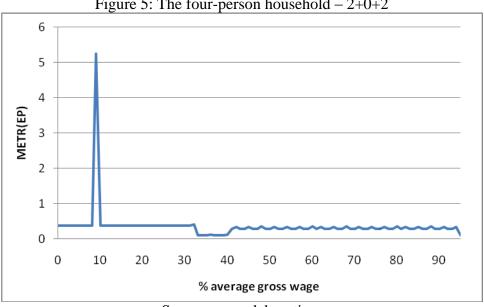


Figure 5: The four-person household -2+0+2

Source: own elaboration.

This figure looks different to the others because it has a different scale. This is due to outliers in 10 % of average gross wage level. The employee receives CZK 250,- gross wage, but loses over CZK 1287,-11 in net income as mentioned by Průša (2004). It is apparent that to this type of household it is clearly not convenient to work under such conditions, or it would have to gain more income in gross wage to cover the loss. METR(EP) value starts at 0,38, falling to 0,108 in 34 % of average gross wage and from 42 % of average gross wage is between 0,288 and 0,356. The final value is 0,106383. For this household except for one possibility shall be convenient to always work and not to rely on social benefits.

### 5. Conclusion

In our article we have focused on one economic factor that affects the unemployed to remain in a state of unemployment. All factors revolve around the income: gross wages, net wages, social benefits, net income. We've combined them all in one single indicator - METR(EP).

Our analysis is different from others primarily in the surveyed person. We focused on the long-term unemployed who are not entitled to unemployment benefits and their re-placement in the labour market is of small account and problematic. Such people in the Czech Republic find themselves in the social system and are in a trap of inactivity.

Analysis has revealed that in some types of households there are combinations of income from work, income taxes and social benefits that create the trap of inactivity. We consider METR(EP) value 0,8 to risk limit. Here the possibility of not going to work and getting by social benefits is high. People above this value can prioritize their free time before entering the state of employment. Certain income from social benefits provided by with assurance, that he can improve it by working illegally (without paying taxes). In other words, it is economically advantageous.

Such a serious demotivating effect occurred at household 1 +1 +2 and that from 44 % to 90 % of the average gross wage. In this type of household, it is in fact even worse, because children may perceive it as a model way of life. Find the answer on how to fix this problem is very complicated. We are facing two problems here: helping families with children and motivate people to work. If the motivation to work would increase by reducing the social benefits, it would not be supportive to a

<sup>&</sup>lt;sup>11</sup> It is the sum of child benefit and housing benefit.

family with children. The Czech Republic has already demographic problems a big enough, and those certainly will not reduced by some kind of economic dissuasion of people to have children.

The boundary of 0,8 has been exceeded also in household types of 1+0+0, 1+1+0 and 1+1+2. The METR(EP) value was above 0,8 and it equalled 1 at household 1+0+0 till 48 % of average gross wage (the longest section among all types). The explanation of why one-person household, after such a long time demotivated and not forced to start looking for job is in the amount of rent. If this person found cheaper subletting and its social benefits would also be lower. The values of METR(EP) would not have been such and problem would not occur. In the remaining two types of households METR(EP) exceeds 0,8 and is again equal to 1 when values of average gross wage are below CZK 8000,-. For household of 1+1+0 it is up 33 % of average gross wage and in the household of 1+1+2 to 22 % of average gross wage. Therefore it does not constitute a big problem. Status of the minimum wage in finding full-time work solves this problem automatically. The part-time job is already a problem, but it depends on the situation and there are many other factors.

Households of 2+0+0 and 2+0+2 are always at low levels. Therefore, it is convenient for them to work. This exception is at household of 2+0+2 and exactly in 10 % of average gross wage. These types of households does not constitute burden on the state budget in the form of payment of social benefits.

We are aware that the model households are affected by certain errors due to rounding 1 % of average gross wage. But this is a negligible deviation, which does not affect the resulting value. The Czech Republic social benefits system is not as generous as it might seem. When a person works, then from an economic point of view, it has great motivation to keep a job. The problem is with those who are still unemployed. Here, State, Government, Ministry of Labour and Social Affairs should use motivational tools to integrate economically inactive individuals into a state of the economically active.

#### References

## Citation of a book

BŘESKÁ N. BURDOVÁ E. VRÁNOVÁ L. (2010). Státní sociální podpora s komentářem a příklady k 1. 6. 2010. Olomouc: ANAG.

JAHODA, R. (2006). *Analýza úprav daňového a dávkového systému v letech 2003 až 2009 z hlediska jejich adresnosti a pobídkovosti*. Praha: Výzkumný ústav práce a sociálních věcí. KUBÁTOVÁ, K. (2000). *Daňová teorie a politika*, Praha: Eurolex Bohemia.

PRŮŠA, L. (2004). K vybraným otázkám charakteru sociálních transferů rodinám s dětmi v České republice. Praha: VÚPSV.

PRUŠVIC, D. PŘIBYL, J. (2006). Komparace zatížení pracovních příjmů reprezentativních typů domácností zaměstnanců v České a Slovenské republice osobní důchodovou daní a příspěvky na sociální zabezpečení. Praha: VÚPSV.

ŠUBRT, B. (2010). Abeceda mzdové účetní. Olomouc: ANAG.

ŽENÍŠKOVÁ, M. (2010). Pojistné na sociální zabezpečení zaměstnavatelů, zaměstnanců, OSVČ, dobrovolně důchodově pojištěných: s komentářem a příklady k 1. 1. 2010. Olomouc: ANAG.

# Citation of a journal paper

DELEECK, H. VAN DEN BOSCH, K. (1992). Poverty and adequacy of social security in Europe: a comparative analysis. *Journal of European social policy*, vol. 2, no. 2, pp. 107–120. PAVEL, J. VÍTEK, L. (2005). Mezní efektivní daňové sazby zaměstnanců na českém a slovenském trhu práce v období transformace. *Politická ekonomie*, no. 4, pp. 477–494. SCHNEIDER, O. JELÍNEK, T. (2001). Vliv českého sociálního systému a daňových úlev na rozdělení příjmů. *Finance a úvěr*, vol. 51, no. 12, pp. 639-657.

### Citation of a working paper

CARONE, G. IMMERVOLL, H. PATUROT, D. SALOMÄKI, A. (2004). *Indicators of Unemployment and Low-Wage Traps (Marginal Effective Tax Rates on Employment Incomes)*. OECD SEM Working Paper 2004-18. OECD Paris: Social, Employment and Migration.

HAVEMAN, R. (1996). *Reducing Poverty while increasing employment: a primer in alternative strategives, and a blueprint*. OECD Working Paper 1996-26. Paris: OECD Economic Studies.

IMMERVOLL, H. (2002). *The Distribution of Average and Marginal Effective Tax Rates in European Union Member States*. EUROMOD Working Paper 2002-EM2/02. Cambridge Vienna: European Centre for Social Welfare Policy and Research.

JAHODA, R. (2004). *Interakce sociálního a daňového systému a pracovní pobídky*. MPSV Working Paper 2004. Praha: VÚPSV, výzkumné centrum Brno.

PAVEL, J. (2005). *Vliv daní a dávek na pracovní úsilí v ČR*. MF ČR Working Paper 2005-2. Praha: Výzkumná studie Ministerstva financí ČR.

PAVEL, J. (2009). *Dopady změn v daňovém a dávkovém systému v letech 2004 – 2008 na hodnoty ukazatelů motivace k práci v ČR*. MF ČR Working Paper 2009-1. Praha: Výzkumná studie Ministerstva financí ČR.

TABELLINI, G. *The politics of intergenerational redistribution*. NBER working paper series 1989-3058. Cambridge: National Bureau of economic research.

Act No. 117/1995 Coll., on state social support as in subsequent alterations.

Act No. 111/2006 Coll., on assistance in material poverty as in subsequent alterations.

Act No. 110/2006 Coll., on living and subsistence minimum as in subsequent alterations.