



# Research on Mechanisms for the Inclusion at the Formal Labour Market of Finance Social Assistance Beneficiaries



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UNICEF The United Nations Children's Fund

Figure 7. Disposable household income in case of employment at the minimum wage, Figure 8. Disposable income in case of employment at 2/3 of the average wage, absolute and List of acronyms **LFS** Labour Force Survey FM Free meal FT Free textbooks **CSP** Centre for Social Policy **CSW** Centre for social work CA Child allowance DKTI German Climate and Technology Initiative; Deutsche Klimaund *Technologieinitiative* IUE Income upon employment EU **European Union VEC** Vulnerable energy customer **METR** Marginal effective tax rate GIZ German Agency for International Cooperation; Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH LG Local government **FSA** Financial social assistance NRR Net replacement rate **OECD** Organization for Economic Co-operation and Development **PTR** Participation tax rate SB Social benefits SBIUE Social benefits to income upon employment SILC Survey on Income and Living Conditions

### **FOREWORD**

Since 2015, the work of informal collectros of secondary raw materials, improvement of their socio-economic status, as well their contribution to recycling in Serbia have been in the focus of German German Development Cooperation projects implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). The research "Inclusion of Informal Collectors into the Evolving Waste Management System in Serbia" presented in 2017 set the path to their integration into the waste management system. From the research five different models of fomalizing their work were developed. During 2018, within the scope of the "Climate Sensitive Waste Management (DKTI)" Project, numerous direct consultations were organized with the collectors as well as with other relevant actors in Project partner municipalities: public utility companies, local self-governmets, representatives of Center for Social Work and National Employment Service local branches, all in order to test and implement the developed models. The one commononality of the consultations was – the issue of motivation of collectoors, who are mostly beneficiaries of the financial social assistance (FSA), to formalize their work as by doing so they would lose such benefits which form many present the only regular stedy income.

Understanding that without detailed research on the direct impact of financial social assistance on the motivation of the collectros to transition from "grey economy" to formal labour, the Project "Climate Sensitive Waste Management (DKTI)" aimed to further review the mechanisms for the inclusion of the beneficiaries of the financial social assistance scheme into the formal labour market.

Their inclusion and activation on labour market is aimed primarily at recognizing obstacles to their activation, and then finding solutions and proposing measures that would enable long-term beneficiaries to work independently and ensure decent living without relying on social benefits and full dependence on the social protection system.

The research on mechanisms for the integration of financial social assistance beneficiaries into the formal labour market is aimed at promoting understanding of incentive and disincentive mechanisms, as well as enabling an assessment of specific challenges in the integration of beneficiaries of the financial social assistance scheme into the formal labour market, with a special emphasis on waste collectors, which, in the long-term perspective, should enable improvement of the relevant strategic and legal framework with regard to poverty reduction and activation policies.

The research was conducted by the Belgrade-based Centre for Social Policy (CSP) from September 2019 to May 2020. The author of the research is Gordana Matković, Programme Director of the Centre for Social Policy. Žarko Šunderić, Director of the Centre for Social Policy, Ivana Poljak and Lazar Muždalo, researchers at the Centre for Social Policy, and Nataša Pavlović, teaching fellow at the Faculty of Agriculture, provided their contributions to the research.

All terms used in the masculine gender in this text encompass the corresponding terms in the feminine gender.

Project "Climate-Sensitive Waste Management (DKTI)"

### 1. INTRODUCTION

Social benefits are social transfers from the central or local level, awarded in the form of cash, services and other benefits in kind, with a view to social assistance and protection against various risks. The primary objective of social benefits is poverty reduction (social assistance, means-tested child benefits, social housing for the poor), insurance (unemployment and sickness benefits), or consumption smoothing (pensions, student loans) (Barr, 2012).

Some cash social transfers are conceived so as to replace earnings (all kinds of insurance-based allowances, financial social assistance), while some top up total household income (child allowance, housing assistance, care allowance).

The welfare state aims to provide adequate social benefits which replace income and ensure subsistence for individuals and families during unemployment, leave from work due to illness and pregnancy, or in the event of disability or old age.

Adequacy is assessed in different ways, depending on the objective and type of transfer. For contributory benefits, adequacy is assessed based on the net replacement rate, by calculating the ratio of the benefit amount to the insuree's earnings while working. For non-contributory social benefits aiming at poverty reduction, adequacy is analysed in the context of meeting the basic needs, i.e. from the aspect of whether they lift the beneficiary out of poverty and ensure the minimum living standard.

However, social transfer schemes are assessed against yet another criterion – the extent to which the generosity of social benefits discourages labour supply. This issue is especially pronounced in the case of unemployment benefits, where individuals do not seek or accept employment until their unemployment benefit entitlement expires, pensions, where individuals opt for early (premature) retirement, as well as social assistance, where beneficiaries slip into passivity or only work in the grey economy, mostly relying on support from the public budget. The more adequate the benefit, the more likely it presents an incentive for the individual to withdraw from the labour market or not to seek employment.

The central issue of policies faced with this dichotomy is, in fact, a trade-off between equity and efficiency. An important role of the state is the collection of taxes and redistribution of funds from the wealthier towards the poorer by awarding social benefits, thus achieving the aim of equity. However, the system of taxes and social benefits also has an impact on the decisions concerning employment, number of working hours, as well as withdrawal from the labour market. Indeed, depending on what he stands to gain or lose, the individual takes a rational decision whether to forego his leisure time, unpaid activities, and possibly even work in the grey economy for the sake of employment in the formal sector. The more generous the benefits, the weaker the incentive for employment, which results in reduction of labour supply and potentially overall output, as well as in losses in terms of efficiency. High employment within a society is also very important for welfare state sustainability.

Reforms of the systems governing social transfers have been aimed at increasing the coverage and improving the adequacy in terms of providing sufficient benefit amounts (relative

to earnings or for the purpose of meeting the basic needs), as well as reducing work disincentives. The latter aspect has also gained importance owing to the high goals set with respect to increasing employment and decreasing inactivity and unemployment.

Inefficiency and ambitious goals have had an impact on the redesign of social transfer schemes, which are increasingly aimed at encouraging individuals' integration into the labour market and conceived so as to make formal employment an economically attractive option (making work pay) (Carone et al., 2004). The EU active inclusion strategy also points to the necessity of simultaneously providing adequate income support, an inclusive labour market, and access to quality social services (European Commission, 2008). The European Pillar of Social Rights, in the context of minimum income, i.e. social assistance, suggests that benefits for those that can work should be combined with incentives to reintegrate into the labour market (European Commission, 2017).

In order to improve the adequacy of transfers in terms of meeting the basic needs, and having in mind that the minimum wage is a "glass ceiling" which social benefits should not exceed, reforms also imply raising the minimum wage in gross or net terms (most commonly by reducing the tax burden). This also creates space for increasing social benefits without discouraging employment. Reduction of work disincentives is also achieved by beneficiary activation measures, by gradual withdrawal of social assistance when a recipient takes on paid work or introduction of special social benefits intended only for those employed (in-work benefits) (Frazer and Marlier, 2016). Other policies relevant to labour market integration include work-life reconciliation policies (provision of maternity leaves and access to child care services), as well as active labour market policies (OECD, 2005).

The situation in which the level of means-tested benefits discourages the individual from seeking or accepting employment is defined as the inactivity trap (OECD, 2019). This term is technically different from the term "unemployment trap" in that the individual has never been employed or no longer receives the unemployment benefit, but is only eligible for means-tested benefits. Essentially, the social assistance amount equals the wage level below which the individual is not willing to accept work, also termed "reservation wage".

The inactivity trap is more dangerous than the unemployment trap, having in mind that the unemployment benefit amount is higher than the social assistance amount (especially for a single person), and that the duration of unemployment benefit entitlement is limited in almost all countries, which is not the case with the entitlement to social assistance. In addition, unemployment benefit schemes usually include more stringent requirements in terms of acceptance of a job or training (Carone and Salomäki, 2005). Finally, in setting the social assistance amount, poverty concerns carry more weight, making it more difficult to redesign these schemes with a view to any reduction of benefits (Carone et al., 2004).

The risk of falling into the inactivity trap is higher for individuals with lower education attainment and low earnings and for families with children. Greater risk for less educated individuals is the result of the fact that their earnings are lower; thus, the difference between their potential earnings in the market and the social assistance received outside the market is lower as well. Poor families with children receive higher assistance amounts due to a larger number of household members, while in a significant number of countries they also receive additional benefits for children. For these families, the risk of falling into the trap is lower only in the case

of employment with earnings equal to or higher than 67% of the average wage. Single-parent families are at a particularly high risk (Carone et al., 2004) (OECD, 2005). The inactivity trap frequently occurs in the case of secondary earners, when one household member is already employed, depending on tax policy in individual countries (Carone et al., 2004) (Carone and Salomäki, 2005). The traps have the highest impact when prospective employment features either part-time work or very low earnings (for instance, 33% of the average wage) (Carone et al., 2004). The aim of the present research is to analyse the motivation mechanisms that promote the integration of financial social assistance beneficiaries into the formal labour market in Serbia.

After the introduction, the study first examines the legal framework governing specific social benefits at the national level and in selected local governments and presents the research methodology. In a separate chapter, the inactivity trap in Serbia is compared to those of the EU Member States, while the central chapter analyses the impact of employment on FSA recipients' income, at both national and local levels, as well as the reservation wage. The last chapter presents findings and recommendations.

### 2. SOCIAL BENEFITS – LEGAL FRAMEWORK

### 1. Financial social assistance

Financial social assistance (FSA) is conceived as a social protection instrument activated once all other support mechanisms have been exhausted and falls into the group of non-contributory social benefits. FSA is a means-tested benefit and is solely aimed at poverty reduction.

The Law on Social Protection ("Official Gazette of RS" No. 24/2011) establishes, in absolute terms, the FSA calculation base, which is renumerated by the consumer price index once every six months. The assistance amount tops up household income to the legally defined ceiling, and differs depending on household size and age structure.

For a single person, or for the head of household, the maximum assistance amount equals the base; 0.5 of the base is awarded for each additional adult member, while 0.3 is awarded for children. The assistance amount is not increased any further for households with more than 6 members. Financial social assistance is increased by 20% for households in which all members are unable to work, as well as for single-parent families.

Beneficiaries are paid top-up funds up to the legally defined ceiling which thus represents the income threshold. According to the Decree on receipts and income affecting eligibility for financial social assistance ("Official Gazette of RS" No. 36/2011), income comprises all receipts including those from unregistered activities (income on account of missed earnings, determined based on social workers' findings and opinions), and does not include social benefits such as the child allowance, birth grant, care allowance, pupil and student living standard allowances, etc.

Based on the asset threshold, which includes appropriate housing and movable assets,<sup>1</sup> this entitlement is not available to those who own more than 0.5 hectares of land, or 1 hectare for households in which all members are unable to work. Households with assets exceeding the threshold may become eligible if they consent to the registration of mortgage on their real property, to secure the recovery of the FSA paid. Individuals who have concluded life-care contracts are not eligible. For those who are unable to work, the law governing family relations stipulates the obligation of support on the part of family and relatives.

In order to decrease the work disincentive, families in which the majority of members are able to work are eligible for up to nine months in a calendar year. The law also provides the activation of beneficiaries. The Decree on the measures for social inclusion of financial social assistance beneficiaries ("Official Gazette of RS" No. 112/14) specifies forms of activation, such as participation in formal and informal education, employment, medical treatment, and community service, i.e. work in the local community. The centre for social work (CSW) concludes an agreement with a beneficiary able to work (individual activation plan), stipulating the beneficiary's activities and obligations, as well as the possibility of reducing or terminating the FSA entitlement in case of unjustified failure to fulfil the obligations under the agreement.

Mechanisms for the integration of financial social assistance beneficiaries into the formal labour market 10

<sup>&</sup>lt;sup>1</sup> Appropriate housing comprises one room per family member, while movable assets are limited to six times the amout of FSA (Article 82, Law on Social Protection).

FSA is within the mandate of the central government; it is funded from the central budget, and administered by municipal and city centres for social work.

### 2. Child allowance

The child allowance is a cash benefit geared towards reducing poverty in lower-income families with children. The allowance is non-contributory and is subject to a means test. The entitlement to child allowance is governed by the Law on Financial Support to Families with Children ("Official Gazette of RS" Nos 113/2017 and 50/2018).

The child allowance amount is equal for all children, except for children with developmental or other disabilities and children in single-parent and guardians' families, who are entitled to a 50% and 30% increase, respectively. In addition, children of upper-secondary-school age receive an additional child allowance instalment at the beginning of the school year. The child allowance amounts are set by decrees of the Government of the Republic of Serbia (the Government).

The entitlement to child allowance is limited to four children in the family, under the condition that they attend school regularly and that the parent personally cares for them. The child allowance is also granted to young people until the completion of upper secondary education, up to the age of 20. Young people with developmental or other disabilities are eligible for child allowance up to the age of 26, provided that they participate in educational and vocational training programmes.

The means of families with children are assessed by the income and assets test. Beside wages and other earnings, cadastral income and pensions, income also includes specific social benefits (e.g. birth grants for third- and fourth-born children). The income threshold is stated per household member and is also set by a Government decree. In practice, so far, the threshold for child allowance has been considerably above that for financial social assistance.

The assets threshold excludes all those who own assets above 2 hectares of land per family member and limited housing space in which the family lives.<sup>2</sup> For single-parent families, the threshold is raised by 20% or 30%, depending on the absent parent's status,<sup>3</sup> while for guardians' families and children with developmental disabilities recognized by the intersectoral commission, the threshold is raised by 20%.

Children receiving the care allowance are universally entitled to the child allowance, regardless of the means. Children from FSA recipient families are automatically eligible, without an additional means test.

unknown, that he is permamently incapable to work, that he does not contribute to child maintenance, that he is serving a prison sentence, etc. (Article 28).

<sup>&</sup>lt;sup>2</sup> Housing may not be larger than one room per houshold member plus another room and the necessary ancillary farm buildings in a farming household. Beside the housing occupied by the family, a household may also have a garage and rented (leased) commercial premises whose floor area does not exceed 20 square meters (Article 8).

<sup>3</sup> The status may imply that the other parent is deceased, without the entitlement to a survivor's pension, that he is

The child allowance is within the mandate of the central government; it is funded from the central budget and administered by municipal and city child protection administrations.

### 3. Eligibility for the vulnerable energy customer status

Under the Law on Energy ("Official Gazette of RS" No. 145/14), eligible for the vulnerable energy customer status are poor households and households with a member whose health or life may be jeopardized by power or gas supply interruption, provided that their energy consumption is not excessive (Article 10). Additional conditions and criteria, as well as bill reductions, are stipulated by the Decree on vulnerable energy customers ("Official Gazette of RS" Nos 113/2015 to 59/2018).

Under the Decree, financial social assistance and child allowance beneficiaries automatically meet the means test criteria (Article 6). The entitlement amount depends on household size.

The entitlement is funded from the central budget, and administered by local governments.

### 4. Other entitlements for FSA beneficiaries at the national level

Beside the vulnerable energy customer status and child allowance, FSA beneficiaries are automatically eligible for some additional entitlements at the national level.

Under the Law on Health Insurance ("Official Gazette of RS" No. 25/2019) FSA beneficiaries are deemed insurees and have access to statutory health insurance entitlements (Article 16).

Under the Law on Financial Support to Families with Children, FSA beneficiaries' children are entitled to free-of-charge preschool attendance; this is funded from the national level (Article 36).

Under the Law on Textbooks ("Official Gazette of RS" No. 27/2018, Article 10) and the corresponding decisions of the Serbian Government which are passed every year, FSA recipient children are entitled to free-of-charge textbooks during basic education.

The Law on Simplified Arrangements for Seasonal Work in Certain Activities ("Official Gazette of RS" No. 50/2018) provides that FSA beneficiaries' income from seasonal work is not taken into account in eligibility assessment (Article 9). The Law took effect on 1 January 2019.

Although means-tested benefits are particularly important in the context of analysing the work disincentives caused by social benefits, it should be noted that, as all other citizens, FSA beneficiaries are entitled to birth grants upon birth of their children (Law on Financial Support to Families with Children). The universal entitlement to birth grants is awarded for the first four children, with very high amounts for third- and fourth-born children disbursed over ten years.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> For the first-born child, this entitlement amounts to RSD 100,000 paid as a lump sum, while for other children it is paid in monthly installments as follows: for the second-born child – RSD 10,000 per month over two years; for the third- and fourth-born children – RSD 12,000 and 18,000 per month, respectively, over 10 years. The birth grant is supplemented by a one-off grant for the purchase of baby supplies amounting to RSD 5,000 (Artice 23).

### 5. Benefits provided at the local level

Under the Law on Social Protection and Law on Financial Support to Families with Children, local governments also provide different types of cash benefits, in-kind benefits and social services to vulnerable citizens.

The Law on Social Protection expressly provides that social benefits, whether in cash or in kind, also include one-off assistance awarded in the event of unexpected or temporary hardship, or upon referral to institutional or foster care services (Article 110). The Law also allows local governments (LGs) to provide other types of assistance (Article 111), as well as non-institutional social services such as home care, day care, personal assistance, personal attendant for children, shelters, supportive housing for persons with disabilities, etc.

Under the Law on Financial Support to Families with Children, cities and municipalities allocate funds to subsidize pre-school attendance costs for children from disadvantaged families, but may also provide for additional entitlements, augmented entitlements and more favourable eligibility requirements, if they have sufficient funds to do so (Article 11).

In the context of assessing the system features that disincentivize the formal employment of FSA beneficiaries, it is essential to look into benefits that can be anticipated and explicitly target this vulnerable group. Benefits that are truly of a one-off nature and targeted at specific unexpected and temporary needs, as well as the provision of social services targeting vulnerable groups such as the elderly, children, and adults with disabilities do not act as a work disincentive for the poor who receive social assistance.

Cities and municipalities opt for different types of additional support to FSA beneficiaries; these entitlements are defined in the relevant local government decisions on social protection and financial support to families with children. Beside benefits awarded without conditionality, some LGs arrange voluntary work for FSA beneficiaries and other vulnerable persons referred by CSWs to work in public enterprises and institutions (primary healthcare centres, hospitals, public utility enterprises, etc.) for a limited period of time (for instance, 80 or 100 hours a month). Remuneration is paid as one-off cash assistance and is equal to the net minimum hourly wage. In some municipalities, remuneration is provided in kind (in goods). FSA beneficiaries' social benefits from the national level are not reduced during this period, which increases their motivation to be "activated".

Below is an overview of benefits under social and child protection provided in Belgrade as the largest LG and in selected municipalities and cities analysed in more detail within the project.<sup>5</sup> The focus is on the benefits targeting the vulnerable, with benefits awarded to FSA beneficiaries stated separately.

In Belgrade, under material support schemes, different types of one-off assistance (occasional, emergency, and permanent), as well as free meals and scholarships are provided in accordance with the Decision on social protection entitlements and services ("Official Journal of the City of Belgrade" Nos 55/2011, 8/2012 – corr., 8/2012, 42/2012, 65/2012, 31/2013, 57/2013, 37/2014, 82/2015, 4/2016, 37/2016, 56/2016, 114/2016, 102/2017, 50/201

<sup>&</sup>lt;sup>5</sup> For more details on the selection of LGs, see the chapter on the methodology.

and 103/2018) (Article 57). Pursuant to the Decision on children's rights in the area of financial support to families with children ("Official Journal of the City of Belgrade" No. 2/2015), preschool attendance cost reimbursement (including holiday trips and recreational activities) is provided.

Children from FSA recipient families are awarded occasional one-off assistance for school supplies (once a year), transport to school (monthly), and scholarships during upper secondary and higher education if their academic performance is very good or excellent. In addition, FSA recipient single-parent families are eligible for financial assistance once per year. Together with some other vulnerable categories, FSA beneficiaries are entitled to one free meal per day. Finally, if they attend pre-school, children from FSA recipient families are entitled to reimbursement of holiday and recreation costs (Article 17).

In Novi Sad, in accordance with the Decision on social protection ("Official Journal of the City of Novi Sad" Nos 38/2011, 10/2012 and 42/2018) and the Decision on entitlements under financial assistance to families with children ("Official Gazette of the City of Novi Sad" Nos 34/2017 – amended by another decision and 42/2018), beside social services, financial assistance is also provided (monthly, one-off, and emergency), as well as funeral grants, free-of-charge preschool attendance, free meals for children in basic schools, and grants for talented pupils and students.

Children from FSA and child allowance recipient families are also entitled to free snacks during basic education and three meals in before- and after-school care in the first grade of basic school (Article 19).

In Valjevo, in accordance with the Decision on social protection ("Official Journal of the City of Valjevo" No. 1/2016), one-off and special cash assistance is provided, as are funeral grants, reimbursement of utility costs, and food assistance. The Decision on augmented entitlements for families with children and financial support for birth promotion ("Official Journal of the City of Valjevo" Nos 15/2016, 19/2019) provides for financial assistance to unemployed new mothers and reimbursement of pre-school attendance costs.

The entitlements specifically awarded to financial social assistance recipients are food assistance, grant for baby supplies (as needed), and coverage of heating and utility costs in social housing facilities.

In Kruševac, beside local services, pursuant to the Decision on social protection ("Official Journal of the City of Kruševac" No. 4/2013), the following forms of assistance are provided: one-off assistance, school equipment, supplies and textbooks, coverage of costs of summer and winter holidays and school trips, funeral grants, free transport for persons with disabilities and low pension recipients, as well as free meals. Vulnerable persons are also offered a scheme known as "voluntary work" remunerated with one-off assistance. Pursuant to the Decision on financial support to families with children ("Official Journal of the City of Kruševac" No. 8/2018, part I), free-of-charge and subsidized preschool attendance are also provided.

Children from FSA recipient families are also eligible for assistance for school equipment and supplies, as well as full or partial coverage of costs of summer and winter holidays and school

trips, while FSA beneficiaries who are not able to work, single parents, and families with many children are provided with free meals.

Pursuant to the Decision on social protection entitlements in the Municipality of Vladičin Han ("Official Gazette of the City of Vranje" Nos 28/2015 and 10/16), beside social services, vulnerable persons are eligible for one-off<sup>6</sup> and emergency one-off assistance, coverage of travel costs and meals for persons in need out of their place of residence, and funeral grants. FSA beneficiaries are mentioned only with reference to the last aforementioned entitlement. The Decision also provides for the possibility of voluntary work Article 11).

Pursuant to the Decision on social protection of the Municipality of Merošina ("Official Journal of the City of Niš" No. 47/17), beside social services, the following benefits are provided: one-off cash assistance, assistance in kind (heating fuel, textbooks, school supplies and food supplies), funeral grant, subsidized transport and accommodation in student dorms, subsidized pre-school attendance, free snacks, support to children without parental care to start living independently, financial assistance to families whose breadwinners are in voluntary military service, free meals, subsidized utility services, reimbursement of costs of summer and winter holidays, school trips, and outdoor education, subsidies for medical services, and assistance to unemployed students.

Children from FSA recipient families are provided with free textbooks and school supplies, reimbursement of costs of summer and winter holidays, school trips, outings and outdoor education, subsidized transport and accommodation in student dorms, and free snacks. FSA beneficiaries are provided with foodstuffs, free meals, and funeral grants. Elderly FSA beneficiaries without family care are eligible for subsidized utility services and heating fuel. FSA recipients able to work are eligible for subsidized utility services provided they perform community service.

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<sup>&</sup>lt;sup>6</sup> Including the provision of the necessary supplies for beneficiaries referred to institutional or family-based care.

### 3. METHODOLOGY

In this research, we analysed the effects of employment on household income and the inactivity trap for five different household types.

The simulation method was applied on hypothetical households, based on the legally stipulated rules on taxes, contributions and social benefits. Micro-data were not used, given the insufficient coverage of beneficiaries of certain social entitlements by the Survey on Income and Living Conditions in Serbia (Arandarenko, Krstić, Žarković-Rakić, 2017), the underestimation of the poorest population's income in the Survey (Centre for Social Policy, 2018), as well as the inability to capture benefits in kind.

The methodology is based on the OECD tax-benefit model presented in Immervoll & O'Donoghue (2003), Carone et al. (2004) and the OECD methodology (OECD, 2019).

### 1. Households

Household types for which the indicators are calculated are as follows:

- a) Single-member households (1)
- b) Two adults (2)
- c) Single-parent households with two children (1+2)
- d) Two adults and two children (2+2)
- e) Two adults and three children (2+3)

The selection of households is based on the OECD methodology and the structure of FSA recipient households (Matković, 2014). Unlike the OECD methodology, the simulation model additionally includes households with two adult members and three children. International comparisons are presented only for single-member households, single-parent households, and households with two adults and two children.

It is assumed that all adult family members are able to work.

All children are assumed to have no developmental disabilities and to be aged between 2 and 12, which is the age span when the household no longer receives birth grants, but is not eligible for an additional annual instalment of the child allowance either. In all households with children, one child is of primary school age, while other children are younger.

The concept of single-parent households is in line with the definition of single-parent families under the Law on Financial Support to Families with Children, Article 28, paragraph 1, items 1-3 ("Official Gazette of RS" Nos 113/2017 and 50/2018)<sup>7</sup>, which ensures somewhat more favourable treatment with regard to the determination of the child allowance income threshold.

<sup>&</sup>lt;sup>7</sup> This implies that the other parent is unknown, deceased without entitlement to a survivors' pension, or is fully and permanently incapable of work and is not entitled to a pension.

### 2. Income and earnings

Income means income of the household, rather than individual members; it is assumed that earnings and social benefits are the only potential source of disposable income. The possibility of any household generating income from, for instance, child support or capital income was not taken into consideration. Benefits under social insurance (for instance, survivor's pensions or sickness benefits) were not taken into account either.

When calculating the inactivity trap, for the purpose of international comparability, according to the OECD methodology, only cash income was taken into account; among social benefits, financial social assistance and child allowance were taken into consideration. With regard to EU countries, the options selected in the OECD database were those that did not include temporary into-work benefits or housing support.<sup>8</sup>

When calculating the impact of employment on household income, means-tested social benefits were taken into account, namely financial social assistance, child allowance, free textbooks, and bill reduction on account of the vulnerable energy customer status; in addition, at the level of the selected local governments, other in-kind benefits and additional cash assistance were included if awarded to a substantial number of FSA beneficiaries.

Disposable household income is the sum of gross wages and social benefits less the income tax and contributions payable by the employee. Upon employment, disposable income is reduced by the amount of cash social benefits which are lost due to higher income, as well as expenditures which were not incurred by the household while it had the status of FSA beneficiary because of benefits in kind (free textbooks, for instance).

Employment is taken to be full-time, in the formal sector, in jobs paying the minimum wage, average wage, or 2/3 of the average wage.

The amounts of wages and social benefits are average monthly amounts from 2018.

In 2018, the average monthly minimum wage excluding taxes and contributions (hereinafter: net) amounted to RSD 24,882, while the minimum wage including taxes and contributions payable by the employee (hereinafter: gross) amounted to RSD 33,355 RSD. The average net wage amounted to RSD 49,650, and the average gross wage amounted to RSD 68,629 (Statistical Office of the Republic of Serbia, 2019).

One-off benefits are added to the annual income, and then translated into monthly amounts.

Although one-off benefits are commonly considered to have no long-term impact on incentives for employment, this is not the case with benefits that recur year after year and/or are defined by official Government or local government instruments and decisions (free textbooks and school supplies at the beginning of the school year, subsidized transport, meals in soup kitchens, etc.).

The data on earnings in the informal economy were taken from the study on the integration of informal waste collectors into the waste management system (GIZ, 2018, p. 47), more

<sup>8</sup> https://stats.oecd.org/Index.aspx?DataSetCode=PTR

specifically small-scale collectors who work 4 hours per day during the working week, earning RSD 13,500 RSD per month from these activities.

### 3. The inactivity trap

The inactivity trap, the tax rate on participation in the labour market (participation tax rate, PTR) or effective tax rate on entering employment indicates the proportion of (gross) earnings that are lost, either owing to taxes and contributions payable by the employee or owing to social benefits reduced or fully withdrawn once an unemployed individual takes up employment (OECD, 2019).

This indicator measures the financial disincentives to take up employment in the formal sector in cases where the household receives social assistance (guaranteed minimum income) and facilitates an assessment of the extent to which (formal) work is economically attractive (making work pay).

In order to look into the poverty trap or the low-wage trap, i.e. the extent to which higher taxes and social benefits reduce the financial gains of transition to a higher-paying job or working more hours, the marginal effective tax rate (METR) is used (Carone et al. 2004, p. 9; OECD, 2005, p. 129; OECD, 2019, p. 9).

Stated in technical terms:

$$METR = 1 - \frac{\Delta y_{net}}{\Delta y_{gross}} \, ^{9}$$

$$\Delta y_{gross} = y_{grossB} - y_{grossA}$$

$$\Delta y_{net} = y_{netB} - y_{netA} = (y_{grossB} - T_B + SB_B) - (y_{grossA} - T_A + SB_A)$$

where:

A is the previous labour market status (with a lower hourly wage or fewer working hours)

B is the new labour market status (with a higher wage or more working hours)

T is taxes and contributions payable by the employee

SB is social benefits

 $\Delta y_{\rm gross}$  is additional earnings, due to working more hours and higher hourly wage

 $\Delta y_{\text{net}}$  is the change in net income, i.e. earnings less taxes and contributions and the change in the amount received on account of social benefits.

 $<sup>^{9}</sup>$  Which, in technical terms,equals METR =  $\frac{\Delta T + \Delta SB}{\Delta y_{gross}}$ 

A slightly modified formula is used to assess incentives for employment in the formal sector in cases where the previous labour market status involved unemployment with income on account of unemployment benefit, which is termed "unemployment trap", and in cases where the previous status involves the individual/household subsisting on social assistance, which is termed "inactivity trap" (Carone et al. 2004, p. 9; OECD, 2005, p. 129; OECD, 2019, p. 9).

In the case of the inactivity trap:

A – no one is employed and the household lives on social assistance

B – a household member takes up employment

T – taxes and contributions payable by the employee

SB - social benefits

 $\Delta y_{\text{gross}}$  becomes  $y_{\text{gross}}$ , as this is not an increase in earnings, but rather total gross earnings upon entering employment

y<sub>netB</sub> is net income when a household member is employed; it includes net earnings, i.e. gross earnings less taxes and contributions, and any income on account of social benefits

y<sub>netA</sub> is income when social benefits are the only source of income

Thus:

PTR = 
$$1 - \frac{(y_{netB} - y_{netA})}{y_{aross B}}$$
,

$$PTR = 1 - \frac{(y_{gross B} - T_B + SB_B) - SB_A)}{y_{gross B}}$$

which is, in mathematical terms, reduced to the portion of gross earnings which is "lost" on account of taxes and contributions payable by the employee or social benefits reduced or fully withdrawn upon employment.

PTR = 
$$\frac{y_{gross\,B}}{y_{gross\,B}} - \frac{(y_{gross\,B} - T_B + SB_B) - SB_A)}{y_{gross\,B}}$$
 i.e.

PTR = 
$$\frac{y_{gross\,B} - y_{gross\,B} + T_B - SB_B + SB}{y_{gross\,B}}$$
 i.e.

$$PTR = \frac{(T_B - SB_B) + SB_A}{y_{gross B}}$$

In Serbia,  $SB_B$  is, for instance, the child allowance, which may still be received by households in which one member became employed, while  $SB_A$  for families with children includes both FSA and the child allowance. Thus, for example, for families with children, in case of the minimum wage the formula is as follows:

PTR = 
$$\frac{(T_B - CA) + FSA + CA}{y_{gross B}}$$
 i.e.

$$PTR = \frac{T_B + FSA}{y_{gross B}}$$

The higher the rate, the more significantly the taxes and contributions system reduces the financial gains from employment in the formal sector; a value higher than 1 means that the individual/household is worse off when employed than when subsisting solely on social assistance and other appertaining social benefits.

### 4. Impact of employment on disposable household income

In the present research, the impact of employment on household income is calculated by comparing disposable household income when the household subsists on means-tested social benefits to disposable income once a household member takes up employment in the formal sector.

Where income comprises the unemployment benefit, the net replacement rate (NRR) is used to assess the impact of employment on income. The NRR is generally an indicator of adequacy, since it is calculated as the ratio of the unemployment benefit to the individual's earnings while employed. Where the household subsists on the unemployment benefit, especially in hypothetical simulations based on administrative data on taxes and social benefits, the NRR may also be regarded as an indicator of motivation for employment, with the expectation that future earnings will be equal to the earnings prior to job loss (transition from unemployment to employment) (Browne et al., 2019). It is clear that the disincentive is strong if income from the unemployment benefit is equal to or slightly lower than disposable income when a household member takes up employment.

The higher the income of a household subsisting on social assistance relative to disposable income upon employment, the weaker the incentive for employment in the formal sector. Conversely, the lower the ratio, the stronger the incentive to find and accept employment.

In technical terms, the ratio of income from social benefits to income upon employment (SBIUE) is as follows:

SBIUE = 
$$\frac{y_{sb}}{y_{ue}}$$

where:

 $y_{sb}$  is disposable household income when all household members are without formal employment and social benefits are the only source of income

 $y_{ue}$  is household income upon employment of a household member in the formal sector

Two rounds of calculations were performed: firstly, the indicators were calculated taking into account only the social benefits provided at the national level, and secondly, for the five selected local governments, the indicators were calculated separately, taking into account the benefits at the local level as well.

# 5. Amounts of social benefits provided at the national level and eligibility thresholds

The annual amount of financial social assistance is calculated on the basis of the relevant decisions of the minister in charge of social protection affairs (Table 1). As noted above, since the research is focused on the labour market integration of FSA beneficiaries, it was assumed that all adult household members were able to work; thus, only single-parent families were eligible for augmented financial social assistance. The augmented FSA amounts to 20% above the amount granted to the family (Article 90, Law on Social Protection).

As single-member households and households with two adult members are entitled to FSA for nine months in a year, the average monthly FSA amount these households could receive in 2018 were correspondingly reduced relative to the nominal monthly amounts. For a single person, for instance, the annual income from receiving financial social assistance for nine months was calculated (RSD 8,285.25 × 9), and then translated into the monthly amount (divided by 12). The same process was applied to households with two adult members. In all other cases, 12 months' entitlement was assumed, in accordance with Article 85 of the Law on Social Protection, having in mind that households with children fall into the group of those where the number of members unable to work (children) is greater than or equal to the number of members able to work.

As in the case of other benefits, it was assumed that all requirements in terms of the status of financial social assistance recipients able to work were fulfilled in accordance with Articles 83 and 86 of the Law on Social Protection (that they were registered as unemployed or pursuing education or job training, and that they had not declined an offer of employment, temporary, casual or seasonal work, vocational training, re-training, additional training, or basic education).

All households subsisting on social benefits were assumed to be receiving maximum financial social assistance amounts, in view of the above assumptions on social benefits and the minimum wage as the only potential source of income.

Table 1. Maximum average monthly amounts of financial social assistance, 2018

	1 <sup>st</sup> adult	2 <sup>nd</sup> adult	Child (0-17)	Single person
1 January – 31 March	8,201	4,101	2,460	
1 April - 30 September	8,283	4,142	2,485	
1 October- 31 December	8,374	4,187	2,512	
Monthly average	8,285.3	4,143	2,485.5	6,213.9

Source: Decision on nominal amounts of financial social assistance, "Official Gazette of RS" Nos 31/2018, 94/2017

The child allowance amount for 2018 was calculated on the basis of the relevant decisions of the minister in charge of social affairs and the Decree on nominal amounts and modality of uprating the child allowance eligibility threshold and the amount and modality of uprating the child allowance ("Official Gazette of RS" No. 31/2018 (Table 2). Under the Law, financial social assistance beneficiaries are automatically eligible for the child allowance, provided that all other non-economic requirements are fulfilled.

As noted above, it was assumed that children were without developmental or other disabilities and that none were of upper-secondary-school age (which would entail a higher total annual amount of child allowance), and that all specific eligibility requirements (regular attendance of the preparatory pre-school programme or school, as appropriate; parents personally caring for the child) were fulfilled.

When calculating the indicators, it was assumed that beneficiaries, while without formal employment, received the nominal amounts of child allowance in accordance with the transitional provisions of the Law on Financial Support to Families with Children (amounts shown in rows 4 and 5), and that, in case of taking up employment, they were entitled to the nominal amounts under the Decree, as new beneficiaries (amounts shown in rows 6 and 7).

Based on this assumption, in 2018, the child allowance income threshold stood at 9,000 dinars per household member, while for single-parent families it stood at 11,700 dinars per member, in accordance with the Decree.

Table 2. Monthly amounts of child allowance for one child, 2018

1.	1 January – 31 March	2,761.0
2.	1 April - 30 September	2,788.6
3.	1 October – 31 December	2,819.2
4.	Average monthly (basic)	2,789.3
5.	Average monthly (augmented)	3,626.1
6.	As of 12 July, new beneficiaries (basic)	3,000.0
7.	As of 12 July, new beneficiaries (augmented)	3,900.0

Source: Decision on nominal amounts of financial social assistance, "Official Gazette of RS" Nos 31/2018, 94/2017 and Decree on nominal amounts and modality of uprating the child allowance eligibility threshold and the amount and modality of uprating the child allowance ("Official Gazette of RS" No. 54/18)

### 6. Vulnerable energy customer entitlements

All financial social assistance and child allowance beneficiaries automatically meet the income and asset requirements for the reduction of monthly electricity and natural gas bills under the Decree on vulnerable energy customers ("Official Gazette of RS" Nos 113/2015 to 59/2018).

The simulation only took into account the entitlement to electricity bill reduction, given the limited natural gas supply in Serbia.

Additional eligibility requirements concern monthly electricity consumption. In the case of this entitlement, all additional requirements were assumed to be fulfilled to the extent that beneficiaries qualified for the full amount of the reduction.

In the case of employment, if the family is not an FSA or child allowance beneficiary, the eligibility for the vulnerable energy customer status depends on the thresholds specified by decisions of the minister in charge of energy affairs.

The prescribed reductions were translated into dinar amounts based on the rules prescribed in the Decree, whereby the reduction quantities from Table 3 are multiplied "by the higher, day rate from the green price band for customers from the category "general consumption with dual-tariff meters", increased by 10%, as set in the applicable instrument governing regulated prices of electric power for guaranteed supply, approved by the Council of the Serbian Energy Agency" (Article 11). In 2018, the price for 1 kWh set by the then applicable decision amounted to RSD 5.962, excluding the abovementioned increase.

Table 3. Thresholds and bill reductions for vulnerable energy customers, 2018.

Number of household	Total income ceiling	Redu	ıctions
members		kWh	RSD
One member	14,644.97	120	786.98
Two or three members	21,322.75	160	1,049.31
Four or five members	27,996.20	200	1,311.64
Six or more members	35,206.80	250	1,442.80

Source: Author's calculation based on the data from the Decree and Decision on regulated prices of electric power for guaranteed supply, <a href="https://www.aers.rs/FILES/Odluke/OCenama/2017-10-01%20Cenovnik%20EPS%20-%20garantovano%20snabdevanje.pdf">https://www.aers.rs/FILES/Odluke/OCenama/2017-10-01%20Cenovnik%20EPS%20-%20garantovano%20snabdevanje.pdf</a>

### 7. Free textbooks

Under the Law on Textbooks ("Official Gazette of RS" No. 27/2018, Article 10) and corresponding Serbian Government decisions passed annually, FSA recipient children are entitled to free textbooks during basic education.

The price of a set of textbooks was estimated based on two elements: firstly, the Decision on funding textbook procurement from the Republic of Serbia budget for school year 2018/2019 ("Official Gazette of RS" No. 48/2018), which specifies the subjects and textbooks included in the free textbook sets from the first to the fourth grade, and secondly, the data on textbook prices collected within the project "Overcoming inequality and increasing access to quality inclusive education for Roma children and other children left out of the educational system".<sup>10</sup>

The average price of a set of textbooks foreseen for free-of-charge distribution was estimated at 6,163 dinars, and amounted to 513.6 dinars per child per month.

<sup>&</sup>lt;sup>10</sup> The project is implemented by the Centre for Social Policy, and supported by UNICEF.

### 8. Other entitlements at the national level

Beside the benefits described above, FSA beneficiaries are automatically eligible for health insurance and free-of-charge preschool attendace. These two benefits were not taken into account in the research performed.

The right to healthcare is not lost upon employment. Under the law, all employed persons, and – indirectly – their family members as well, are covered by statutory health insurance.<sup>11</sup>

Free-of-charge pre-school attendance for FSA recipient children, funded from the national budget, was only introduced as of September 2018. During most of the observed period, this benefit was not available as an entitlement defined at national level.

Finally, it is worth noting that income from seasonal work does not affect eligibility for and access to FSA. This legal provision may be deemed a privilege for financial social assistance beneficiaries, which was not taken into consideration as the Law only took effect as of January 2019. However, in the formulation of recommendations, some possible consequences of this arrangement were pointed out.

### 9. Selection of local governments

In accordance with project requirements and the broader research context, three larger and two smaller local governments were selected for the purpose of more detailed assessment of the situation at the local level. The larger local governments selected are the cities of Novi Sad, Kruševac and Valjevo, while the smaller ones are the municipalities of Merošina and Vladičin Han.

### 10. Amounts of social benefits provided at the local level

The database of the project "Mapping Social Care Services and Benefits within the Mandate of Local Governments=="<sup>12</sup> was used to calculate the amounts of social benefits provided at the local level. All data pertain to 2018 in the selected local governments, taking into account only the benefits granted to substantial numbers of financial social assistance beneficiaries.

In accordance with the relevant decisions presented in the previous chapter, in Novi Sad, the fact that children from FSA and child allowance recipient families were entitled to free snacks during basic education was taken into account. Based on total annual budget expenditures,

<sup>&</sup>lt;sup>11</sup> This applies for all hypothetical households, in accordance with Article 18 of the Law on Health Insurance. Beyond this circle, households with young persons past the age limit for coverage by insurance through their parents may access free health insurance through the relevant procedure if the monthly income per household member does not exceed the minimum wage (Rulebook on the monthly income amount as threshold for attaining the status of an insuree "Official Gazette of RS" Nos 112/06 and 5/09).

<sup>&</sup>lt;sup>12</sup> As of mid-2020, the database will be available to the public on the website of the Social Inclusion and Poverty Reduction Unit, <a href="http://socijalnoukljucivanje.gov.rs/sr/">http://socijalnoukljucivanje.gov.rs/sr/</a>

the estimated monthly amount of this benefit (throughout the year) stood at RSD 800 per child.

In Kruševac and Vladičin Han, only free meals for FSA beneficiaries were taken into account. As shown in the chapter on the legal framework, both LGs provide other types of assistance as well, albeit to a relatively small number of financial social assistance beneficiaries. In Kruševac, free meals are only provided to families with children, specifically single-parent families and families with a larger number of children. In Vladičin Han, free meals are provided to single-parent families.

On entering employment, disposable income is reduced by amounts estimated based on expenditures for food in the poorest decile according to the 2018 Household Budget Survey data (Statistical Office of the Republic of Serbia, 2019a). The monthly amount per equivalent adult stands at 5,692.2 dinars, and the estimated expenditures for food per month and per meal for different household types are shown in Table 4.

Table 4. Monthly expenditures for food in the first decile, by household type, 2018

Household type	Total expenditure for food	Per meal	
1	5,692.2	1,897.4	
2	9,676.8	3,225.6	
1+2	11,384.5	3,794.8	
2+2	15,369.0	5,123.0	
2+3	18,215.2	6,071.7	

Source: Statistical Office of RS, 2019a

In Valjevo, significant funds are allocated for additional cash assistance to FSA beneficiaries to meet their basic needs. Assistance is mostly granted to single-parent families and large multigenerational households. Maximum financial assistance may not exceed RSD 41,000 per year, which corresponds to 3,416.7 dinars per month in case a family received assistance throughout the year.

Although the Decision on social protection provides for numerous entitlements, according to the mapping data, in the municipality of Merošina none are granted to a substantial number of financial social assistance beneficiaries.

### 11. Reservation wage

The reservation wage is the lowest wage at which the unemployed are willing to accept a job (European Commission, 2019, p. 10). The sources of data on the level of reservation wage were SILC (2013) and the Labour Force Survey (LFS, 2018).<sup>14</sup>

SILC data enable identifying the poorest individuals' reservation wage. The question was "What are the minimum net earnings at which you are willing to accept employment this

<sup>&</sup>lt;sup>13</sup> If the calculation pertained to the school year, rather than the calendar year, the amount would, naturally, be higher.

<sup>&</sup>lt;sup>14</sup> The database of both surveys was provided by the Statistical Office of RS.

month?" The data pertain to 2013, as this question was excluded from the SILC survey in subsequent years.

The median reservation wage was stated for unemployed individuals from the first decile by income level.<sup>15</sup> As the first decile also includes those with zero and negative income (Centre for Social Policy, 2018), the reservation wage was also separately calculated for individuals living in households with positive income (row 2).

The Labour Force Survey also contains a question on the reservation wage, but it does not lend itself to being cross-referenced with the income level of an individual who is attributed the income of the household in which he lives. LFS data are included as they are more recent, pertaining to 2018. The question is formulated similarly to the SILC: "What are the minimum earnings at which you would accept a job?" Given the above definition of the reservation wage, only unemployed individuals' responses were taken into account.<sup>16</sup>

The table shows median reservation wages for the unemployed with the lowest educational attainment, considering that earlier research indicates that about two thirds of FSA beneficiaries (aged 15-64) completed basic education only (41.8%) or are without education (20.6%) (Petrović, 2011).

The responses given by respondents who stated specific reservation wage amounts were taken into account, as well as the responses of those who provided an interval (for example, between RSD 20,000 and 30,000). In the latter case, the mean value of the interval was attributed to the respondents (RSD 25,000 RSD in the example given). As among the respondents with the lowest educational attainment (groups: with no education; 1-3 grades of basic education; 4-7 grades of basic education, and with completed basic education), equal numbers of respondents stated specific amounts and intervals, the average of these two values was taken as the reservation wage for the unemployed.

The following table shows the median reservation wage levels based on both sources.

		First decile	With the lowest educational attainment
1.	SILC (2013), all unemployed	22,000	-
2.	SILC (2013), with positive income	20,000	-
3.	LFS (2018), specific amount	-	27,250
4.	LFS (2018), interval	-	20,000
5.	LFS (2018), average of 3 and 4		23,625

Source: Author's calculation and sources referred to in the Methodology

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<sup>&</sup>lt;sup>15</sup> 10% of individuals with the lowest income, where each person is attributed the income of the household in which they live.

<sup>&</sup>lt;sup>16</sup> But not for employed persons seeking another job, who also respond to this question.

# 4. THE INACTIVITY TRAP IN SERBIA AND INTERNATIONAL COMPARISONS

The inactivity trap (the tax rate on participation in the labour market, PTR) indicates the proportion of (gross) earnings that is lost either owing to taxes and contributions payable by the employee or owing to the reduction or full withdrawal of social benefits when an unemployed individual takes up employment. The higher the indicator value, the weaker the incentive to accept employment.

In the simulation, the only social benefits provided in Serbia that were taken into consideration were the financial social assistance and child allowance schemes, in accordance with the OECD methodology, so as to ensure international comparability.

In view of the availability of data on other countries and the specific nature of the present research, comparisons are made for three household types (single-member households, single-parent households with two children, and households with two adults and two children), as well as for two earnings levels – minimum and average.

As shown in Table 5, column F, in case one family member becomes employed and earns the minimum wage, for all types of households with children, income per household member on these grounds is below the child allowance income threshold (which, under the Decree, amounted to 9,000 dinars per member, and 11,700 dinars per member for single-parent families in 2018). In this scenario, households with children would thus lose only financial social assistance, while retaining the child allowance. The total amount lost upon employment would equal the sum of taxes and contributions payable by the employee (column D) and financial social assistance (column B).

The data in Table 5 indicate that, if a household member accepts employment at the minimum wage level, the inactivity trap is low for single-member households, but relatively high for families with children, regardless of the parents' status (single or partnered).

Table 5. Inactivity trap (in %), social benefit amounts, gross minimum wage, net minimum wage per member (RSD), by household type, on average per month, Serbia, 2018

Househol d type	FSA	CA	Taxes and contributions	Gross minimum wage	Net minimum wage per member	PTR
Α	В	С	D	E	F	(D+B)/E
1	6,213.9	-	8,473	33,355	24,882	44.0
1+2	15,907.5	7,252.2	8,473	33,355	8,294	73.1
2+2	17,399.3	5,578.7	8,473	33,355	6,220.5	77.6

Source: Author's calculation and sources referred to in the Methodology

In case one household member accepts employment at the average wage level, the entitlement to child allowance is lost as well, and the inactivity trap is lower for all household

types in comparison to employment at the minimum wage level. The rate is still the lowest for single-member households, at only 36.7%.

Table 6. Inactivity trap (in %), social benefit amounts, and gross average wage (RSD), by household type, on average per month, Serbia, 2018

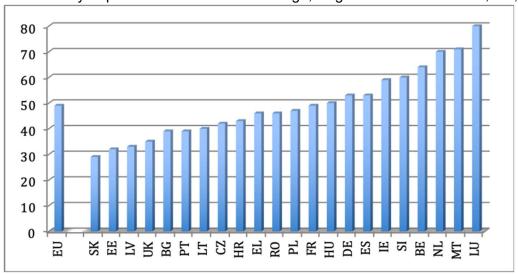
Househ old type	FSA	CA	FSA+CA	Taxes and contributions	Gross average wage	PTR
Α	В	С	D	E	F	(E+D)/F
1	6,213.9	-	6,213.9	18,979	68,629	36.7
1+2	15,907.5	7,252.2	23,159.8	18,979	68,629	61.4
2+2	17,399.3	5,578.7	22,977.9	18,979	68,629	61.1

Source: Author's calculation and sources referred to in the Methodology

PTR values in Serbia do not differ significantly from, nor are they extreme in comparison to those recorded in the EU.

In EU Member States, for single-member households, the inactivity trap in case of entering employment at the minimum wage stands at 49% on average, ranging from 29% in Slovakia to as high as 80% in Luxemburg. For a single person, in case of the minimum wage, the inactivity trap in Serbia is below the EU average (44%, i.e. by 5 percentage points) and is close to the levels recorded in Croatia, Greece and Romania (between 43% and 46%).

Figure 1. Inactivity trap in case of the minimum wage, single-member household, EU, 2018

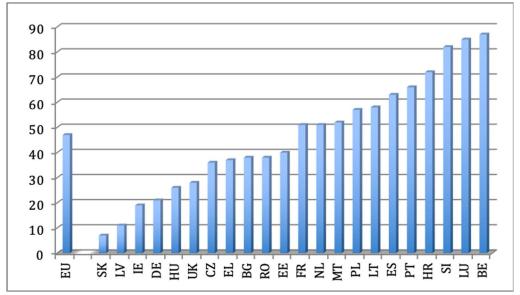


Source: OECD Dataset: Effective tax rate on entering employment, data extracted on 09 Nov 2019.

In EU Member States, for single-parent households with two children, the inactivity trap in case of entering employment at the minimum wage level stands at 47% on average, ranging from the very low levels of 7% and 11% in Slovakia and Latvia, respectively, to more than 80% in Slovenia, Luxemburg and Belgium. In Serbia, the inactivity trap for single-parent families

(73.1%) is considerably above the EU average, close to the level recorded in Croatia, which has one of the highest PTR rates.

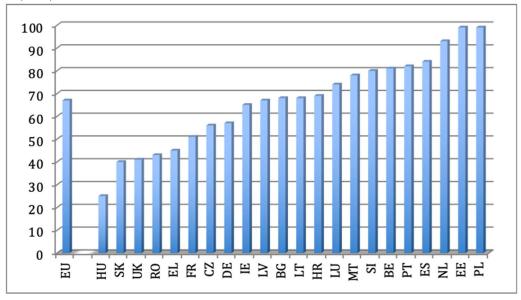
Figure 2. Inactivity trap in case of the minimum wage, single-parent household with two children, EU, 2018



Source: OECD Dataset: Effective tax rate on entering employment, data extracted on 09 Nov 2019.

In EU Member States, for households with two adults and two children, in case one household member accepts employment at the minimum wage level, the inactivity trap stands at 67% on average, ranging between as low as 25% in Hungary and more than 90% in the Netherlands, Estonia and Poland. In Serbia, the inactivity trap for this household type is by approximately 10 percentage points higher than the EU average, close to the level recorded in Malta.

Figure 3. Inactivity trap in case of the minimum wage, households with two adults and two children, EU, 2018



Source: OECD Dataset: Effective tax rate on entering employment, data extracted on 09 Nov 2019.

In EU Member States, for single-member households, the inactivity trap in case of employment at the average wage level stands at 42% on average, ranging between below 30% in Estonia and Italy and more than 60% in Denmark, the Netherlands, Luxemburg and Belgium. The inactivity trap in Serbia (36.7%) for a single person is somewhat below the EU average, close to the levels recorded in a number of countries where the trap ranges between 35 and 37% (Czech Republic, Lithuania, Sweden and Greece).

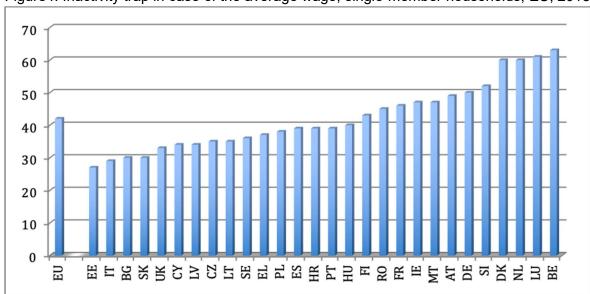


Figure 4. Inactivity trap in case of the average wage, single-member households, EU, 2018

Source: OECD Dataset: Effective tax rate on entering employment, data extracted on 09 Nov 2019.

In EU Member States, for single-parent households with two children, the inactivity trap in case of employment at the average wage level stands at 46% on average, ranging from 21% in Latvia to more than 70% in Belgium and Slovenia. In Serbia, the inactivity trap (61.4%) in this case is considerably above the EU average, close to the value recorded in Austria.

Figure 5. Inactivity trap in case of average wage, single-parent households with two children, EU, 2018

Source: OECD Dataset: Effective tax rate on entering employment, data extracted on 09 Nov 2019.

In EU Member States, for a household with two adults and two children, the inactivity trap in case of employment at the average wage level stands at 54% on average, ranging between 30% in Hungary and 90% in Denmark. In this case, the inactivity trap in Serbia (61.1%) is 7 p.p. above the EU average, between the values recorded in Ireland and Belgium.

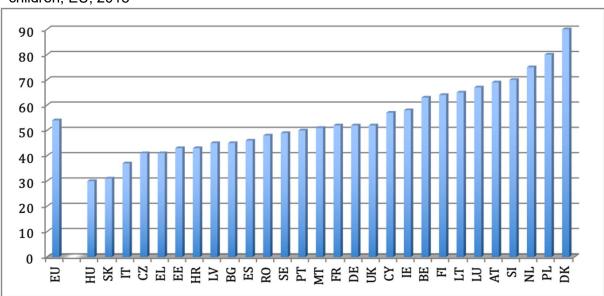


Figure 6. Inactivity trap in case of the average wage, households with two adults and two children, EU, 2018

Source: OECD Dataset: Effective tax rate on entering employment, data extracted on 09 Nov 2019.

# 5. IMPACT OF EMPLOYMENT ON HOUSEHOLD INCOME AND THE RESERVATION WAGE

# 1. Impact of employment on disposable household income at the national level

The impact of employment on household income is analysed by means of the ratio of disposable income when the household subsists on means-tested social benefits to disposable income when a household member enters employment in the formal sector, as described in the chapter on the methodology. The higher the ratio of social benefits to income upon employment (SBIUE), the lower the impact of employment on disposable household income, and thus also the incentive for labour market integration.

The ratio of income from national-level means-tested social benefits to disposable household income upon a household member's entry into employment (SBIUE), in total and for specific household types in Serbia in 2018 is shown in Tables 8-11.

This simulation takes into account only the cash benefits provided at the national level (financial social assistance and child allowance), as well as the amounts of entitlements on account of the vulnerable energy customer status (VEC) and free textbooks. In line with the methodology, it is assumed that only one child in the household is of basic school age and eligible for free textbooks (for more details, see the chapter on the methodology).

Table 7. Income from national-level means-tested social benefits and amounts of benefits in kind by household type, on average per month, Serbia, 2018

Household type	FSA	CA	FSA+CA	Bill reduction, VEC status	Free textbooks per child
1	6,213.9	-	6,213.9	787.0	-
2	9,321.2	-	9,321.2	1,049.3	-
1+2	15,907.5	7,252.2	23,159.8	1,049.3	513.6
2+2	17,399.3	5,578.7	22,977.9	1,311.6	513.6
2+3	19,884.8	8368.0	28,252.7	1,311.6	513.6

Source: Author's calculation and sources referred to in the methodology

Note: Child allowance amounts are based on the entitlement amounts before the adoption of the Decree (for explanation, see the chapter on the methodology)

As shown in Tables 8 and 10, in case one household member enters employment, regardless of whether he earns the minimum wage or two thirds of the average wage, for all types of households with children, the monthly income per member is below the child allowance eligibility threshold (which, purusuant to the Decree, stood at 9,000 dinars, and 11,700 dinars for single-parent families in 2018). In such circumstances, households with children retain the child allowance, and thus also the entitlements under the vulnerable energy customer status, but lose the entitlement to free textbooks; hence, their disposable income upon employment

comprises the minimum wage and the corresponding child allowance amount, less the price of a set of textbooks, which they must pay in the new situation.

Already at the minimum wage level, households without children lose the VEC status and the electricity bill reduction; thus, their disposable income upon employment is reduced by the amounts they need to pay due to the loss of this benefit they were entitled to as FSA beneficiaries (the amounts are shown in Table 7).

The SBIUE was calculated for allhousehold types taking into consideration disposable income when one household member finds employment, including the abovementioned reductions or increases.

Table 8 shows that incentives to accept employment in the formal sector decline as the number of people in the household increases and that they are significantly different for families with children and those without children. For a single person, income from social benefits represents only a quarter of potential earnings from employment at the minimum wage, hence the strong financial incentive to take up employment, while for families with children the SBIUE ranges between 72 and 85%, i.e. the difference between disposable income when all adult household members are unemployed and when one household member works in the formal sector is not substantial, especially for families with three children.

Table 8. SBIUE and disposable household income when one member earns the minimum wage, by household type, on average per month, Serbia, 2018

Household type	Income from SB (FSA+CA)	CA	Wage income per member	Disposable income W +(CA)-(VEC)- (FT)	SBIUE (in %)
А	В	С	D	Е	B/E
1	6,213.9	-	24,882.0	24,095.0	25.8
2	9,321.2	-	12,441.0	23,832.7	39.1
1+2	23,159.8	7,800	8,294.0	32,168.4	72.0
2+2	22,977.9	6,000	6,220.5	30,368.4	75.7
2+3	28,252.7	9,000	4,976.4	33,368.4	84.7

Note: Brackets are used to denote the entitlements that do not apply to all households (for instance, the child allowance is not granted to families without children, etc.). Upon employment, the disposable income of households without children is reduced owing to loss of the vulnerable energy customer status, as a result of which the electricity bill must be paid in full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge. The child allowance amount in column C is pursuant to the Decree, and in column B – the entitlement prior to the adoption of the Decree (for more details, see the chapter on the methodology).

However, these data should be interpreted with caution, primarily in the context of poverty. The analysis of the impact of employment on household income alone gives rise to the conclusion that, for instance, a single parent's motivation for employment is not high (with SBIUE at 72%); yet, this assessment must be considered in the context of the fact that employment, even at the minimum wage level with the appertaining child allowance, enables meeting the basic needs, i.e. rising out of absolute, and even relative poverty (Figure 7). Although this is not the case with other types of households with children, in these households

employment nevertheless reduces the gap between disposable income and the poverty line, and may be worthwhile when "gains" are regarded in absolute terms.

Disposable income in case of formal employment of a household member at the minimum wage level lifts single-member households and single-parent families out of poverty; the same applies for two-member households with regard to absolute poverty (Figure 7).

40,000 35,000 30,000 25,000 20,000 15.000 10,000 5,000 2 1 1+22+2 2+3 24,095 DNZ (min.z) 23,833 30,368 33,368 32,168 apsolutno 12,286 20,886 24,572 33,172 39,315 relativno 16,615 24,923 26,585 34,892 39,877

Figure 7. Disposable household income in case of employment at the minimum wage, absolute and relative poverty thresholds for different household types, 2018

Source: Table 8 (column E), Eurostat (2019a), and Tim za socijalno uključivanje i smanjenje siromaštva Vlade Republike Srbije (2019)

The impact of employment on household income changes significantly if we assume that only one household member works several hours per day in the informal economy, with no reduction of social benefits. In this case too, the other adult household member is assumed not to be employed. The hypothetical monthly income from the informal economy amounts to RSD 13,500 for four hours of engagement, in line with the explanation and sources given in the chapter on the methodology.

If minimum income from the informal economy is taken into account, the SBIUE ranges between 82 and 125%, which, in fact, means that incentives for employment in the formal sector are weak, i.e. that the household is better off when it receives social benefits than when one member takes up employment. Households without children have a weak financial incentive for employment in the formal sector, while the incentive is entirely lost in the case of households with children – all the more so because in this situation, even without employment, disposable income is sufficient to lift all household types out of poverty under both poverty concepts, with the exception of two-member households without children under the relative poverty concept.

The SBIUE deteriorates further with rising income from the informal economy.

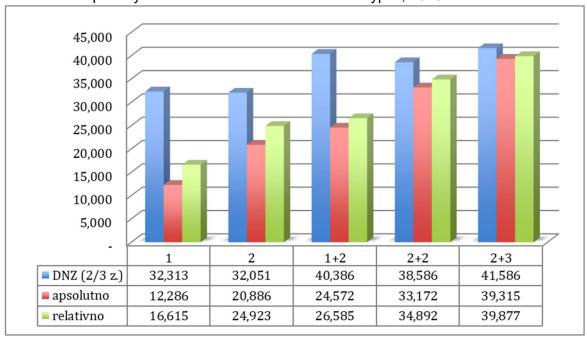
Table 9. SBIUE, income from social benefits and informal economy, and disposable income when one household member is employed at the minimum wage, by household type, on average per month, Serbia, 2018

Household type	SB + informal economy	Disposable income W +(CA)-(VEC)-(FT)	SBIUE with informal economy
А	В	С	B/C
1	19,713.9	24,095.0	81.8
2	22,821.2	23,832.7	95.8
1+2	36,659.7	32,168.4	114.0
2+2	36,477.9	30,368.4	120.1
2+3	41,752.7	33,368.4	125.1

Note: Brackets are used to denote the entitlements that do not apply to all households (for instance, the child allowance is not granted to families without children, etc.). Upon employment, the disposable income of households without children is reduced owing to loss of the VEC status, as a result of which the electricity bill must be paid in full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge.

When a household member enters employment and earns two thirds of the average wage, families with children retain the child allowance (thus also the VEC status), but lose the entitlement to free textbooks. The SBIUE is lower, and, as in the previous case, the incentive for employment significantly decreases as the number of children in the household increases. For families with three children, the SBIUE is still relatively high, at 68%; however, in case of employment at two thirds of the average wage, these households are also lifted out of poverty (both absolute and relative), manage to earn enough to meet the basic needs and leave the at-risk-of-poverty zone (Figure 8).

Figure 8. Disposable income in case of employment at 2/3 of the average wage, absolute and relative poverty thresholds for different household types, 2018



Source: Table 10 (column C), Eurostat (2019a), and Tim za socijalno uključivanje i smanjenje siromaštva Vlade Republike Srbije (2019)

When the possibility that, in addition to social benefits, the household also earns income from the informal economy is taken into account, the SBIUE increases significantly and the financial incentive for employment in the formal sector is almost entirely lost (especially if the difference in the number of working hours is considered as well).

Table 10. SBIUE and disposable household income when one household member is employed and earns 2/3 of the average wage, by household type, on average per month, Serbia, 2018

Household type	Wage income per member	Disposable income W +(CA)-(VEC)-(FT)	SBIUE	SBIUE with informal economy	
А	В	С	D	E	
1	33,100	32,313.0	19.2	61.0	
2	16,550	32,050.7	29.1	71.2	
1+2	11,033.3	40,386.4	57.3	90.7	
2+2	8,275	38,586.4	59.5	94.5	
2+3	6.620	41.586.4	67,9	100,4	

Note: Brackets are used to denote the entitlements that do not apply to all households (for instance, the child allowance is not granted to families without children; families with children do not lose the VEC status with income increase, etc.). Upon employment, the disposable income of households without children is reduced owing to loss of the VEC status, as a result of which the electricity bill must be paid in full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge.

In case one household member takes up employment at the average wage, or two household members at the minimum wage, the households' financial circumstances are equal, since the net minimum wage practically amounted to half of the net average wage in 2018.

In both cases, the household loses the entitlement to child allowance, free textbooks, and benefits under the VEC status, while incentives for employment in the formal sector are considerable. The SBIUE is low, although it increases with the number of household members. It is the highest for families with three children, but even for this household type, it amounts to only about 41%.

Table 11. SBIUE and disposable household income when one member is employed and earns the average wage, and when two members are employed and earn the minimum wage, by household type, on average per month, Serbia, 2018

	One member with average wage			Two members, both with minimum wage		
House	Wage	Disposable	SBIU	Wage	Disposable	SBIU
hold	income	income	E	income	income	E
type	per member	W-VEC-(FT)	(in %)	per member	W - VEC -(FT)	(in %)
Α	В	С		E	F	

1	49,650.0	48,863.0	12.7	49,764.0	48,977.0	12.7
2	24,825.0	48,600.7	19.2	24,882.0	48,714.7	19.1
1+2	16,550.0	48,087.1	33.1	16,588.0	48,201.1	33.0
2+2	12,412.5	47,824.8	36.4	12,441.0	47,938.8	36.3
2+3	9,930.0	47,824.8	41.6	9,952.8	47,938.8	41.5

Note: Upon employment, the disposable income of all households is reduced owing to loss of the VEC status, as a result of which the electricity bill must be paid in full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge.

## 2. Impact of employment on disposable household income at the local level

Given that local-level benefits differ widely, the impact of employment on disposable household income was analysed in the selected LGs, and only with respect to employment at the minimum wage. Any income from the informal economy was not taken into account.

In Novi Sad, children from FSA recipient families are entitled to free snacks during basic education; the value of this benefit is estimated at 800 dinars per month (for details, see the chapter on the methodology). This benefit is also available to child allowance recipient families. When a household member is employed and earns the minimum wage, the child allowance is not lost; thus, children continue to receive free snacks. The SBIUE thus remains at the same level as in case only the national-level social benefits are taken into account, and families are better protected (Table 8).

In Kruševac, FSA recipient single-parent families and families with a larger number of children (2+3) are entitled to free meals. This entitlement is lost upon entering employment; as a result, the disposable income of these households is reduced by the increased expenditure for food (the amount is explained in the chapter on the methodology), while the SBIUE ratio increases relative to the national level. For single-parent families, incentives for employment in the formal sector are still present, while for families with three children, the income from social benefits is higher than the disposable income when one member is employed at the minimum wage.

Table 12. SBIUE and disposable household income when one member earns the minimum wage, by household type, on average per month, Kruševac, 2018

House hold type	Disposable income at national level W +(CA)-(VEC)- (FT)	SBIUE national level	Disposable income at local level W +CA-(VEC)- (FT)-(FM)	SBIUE local level
Α	В	С	D	E
1	24,095.0	25.8	24,095.0	25.8
2	23,832.7	39.1	23,832.7	39.1
1+2	32,168.4	72.0	28,373.6	81.6
2+2	30,368.4	75.7	30,368.4	75.7
2+3	33,368.4	84.7	27,296.7	103.5

Note: Brackets are used to denote the entitlements that do not apply to all households (for instance, the child allowance is not granted to families without children, etc.). Upon employment, the disposable income of households without children is reduced owing to loss of the VEC status, as a result of which the electricity bill must be paid in

full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge. The disposable income of single-parent families and families with three children is also reduced by the expenditures for one meal per day, which is no longer provided by the soup kitchen.

According to the mapping data, single-parent families in the municipality of Vladičin Han are entitled to free meals in the soup kitchen. In comparison with the national level, employment incentives are weaker for single-parent families.

Table 13. SBIUE and disposable household income when one member earns the minimum wage, by household type, on average per month, Vladičin Han, 2018

House	Disposable income at	SBIUE	Disposable income at local	SBIUE
hold type	national level	national	level	local
турс	W +(CA)-(VEC)- (FT)	level	W +(CA)-(VEC)- (FT)-(FM)	level
Α	В	О	D	E
1	24,095.0	25.8	24,095.0	25.8
2	23,832.7	39.1	23,832.7	39.1
1+2	32,168.4	72.0	28,373.6	81.6
2+2	30,368.4	75.7	30,368.4	75.7
2+3	33,368.4	84.7	33,368.4	84.7

Note: Brackets are used to denote the entitlements that do not apply to all households (for instance, the child allowance is not granted to families without children, etc.). Upon employment, the disposable income of households without children is reduced owing to loss of the VEC status, as a result of which the electricity bill must be paid in full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge. The disposable income of single-parent families is also reduced by the expenditures for one meal per day, which is no longer provided by the soup kitchen.

According to the mapping data, single-parent families in Valjevo are entitled to additional cash assistance of up to 3,416.7 dinars per month. As this assistance is explicit, for all household types the disposable income upon employment remains equal to that at the national level (column B in Table 14). Both social benefits and the SBIUE are equal to those at the national level (columns C and D) for all household types, except for single-parent households (row 1+2). Compared to the national level, the incentive for employment in the formal sector in Valjevo is somewhat weaker for single-parent families (SBIUE 82.6%, compared to 72% in Serbia). On the other hand, owing to these benefits, Valjevo successfully lifts these families out of absolute poverty and raises their disposable income almost to the level of the relative poverty threshold.

Table 14. SBIUE and disposable household income when one member earns the minimum wage, by household type, on average per month, Serbia and Valjevo, 2018

	<b>7.</b> •		•	
House	Disposable income at	SBIUE	Cash benefits at national	SBIUE
hold	national level	national	and local level	local
type	W +(CA)-(VEC)- (FT)	level		level
	(3,1) (123) (1.1)	1010.		
Α	В	С	D	D/B
1	24,095.0	25.8	6,213.9	25.8
	,		, ,	

2	23,832.7	39.1	9,321.2	39.1
1+2	32,168.4	72.0	26,576.4	82.6
2+2	30,368.4	75.7	22,977.9	75.7
2+3	33,368.4	84.7	28,252.7	84.7

Note: Brackets are used to denote the entitlements that do not apply to all households (for instance, the child allowance is not granted to families without children, etc.). Upon employment, the disposable income of households without children is reduced owing to loss of the VEC status, as a result of which the electricity bill must be paid in full, while, for households with children, it is reduced by the amount needed to purchase textbooks, which are no longer provided free of charge.

Regardless of the numerous entitlements specified in the Decision on Social Protection, according to the mapping data in the Municipality of Merošina, none are granted to a substantial number of financial social assistance beneficiaries; thus, in this municipality, the ratio of income from social benefits to disposable household income when one member is employed is equal to that at the national level.

## 3. Reservation wage

According to the SILC data (2013), the median reservation wage of the poorest unemployed persons in Serbia amounted to RSD 22,000. The reservation wage was 20% higher than the minimum wage (approximately RSD 20,000 in 2013) and was even above the level recorded in the 2<sup>nd</sup> decile. The lowest net wage at which the poorest would accept employment is high, especially in view of the fact that in 2012 the maximum income in the poorest decile amounted to only RSD 7,352.2 per month per equivalent adult,<sup>17</sup> which was almost equal to the FSA base in the same year (RSD 7,275).<sup>18</sup> These findings indicate that individuals who, according to SILC, fall into the poorest group, in fact earn some other income which is not declared (for instance, from the grey economy). The reservation wage is equalized with the minimum wage only when individuals living in households with zero and negative income are excluded from the first decile.

According to the LFS data (2018), the median reservation wage of persons with the lowest educational attainment amounted to approximately RSD 23,600, which was 5% lower than the net minimum wage in that year.

<sup>&</sup>lt;sup>17</sup> Eurostat datase, Table Distribution of income by quantiles - EU-SILC and ECHP surveys [ilc di01]

<sup>&</sup>lt;sup>18</sup> Decision on nominal amounts of financial social assistance ("Official Gazette of RS" No. 100/2012)

## 6. FINDINGS AND RECOMMENDATIONS

Both indicators used in the research conducted – the inactivity trap and the impact of employment on disposable income – point to the same conclusions. In Serbia, employment in the formal sector pays for single persons and families without children. Families with children, especially single-parent families, receive somewhat more substantial support through social benefits; hence, the incentive to accept a job is weaker. If social benefits are supplemented with any earnings in the informal sector, the incentive is lost; moreover, families with children are better off if all adult members are unemployed.

The inactivity trap indicates the proportion of (gross) earnings "lost" upon entering employment, taking into account not only the newly incurred tax liabilities, but also the social benefits for which the individual or family are no longer eligible.

In Serbia, the inactivity trap for single-member households is not high (44% for the minimum wage and 36.7% for the average wage), and the incentive for employment is substantial. The trap is higher for families with children, so formal employment is less economically attractive –if one member is employed at the minimum wage, the household "loses" an amount exceeding 70% of the gross earnings on account of loss of FSA and payment of taxes and contributions. For families with children, the trap is somewhat lower in case of employment at the average wage level (about 61%), as, in addition to FSA, the child allowance is lost as well.

In Serbia, the inactivity trap for a single person is close to that in EU Member States, and higher for families with children.

Compared to the EU (28) average, the inactivity trap for an individual in Serbia is lower by about five percentage points, regardless of whether prospective employment brings the minimum or average wage. For families with children, especially for single-parent families, the inactivity trap is considerably above the EU (28) average, in case of both minimum and average wage. The difference is especially pronounced, at over 25 percentage points, with regard to employment of a single parent at the minimum wage. In these households, the incentive for employment is thus considerably weaker than in most EU Member States.

The impact of employment on household income is assessed by means of the ratio of disposable income when the household subsists on means-tested cash benefits and disposable income when a household member takes up employment in the formal sector.

If the impact of employment on income is assessed solely based on social entitlements provided by the national level, the overall situation resembles that obtained using the indicator termed "inactivity trap". The incentives for employment in the formal sector decrease as the number of household members increases and significantly differ for families with and without children.

For a single person and families with two adult members, the financial incentive for employment is substantial, as income from social benefits is much lower than disposable income upon employment. Even at the minimum wage, the impact on disposable income is significant, because, for instance, a single person's income from social benefits amounts to

only a quarter of potential earnings from employment. The impact of employment on income increases as the earnings from prospective employment rise.

For families with children, the difference between income from social benefits and income upon employment at the minimum wage level is not big, especially for families with three children (the ratio of SB to income upon employment stands at 85%). The impact of employment is not considerable even at 2/3 of the average wage. The incentive for employment becomes substantial only at higher wage levels and under circumstances where families with children lose both the child allowance and the vulnerable energy customer status.

However, in Serbia, neither the inactivity trap nor the impact of employment on income should be assessed in relative terms only and independently from the ability to make ends meet. Even when the increase in disposable income upon employment is not substantial in percentage terms, it may be significant if it results in poverty reduction. In wealthier countries, where households can meet their basic needs even when subsisting on social benefits alone, this indicator carries an entirely different weight.

In Serbia, means-tested cash benefits provided from the national level do allow meeting even the basic needs; the extent to which formal employment facilitates poverty reduction in absolute terms is, therefore, also important. Thus, for instance, for families with three children, the SBIUE ratio is still relatively high, at 68%; however, in case of employment at 2/3 of the average wage, these households, in formal terms, are also lifted out of poverty (both absolute and relative). In absolute terms, transition from one status (FSA beneficiary subsisting on social benefits) to another (employment) entails an increase in disposable income from approximately 28,000 to over 41,000 dinars. At this income level, 13,000 dinars make a difference when it comes to making ends meet.

The situation fundamentally changes when income from the informal economy is taken into consideration, even relatively low income from working 4 hours per day. When a minimum-wage job is offered in the formal sector, households with children will be better off if the job is not accepted, especially in view of the difference in the working hours. The incentive for employment is not substantially stronger even at 2/3 of the average wage, which is not very likely for the majority of FSA beneficiaries, who are mostly without education or special skills. As income from the informal economy rises, the incentive for employment in the formal sector declines.

Benefits provided at the local level vary widely; hence, the impact of employment on household income was analysed in the selected local governments as illustration only, and only with respect to employment at the minimum wage level.

Simulations show that incentives for employment in some local communities do not differ from those at national level (Novi Sad, Merošina). In Novi Sad, vulnerable families are better protected than in other cities and municipalities, as children of FSA beneficiaries receive free snacks throughout basic education. However, the incentives for employment are not weaker than at the national level, nor is this benefit lost upon employment, since the same entitlement is also extended to beneficiaries of the child allowance, which continues to be received by households in which one member is employed and earns the minimum wage. In the Municipality of Merošina, none of the entitlements are awarded in a manner that guarantees

the eligibility of any specific group of FSA beneficiaries; as a result, additional benefits do not have any impact on the incentive for employment.

In some local communities, benefits weaken the incentive for employment for FSA recipient single-parent families, but do not eliminate them entirely (in Kruševac, Valjevo and Vladičin Han). It is also worth stressing that, from the aspect of poverty reduction, all these additional benefits are certainly relevant. In the selected local governments, there are cases where social benefits are equal to the disposable income from the minimum wage (Kruševac, for families with three children).

In the context of the research conducted, two additional remarks should be made. They concern the benefits designed in 2018 and, for the most part, implemented only as of 2019, for which reason they were not encompassed by the research, although they may have a considerable impact on incentives for employment in the formal sector.

Firstly, the possible loss of the entitlement to free-of-charge pre-school attendance for FSA recipient families upon employment is not relevant for most of the cases considered, and may primarily affect the labour market integration of single parents and secondary earners. Depending on the prices, as well as the local pre-school subsidy policy, the work disincentive may vary widely among local governments. In Novi Sad, change of labour market status will no longer have any impact as of 2020, since pre-school attendance will be free of charge for all children.

The other benefit stems from the Law on Simplified Arrangements for Seasonal Works in Certain Activities, which took effect on 1 January 2019. The possibility of both earning income from seasonal work, and receiving social assistance or the unemployment benefit is a strong incentive for beneficiaries' integration into the formal labour market, which also entails entitlements under pension and occupational accident insurance. On the other hand, however, these arrangements weaken the incentive to accept formal employment other than seasonal work in agriculture. As the number of seasonal work days and the number of household members earning income from seasonal work increases, this effect intensifies. Essentially, FSA becomes a specific form of social benefits that are not withdrawn from those participating in the formal labour market (in-work benefits), but applicable only to seasonal workers in agriculture and not to those formally employed under labour contracts or temporary and casual work contracts.

The findings of the research conducted give rise to a number of recommendations, concerning both the national and local levels.

First, a reduction of social benefits in order to increase the incentive for employment is certainly not an option to be discussed, given the circumstances in Serbia. Financial social assistance, even if coupled with the child allowance, does not facilitate rising out of poverty. The adequacy of both benefits is low (Vlada Republike Srbije, 2018, p. 198). However, it is

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<sup>&</sup>lt;sup>19</sup> Assuming that one household member works for 120 working days, the annual income from seasonal work, translated into the monthly amount, would stand at approximately RSD 13,880 in 2020. (Eight hours of work at RSD 172.54, which is the minimum wage per hour, during 120 days would result in the annual income of RSD 165,638.4).

worth noting that enhancing adequacy aggravates the inactivity trap and weakens the motivation to work in the formal sector, especially with regard to families with children.

Second, the child allowance should be designed in such a way as to involve the gradual withdrawal of state financial support for families with children. More specifically, in many countries, in order to provide incentive for employment, social benefits are not abruptly terminated upon employment and increase in income, but rather gradually reduced. As the technical arrangement most commonly involves disregarding a portion of income from employment in the social assistance means test, this option would result in an increase in the number of beneficiaries and budget expenditures. Earlier researches indicate that a 25% benefits withdrawal rate would result in a 78% increase of budget expenditures (Žarković Rakić et al., 2017, p. 28). The effect of gradual withdrawal of assistance may also be achieved by rethinking the entitlement to child allowance. As shown by the research conducted on hypothetical households, the child allowance is not necessarily lost upon employment at lower wage levels. Hence, this allowance may constitute a modality of gradual withdrawal of assistance upon employment, which is a positive incentive to accept a job. However, the scheme is not designed with this goal in mind, and this positive effect may be impossible to achieve, as reality differs from laboratory conditions in the research conducted. In reality, beside the minimum wage, the household may earn a relatively small income which will suffice to nudge it above the child allowance eligibility threshold. It is, therefore, important to incorporate a legal provision whereby FSA recipient households would still be automatically eligible for the child allowance over a certain period of time (for instance, one year) after a household member takes up employment at the minimum wage level.

Third, it is essential to have in mind the already presented proposals to introduce the universal child allowance (not subject to a means test) for all children living in sub-standard (Roma) settlements, which may be deemed geographic, area-based targeting (Centar za socijalnu politiku, 2018, p. 50) (Vlada Republike Srbije, 2018, p. 220). At a more general level, this would mitigate the disincentive for FSA beneficiaries living in sub-standard Roma settlements to accept work in the formal sector, as the entitlement to child allowance would be guaranteed.

Fourth, other benefits targeting the poor should be automatically linked not only to FSA but also to the child allowance, so as to enhance the effect of gradual withdrawal of assistance and further reduce poverty in families with children. This is already the case with the entitlement under the vulnerable energy customer status, and could also be extended to include free textbooks. Alternatively, FSA beneficiaries could be allowed to retain the entitlement to free textbooks even upon employment, but only for one or two years thereafter.

Fifth, the benefits provided by local governments should also be designed in a manner that would take account of their impact on the willingness to acceptemployment. In that respect, it would be important to link certain local benefits to the child allowance, and/or to retain them upon employment, albeit in reduced amounts and over a limited (short) period of time. In the latter case, the rationale for short-term support which is not awarded to those who are already employed may be found in the fact that employment may initially incur some additional, one-off costs. Finally, the fact that local benefits are important for poverty reduction should certainly not be disregarded, having in mind the insufficient amounts of assistance provided at the national level.

Sixth, the impact of the Law on Simplified Arrangements for Seasonal Work on access to FSA should be analysed, seeing that individuals who were engaged in seasonal works and paid under temporary and casual work contracts in past years, when this income was taken into account and precluded access to this entitlement, may now apply for assistance. Analysis and monitoring are all the more important if these legal provisions are to be extended to other activities, such as tourism, construction and domestic work. Further, Government should pass a new Decree on receipts and income affecting eligibility for financial social assistance, which regulates this matter in accordance with the Law on Social Protection; the Decree has not been amended after the passage of the Law on Simplified Arrangements for Seasonal Work in Certain Activities and does not provide for disregarding income from seasonal work in agriculture. It is also necessary to consider, at a conceptual level, whether the entire income from seasonal work should be disregarded in cases where it is relatively high, i.e. when several household members are engaged in this work modality during several months. In this context, the possibility of limiting the annual income from seasonal work at the household level that can be disregarded in assessing eligibility and awarding FSA should be considered. Social workers' practice in the exercise of their discretionary power to assess income on account of missed earnings should certainly change as well.

Seventh, local governments should look into the issue of access to quality social services, in particular childcare, i.e. their pre-school attendance subsidy policies. The literature indicates that the provision of quality services is as important as financial incentives and sanctions within guaranteed minimum income schemes (Frazer and Marlier, 2016, p. 12). The shift from free attendance to payment of even a portion of costs may significantly discourage employment in case of single parents and secondary earners.

Eighth, in the context of informal economy, it is especially important to address the issue of activation of FSA beneficiaries and to review the Decree on Social Inclusion Measures, which governs this matter. The impact of the Decree has not been evaluated (Vlada Republike Srbije, 2018, p. 214), and recent researches indicate that even the extent to which the Decree is enforced is questionable (UNDP i ILO, 2018). The available information on the practice of "voluntary work" suggests that a benefit that would effectively increase the total assistance amount could contribute to the acceptance of both individual activation plans and social inclusion measures by FSA beneficiaries (CSP, 2019). It is also necessary to explore the experiences of the countries where the basic assistance amounts for beneficiaries able to work are kept at relatively low levels, with significant increases in case of activation (Slovakia).

Ninth, appropriate active labour market policies to enhance FSA beneficiaries' employability in the formal sector, primarily through improving their skills and knowledge, are indubitably important. It is crucial to focus on young people who dropped out of education to improve their likelihood of breaking out of the vicious circle of poverty, receiving assistance, and informal economy.

Tenth, it is also necessary to re-examine the provisions concerning the very high amounts of birth grants for third- and fourth-born children, which increase the total financial support to a specific segment of FSA beneficiaries, having in mind that income from this benefit is

disregarded in the FSA means test.<sup>20</sup> In formal terms, the birth grant is not a work disincentive for FSA beneficiaries, since it is awarded to all who have children of higher birth order, without a means test and irrespective of the labour market status. However, it essentially eliminates the poverty-reduction-related aspect of the motivation, which constitutes a fairly strong incentive for employment at that income level. In the changed circumstances, in view of the new arrangements, it is definitely worth reconsidering whether the birth grants for children of higher birth order should be disregarded in FSA eligibility assessment.

Finally, the research conducted indicates that FSA beneficiaries' integration into the formal labour market would need to be coupled with retaining a portion of financial assistance, but that the arrangements need to be carefully designed so as not to undermine the logic of the social benefits system as a whole. The outcomes, however, cannot be favourable unless there is demand for labour and supply of jobs in which FSA beneficiaries could be placed.

<sup>20</sup> Decree on income and earnings of importance for effectuation of the right to financial social assistance, Article

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