This brief discusses the consequences of a recent reform proposal that aims to redistribute resources to low-income families with children through the income tax system in Poland. The proposed reform replaces the current child tax credit with additional amounts of the universal tax credit, and by changing the sequence in which tax deductions are accounted for, it increases resources of low-income families with children by about 1.7 billion PLN per year (0.4 billion EUR). The brief examines four possible ways of additional tax system modifications that would make the reform package neutral for the public finances, and presents distributional implications of the reforms.

The level and structure of financial support for families with children has become an important policy focus in Poland; a country that faces high levels of child poverty and one of the lowest fertility rates in Europe (Immvoll et al., 2001; Haan and Wrohlich, 2011; Eurostat, 2013). In this brief, we outline recent tax reform proposals that aim to increase financial support for low-income families with children through the tax system. A range of such potential reforms has been examined in Myck et al. (2013b); a report prepared for the Chancellery of the President of the Republic of Poland. One of the options became the key element of the President’s family support program Better climate for families proposed in May 2013. Below we discuss its main features and various options for financing the proposals.

The proposed modification of financial support for families would replace the current child tax credit with additional amounts of the universal tax credit conditional on the number of children, and increase tax advantages for families by changing the sequence in which tax credits are accounted for in a way that is favorable for families with children (Chancellery of the President of Poland, 2013). The main beneficiaries of this reform would be low-income families with children whose income is too low to take full advantage of the current child-related advantages. The overall cost of the reform would amount to about 1.7 billion PLN (0.4 billion EUR). In the final section of the brief we discuss potential ways of making the reform budget neutral.

The analysis has been conducted using CenEA’s micro-simulation model SIMPL on reweighted and indexed data from the 2010 Household Budget Survey (HBS) collected annually by the Polish Central Statistical Office (see Morawski and Myck, 2010, 2011; Myck, 2009; Domitrz et al., 2013; Creedy, 2004).
Financial Support for Polish Families in 2013

In Poland, financial support for families with children depends on the level of family income and the demographic structure of the household. The system consists of two main elements – family benefits on the one hand, and tax preferences for families with children on the other. Following Myck et al. (2013a), we define financial support for a family $j$ ($FSF_j$) as the sum of family benefits received by the family ($FB_j$), and tax preferences that families with children collect in the PIT system is defined as the difference in the level of tax liabilities and health insurance contributions paid by the family ($PITHI_{D0} - PITHI_{Dn}$) supposing they have no children ($D0$) and on condition them having $n$ number of dependent children ($Dn$):

$$FSF_j = FB_j + (PITHI_{D0} - PITHI_{Dn})$$  \[1\]

Figure 1a presents the current level of the financial support for single-earner married couples and Figure 1b presents the same for single parents with one and three children in relation to the level of gross earnings.

Family Benefits

Family benefits, which include family allowance with supplements, childbirth allowance and nursing benefits, are means-tested and related to the number and age of dependent children in the family and specific family circumstances. Family benefits are granted only to low-income families and are subject to point withdrawal once the family crosses the income eligibility threshold (539 PLN of net income per person). For example, the stylized married couples in Figure 1 lose family benefits when their monthly gross income exceeds 2,060 PLN if they have one child and 3,435 PLN if they have three children (for single parents these thresholds equal 785 PLN and 1,825 PLN respectively).

Tax Preferences

Taxpayers with children can deduct a non-refundable child tax credit (CTC) from the accrued tax, with the maximum values of the CTC related to the level of universal tax credit.
available to all tax payers (UTC is 46.37 PLN per month). For each of the first two children in the family, taxpayers can deduct up to two values of the UTC (92.67 PLN per month), for the third child up to three values (139.00 PLN per month) and for the fourth and following children up to four values of the UTC (185.34 PLN per month). The CTC is not available for high-income parents with one child (whose annual taxable income exceeds 112,000 PLN per year).

Further tax advantages are available for single parents through joint taxation, which translates into substantial gains in particular for high-income parents. As Figure 1 shows, single parents whose gross income exceeds the second tax income bracket (15,745 PLN per month) gain up to 1,044.19 PLN per month if they have one child and 1,368.54 PLN if they have three children. With the same income levels, the system grants nothing to married couples if they have one child and 324.34 PLN if they have three.

In the current system, the CTC can be deducted from the accrued tax only after the full amount of UTC and the tax-deductible part of health insurance (HI) contributions have been exhausted. As a consequence, there is a large group of low-income families whose income is too low to take full advantage of the CTC. As Figure 2 illustrates, the higher the number of children in a family, the lower is the proportion of families who take full advantage of the credit. Although the percentage of those using the full CTC is 76.1% for families with one child, it decreases to 67.6% for those with two children and is as little as 30.8% for families with three or more kids. Over 40% of the latter use only half of the CTC they are entitled to.

**Figure 2. Use of maximum amount of CTC by number of children**

- **0% CTC**
- **1% - 50% CTC**
- **51% - 99% CTC**
- **100% CTC**

Note: Proportions of families with taxable income satisfying other conditions for CTC. Source: Myck et al. (2013a).

**Recent Reform Proposals**

In a recent report for the Chancellery of the President of Poland, we have analyzed several options for the reform of the family-related elements of the tax system (Myck et al., 2013b). One of these has become the key element of the presidential reform proposal (Chancellery of the President of Poland, 2013). The reform assumes that the CTC is replaced with the amounts of the Universal Tax Credit conditional on the number of children in the family in such a way as to maintain the current maximum advantages offered to families through the CTC system. The main purpose of the reform is to reverse the tax deduction sequence so that tax advantages related to having children are deducted from the accrued tax before considering credits related to health insurance contributions. Such construction would enable low-income families to make greater use of child-related tax advantages, while leaving the situation of higher-income families unchanged.
Figure 3. Monthly tax advantages from the reform among families with 1-4 children (PLN/month)

Source: CenEA – own calculation based on SIMPL model and 2010 HBS data.

Figure 3 presents monthly levels of tax advantages resulting from the proposed reform conditional on the number of children in the family and the level of gross income. We note that families with children gain from the reform if their income exceeds 735 PLN per month. Tax advantages resulting from the proposed modifications are exhausted at different levels of gross income depending on the number of children (from 2,630 PLN for families with one child to 8,010 PLN for those with four children). The higher the number of children is, the greater is also the potential maximum gain – for example, families with four children and income of 4,010 PLN per month would gain up to 311.35 PLN per month.

The results of the analysis show that, overall, 2 million households with children would benefit from this reform (below referred to as System 1). The total annual change in households’ disposable income (equivalent to the total cost for public finances) would amount to 1.69 billion PLN (see Table 1 below).

Table 1. Average annual change in households’ disposable income by number of children in Systems 1-5 (billion PLN)

<table>
<thead>
<tr>
<th></th>
<th>No children</th>
<th>1 child</th>
<th>2 children</th>
<th>3+ children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System 1</strong></td>
<td>0.00</td>
<td>0.39</td>
<td>0.60</td>
<td>0.70</td>
<td>1.69</td>
</tr>
<tr>
<td><strong>System 2</strong></td>
<td>-0.45</td>
<td>-0.20</td>
<td>0.04</td>
<td>0.55</td>
<td>-0.08</td>
</tr>
<tr>
<td><strong>System 3</strong></td>
<td>-0.65</td>
<td>-0.09</td>
<td>0.17</td>
<td>0.59</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>System 4</strong></td>
<td>-0.66</td>
<td>-0.15</td>
<td>0.23</td>
<td>0.59</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>System 5</strong></td>
<td>-0.86</td>
<td>-0.04</td>
<td>0.31</td>
<td>0.63</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Note: Total annual change in disposable income includes change in tax liabilities and level of social benefits. Source: Myck et al. (2013b).

Table 1 shows that most of the resources would be beneficial for families with three or more children (0.7 billion PLN per year), while families with one or two children would benefit about 0.39 billion PLN and 0.6 billion PLN per year, respectively.

The distribution of total income gains by income deciles is presented in Figure 4. The gains are clearly focused in the lower part of the income distribution. For example, families with children in the second income decile would receive a total of 0.4 billion PLN, while those in the bottom and third decile would receive approximately 0.25 billion PLN. Only 0.04 billion PLN of the total cost would be distributed to families in the top income decile.
Potential Ways of Financing the Reform

Concerns about the state of public finances naturally imply questions related to the potential ways of financing any additional tax giveaways. Myck et al. (2013b) presents four alternative modifications of the tax system that make the entire package of reforms neutral for the public finances. These are:

- **System 2** – CTC reform + limitations on joint-taxation preferences for married couples (both with or without children) and single parents;
- **System 3** – CTC reform + reduction of tax income threshold from 85,528 to 68,000 PLN per year;
- **System 4** – CTC reform + reduction of tax revenue costs from 1,335 to 475 PLN per year;
- **System 5** – CTC reform + reduction of tax-deductible part of health insurance from 7.75% to 7.45%.

The overall total outcomes of these proposals for household disposable income are illustrated in Table 1 and Figure 4. The implications in terms of the redistribution of the packages – with losses among childless households and gains among those with children – are clear under all of the proposed packages, although all of the reform combinations imply small losses also for families with one child. Total disposable income of childless households falls by 0.45 PLN per year under **System 2** and by as much as 0.86 billion PLN under **System 5**. By shifting the majority of the costs to households without children, the latter is simultaneously the most generous for families with children since income of those with two children grows on average by 0.31 billion per year, while of those with more children see a growth of 0.63 billion PLN per year.

Figure 4 illustrates that in all of the revenue neutral reform packages, the households from the highest two deciles are the biggest losers. That the financing of the shift of resources to low-income families falls on households from the top income decile is particularly evident in the case of **Systems 2 and 3** where total disposal income for these households fall by 1.64 billion PLN and 1.52 billion PLN, respectively. Since changes to revenue costs and deduction of HI contributions apply to almost all taxpayers, **Systems 4 and 5** are less favorable for households from the lower deciles and generate losses for the upper part of the income distribution. However, a large part of cost is also born by households from the tenth decile (0.26 and 0.39 billion PLN, respectively).

While the combinations of tax changes presented above would be neutral with respect to the current system of taxes in Poland, it is worth noting that the policy of tax increases through the tax-parameter freezing implemented in 2009 has increased taxes by far more than the cost of the Presidential reform proposal. As we showed in Myck et al. (2013c), this policy increased taxes by 3.71 billions PLN per year, of which 2.21 billions was paid by families with children. The recent proposal could thus be thought of as a way of redistributing these resources back to families with children.
Conclusions

Financial support for families with children is an important element of government policy with implications for child poverty, labor-market participation among parents, as well as fertility (Immervoll et al., 2001; Haan and Wrohlich, 2011). In this brief, we outlined the results of a recent analysis of direct financial consequences of modifications in the Polish system of support for families through the tax system with the focus on a reform proposal presented by the Polish President in the program Better climate for families. The reform would benefit lower-income families with children at the cost of about 1.7 billion PLN. As a result, annual income of the families from the three bottom deciles would grow by 0.93 billion PLN. A high proportion of the gains (0.7 billion PLN) would go to families with three or more children.

We also presented four additional modifications of the tax system that would make the CTC reform revenue neutral. Reform packages that withdraw joint-taxation preferences and decrease the threshold of the income tax to a higher rate would be most effective in ensuring redistribution of support for low-income households. It is worth noting though, that the recent approach of the Polish government to the tax system has implied substantial increases in the level of income taxes through the freezing of income tax parameters, and these alone would be more than sufficient to finance the proposed tax changes.

References


Chancellery of the President of Poland (2013). Dobry klimat dla rodziny. Program polityki rodzinnej Prezydenta RP. (Better climate for families. Family support program of the Polish President.)


* This brief draws on recent research at the Centre for Economic Analysis in the projects financed by the Chancellery of the President of the Republic of Poland and the Batory Foundation (project no: 22078). The analysis has been conducted using CenEA’s micro-simulation model SIMPL based on the 2010 Household Budget Survey data collected annually by the Polish Central Statistical Office (CSO). The CSO takes no responsibility for the conclusions resulting from the analysis. Any views presented in this brief are of the authors’ and not of the Centre for Economic Analysis, which has no official policy stance.

Michał Myck
Centre for Economic Analysis (CenEA)
MMyck@cenea.org.pl
http://www.cenea.org.pl/

Michał Myck is Director of the Centre for Economic Analysis (CenEA) in Szczecin (PL). He has previously worked at the Institute for Fiscal Studies (1999-2004) and at the DIW-Berlin (2005-2010) where he is still a part time Research Associate at the Public Economics Department. Since 2005, he has been the Polish Country Team Leader for the Survey of Health, Ageing and Retirement in Europe (SHARE). He received his B.A. (First Class) in Philosophy, Politics and Economics at the University of Oxford (1997) and M.Phil. Degree in Economics at the University of Oxford (1999). In March 2006, he received his Ph.D. degree at the University of Warsaw.

Monika Oczkowska
Centre for Economic Analysis (CenEA)
MOczkowska@cenea.org.pl
http://www.cenea.org.pl/

Monika Oczkowska received her MA degree in Economics with specialization in financial analysis and business valuation (2012) and BA degree in Economics (2010) and International Relations (2011), all at the University of Szczecin. She has been working as Research Economist at CenEA since March 2012. She is the Polish Country Team Operator for the Survey of Health, Ageing and Retirement in Europe (SHARE) and has been working on social exclusion issues using the SHARE data. She is also involved in CenEA’s micro-simulation analysis of the Polish tax and benefit system.