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# FAMILY POLICY IN THE CZECH REPUBLIC: REDISTRIBUTION OF WEALTH THROUGH THE CHILD TAX BONUS

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## Abstract

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Families with children are traditionally the target group of the social system in developed countries. This paper deals with one component of family policy in the Czech Republic, which is household entitlement. The main focus is on the child tax bonus (hereafter CTB). The paper is divided into descriptive and methodological-analytical parts. The descriptive section provides basic information about the beneficiaries of CTB. In the latter section we formulate research questions about the impacts and effects of CTB. We discover that the influence of tax instruments has grown in recent years. The amount of the tax bonus for children exceeded CZK 3 billion in 2009, with almost 22% of all households with children eligible. Although CTB is income-tested, its redistributive impact is rather small – approximately 80% of recipients cannot be considered as poor. Outcomes from our microsimulation model reveal that 82 to 86% households with CTB were at the same time modelled as eligible and therefore we can use microsimulation techniques for future analyses of policy change.

family policy, child allowance, tax credit, child tax bonus, incentives, redistribution, microsimulation

## 1 INTRODUCTION

The redistribution of income and wealth among individual members of society is a traditional goal of public sector policies. On the expenditure side, instruments for achieving this policy goal include the social security system and, on the income side, the tax system. These policies aim in theory to moderate market differences in the incomes of individual members of society. The actual policies, however, may provide aid to particular social groups, as well. Such groups include those of post-productive age, people with disabilities or migrants. A traditional group, and one to which we devote attention in this article, is households with dependent children.

In addition to general income support, this may aim at individual subgoals relating to the socioeconomic environment. One example is the issue of eligibility in which social benefit instruments may be, but do not need to be, conditional on an income test. Another issue involves the type of support suitable for influencing household economic activity. These issues are interesting when they arise from the use of tax credits from standard taxation, labelled tax expenditures. The impact of tax credits comes under less detailed examination than does the impact of benefit policy tools.

Together with Theveron (2011) we can sum up family policies as the following aims: to redistribute income due to increased cost, to reduce poverty, to improve natality or gender equity, to direct the education process and to increase (mostly mother's) labour participation. In our paper we focus mainly on the first two mentioned aims. When we compare policy measures to support families across countries we can find a rather wide variety of instruments. When we exclude services in kind, such as childcare, a good overview of financial support can be found in OECD documents and statistics. For the setting up of family policies, see the OECD Family database, detailed information on family taxation child allowance can be found in the OECD (2011). When

it comes to forms of child allowance or family tax credits, these may differ according to the main aim being followed. So we can find universal or means-tested benefits, refundable or non-refundable tax reliefs. Both instruments are described down to the last detail in the OECD (2011) for all OECD countries.

These issues are a popular research topic in developed economies. The main research direction examines how different 'family packages' influence the income situation of families and how effectively they reduce poverty. A discussion of the topic using empirical data may be found, for example, in Whiteford and Adema (2007). Czech authors analysing the amount of support for households include Mitchell (2011). She compares family packages in post-communist countries versus selected Western economies. The influence of governmental family packages in Central Europe is also the subject of an article by Svarcova and Svarc (2009) which examines the social situation of families and decisions about having children in the context of family financial support. Mitchell (2011) looks at the issue of generosity using model households. Figari, Paulus and Sutherland (2011), by contrast, employ microsimulation techniques using the EUROMOD model. They construct a novel support indicator based on both benefit information and taxation instruments.

We can see a similar approach of negative income tax as a support to families with children, as in the Czech Republic, in the USA. The earned income tax credit (hereinafter "EITC") was implemented in the mid-1970s and is now combined with child tax credit (hereinafter "CTC"). Thus, if the amount of these tax credits (EITC+CTC) exceeds the tax before credits, it means the household receives a net payment from the government. This government support effectively targets assistance at low-income families with children.

Hofman, Seidman (2003) works with data from the Panel Study of Income Dynamics. In their article they remark that the number of families receiving EITC increased by about 26% between 1993 and 1996, when approximately 13% of households were eligible in the latter year. They argue that this expansion was driven mainly by the factor of the higher income eligibility level of families with two or more children. They focus on poverty issues too when they pay attention to near-poor families (income between 100 percent and 150 percent of the poverty line), claiming that these families received on average higher tax credit than poor families.

Holtz, Scholz (2003) monitor developments of EITC, discuss EITC participation and compliance, its effects on labour force participation and hours of work, marriage and fertility, skill formation, consumption and poverty. They conclude that between 1975 and 2000 the real EITC spending has increased eight times in the USA and the number of claimants has tripled.

Ozawa, Hong (2003) are interested in the EITC program too. They use data from the Current Population Survey from 1999, which interviewed 132,324 individuals aged 14 and over, involving 57,325 families. Their work focuses on the effects of the number of children and of race on EITC and the combination of the effects of EITC and Child Allowance.

Quantification of the relative effect of policy change compared to other changes for the UK and their New Labour program is discussed in Bargain (2012). Using microsimulation techniques, he claims that the policy change has significant impact on inequality and poverty.

The integration of welfare function and incentive function into the labour market can be found in the paper of Milligan, Stabile (2007). In analyses of a new child tax credit program introduced in Canada they found that the tax credit program has strong incentive outcomes. They document it with the drop of social assistance recipients.

A similar methodological approach is employed in Kornstad, Thoresen (2004). They use a tax-benefit model calculation for the assessment of the distributional effects of means tested child benefits in Norway. They conclude that targeting is offset by the reduction of the (female) labour supply.

This article looks at tax support of families with children. Such support may take the form of a child allowance from basic income tax, as well as tax credits. In the Czech Republic (CR) in 2005 the child tax allowance was replaced by refundable tax credits. The amount of early credit for each child was significantly increased in 2008 from CZK 6,000 to CZK 10,680. We believe it is worthy of analysis since it has become one of the most important redistributional tools affecting families with children. In keeping with OECD (2011) methodology, the refundable tax credit may take the form of a non-refundable tax credit supplemented by a tax bonus (hereafter CTB) and therefore behave as negative income tax. A particular feature of the Czech system is that CTB is not counted as part of the income used for determining income-tested social benefits. In addition, households may only claim CTB if the total annual income of the person making the claim is at least six times the monthly minimum wage. This measure was adopted to encourage labour supply among low-income households. The maximum CTB which a family may claim is set at CZK 52,200, which is approximately 4.9 times the amount of refundable tax credit for a single child. We should add that, besides tax credit for a child, a family may be eligible for a child allowance, in the form of income tested benefit: only families with little or no income are therefore eligible.

The goal of this paper is to discuss the effects of CTB on Czech households and to analyse problems which occur in the process of CTB modelling. At the same time we discuss problematic legal aspects of CTB.

## 2 MATERIAL AND METHODS

The authors make use of data from the EU-SILC, which stands for European Union Statistics on Income and Living Conditions, a sample survey of the CR for 2009 and 2010. We believe that two datasets will eliminate the errors which might occur when only one dataset is used. At the same time we may see to what extent CTB redistribution changed from 2009 to 2010 in the situation of an unchanged legislative set-up. The EU-SILC database provides comparable, cross-sectional data on income, poverty, social exclusion and living conditions in the European Union. The sample of Czech households used in SILC contains approximately 10,000 households (for more on the EU-SILC survey methodology, see CZSO, 2011).

The model is based on a simplified form of the CR tax system. The procedure for calculating the tax bonus is done on the basis of Act No. 586/1992 Coll., on Income Taxes. We know from the results of a study carried out by the Ministry of Finance of the CR (Jareš, 2010: pp. 77–103,) that the value of some deductible items and tax credits is negligible compared with total tax revenue. The model therefore only uses deductible items for interest on housing loans and the following tax credits: basic credit (for individuals), tax credit for low-income spouses and child tax credit.

In view of this, our research is based upon a similar methodology employed in Figari, Paulus and Sutherland (2011). Whereas these authors analysed a broader spectrum of instruments for various countries, with the goal of judging the impact of the instruments on family incomes and household income poverty, our own contribution focuses on a broader methodological framework for evaluating a single instrument, the Czech tax credit for children. Like the research of Figari, Paulus and Sutherland, our exploration is based on EU-SILC data. Using a basic statistical methodology, we show who the beneficiaries of CTB are. We do not analyse non-refundable child tax credit since it is not recorded in the EU-SILC dataset. Later in the article, we use microsimulation technology to evaluate how the SILC data reported for CTB differ from the claims we have calculated, and discuss the factors which underlie these differences. We suggest that the proposed sequence for complex family support analysis is the best option for our current and future research. Our conclusions rely on similar research into tax credits done in Great Britain by Clark and McCrae (2001), which discusses techniques allowing for the fact that data input into the model underestimates actual credit recipient numbers. In the conclusion, the answers we received to these questions are used to evaluate the impact of CTB on Czech households. The suitability of microsimulation techniques for this evaluation is also assessed.

## 3 RESULTS AND DISCUSSION

This chapter is divided into descriptive and methodological-analytical sections which conclude with a section discussing the main results. The descriptive section provides basic information about CTB beneficiaries in the Czech Republic. In the methodological-analytical section, research questions to do with CTB impact are formulated.

### 3.1 Descriptive Section

This part of the article explores the distribution of CTB among households using several indicators: the number of children in the household, disposable household income, type of household and recipients of selected social benefits. Households receiving CTB were also tested for income poverty levels.

For purposes of comparison, let us here introduce the basic characteristics of the CR in relation to the CTB as given in the data recorded in the EU-SILC survey. Personal income tax revenue was CZK 129.4 billion in 2009 and, in 2010, CZK 130.3 billion. The total number of households in the CR (weight recalculation of the study sample) was 4.1 million. The total sum paid out in CTB in 2009 was CZK 3.4 billion. In 2010, this was reduced to CZK 3.0 billion, a reduction of 12%. The total number of children

I: *Households with CTB as a function of number of children*

| | | CTB 2009 | | | | | CTB 2010 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Count | Row N%* | Mean per household | Sum (mil. CZK) | Mean per child | Count | Row N%* | Mean per household | Sum (mil. CZK) | Mean per child |
| number of children | 0 | 3 865 | 0.1% | 8 884 | 34.3 | N.A. | 4 796 | 0.2% | 5 242 | 25.1 | N.A. |
| | 1 | 110 258 | 15.5% | 7 320 | 807.1 | 7 320 | 103 814 | 14.8% | 7 315 | 759.4 | 7 315 |
| | 2 | 174 788 | 28.4% | 10 171 | 1 777.8 | 5 086 | 160 356 | 25.2% | 9 520 | 1 526.7 | 4 760 |
| | 3 | 41 528 | 40.1% | 13 524 | 561.6 | 4 508 | 34 996 | 37.1% | 15 057 | 526.9 | 5 019 |
| | 4+ | 9 723 | 58.5% | 23 861 | 232.0 | 5414 | 7 236 | 41.5% | 24 409 | 176.6 | 5 963 |
| | Total | 340 163 | 8.3% | 10 033 | 3 412.8 | 5 756 | 311 199 | 7.5% | 9 688 | 3 014.8 | 5 684 |

Source: EU-SILC 2009, 2010

* Row N indicates the relative frequency of households receiving CTB for the given type of household (e.g., in 2009, 58.5% of households with four or more children received CTB and 8.3% of all households, regardless of children, received CTB).

Note: The situation when a family does not have any child and still receives CTB may be found in the data – for discussion on this issue see section 3.2, Group G.

II: *Household CTB as a function of household disposable income*

| | | CTB 2009 | | | CTB 2010 | | |
|---|---|---|---|---|---|---|---|
| | | Mean per household | Share of DI* | Sum (mil. CZK) | Mean per household | Share of DI* | Sum (mil. CZK) |
| Decile groups according to equalised disposable income | 1 | 11 537 | 5.7% | 667.0 | 10 875 | 5.4% | 778.6 |
| | 2 | 9 672 | 3.7% | 547.7 | 10 735 | 3.9% | 569.9 |
| | 3 | 11 054 | 3.5% | 521.4 | 8 937 | 2.9% | 430.2 |
| | 4 | 9 835 | 2.9% | 437.9 | 10 043 | 2.9% | 352.3 |
| | 5 | 11 166 | 3.2% | 523.7 | 10 208 | 2.7% | 429.4 |
| | 6 | 9 540 | 2.3% | 388.3 | 8 742 | 2.1% | 237.5 |
| | 7 | 8 650 | 1.9% | 174.8 | 7 115 | 1.5% | 141.7 |
| | 8 | 5 168 | 1.0% | 72.0 | 3 936 | 0.7% | 28.6 |
| | 9 | 7 085 | 1.2% | 61.8 | 6 358 | 1.1% | 24.5 |
| | 10 | 5 136 | 0.5% | 18.4 | 7 288 | 0.6% | 22.0 |
| | Total | 10 033 | 3.3% | 3 412.8 | 9 688 | 3.4% | 3 014.8 |

Source: own calculations based on EU-SILC 2009 and 2010 data
* Share of DI indicates the ratio of CTB to disposable household income.

III: *Distribution of households with children according to CTB and the at-risk-of-poverty indicator*

| Is household at risk of poverty? | CTB 2009 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | CTB = 0 | | | CTB>0 | | | | |
| | Count | Column N % ** | Row N %* | Count | Column N % ** | Row N %* | Sum (mil. CZK) | Mean per household |
| NO | 1 014 150 | 91.5% | 78.2% | 282 760 | 83.1% | 21.8% | 2 750 | 9 726 |
| YES | 94 768 | 8.5% | 62.3% | 57 403 | 16.9% | 37.7% | 663 | 11 546 |
| Total | 1 108 918 | 100.0% | 76.5% | 340 163 | 100.0% | 23.5% | 3 413 | 10 033 |
| **Is household at risk of poverty?** | **CTB 2010** | | | | | | | |
| | **CTB = 0** | | | **CTB>0** | | | | |
| | **Count** | **Column N % ** ** | **Row N %*** | **Count** | **Column N % ** ** | **Row N %*** | **Sum (mil. CZK)** | **Mean per household** |
| NO | 1 051 703 | 91.7% | 81.4% | 240 350 | 77.2% | 18.6% | 2 244 | 9 337 |
| YES | 94 840 | 8.3% | 57.2% | 70 848 | 22.8% | 42.8% | 771 | 10 877 |
| Total | 1 146 543 | 100.0% | 78.7% | 311 199 | 100.0% | 21.3% | 3 015 | 9 688 |

Source: own calculations based on EU-SILC 2009 and 2010 data
* Row N % indicates the row-wise relative frequency of households with children in the given type of household (e.g., in 2009, 37.7% of households threatened by poverty received CTB).
** Column N % indicates the column-wise relative frequency of households with children in the given type of household (e.g., in 2009, 16.9% of households receiving CTB were threatened by poverty).

remained the same year-on-year (2.3 million children). In the tables below, the main findings of the descriptive section of the paper are presented.

Even though the number of children remained the same in 2010, it can be seen that the number of households receiving CTB dropped to 7.5%. Also visible is the fact that 75% of all paid-out tax bonuses were to families with one or two children (in both 2009 and 2010). Tab. III shows that the proportion of families with CTB to all families with children equated to 21 to 23% in 2009 and 2010.

A declining tendency is evident in the relationship between the amount of CTB and household disposable income. A year-on-year decline is also evident in CTB paid out virtually to all decile groups. Even families within the highest decile groups claim CTB. This is surprising because value of CTB is income dependent. It relates to the fact that the value of CTB is tested against the income of the claimant, not the family. Furthermore it is associated with the situation in which the partner with the lower income, usually the woman in the CR, claims tax credit for children. In the situation when the partner with higher income claims tax credit for children, the household does not receive any CTB because only the non-refundable part of tax credit is used against tax liability. In both situations net family income should be at the same value. For further explanation see Group E in Tab. V.

As already indicated, the amount of CTB depends mainly on the number of children and the income of the claimant. The maximum annual amount of CTB is set at CZK 52,200. When computing the CTB one should moreover take into account the

IV: *Number of households receiving both CTB and selected social benefits*

| | Child allowance | | Social supplement | | Social assistance benefits | |
|---|---|---|---|---|---|---|
| | **CTB 2009** | **CTB 2010** | **CTB 2009** | **CTB 2010** | **CTB 2009** | **CTB 2010** |
| Count | 183 203 | 135 498 | 41 602 | 37 121 | 3 949 | 5 648 |
| Row N %* | 37.2% | 34.5% | 35.7% | 38.8% | 6.6% | 9.3% |
| Column N %** | 53.9% | 43.5% | 12.2% | 11.9% | 1.2% | 1.8% |

Source: EU-SILC 2009, 2010
* Row N % indicates the row-wise relative frequency of households receiving selected social benefit and CTB (e.g., in 2009, 37.2% of households receiving child allowance also received CTB).
** Column N % indicates the column-wise relative frequency of households receiving CTB and the selected social benefit (e.g., in 2009, 53.9% of households receiving CTB also received child allowance).

V: *Results of modelling eligibility to CTB (model eligibility to CTB vs. recorded CTB)*

| 2009 | | | | Note | households | | CTB | | Tax | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **Count** | **N %** | **Sum (mil. CZK)** | **Sum %** | **Sum (bil. CZK)** | **Sum %** |
| CTB eligibility (according to the model) | is not eligible to | families without children | CTB = 0 | H | 2 667 283 | 64.8% | 0.0 | 0.0% | 68.3 | 52.8% |
| | | | CTB > 0 | G | 3 865 | 0.1% | 34.3 | 1.0% | 0.04 | 0.03% |
| | | families with children | CTB = 0 | F | 831 491 | 20.2% | 0.0 | 0.0% | 51.6 | 39.9% |
| | | | CTB > 0 | E | 82 523 | 2.0% | 591.0 | 17.3% | 1.8 | 1.4% |
| | is eligible to | families without children | CTB = 0 | D | 0 | . | . | . | . | . |
| | | | CTB > 0 | C | 0 | . | . | . | . | . |
| | | families with children | CTB = 0 | B | 277 427 | 6.7% | 0.0 | 0.0% | 6.2 | 4.8% |
| | | | CTB > 0 | A | 253 775 | 6.2% | 2 787.4 | 81.7% | 1.4 | 1.1% |
| Total | | | | | 4 116 364 | 100% | 3 412.8 | 100% | 129.4 | 100% |

| 2010 | | | | Note | households | | CTB | | Tax | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **Count** | **N %** | **Sum (mil. CZK)** | **Sum %** | **Sum (bil. CZK)** | **Sum %** |
| CTB eligibility (according to the model) | is not eligible to | families without children | CTB = 0 | H | 2 691 924 | 64.9% | 0.0 | 0.0% | 69.0 | 52.9% |
| | | | CTB > 0 | G | 4 796 | 0.1% | 25.1 | 0.8% | 0.2 | 0.1% |
| | | families with children | CTB = 0 | F | 831 616 | 20.0% | 0.0 | 0.0% | 51.6 | 39.6% |
| | | | CTB > 0 | E | 62 711 | 1.5% | 401.2 | 13.3% | 1.5 | 1.2% |
| | is eligible to | families without children | CTB = 0 | D | 0 | . | . | . | . | . |
| | | | CTB > 0 | C | 0 | . | . | . | . | . |
| | | families with children | CTB = 0 | B | 314 927 | 7.6% | 0.0 | 0.0% | 6.7 | 5.2% |
| | | | CTB > 0 | A | 243 691 | 5.9% | 2 588.4 | 85.9% | 1.2 | 0.9% |
| Total | | | | | 4 149 665 | 100% | 3 014.8 | 100% | 130.3 | 100% |

Source: own calculations based on EU-SILC 2009, 2010 data

mutual interaction of other tax allowances and tax credits as well as income tax rates. The amount of CTB depends not only on statistically observable variables but also on other social phenomena such as non-take-up. This article does not consider them, however.

In 2009, almost 17% of households with children receiving CTB were threatened by poverty. In 2010, the figure was almost 23%. These households represent 20% of the total CTB paid (25% in 2010).

Table IV shows the absolute and relative frequency of households receiving both CTB and selected social benefits: child allowance, social supplement and social assistance benefits (the tax and benefit supports for families with children are complementary). CZK 6 billion were paid out in child allowances in 2009 (CZK 4.9 billion in 2010). Approximately 40% of all expenses incurred were spent on households receiving CTB as well (in both 2009 and 2010). Social supplements totalled CZK 1.8 billion in both 2009 and 2010. Households receiving CTB spent 35% of the total expenditures incurred in 2009 (39% in 2010). Social assistance benefits added up to CZK 2.4 billion in 2009 and, in 2010, CZK 2.2

billion. Of this amount, households receiving CTB spent 3% in 2009 and 10% in 2010.

### 3.2 Methodological-Analytical Section

As noted earlier, the model is based on EU-SILC data and Act No. 586/1992 Coll., on Income Tax. In our model and the survey data, households may be divided into eight groups using the CTB claim calculation indicator (in the model), the number of children (families with/without children) and the CTB recorded in EU-SILC. Mutual relationships between calculated and recorded claims for CTB and the existence of children may be found in Tab. V. Groups C and D cannot be created under the definition of CTB claims. They have been left in the table only for the purpose of providing a complete count of potential combinations.

A description of individual household groups and the quantification of indicators for these groups is provided below.

Group A: households, consisting of approximately 6% of total households, which collect more than 80% of CTB. Given the amount of tax paid (approximately 1.5% of total tax revenues) it may be stated that these households are low-income, with CTB functioning as additional income.

Group B: makes up 6.7% (7.6% in 2010) of households. These households do not receive CTB but only tax credits for children. Some households in this group may have been so classified because of problems to do with child records, as discussed in the chapter 4.

Group E: makes up approximately 2% of households. Problems with the model are most evident here, as discussed in the chapter 4, as is irrational behaviour by households. The parent with the higher income might not, as presumed in our model, claim the tax credit so no tax bonus would accrue. It would, instead, be claimed by someone with a lower income eligible for the tax bonus. These households spent 18% of the total CTB amount (14% in 2010).

Group F: 20% of households. These households do not receive CTB but only tax credits for children. These households tend to be higher-income, as testified to by the relative share of tax paid (40%).

Group G: less than 1% of households. This group comes into being as a result of the fact that, during the survey period, children for which CTB was spent were adult, causing the model to show that the household should not have any entitlement to CTB. Because of the amount paid, the importance of this group is nevertheless negligible.

Group H: the largest group of households, comprising 65%. This group consists of households without children, who thus have no entitlement to CTB.

## 4 DISCUSSION

In this part of the paper we discuss the main findings from previous sections and examine problems in the current set-up of CTB. We aim to come up with recommendations for law amendment and for future work.

Analysis has shown that over 20% of all households with children are eligible for CTB, with the greatest amount distributed to households with one or two children. The fact that the maximum amount of CTB per family is currently restricted by law seems to be an excessive restriction. As our analysis has indicated, doing away with this law would currently affect less than 1% of CTB recipients and annual budget costs could be considered as negligible. According to SILC microdata, there was only one household which received the maximum amount of CTB in SILC 2009 and none in SILC 2010.

If the tax benefit for children is intended to pull this type of household into the labour market, we are of the opinion that it will be of minimal help, since the household groups receiving CTB and social assistance benefits or other income-tested benefits do not intersect to any significant degree. The relevant passage in the law which excludes CTB income from the income test for these benefits is therefore redundant, and rescinding it would have only minimal effect on household incomes. At the same time, the system would be simplified, with claims and the amounts distributed becoming more transparent.

Problems arise with the EU-SILC data in the modelling process, causing problems with the interpretation of results and in the model itself. Our goal was to demonstrate the impact of changes to the law which exchanged the child tax allowance for tax credits for children in the form of non-refundable tax credit, supplemented by a tax bonus for children. Other problems arise from classifying income monitored only as household totals, and not for individuals. Some incomes (taxed individually by withholding) tax may not be recorded in EU-SILC.

So far, we have identified four salient facts. The first is that CTB income is recorded retrospectively in the survey. Consequently, the household may have a different composition from that which it had in the year of the survey. The second issue is that households of employees may spend the tax bonus on a monthly basis, amounting to one-twelfth of the annual amount. Irregular income during the year may show up in the microsimulation model when the household has no entitlement to CTB, even if CTB was spent in the year in question. The third issue is that on the basis of the SILC survey data, we cannot properly evaluate a situation in which households had an entitlement to CTB based on income from the year preceding the survey and which was received only during the year of the survey, during which there was no entitlement to CTB. Finally, a real-world situation may arise in which a person in the household with a lower income spends CTB but in the microsimulation model the tax benefit accrues to a person with higher income. This particular situation has no influence

on the total household income, only on the division of income between individual household members. In all the above cases, we cannot satisfactorily explain the fact that the household receives CTB but, in the microsimulation model, should have no entitlement to it.

## 5 Conclusion

A tax bonus for children is one possible way in which the CR can support families with children. Although income tests for benefits primarily target the poorest families and have played an increasingly less significant role since 1996, starting in 2005, with significant change in 2008, the influence of tax instruments has grown – in particular, tax credits and tax bonuses for children.

In general, evaluating the impact of tax instruments for the support of families with children does not receive the amount of attention devoted to benefit instruments. The goal of this paper has been to discuss the influence of the tax bonus for children which, as we have indicated, exceeded CZK 3 billion in 2008 and 2009. The conclusions of our analysis have been drawn from microdata from EU-SILC surveys. These demonstrate that something over 20% of all households with children are eligible to claim CTB, with the greatest amount spent by households with one or two children.

In spite of the fact that in contrast to the child allowance the CTB claim is not limited to the lowest deciles, households in the first five deciles share in it. That the CTB does not target the most impoverished group is evident in the fact that approximately 80% of beneficiaries may not be considered impoverished households under the EU definition. At the same time, only 12% of beneficiaries also received social benefits during the years under analysis, and only 1.2 to 1.8% of CTB beneficiaries also collected social assistance benefits.

While examining the Italian experience with tax credits for dependent children, Gastaldi, Liberati (2009) formulate similar results in their paper as we do in our paper. According to their paper (1) a much simpler tax/benefit system would achieve similar results as the present one, (2) the redistributive impact of tax credits toward poor families is poor.

The more comprehensive impact of the CTB was assessed with a microsimulation model. In this model, the group of households eligible for CTB is slightly different from households which be eligible according to our calculations. Clark and McCrae (2001) pointed to similar problems in their research. Our paper analyses the main differences and discusses what influence they might have on future policy models. On the other hand, we would like to note the fact that the microsimulation model properly accounts for 81.7% (or 85.9%) of households in the 2009 or 2010 EU-SILC. The problems noted above are therefore not significant in terms of the microsimulation model and further analysis of policy variants.

We plan to continue evaluating CTB in relation to the complex system of tax and benefit instruments which support families with children. We would like to use the analysis of model households to show that the amount of legislative simplification discussed above for CTB will have no negative impact on its functioning. We would also like to analyse the development of Czech support for families with children.

## SUMMARY

Families with children are traditionally the target group of the social system in developed countries, and tax tools are one way for the state to support this group. This paper examines regular financial state support, specifically the child tax bonus (hereafter CTB), as part of the refundable child tax credit system. Although other elements of the welfare system for families have already been analysed, CTB remains unexplored.

Our microsimulation model makes use of the data from the EU-SILC (European Union Statistics on Income and Living Conditions) sample survey for the CR for 2009 and 2010, and is based upon a simplified form of the CR tax system (Act No. 586/1992 Coll., on Income Taxes.).

The goal of this paper was to discuss the influence of the tax bonus for children which, as we have indicated, exceeded CZK 3 billion in 2008 and 2009. Our analyses demonstrate that something over 20% of all households with children are eligible to claim CTB, with the greatest amount spent by households with one or two children. In contrast to the child allowance, another financial support for families with children, the CTB claim is not limited to the lowest deciles. Still, approximately 80% of the total CTB is drawn by households in the first five deciles and it represents 3 to 6% of their disposable income.

As well as a descriptive and analytical section our paper contains a methodological section, which is focused on problems with designing a microsimulation model and with the available data and identifies the chief differences between the real situation and model results. Outcomes from our microsimulation model reveal that 82 to 86% of households with CTB were modelled as eligible and therefore we can use our model for future analyses of alternative family policies and their potential impact on public finance as well as individual households.

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Act No. 586/1992 Coll. on Income Taxes [Zákon č. 586/1992 Sb., o daních z příjmů].

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