

Reducing child poverty in Romania: the role of universal child benefit

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Abstract: *Child poverty is a structural issue and a persisting challenge in Romania. According to the latest figures published by Eurostat, 4 in 10 children were at risk of poverty or social exclusion in 2020, almost double compared to the EU27 average. For 2022, the Government decided to increase the universal child benefit by 14% and 41%, depending on the age and the health status of children. The aim of this analysis is to gauge the impact of rising universal child allowance in reducing child poverty in Romania. For this purpose, our paper makes use of the EUROMOD, the EU tax-benefit microsimulation model based on the 2019 EU-SILC database. The main takeaway of this analysis is that increasing universal child allowance has only a marginal impact on children poverty and should not be seen as the sole ingredient to solve this multidimensional phenomenon. In order to tackle this delicate situation, authorities should put in place a coherent strategy at national level, with targeted measures and effective investment. Furthermore, the Government should take full advantage of the Recovery and Resilience Fund and implement reforms to improve the welfare of children, with focus on disadvantaged groups.*

Keywords: *universal child benefit, child poverty, microsimulation, EUROMOD universal child benefit, child poverty, microsimulation, EUROMOD*

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1. Introduction

The most recent data published by Eurostat reveals that, in 2020, 4 in 10 children in Romania were at risk of poverty or social exclusion, the highest rate in the European Union, almost double compared to the EU27 average. Over the last years, besides few measures applied locally (such as the Hot Meal program or tickets supporting the participation into early childhood education), the main response of the Government was to increase the universal child allowance and other child-related benefits, with a limited impact on reducing child poverty. Despite the income convergence achieved since 2007 – the moment Romania joined the European Union (GDP per capita in PPS increased from 44.1% of EU average in 2007 to 72% in 2020), which has been also translated into a gradual decline of child poverty, the share of children at risk of poverty and social exclusion remains stubbornly high (41.5% in 2020).

Children face long-term, acute and potentially lifelong risks from exposure to poverty. A lack of goods and health services, on one hand, and social and psychosocial unfulfilled needs, on the other hand, can have destructive and irreparable influences on future development and life opportunities of children (UNICEF, 2020; Bárcena-Martín et al., 2021). Acknowledging how severe the poverty's consequences might be on current well-being and future capabilities, there is an overwhelming consensus that child poverty is an area requiring public intervention, at both national and European levels. According to UNICEF, "protecting children from the sharpest edges of poverty during their years of growth and formation is both a mark of a civilized society and a means of addressing some of the evident problems that affect the quality of life" (UNICEF, 2005). Also, "poverty reduction begins with children" (UNICEF, 2020).

Combating child poverty and social exclusion has been a priority issue at EU level for a long time. The ten years' strategy (2010-2020) for smart, sustainable and inclusive growth - Europe 2020 Agenda targeted, among other objectives: (i) reducing the number of people at risk of poverty and social exclusion by at least 20 million, (ii) reducing early school leavers to below 10%, and (iii) increasing the share of younger generation with a tertiary degree to at least 40% (European Commission, 2010). However, the EU strategy proved to be too ambitious, and the targets were not achieved due to the slow economic recovery after the global financial crisis and, more recently, the outbreak of the pandemic.

The onset of the pandemic has deepened income inequalities and reduced the availability of services in particular for low-income households. For vulnerable children, the closure of schools has triggered additional challenges given the educational and digital gap, especially in rural and remote areas. Similarly, children with disabilities faced additional risks of exclusion due to lack of access to specialized support platforms. In this new context, the European Commission launched major policy initiatives in 2021: the EU Strategy on the Rights of the Child and the European Child Guarantee. The first one proposes a number of specific actions, including tackling child poverty and promoting equal opportunities, building

quality and inclusive education, etc. (European Commission, 2021b). The latter one¹ complements the Strategy on the Rights of the Child and it is a key deliverable of the European Pillar of Social Rights Action Plan² - which has a goal of reducing the number of people at risk of poverty or social exclusion in the EU by at least 15 million by 2030, out of which at least 5 million are children (European Commission, 2021a).

In Romania, child poverty is a multidimensional issue and includes phenomena such as early school leavers, children left behind (in particular those from rural areas, children with disabilities and from Roma communities) and unsatisfactory and deteriorating PISA scores (OECD, 2019). Since 2014, Romanian authorities have largely increased the universal child allowance, by an average annual growth rate between 17% and 32%, depending on the age and disability of children. However, given the complexity of the problem, the Government should not see the child benefits as the sole instrument of anti-poverty policy. Breaking the vicious cycles requires a coherent strategy and an integrated approach focused on vulnerable children and their families, built on several pillars: access to financial resources for parents – preferably employment income, access to quality health services for both parents and children, access to quality education services for children (including recreation, sport and cultural activities).

The remainder of the paper is structured as follows. Second section includes a short review of the literature and briefly describes the main European solutions to tame child poverty. Third section explains the status quo in Romania, highlights main challenges and captures the legislative changes over the last few years. The fourth section describes the EU-SILC data and the microsimulation techniques used (EUROMOD) to gauge the role of universal child allowance in reducing child poverty in Romania. Fifth section presents the main results of the simulation. Sixth section concludes.

2. Literature review

The future performance of any country intrinsically depends on the wellbeing and education of children (Hanushek et al., 2008). Research has underlined that social investment in health, education and protection are not only indispensable for the wellbeing of children, families and communities, but also for the economic returns, growth potential and long-term

¹ To ensure that the European Child Guarantee becomes fully operational, member states will report their progress to the European Commission every two years and the European Semester will play a key role in the monitoring process (European Commission, 2021c).

² The European Pillar of Social Rights (EPSR) was adopted in 2017 with the purpose to rebalance economic policies and social considerations. All EU member states have agreed to implement the 20 principles of the Pillar. The Action Plan for the European Pillar of Social Rights turns the Principles into concrete actions (e.g. EU Strategy on the Rights of the Child and the European Child Guarantee).

sustainability of democracies and economies (UNICEF, 2021; Lister, 2006). In order to sustain a fast-paced economic growth and income convergence towards developed countries, authorities need to promote inclusive development for children (World Bank, 2020a). At the end of the day, a better educated labor force can easily adapt to shocks and increase the resilience of an economy (Briguglio et al., 2006). In a nutshell, "investing in children is perhaps one of the best examples of social investment" (European Commission, 2017). Transfers for children can be perceived as "a form of smoothing inter-temporal difference in consumption patterns, making people better off at a time of greater need and supporting the process of intergenerational mobility" (Figari et al., 2009). Furthermore, children can be seen as public goods for which the entire society should bear responsibility and all benefits applied to them should be seen as a mechanism to socializing the financial cost of childbearing and as a way to enhance social welfare and build the social contract (Matsaganis et al. 2006; UNICEF, 2020).

Of course, one of the main challenges for policymakers is to design the child benefit system in order to yield the most sizable results in terms of poverty reduction. In general, there is an intense debate if more targeted measures outperform universally designed benefits. On one hand, universal benefits have the advantage of lower administrative and transaction costs and higher effective coverage rate. Also, the administrative simplicity (usually an automatic child benefit registration at birth) determines a high take-up rate. On the other hand, for targeted measures, it is crucial to identify beneficiaries and to assess how low-income households with children are covered, to take into account potential inclusion and exclusion errors, a non-take up of benefits and any potential distortions. This practical challenge may influence the performance and accuracy of a targeting instrument and ultimately the impact on child poverty (UNICEF, 2020; Finn et al., 2014). Certainly, cash transfers do not work in isolation and one should assess them as part of a wider policy system (taxes and cash and in-kind transfers) which encompass different degrees of universalism and selectivity.

In a review of more than one hundred anti-poverty interventions in 47 countries, Coady et al. (2004) underline that the median means-tested programme allocated $\frac{1}{4}$ more to the target group than in the case of a universal allocation. However, since universal benefits are likely to obtain more political support, cross-countries studies of OECD economies conclude that universal child allowance systems have a larger redistributive potential since they tend to have higher budgets compared to those under targeted systems (Korpi et al., 1998; Van Lancker et al., 2014). Universalistic systems that combine universal instruments with measures for low-income families seem to be the most effective in reducing child poverty (UNICEF, 2020).

Recent reviews of cash transfers for children highlight a positive impact on children's intermediate outcomes (expenditure on goods, school attendance, access to healthcare services), but also on final outcomes, such as cognitive development and healthcare when benefits are properly designed and part of a broader social policy (Cooper et al., 2017;

UNICEF, 2020). Cash benefits may help tackle some of the bottlenecks, but high-quality services and in-kind transfers are also needed in order to achieve a sizable and persistent influence on final outcomes (UNICEF, 2020).

As expected, the size of the benefits is a crucial determinant of poverty reduction (Fiszbein et al., 2009; Bastagli et al., 2016). A review of 15 studies assessing the impact of variations in benefits amounts finds that larger transfers are associated with higher food expenditure, investment in livestock, and health and nutrition outcomes (Bastagli et al., 2016). A large number of studies focusing on OECD countries underline a strong link between more generous transfers and larger child poverty reduction (Matsaganis et al., 2006; Van Lancker et al., 2014; Bárcena-Martín et al., 2021). For instance, covering 30 European countries, Bárcena-Martín et al. (2021) highlight that child poverty declines by 7.6% when the share of family/child benefits increase by 1 percentage point relative to total transfers in a country. Compared to other static approaches, Bárcena-Martín et al. (2021) use the EU-SILC data for the years following the global financial crisis and perform a dynamic assessment in order to better evaluate the policies' effectiveness to eradicate poverty persistence. The analysis highlights that 16% of children were in poverty for at least two consecutive years out of the four-year observation period. One of the main takeaways of this study is that past poverty experience raises the probability of facing child poverty in the present (scarring effects).

In general, it is considered a good practice to index the child benefit to inflation rate in order to avoid a drop in the real value of the benefit (UNICEF, 2020). Importantly, policy makers face a trade-off between fiscal cost and poverty reduction: the more generous the child benefits are, the higher the pressures on national budgets. Therefore, the fiscal situation of a country is the main factor shaping the design and dynamic of child related benefits. Policymakers should take pivotal decisions in terms of the way social programs are to be funded, or the relative importance of social protection expenditures in the national budget.

Looking at the potential impact of introducing universal child benefits instead of the policies in place in Southern Europe, Matsaganis et al. (2006) found out that, in a budgetary neutral simulation, the policy reform would increase the headcount child poverty rate by 1 to 2 percentage points (except for Greece). The results in EUROMOD highlight that a universal benefit has a sizable redistributive impact in Southern countries only if the amount is high enough. Moreover, as a complement, authorities should focus also on family services. For example, providing good-quality and affordable child-care services would allow mothers to continue their careers instead of relying on cash benefits alone. Importantly, cash benefits and public services should be seen as complements and not substitutes. A family with no income will be poor no matter how broad the range of public services it receives for free. Thus, the design of income transfers matters.

A simulation of introducing a universal child benefit with a financial envelope of 1% of GDP across middle-income countries underlines that such benefit paid to all families with children would contribute to a 7% - 20% decline in overall poverty rate (for the whole population),

while the impact on children would be similar or even greater depending on the policy system of each country (Evans et al., 2018). However, for all 14 countries included in the sample, an even higher poverty reduction was achieved when cash transfers were weighted, paying higher benefits to the bottom 40% of households. This contributed to an additional poverty reduction (between 4% and 6% for child poverty) and underlines the potential for "selectivity within universalism".

An ex-post impact assessment of the 2015 child-related policy reform in Romania highlights a consistent effect for the bottom deciles (up to the third decile) thanks to the large increase of the benefit amounts, but also due to easing eligibility conditions for the family support allowance. In 2015, Romanian authorities decided to double the universal child allowance for children aged 2 - 18 years old and to increase by ~140% the universal child allowance for children with disabilities aged 3-18 years old. At the same time, the Government changed the eligibility conditions for family support allowance by increasing the upper income-testing threshold by 43%, while the benefit was raised by 64% to 127% according to the number of children in the family. Using EUROMOD and evaluating the ex-post joint effect of those two measures by constructing a counterfactual scenario, simulation underlines that the reform was clearly progressive thanks to the family support allowance which is a means-tested benefit. Main beneficiaries of the reform were concentrated in the poorer deciles, in larger families and single parent families, and less in households with only one child (Militaru et al., 2017).

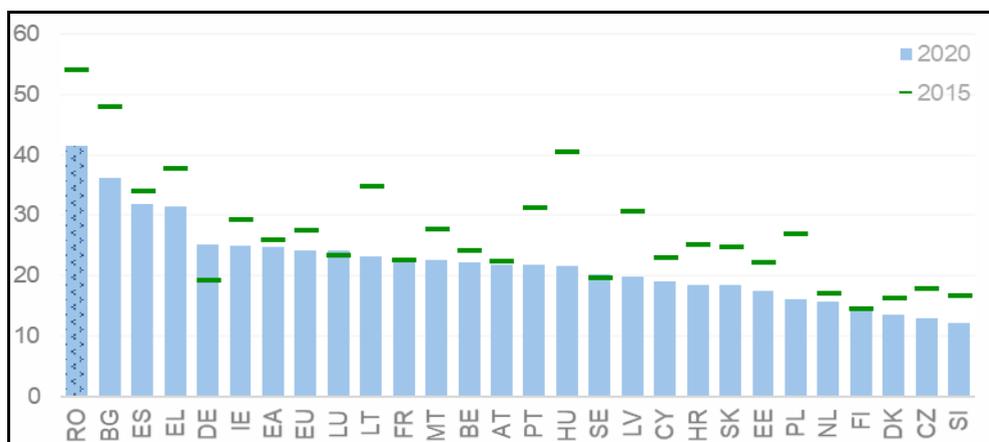
Using EUROMOD, Avram et al. (2015) compare the poverty reduction effects of child contingent policies in Romania and the Czech Republic and find out that population characteristics and the wider tax-benefit system exert a sizeable influence on policies' effectiveness. The study applies different approaches and estimates the joint child-poverty reduction effects of three family transfers and one tax concession. Firstly, when assuming that the policy effect is independent of population characteristics and other tax-benefits in place, the child related policies proved to be more effective in the Czech Republic, where poverty rates were reduced by ~38%, whereas the Romanian policies achieved only a 14% reduction. Then, when tested the sensitivity of the child poverty effects to population characteristics, the Romanian policies are much more effective in reducing poverty when they are applied to Czech instead of Romanian population (the impact is almost three times larger). Thus, population characteristics play an important role in shaping the effectiveness of a policy. Lastly, regarding the interaction with the wider tax-benefits system, child benefits appear to be more effective in Romania than in the Czech Republic, given also the ineffectiveness of other instruments of the Romanian tax-benefits system to reduce child poverty. Performing a similar analysis, Salanauskaitė, et al. (2011) use EUROMOD to swap family policies across countries in order to check whether size or design of benefits have larger effects on child poverty reduction in Lithuania. According to their simulations, both size and design of transfer could be of equal significance.

Performing a survey every 2 years which covers households with children in rural areas in Romania, World Vision identifies a gradual increase of the share of the employed population, from 37% in 2012 to 46% in 2020. However, the overall satisfaction on the income earned has declined due to the outbreak of the pandemic and the increasing inflationary pressures which erode the purchasing power. In general, the dwellings of families included in the survey have around 45 square meters and on average 2.7 rooms. Compared to previous years, there is a slight improvement in access to utilities: 30% of households are connected to gas network, 51% have a bathroom inside, 26% are connected to sewerage network, 58% have access to running water inside the house, 32% have heating system and 47% of households have a toilet inside (World Vision, 2020).

3. Current state of play in Romania

In 2020, 41.5% of children in Romania were at risk of poverty and social exclusion, the highest rate among EU member states and almost double than the EU27 average (Fig.1). According to the Eurostat's definition, a person is at risk of poverty and social exclusion when she/he fulfills at least one of the next three conditions: (i) has an equivalent disposable income below the risk poverty threshold (60% of the national median equivalised disposable income), (ii) is severely materially deprived¹ and (iii) lives in a household with a very low work intensity (where adults aged 18-59 work 20% or less of their total work potential during last year).

Figure 1. Children at risk of poverty and social exclusion in the EU (%)



Note: data not available for IT, IE and LV, thus the EU value was estimated.

Source: Eurostat, EU-SILC database, ilc_peps01n

¹ More details available here – Eurostat.

According to UNICEF (2005), there are three main determinants of children's economic well-being: **(i) social trends**, **(ii) labor market conditions**, and **(iii) public intervention**. These three drivers are in a close interdependence, and their unfavorable developments in Romania have triggered a vicious circle against the escape from poverty trap and social exclusion. Persistence of high-risk poverty in Romania was influenced by an unpropitious context associated with the post-communist period - a difficult transition to a well-functioning market economy, amid delayed implementation of structural reforms. Afterwards, the EU accession in 2007 has supported economic convergence in terms of GDP per capita (72% of the EU average in 2020, compared to 44.1% in 2007) through EU funds absorption and enhancing foreign direct investment. At the same time, integration into the European Single Market has also led to agglomeration effects, highlighted by investments' concentration in certain metropolitan areas. This polarization has deepened the gaps between urban and rural areas – where poverty and social exclusion rates are disproportionately high (Fig.5, Annex).

Social trends. Alongside overall benefits, the accession to the EU has intensified the emigration phenomenon (in 2007 the flow of emigrants reached a record high). Over the last decades, Romania has lost a large proportion of its population¹, especially young and economically active people (INS, 2021). Most importantly, a significant share of them is represented by high-skilled workers (brain drain). According to the Work Bank, Romania experienced the highest emigration rate at the EU level - over a quarter of highly qualified workers were living abroad in 2017 (World Bank, 2019). Thereupon, this process has led to labor shortages, especially in science and technology. The long-term negative effects of this phenomenon are reflected in the loss of human capital (often irreversible), productivity slowdown and poor quality of economic growth. The challenging mix of an aging² and declining population, and the migration of young skilled workers is expected to add significant pressure on certain sectors, but also healthcare and pensions expenditures.

In Romania, although public healthcare spending (as a share of GDP) has increased in recent years, it is still behind the EU average, while the health infrastructure remains limited. In general, the access to healthcare services is largely unequal along rural versus urban areas. The small number of medical units and human resources available³ in the rural areas, long distances to clinics and hospitals, high costs or waiting lists are the most relevant factors determining the disparities in the access to healthcare services (INS, 2021).

¹ According to OECD data, in 2020, Romanians represented the group with the largest share of citizens living in other member states.

² The Demographic Aging Index has worsened significantly over the last decade. In 2021, Romania registered 123.9 elderly people (65 years and over) per 100 children (0-14 years) – INS data.

³ For instance, in 2020, in rural areas it was a physician per 1591 inhabitants (almost 10 times lower than in the urban area).

Inefficient spending on education is reflected by modest quantitative and qualitative indicators. The most recent Programme for International Student Assessment (PISA) reveals a worsening of results compared to 2015 and a significant gap between students in urban and rural areas (OECD, 2019). The education system continues to face significant challenges in terms of inclusion, with education levels remaining persistently lower in rural and economically disadvantaged areas. This aspect has a negative effect on the acquisition of basic skills and social mobility of children from disadvantaged backgrounds or from marginalized communities (European Commission, 2020b). More recently, the outbreak of the pandemic has further exacerbated disparities given the poor digital infrastructure in rural areas. Moreover, the risk of poverty and social exclusion for children is largely associated with their parents' level of education (Save the Children, 2014) (Fig 6, Annex). For instance, the index¹ of the economic, social and cultural status (related to parents) has the strongest influence on students' PISA results. In this regard, Romania registers one of the highest gaps between students from disadvantaged families compared to regular or wealthy families (ISS, 2020). Furthermore, over theoretical curriculum and teaching methods, with insufficient focus on practical applications are misaligned with the current needs of the labor market and technological progress, thus maintaining the mismatch between the qualifications provided by the educational system and the labor market requirements.

Labor market conditions. In Romania, access to the labor market remains limited for certain groups, while skill mismatches persist (European Commission, 2020b). For instance, the rate of labor market participation for women is one of the lowest among EU member states. Also, the share of self-employed workers in agriculture is almost 5 times higher than the EU average and usually they are not covered by health insurance, since a large part of them are involved in subsistence agriculture activities. The high share of people working in agriculture implies more income volatility given the seasonality pattern of this sector. Moreover, 1 out of 3 employees is officially earning the minimum wage which highlights an atypical income distribution, but also a high rate of informality. Besides this, the situation is particularly challenging for young women (25% NEETs rate).

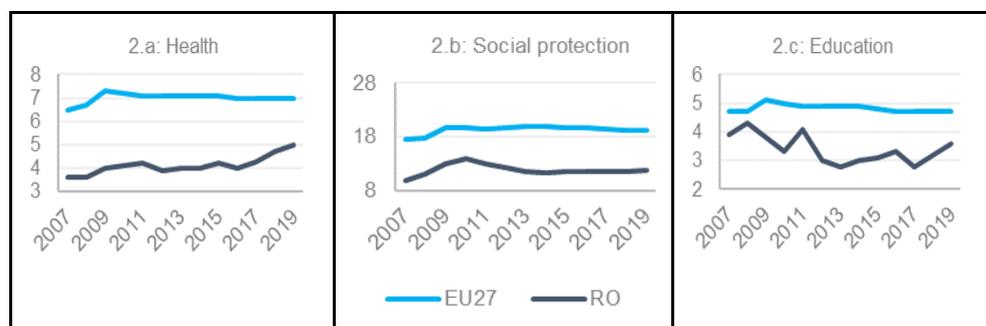
Despite efforts to improve the quality of the education system, the results of PISA tests have worsened since 2015 and the over-qualification rate has almost doubled over the last decade (European Commission, 2019a). Furthermore, labor market conditions have been affected by demographic phenomena (increasing emigration, aging population), which have triggered a decline in the share of the active population. At the end of the day, this has been

¹ The Programme for International Student Assessment (PISA) index of economic, social and cultural status was created based on the following variables: the International Socio-Economic Index of Occupational Status, the highest level of education of the student's parents, the PISA index of family wealth, the PISA index of home educational resources, and the PISA index of possessions related to "classical" culture in the family home (OECD definition).

translated into an increasing fiscal pressure to support the elderly, dependent population, with extensive implications on social security systems, health and education (INS, 2021).

In terms of **public intervention**, a large amount of research highlights that higher social spending alleviates poverty and social exclusion. However, countries facing low fiscal revenues have a more limited space to accommodate transfers. For instance, Romania has the second lowest revenue as a share of GDP within the EU¹. Also, the negative effects of demography on the labor market mentioned above have led to a tighter budget construction, with far-reaching implications on budget allocations for social security, health and education. These issues coupled with fiscal adjustment and consolidation - in the aftermath of the global financial crisis - have fostered divergence between regions. Since the EU accession, spending on education, health and social protection systems has been consistently below the EU average (Fig.2).

Figure 2. General Government expenditure (% of GDP)



Source: Eurostat (gov_10a_exp)

When looking at the social benefits allocated to family / children, it should be noted that this indicator is corroborated with tax benefits (tax credits, deductions, etc.) which may substantially differ from one country to another, depending on the socio-economic factors that may determine a policy to focus more on spending, or rather on tax benefits - as in the case of the Czech Republic or Spain (Hernández et al., 2021). Thus, this indicator should be interpreted with a word of caution since it does not necessarily provide an ideal basis for comparison among countries. Perhaps a more meaningful comparison of spending for family / children's benefits is to consider it per child, where Romania has generally recorded one of

¹ In 2019, government revenues amounted to 31.9% of GDP in Romania, compared to 46.0% the EU average. As a consequence, spending on social protection represented only 11.9% of GDP, well below the EU average (19.3% of GDP).

the lowest allocations in the EU (Fig. 7, Annex). Regarding the structure of this spending item, similar to other EU member states, the universal child benefits play a key role in Romania, accounting for a large share of expenditure on family/children benefits (Fig. 9, Annex).

In general, one of the main responses of the Romanian Government in tackling child poverty was to increase the universal child allowance and other child-related benefits. According to Romanian legislation, the universal child allowance is a universal right, non-contributory benefit granted to families with children up to the age of 18, or older when attending secondary or vocational education. The universal child allowance can be combined with family support allowance, maternity leave allowance and its associated insertion incentive. Since 2012, the quantum of the universal child allowance has been linked to the reference social indicator. In contrast to other European member states, the child benefit payments do not increase with the number of children in the family. As of January 2023, the universal child benefit will be adjusted by inflation (GEO 126/2021).

Table 1 – Evolution of state allowance for children, 2014 – 2022, RON

Universal child benefit	2014	Jul-15 Law 125/2015	Apr-19 GEO 9/2019	Jan-20 Law 214/2019	Aug-20 GEO 123/2020	Jan-21 GEO 123/2020	Jan-22 GEO 126/2021	Average annual growth rate, (2014- 2022) %
Aged below 2 years (or 3 years if disabled)	200	200	300	311	369	427	600	17.0
Aged 2-18 years and >18 years attending high school/vocational school	42	84	150	156	185	214	243	28.5
Aged 3–18 years disabled	84	200	300	311	369	427	600	32.4

Source: Ministry of Labor and Social Solidarity

As per the data included in Table 1, there is a substantial age-related variation in the universal child allowance. Whilst the benefit for children below 2 years old or for disabled represents almost 40% of the net minimum wage, the universal child allowance for children aged 2-18 years old is still relatively low, despite a steep increase over the last years. From a fiscal point of view, a further sharp increase of child allowance for the latter category would put additional pressure on the state budget since 87% of total beneficiaries are aged 2-18 years. For instance, according to the Ministry of Labor's data, the total child allowance related payments doubled as a percentage of GDP over the last 7 years (from 0.4% in 2014 to 0.8% in 2020).

However, EU funds can be used to partially offset the fiscal impact of child related measures. Over the medium run, Romanian authorities should take full advantage of the

Recovery and Resilience Facility (the European solution to bounce back from the pandemic) and implement effective and wider reforms in order to tackle child poverty. The National Recovery and Resilience Plan which includes reforms and investment to be implemented until 2026 contains a dedicated chapter to Policies for the next generation, children and young people. The measures included address the 2019 and 2020 country specific recommendation to improve the quality and inclusiveness of education, mainly for Roma communities and other disadvantaged groups and to improve skills, including digital, notably by expanding the relevance of vocational and higher education for the labor market - CSR3, 2019 (European Commission, 2019b). The plan also addresses the recommendation to strengthen skills and digital learning and ensure equal access to education services - CSR2, 2020 (European Commission, 2020a). Equally important, the plan aims to implement the minimum inclusion income (in line with the CSR3, 2019).

The National and Recovery Plan includes several reforms to directly tackle child poverty: (i) development of an inclusive and quality early-childhood education and care system, (ii) development of social infrastructure for disabled children, (iii) increasing the autonomy of schools to prevent and reduce early school leaving, (iv) creation of a full professional route for vocational education and dual education, (v) improving the infrastructure (upgrading schools), (vi) boosting the digitalization of education, (vi) improving the school governance. At the end of the day, these reforms have a significant potential impact on children welfare, thus their implementation is paramount.

Moreover, Romania should not overlook traditional EU funds and make the best use of them to implement initiatives in order to increase the social protection of children. For instance, the multiannual financial framework 2021-2027 will continue to address some of the priorities identified in the country-specific recommendations and country reports, which are closely linked to the objectives covered by the European Child Guarantee. For example, member states that register a share of children at risk of poverty or social exclusion higher than the EU average (2017-2019) will have to allocate at least 5% of ESF+ to combat poverty among children (European Commission, 2021c).

4. Data and methodology

In order to gauge the impact of rising universal child allowance on child poverty, we make use of the EUROMOD (version I3.0+), which is a microsimulation tool based on a set of variables from the EU-SILC data - EU statistics on income and living conditions. EUROMOD is developed for all EU member states and the calibration is specific to every country. It simulates individual and households tax liabilities and benefit entitlements according to the policy rules in place in each member state. Also, the policy system is yearly updated by the European Commission to the most recent legislative changes. Covering all European

countries within the same framework allows for flexibility and comparability of the results (Sutherland and Figari, 2013).

EUROMOD permits us to perform an ex-ante assessment and better understand how child allowance reform may affect income distribution, main poverty and inequality indicators and how large is the fiscal cost. EUROMOD is a static model, based upon purely arithmetical calculation, meaning that it does not attempt to capture individual behavioral responses, such as those related to labor supply decisions, when simulating the effects of policy changes (Immervoll et al., 1999). In other words, possible behavioral reactions of individuals and socio-demographic characteristics of households are assumed to be fixed over time. Still, given the specifics of our simulation, this is not a concern. However, due to the input data limitation, in-kind benefits and publicly provided services are not captured in the analysis although non-cash benefits might have a notable effect on families' welfare, in particular for low-income households. Another limitation of the analysis is that one does not count for labor market transitions in the pandemic context.

EUROMOD is based on EU-SILC data which is used by the Eurostat to monitor poverty and social exclusion as part of the European Semester. Basically, all statistics under the Income and Living conditions domain in the Eurostat are EU-SILC data. Currently, the latest data available are for 2019 which reflect 2019 household characteristics and 2018 incomes. For Romania, the 2019 EU-SILC data cover 7,278 households and 16,766 individuals. EU-SILC variables used by EUROMOD provide individual level information on demography (composition of households, gender, marital status, citizenship, education), labor market characteristics (economic status – employee, self-employed, seeking for work, pensioner, etc.), different types of incomes (wages, pensions, public transfers, social benefits) and taxes paid (social insurance contribution, personal income tax, health contribution, etc.). A description of variables is provided in the Annex (Table 4). In EUROMOD, it is assumed that the yearly income earned is received equally throughout all twelve months of the year (Militaru et al., 2021).

In order to overcome the time inconsistency (2018 incomes versus 2021 tax-benefit rules), the monetary values are uprated based on indexation rules and/or changes in the average value of the income, information provided by the National Institute of Statistics, Eurostat, Ministry of Labor and Social Solidarity and National House of Pensions. Uprating factors bring the income values from 2018 levels up to the level of the policy year. On the other hand, demographic variables are maintained constant.

In EUROMOD, the universal child benefit is allocated to the mother when she is present in the household. As per Law no 61/1993, the universal child benefit is granted to households with children below age of 18 or older, but only if the recipient is attending secondary education. EUROMOD simulates only the rise in the benefit for healthy children due to lack of details regarding the disabled children in the input file. According to the administrative data provided by the Ministry of Labor and Social Solidarity, a share of 3.4% of children has

disabilities. Also, benefits are not simulated for children who turn 18 during the income reference year.

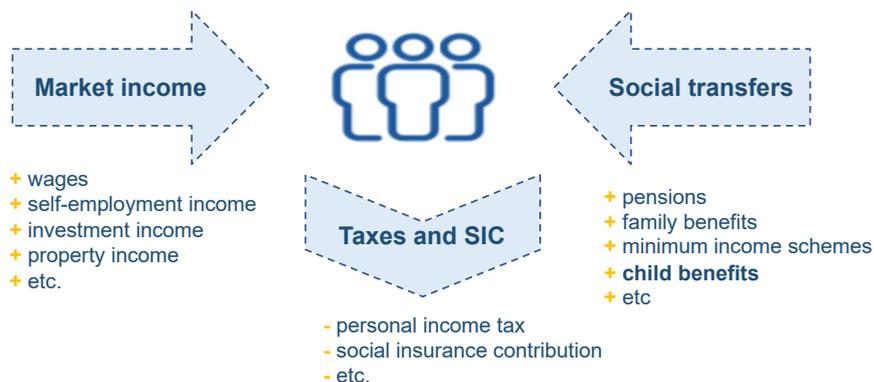
Initially, we estimated the impact of the universal child benefit increase adopted by the Government as of January 2022 (scenario 1 - S1). Then, since the political discussion takes into consideration a further increase to up to 20% of the child allowance for children aged 2-18 years old during 2022, we run an additional scenario (S2). Finally, given the limited impact of the first two scenarios on child poverty reduction, we decided to run a more generous scenario which provides a 50% increase of universal child benefit compared to 2021 (S3). The rationale behind the third scenario is based on the decision makers' public discourse during election times (proposals to further increase social protection) and on past experience (Table 1): for example, in 2019, the Government raised the child allowance for children aged 2-18 years and older than 18 years by 79%, and by 50% for children aged below 2 years (or 3 if disabled) and children aged between 3-18 years with disabilities.

Table 2 – Simulation in EUROMOD

Universal child benefit	Jan-21 (RON)	Jan-22 (RON)	% (2022/2021)	% (2022/2021)	% (2022/2021)
Aged below 2 years	427	600	41%	41%	41%
Aged 2 – 18 years	214	243	14%	20%	50%
		S1		S2	S3

In EUROMOD, a 100% rate of benefit take-up is assumed, which is considered a reasonable approximation for a universal benefit as non-take up is hardly an issue (Hernanz et al., 2004; UNICEF, 2020, Matsaganis et al., 2010), in line with ex-post assessment's findings (Finn et al., 2014). As a rule, in the counterfactual scenarios (higher child allowance), the model recalculates the disposable income of each individual, maintaining the composition of the household from the EU-SILC input data (Fig. 3). The first-round effect of the policy changes represents the arithmetic difference in the before policy and after policy calculations. The poverty line is set at 60% of national median equivalent disposable income and it is held constant as policies are simulated. Disposable income is defined as original income minus taxes and contributions plus benefits (Militaru et al., 2021).

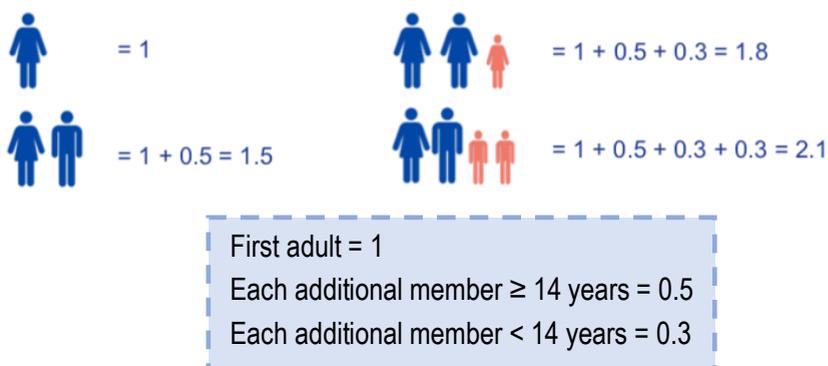
Figure 3: Disposable income (concept)



Source: EUROMOD Country Report Romania, 2018 - 2021

The income distribution is assessed at individual level according to their household disposable income equivalised using the modified OECD equivalence of scale. Household disposable incomes are calculated as the sum of all members' net incomes. The OECD equivalence of scale reflects that, although larger households need higher income, however, since members of a household can share both expenses and assets, needs do not double when the size of the household doubles. For every individual in the household there are weights attributed (as in Fig.4). In a nutshell, equivalence scale captures the economy of scale in consumption inside a household.

Figure 4. The OECD – modified equivalence scale



In order to compute the equivalised disposable income, there are three steps to be followed:
 (i) sum up all monetary incomes received by each member of the household and discount

from taxes and social contribution paid, (ii) divide the total net household income by the number of equivalent adults using the OECD scale, and finally (iii) attribute this equal amount (named equivalised disposable income) to each member of the households, including children¹. This approach assumes that income is shared within the household. Poverty is operationalized as having an equivalised disposable income lower than 60 % of the median income. For severe poverty, a threshold of 40% of the median income is used.

5. Results of simulations and discussions

EUROMOD produces individual level output data with information coming from the input data and the increasing of child allowance. Importantly, EUROMOD captures the interaction with other tax-benefit instruments. The main output variables include: first round impact on poverty and income inequality, differential effects on household by deciles, estimated impact on government expenditure, etc. The results of EUROMOD calculation are stored at individual level, maintaining the composition of households. When analyzing the impact of benefit changes, we used the Statistic Presenter tool and then the In-depth Analysis plugin.

Since our simulation does not take into account the impact of the Covid-19 pandemic on labor market characteristics, the results should be interpreted as the impact that the policy change would have in a normal situation. As expected, EUROMOD simulations highlight that raising universal child allowance has only a marginal effect on child poverty and poverty and inequality overall (Table 3). Even when applying the most generous scenario (S3), the impact on child poverty is marginal (-0.92 percentage points).

Table 3 – Impact of increasing child allowance

	2021 baseline	S1 (14% increase)	Δ	S2 (20% increase)	Δ	S3 (50% increase)	Δ
Population (overall)	24.63%	24.37%	-0.25pp	24.35%	-0.28pp	24.28%	-0.34pp
Children	33.54%	32.91%	-0.63pp	32.87%	-0.67pp	32.63%	-0.92pp
Working Age	22.38%	22.18%	-0.20pp	22.16%	-0.22pp	22.12%	-0.26pp
Working Age Economically Active	16.61%	16.43%	-0.18pp	16.42%	-0.19pp	16.36%	-0.25pp
Impact on inequality (Gini)	0.3619	0.3613	-0.0006	0.3611	-0.0008	0.3599	-0.0020
Impact on inequality (S80/S20)	8.2571	8.2033	-0.0538	8.1769	-0.0801	8.0834	-0.1737
Budgetary impact (% of 2022 estimated GDP2)			0.12%		0.16%		0.38%

Source: authors' simulation in EUROMOD

An in-depth analysis reveals that the poverty risks largely depend on the composition of households. The most vulnerable households are families with three or more children and to

¹ More details available here - Eurostat.

² National Commission for Strategy and Prognosis – Autumn Forecast 2021

a lesser extent single-parent families. The impact of rising child allowance on poverty is also more significant on these two types of households. When looking at the extreme poverty rates (income below 40% of equivalised disposable income), large parts of families with three or more children are still at risk of poverty (63%).

To complement the picture already described, we also looked at the risk of poverty gaps which underlines the intensity of poverty measured as mean shortfall in income from the poverty line, in percentage of the latter. In a nutshell, this indicator measures the distance of poor households with respect to the poverty line (60% of median equivalised disposable income). For families with three or more children, the poverty gap is significant (43.6%) and most likely, at least one adult member in those vulnerable households is not active on the labor market. In this case, both members of the couple have to work to escape poverty (OECD, 2020). Also, lone parents need to earn substantial additional earnings (~20% on average) to escape poverty and cover children's costs.

Finally, an assessment per deciles underlines that winners are largely concentrated in the first decile (the poorest decile), where 45% of households obtain a higher equivalised disposable income thanks to raising child allowance. Still, few households (0.2%) in the same decile lose other means tested benefits, since the child allowance interacts with guaranteed minimum income (i.e., 50% of the child allowance is income subject to the means-test of guaranteed minimum income). In the most generous scenario, the mean equivalised disposable annual income of the bottom 10% of families increases by 5.2%.

A comparison to similar studies performed in other countries is difficult, given the large heterogeneity of support to children across member states (Fig. 9, Annex). For instance, Hernandez and Picos (2021) underline a very different composition of Romanian support to children with respect to other EU member states. Also, Romania has one of the lowest mean benefit granted to children (in PPS, per child) across EU countries – indicating a limited generosity. While the support to children in Romania is almost entirely based on child-related benefits, in some other countries the child-related tax reliefs account for more or almost 50% of the support to children (the Czech Republic, Spain, Hungary, Portugal, Italy, Croatia).

Concluding remarks

Child poverty remains a persistent challenge in Romania, which largely depends on the type of households, work intensity of parents or caretaker, level of education of parents and living conditions. More recently, it has become an even deeper concern since the ongoing pandemic has a disproportionate impact on low-income families which ultimately entails a rise in persistent child poverty. In general, there is an overwhelming agreement on the motivations for child benefits: taming child poverty, socializing the cost of childbearing, influencing fertility, enhancing social welfare, building social contract, etc. When exposed to poverty, children face long-term, acute and potentially lifelong risks. A lack of goods and health services, on one hand, and social and psychosocial unfulfilled needs, on the other

hand, can have destructive and irreparable influences on future development and life opportunities of children. For instance, according to the World Bank's Human Capital Index, "almost 60% of children born today will be, at best, only half as productive as they could be with complete education and full health" (World Bank, 2020b).

Despite a gradual (but sluggish) progress achieved over the last years, the share of children at risk of poverty and social exclusion remains stubbornly high in Romania. As a response, the authorities have significantly increased the universal child allowance since 2014. However, according to our simulation in EUROMOD, raising child allowance has only a marginal impact on poverty reduction, even in a more generous hypothetical scenario. Therefore, one main takeaway of our analysis is that the Government should not see the universal child allowance as the sole ingredient to tame poverty. Given the complexity of the problem, the authorities should implement a coherent and effective strategy and also achieve synergy with other benefits and EU funded programs. Over the medium term, Romania should take full advantage of the Recovery and Resilience Facility and implement all reforms and investment included in the NRRP. Equally important, structural EU funds should be attracted in order to increase the social protection of children. In a nutshell, our analysis underlines the need for a more complex public policies approach on tackling child poverty by looking also at labor market reform and other public intervention tools.

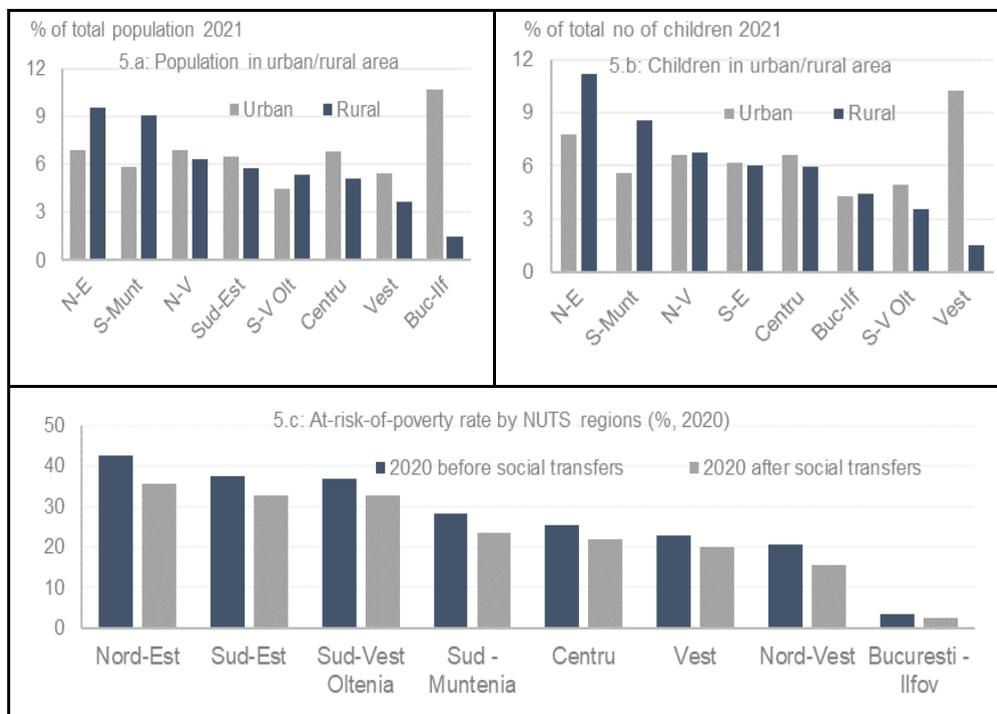
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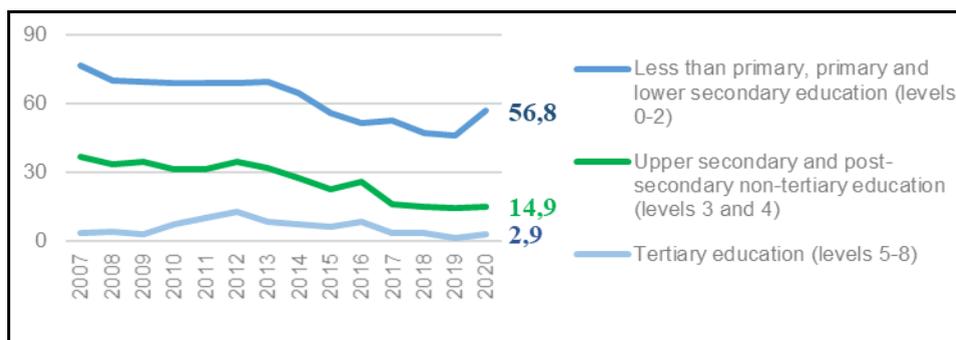
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ANNEX

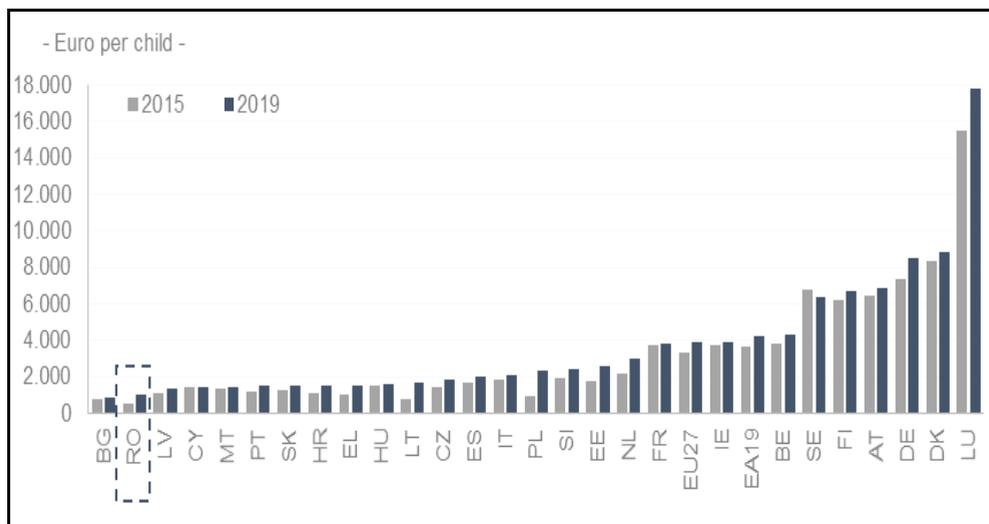
Figure 5. Total population and children in urban/rural area

Source: National Institute of Statistics, Eurostat (ilc_li10_r; ilc_li41)

Figure 6. Severe material deprivation rate for children by educational attainment level of parents (%)

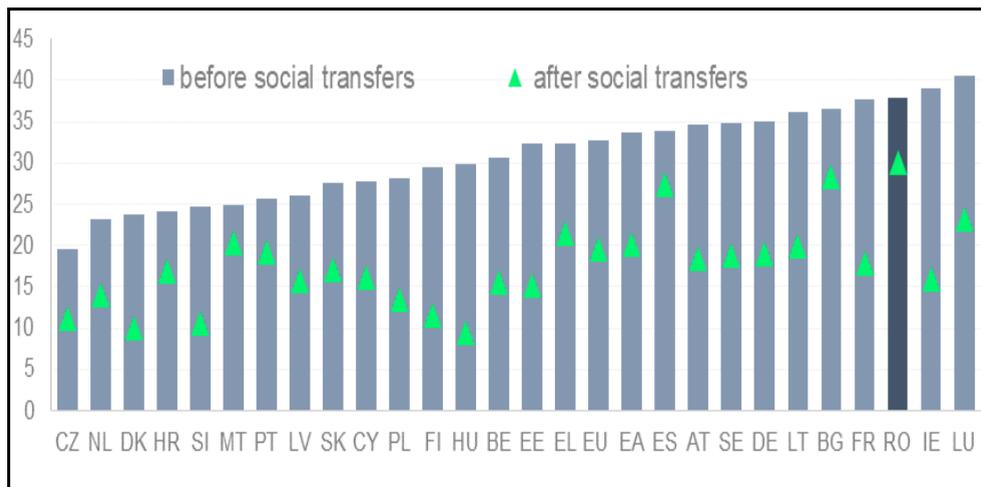
Source: Eurostat (ilc_mddd60)

Figure 7. Annual expenditure on family/children benefits



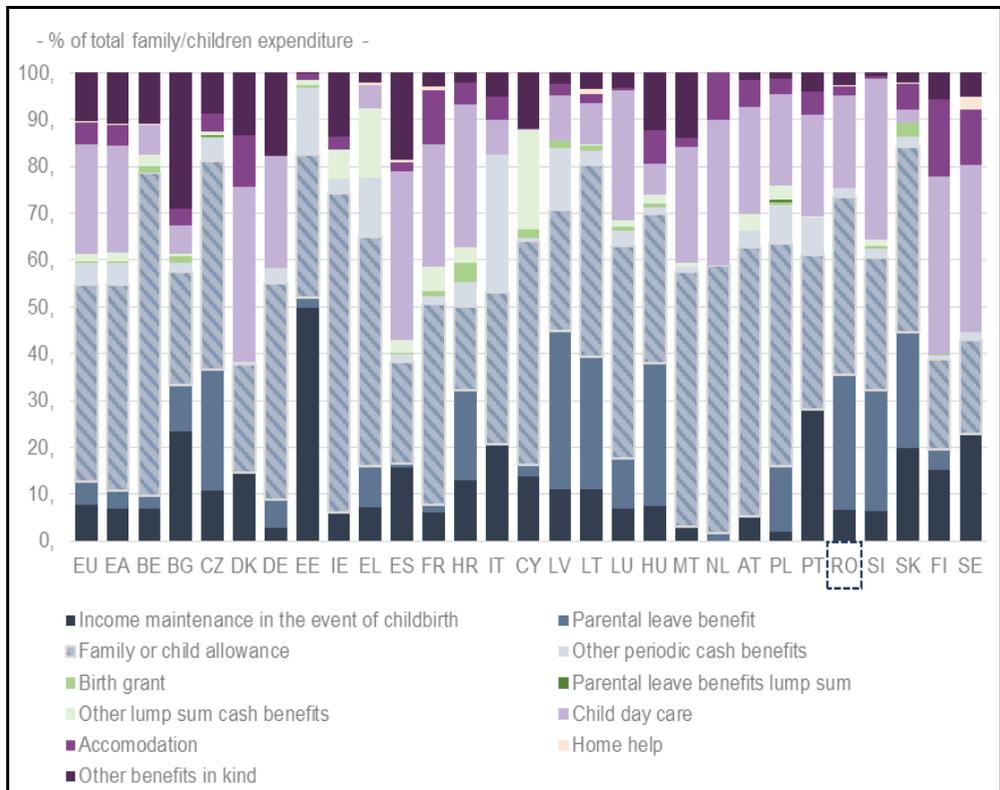
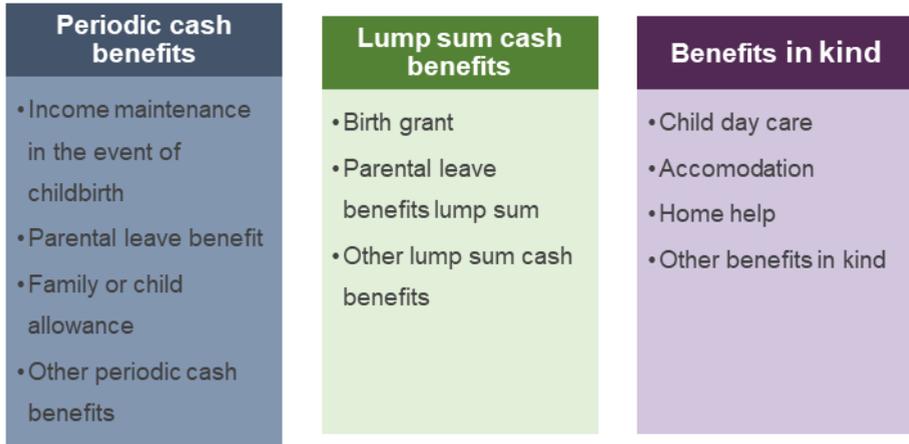
Source: Eurostat (spr_exp_sum; demo_pjan)

Figure 8. Children at risk of poverty rate, 2020 (%)



Note: the share of children at risk of poverty measures the income poverty (by applying the threshold of 60% of the median equivalised disposable income). It should not be confused with the indicator children at risk of poverty and social exclusion which, among income poverty, captures also severely materially deprived and low work intensity households.

Source: Eurostat (ilc_li10; ilc_li02)

Figure 9. Detailed composition of annual family/children expenditure

Source: Eurostat (spr_exp_ffa)

Table 4: Description of main variables used in EUROMOD

Variable	Obs	Mean	Std. Dev.	Min	Max
child raising benefit	6,00	612,55	644,08	0,00	1.250,00
means-tested family benefits	1.176,00	62,85	273,70	0,00	3.590,00
universal child benefit	1.236,00	140,91	77,59	16,67	542,67
benefits for the severely disabled	95,00	514,94	333,45	50,00	1.763,00
education-related allowances	37,00	250,07	229,06	12,50	817,50
family/children related allowances	1.306,00	202,66	301,77	0,00	3.758,00
sickness benefits	3,00	1.506,69	1.043,14	704,34	2.615,39
maternity allowance	19,00	611,23	439,06	0,00	1.366,19
social exclusion/assistance benefits	150,00	230,55	263,62	8,33	1.300,00
minimum pension	81,00	306,06	230,15	5,50	700,00
unemployment benefits	22,00	220,16	172,06	83,33	902,10
age	16.766,00	41,62	22,08	0,00	81,00
hours worked per week	7.132,00	40,46	7,02	1,00	60,00
in work: full time months per year	6.474,00	11,87	0,83	1,00	12,00
in work: months per year	6.995,00	11,91	0,73	2,00	12,00
in work: part time months per year	615,00	10,61	2,98	1,00	12,00
pensioner: months per year	5.757,00	11,97	0,48	1,00	12,00
unemployed: months per year	172,00	10,29	3,04	1,00	12,00
old age pension	5.280,00	1.239,11	688,20	5,50	9.898,15
survivor pension	247,00	760,42	283,01	69,59	2.307,26
disposable income	7.263,00	2.955,35	2.367,53	-175,00	25.975,17
disposable equivalised income	16.742,00	1.718,22	1.141,05	-116,67	15.413,89
employment income	5.468,00	3.657,15	1.789,15	165,00	20.512,82
employment income: months per year	5.468,00	11,87	0,91	1,00	12,00
investment income	1.165,00	10,29	64,26	0,17	1.500,00
other incomes	973,00	17,90	12,36	1,17	154,67
property income	5,00	85,00	197,43	9,17	600,00
regular inter-household cash transfer received	58,00	402,26	259,21	58,33	1.500,00
self-employment income	1.614,00	816,42	1.036,91	6,25	10.649,00
self-employment income: months per year	1.614,00	11,47	1,97	1,00	12,00
non-cash employee income	68,00	1.988,40	1.300,54	208,33	7.500,00
property taxes	6.601,00	25,40	20,07	4,17	458,33
Income tax and SIC	3.753,00	2.278,61	1.605,29	-12,50	12.297,87