Reduction of child poverty in Serbia: balancing between improved cash-transfers and policies that promote parental employment

RESEARCH PROPOSAL
Presented to
Partnership for Economic Policy (PEP)

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Before you begin

Please consult the following webpages/documents regarding PEP's expectations in terms of:

➢ Specific policy issues to be addressed by projects supported under the PAGE programme
➢ Scientific content of eligible research project proposals
➢ Initiatives to be undertaken by PEP supported research teams in terms of policy outreach

Please note that:

– projects involving data collection will not be considered/selected under this final (3rd) PAGE round, with the exception of those selected under the "**special call for field experiments**"

– plagiarism is strictly forbidden – see note on "references and plagiarism" at the end of this document/template. PEP will be using a software program to detect cases of plagiarism.

PEP encourages applicant research teams to submit proposals in English, but content (in text boxes below) may also be written in French or Spanish (and will be accepted given proper justification of language barrier).

1. Abstract (100 to 250 words)

The abstract should state the main research question, the context and its relevance in terms of policy issues/needs in relation to PAGE thematic foci, complete with a brief description of the data that will be used.

Child poverty rates in Serbia are well above the average rates for the general population, and also much higher than ones found in other European countries. Previous research has argued that high poverty rates among children in Serbia are not only the consequence of the low spending on child benefits, but also a consequence of the poor design of major benefit programs. These studies offered several solutions, but this proposed research would be the first one to empirically asses which reforms to the benefits design would have largest impact on improved targeting and coverage of the benefit programmes and thus lower poverty of families with children. We will use brand new data set, Survey on Income and Living Conditions conducted in 2013, best suited for this type of the research. Additionally, bearing in mind the fact that all countries with very low child poverty rates combine effective social transfers with low levels of family joblessness, this project intends to assess the extent to which child poverty can be also reduced by policies which increase parental employment. The use of micro-simulation and labour supply modelling techniques will allow us to seek an appropriate balance between improved cash-transfer programs and work promoting policies. We expect these findings to be particularly relevant for the policy making process in the social, labour market and fiscal sphere in Serbia.

2. Main research questions and contributions

Explain the focus (or key questions) of your research and its policy relevance.

2.1. Explain why you think this is an interesting research question and what the potential value added of your work might be (knowledge gaps). You might want to explain whether or not this question has been addressed before in this context (including key references), and if so, what do you wish to achieve (in addition) by examining the question again?

According to the Survey on Income and Living Conditions (SILC) 2013 data, at-risk-of-poverty rate in Serbia equals 24.6%. The same data further show that children under the age of 18 and families with high dependency ratio, i.e. families with 3+ children, are particularly exposed to this risk. Their at-risk-of-poverty rates equal 30% and 44%, respectively. Moreover, child poverty rates are significantly higher for jobless families than for families with at least one parent in employment.

Both theoretical and empirical literature suggest that children who were raised in poverty are permanently disadvantaged in the market through the rest of their lives (UNICEF, 2000). Poverty in childhood is also transmitted from one generation to the next. Empirical studies on the UK (Atkinson, et. al, 1983) show that children who were raised in poor families have 50% higher chances to be poor themselves (25 years later) and higher chances to raise their children in poverty. These are some of the reasons why the topic of child-poverty reduction policies is of growing interest, both by researchers, policy-makers and general public.

In general, there are three types of government policies which can help reducing the at-risk-of-poverty of children (Sutherland, 2000):
  i) Child benefits which present direct financial support to poor families with children (means-tested cash transfers);
  ii) Policies aimed at promoting work of parents of children who are at risk of poverty. These typically include in-work benefits (employment conditional cash transfers) and child tax credits.
  iii) Measures to tackle long-term disadvantaged, such as: policies which attempt to reduce the number of teenage pregnancies, provision of support for parents of children aged under 5 in disadvantaged areas, attempts to raise basic standards of literacy and numeracy and tackle school truancy and exclusions, etc.

Although the level of government spending on poverty alleviating policies is important, empirical studies have shown that countries with the lowest child poverty rates are the ones that have appropriately designed policies. Adamson et al. (2000, p.2) find that "differences in tax and social expenditure policies mean that some nations reduce 'market child poverty' by as much as 20 percentage points and others by as little as 5 percentage points". Importance of benefit design is also analysed by Levy et al. (2007), who found that in a hypothetical reform scenario when policies from the UK are applied in Spain they were more effective at reducing poverty levels even when expenditure levels were held constant.

Total spending on benefits aimed at reducing child poverty in Serbia is very low.

Expenditures on child allowance (CA), main means-tested benefit to poor families with children, amounts to 0.3% of GDP which is considerably less than the spending in the European Union (EU) average (1.1% of GDP). Families with children are also eligible for monetary social assistance (MSA), second major means-tested benefit in Serbia. However, government spends only 0.13% of the GDP on this programme, again considerably lower than in the EU average: 0.5% of GDP, excluding Baltic states where spending amounts to 0.2% of GDP (World Bank, 2009).

According to World Bank (2006) and Matkovic and Mijatovic (2009; 2012), high poverty rates among children in Serbia are not only the consequence of the low spending on child benefits, but also the consequence of poor design of these benefit programs. For that reason both coverage and targeting of the existing child-allowance in Serbia are weak: 59.4% of poor children do not receive child allowance, while 52.8% of those receiving child allowance do not live in poor families (Matkovic and Mijatovic, 2012). Numbers are more alarming when it comes to the social assistance benefit, given that only 14.9% of poor children receive this benefit. (Our preliminary calculations based on SILC data).

Therefore, there is obviously a space for improvement of targeting of both benefits. For example, World Bank (2006) has argued that targeting based on income is likely to be underestimating household welfare in an environment of high informal employment According to the latest Labour Force Survey data, informal employment rate in Serbia stands at very high 23.4 percent, while shadow economy is estimated at 30.1% of GDP (Krstic et al. 2014). Therefore, as Bank further argues, piloting new targeting approaches such as proxy means-testing, or stronger reliance on assets test, would be an important investment to improve the safety net for the poor. Related to this, the first objective of the proposed research would be to empirically estimate which of these proposed changes to the design of child allowance and monetary social assistance would perform better in terms of the improved targeting and coverage of the social transfers. We would also estimate other policy solutions aimed at increasing targeting accuracy that are found in studies for other countries (Levy et al. (2005) for Austria, Spain and the United Kingdom; Salanauskaite and Verbist (2011) for EU new member states; Levy, et al. (2009) for Poland; Immervoll et al. (2000) for Netherlands and the UK; De Lathouwer (1996) for Belgium and Netherlands and Popova (2013) for Russia.

Bearing in mind that countries with very low child poverty rates (less than 5%) are the ones that combine effective social protection with low levels of parental joblessness (Whiteford and Adema, 2007), the second objective of this research would be to assess the extent to which child poverty can be also reduced by policies which promote higher parental employment. These typically include in-work benefits (IWB), that is, employment conditional cash transfers. For example, central stimulus for the introduction of the well-known Working Family Tax Credit (type of IWB) in the UK in the 1990s, as Blundell (2005, p.426) argues: "…was the stubbornly low level of labour market attachment of single mothers and women

with low educational attainment, at a time when for other women labour force attachment was on an increasing path."

In Serbia at the moment, for a single parent family with two children the amount of child allowances and social assistance benefit equals the amount of wage this parent could earn working part-time at the minimum wage level (Arandarenko et al, 2012). Given very high and rising informal employment rate (currently 23.4%), to these benefits we should add up income form informal employment as it represents important part of disposable income for those with low earnings capacity (i.e. low educational attainment coupled with lack of working experience) who are mainly attracted into the informal labour market. Therefore, for parents on welfare who also work in the informal sector, incentives to look for a job, at least one in the formal sector are diminished. Moreover, flexibility of informal working arrangements, which allows informal work to be carried on together with child care and homework, could be another factor keeping these parents inactive or in the informal labour market. This research intends to show that with IWB, designed to create a significant gap between the incomes of people in and out of work and conditioned on having a formal job, not only that poverty would be reduced but entry into the formal labour market would also be encouraged. IWB would also create a larger gap between low wages earned at part-time working arrangement and those earned for full time work, and thus provide incentives for parents to increase their working hours.

Finally, third objective of this proposed research is to analyse what would be an appropriate balance, in terms of lower child poverty rates, between improved cash-transfer programs and work promoting policies. Using tax and benefit micro-simulation model as a methodological tool (similar to the abovementioned studies for developed countries) would allow us to do that. Also, we would be able to take into account the interplay of redesigned policies, aimed at reducing child poverty, with other tax and benefit schemes which determines, among other things, the success of these policies.

2.2. Describe the specific policy issues/needs that your research aims to address; how your potential outcomes/findings may be used in policy making?
- Justify timing of your research in terms of policy and socioeconomic needs/context – e.g. reference to existing/planned/potential policies at the national level.
- Evidence of previous consultation with potential users (e.g. policymakers and key stakeholders) to help define your research question is strongly encouraged. Include a list of names, institutions and email addresses when possible.

The economic crisis led to increase in the total poverty rate in Serbia while vulnerable groups (families with many children, single parent families in rural areas, low-skilled individuals working in the informal sector) have been particularly affected. Due to the need to bring country's public finances back on the

sustainable path, in October 2014 the government introduced the new fiscal consolidation program which relies on cut in public wages and pensions. Lay-offs in the public sector have also been announced. These measures are expected to trigger further increase in the poverty rates. Under such circumstances, the increase in efficiency of social policy in protecting the most vulnerable subgroups is a prerequisite of sustainability of economic reforms and social stability of the country.

In the 2014-2016 Fiscal Strategy, the government of Serbia has announced a social policy reform which should help in offsetting adverse effects of austerity measures on inequality and poverty. Since the fiscal space is limited due to large fiscal deficit, increase in social spending is not expected meaning that the government need to seek for the ways to improve efficiency of the existing benefit schemes. Member of our research team, Dr Sasa Randjelovic, was engaged as an advisor to the former Minister of Finance, and he is also invited by the new cabinet to provide his view on the structural reforms ahead of Serbia, including the reform of social welfare system.

Ministry of Finance is in charge for the implementation of the Fiscal Strategy and during the drafting of the Strategy Dr Randjelovic has been invited to present our work in the social policy field. In particular, he has informed the Ministry that our research team was commissioned in 2011 by the World Bank to perform ex-ante analysis of the effects of the new draft Social Welfare Law before its adoption by the Serbian parliament (Arandarenko et al, 2013). The new law has introduced a number of changes into the eligibility criteria for the monetary social assistance benefit. Although it was expected that this would significantly improve the targeting of the social assistance, there is no evidence that new law achieved that goal. Mainly due to lack of high quality data it was not possible to perform this type of analysis. For the first time since the introduction of the new law, using SILC data (see Section 4), we will be able to assess the effectiveness and efficiency of child allowance and social assistance. Furthermore, given that the intention of the Ministry of Finance is not to increase the spending on current programmes, using tax and benefit micro-simulation modelling framework we will be able to propose to the Ministry several alternative solutions for the redesign of current benefits in order to improve their targeting with the same budgetary resources.

Ministry for Labour and Social Affairs has recently announced that the government intends to promote work among social benefits recipients, encouraging formalization at the same time. According to their estimates almost half of the social benefit recipients are able bodied individuals. Some of them are inactive due to care for children or elderly, but many of them are working in the informal sector. Announced reforms are likely to be discussed in 2015 and implemented in 2016. Group of researchers for this project proposal has been already contacted by the World Bank office in Serbia, which is one of the key stakeholders in social policy reforms in the country. Given that the Bank is familiar with our work in the

field of social policy and shadow economy, we have been discussing policy options that would help activate the inactive ones and help formalize the informal workers that are at the same time social benefits recipients. Several proposals on how to change benefit design and increase incentive for formal work (discussed in Section 2.1), have been offered by the Bank itself, but none of them has been empirically tested. Our research intends to do that.

Additionally, this research aims to assess the extent to which child poverty can be reduced not only by more effective benefit system but also by policies which successfully promote higher parental employment. Our previous research on in-work benefit programmes (Randjelovic et al, 2014) has gained interest among policymakers in charge for the employment policy within the government. In particular, we have presented our findings at the Working group for the National Employment Strategy, led by the assistant minister at Ministry for Labour and Social Affairs, Mrs Ljiljana Dzuver. New Employment strategy for the 2015-2020 period is being drafted and we have been invited by Mrs Dzuver to participate in the meetings of the Working Group. In Randjelovic et al. (2014) we investigated the effects of in-work benefits for the general population and found that these benefit could considerably increase labour market participation of individuals belonging to the first quintile of the income distribution. The present proposed research aims at devising policy proposal that would be most beneficial for families with children, in particular single parent families that have been recognized as vulnerable groups in the National Employment Strategy.

I. *Previous consultation with potential users*

Name	Title	Institution	Email
Mrs Ljiljana Dzuver	Assistant Minister for Employment	Ministry of Labour and Social Affairs.	ljiljana.dzuver@minrzs.gov.rs
Mr. Johannes Koettl	Senior Economist at the Human Development Department	World Bank's Europe and Central Asia unit	jkoettl@worldbank.org
Mrs Irina Stevanović-Gavrović	Assistant to the Minister of Finance, in charge for fiscal system	Ministry of Finance	irina.stevanovicgavrilovic @mfin.gov.rs

3. Methodology

Presentation of the specific techniques that will be used to answer the research questions and how exactly they will be used to do so. Explain whether you will use a particular technique normally used in other contexts or whether you intend to extend a particular

method and how you will do so. Explain if these methods have already been used in the context you are interested in (including key references).

Before going into econometric analysis, we will perform detailed profiling/mapping of child poverty in Serbia. The profiling will include the analysis of different poverty indicators such as poverty rate, poverty gap and poverty severity index. The indicators will be based on the relative poverty line, which is more commonly used approach (compared to the absolute poverty line) in the OECD and the EU countries, and usually set at 60% of the median household income. Child poverty indicators will be calculated for the whole population, but we will also disaggregate indicators across main features characterizing poor families with children (e.g. parental employment status, household composition, education level of parents, regional distribution of poverty etc.)

In order to assess how change in the design of CA and MSA could improve the coverage and targeting of the benefit programs, this research will use the tax and benefit micro-simulation model for Serbia (SRMOD). Database that will be used in the model is Survey of Income and Living Conditions (SILC) based on 2012 income data.

SRMOD is based upon the EUROMOD platform (tax and benefit micro-simulation model for the European Union; for details see Randjelovic and Zarković-Rakic (2013). Similar to other micro-simulation models, SRMOD is a tax and benefit calculator based on micro-data on income, earnings, labour force participation as well as socio-demographic variables. SRMOD encompasses rules (based on law provisions) for the calculation of the taxes that each person/household is due to pay, and the benefits each person/household is eligible to. More specifically, for the simulation of CA and MSA, based on the information on income, assets and socio-demographic variables, we use SRMOD to: 1) check whether a household fulfils the eligibility conditions for the benefit receipt (e.g. for CA: is the level of the household income lower than a certain level, the presence of children in the household, etc) and 2) calculate the amount of benefit this person is entitled to (for CA: fixed monthly sum, depending on the number of children in the household).

Using elements of income from the Survey data and combining them with simulated values of taxes and benefits, the model calculates disposable income for each household, which can then be used to calculate the poverty indicators.

Micro-simulation models have been used in numerous studies examining targeting and coverage of means-tested child benefits schemes ((Levy et al. (2005) for Austria, Spain and the United Kingdom; Salanauskaite and Verbist (2011) for EU new member states; Levy, H., Morawski, L. & Myck, M. (2009) for Poland; Immervoll et al. (2000) for Netherlands and the UK; De Lathouwer (1996) for Belgium and Netherlands. Study for Russia uses the same modelling framework as we use (model is based on the EUROMOD) to examine how the change in the means test of the major social assistance programme for children could improve its targeting

(Popova, 2013). There are several scenarios, each with few options on how to improve the targeting of child allowance, and some of them could be tested in the case of Serbia.

Our proposed research aims to evaluate new targeting approaches such as proxy means-testing and stronger reliance on assets test. To do this, we develop reform scenario in SRMOD in which we change the eligibility conditions for the benefit receipt (e.g. for CA: switch from the means test to proxy-means testing) and then (re-)calculate the number of beneficiaries and the benefit amounts they are entitled to, according to the new benefit design. We create a new reform scenario for each of the proposed changes to the benefit design.

In the next step, we calculate the disposable incomes and poverty indicators under current and reform policy scenarios and compare them. This allows us to asses which policy reform option would perform better in terms of reduced child poverty indicators. We will also calculate improvement in coverage (share of poor children covered by CA and MSA) and targeting (share of CA and MSA recipients that are poor) after the implementation of the reforms.

Besides being used to simulate hypothetical reforms of means-tested benefit programmes and to assess their impact on income distribution and poverty, SRMOD is also used to estimate the impact of the reform on the government budget. For CA and MSA reforms, budget neutral policy reform options will be considered only (given our interest in the impact of different policy structures rather than the expenditure level on the targeting and coverage). In that respect, all policy options would be feasible, while their optimality will be assessed against their impact on improved targeting, coverage, and reduced poverty indicators. We will particularly focus on those aspects of the benefits' design that have been reported in earlier studies as main drivers of exclusion of poor families with children from benefits programme, as well as on those factors contributing to the leakage of the benefits to non-poor households.

Given the second objective of the research - to assess the extent to which child poverty can be reduced by policies which successfully promote higher parental employment- SRMOD will be used, together with the labour supply model, to simulate an introduction of an in-work benefit schemes.

SRMOD enables us to calculate the changes of the poverty indicators that would occur after the introduction of the in-work benefit (short-run, or so called "day after effects", before behavioural responses occur). To assess the changes, in SRMOD we create additional reform scenario in which, based on the information on income and demographic variables: 1) we check whether a person fulfils the eligibility conditions for the IWB receipt (e.g. we check is the person is working and if the level of his/her household income is below the threshold for the benefit receipt) and 2) calculate the amount of benefit this person is entitled to (monthly sum, depending on the total household income and the presence of children). We then calculate the disposable incomes and poverty indicators for the current (IWB

not included in the disposable income) and reform policy scenario (IWB included in the disposable income) and compare them. This will allow us to assess the changes of the poverty indicators after the introduction of the IWB.

Given benefit's conditionality on employment, the static SRMOD analysis (before labour supply effects are taken into account) could address mainly the position of the children in the currently working poor families. In other words, by using SRMOD we will assess the extent to which poverty has been reduced due to larger disposable income of the working families, recipients of IWB.

In order to be able to assess the effects of IWB schemes on parental employment, SRMOD needs to be linked to the labour supply model. Labour supply model is based on the assumption that a person can choose among a finite number of working hours depending on its income-leisure preferences. We assume that each individual in the sample can choose to work 0, 20, or 40 hours, corresponding to non-participation, part-time, and full-time employment and thus earn the wage equal to the product of his/her hourly wage (calculated from the data) and the number of working hours chosen (if they choose not to participate their wage is zero). Person's choice of working hours depends on total household disposable income (calculated by SRMOD, including person's income, and other household income, such as partner's earnings, pensions, social benefits, etc) and the individual and household characteristics (e.g. level of education, number of children, etc).

More formally, an individual in the labour supply model maximises the utility function:

$$U_{ji} = a \cdot DI_{ji}(w_i H_j, Z_i) + bH_j + v_{ji}, \quad j = 0, 20, 40 \quad i = 1, 2, \dots, n.$$

Where, Uji is a total utility which is a sum of the deterministic ($a \cdot DI_{ji}(w_i H_j, Z_i) + bH_j$), and the stochastic part (vji, an error term for each choice). Within the deterministic part of the utility function, $DI(w_i H_j, Z_i)$ represents household disposable income, calculated in SRMOD based on the persons choice of working hours (Hj), his/her hourly wage (wi) and other household characteristics and incomes (Zi). Parameter a, marginal utility of income, is expected to be positive (higher income is more preferable than the lower). The second part of the utility function (bH_j) represents the working hours. The parameter b, marginal utility of working hours is expected to be negative (lower hours of work are preferable to higher). Both parameters (a and b) are heterogeneous, as they vary with individual and household characteristics (e.g. level of education, number of children, etc)

Then, a maximum-likelihood estimation is applied on a conditional logit function in order to estimate preference parameters of the utility function and the probability of each of the choice (non participation, part-time and full time).

We then use estimated preference parameters of the utility function (a and b) and disposable income for the reform policy scenario (IWB included in the disposable income, calculated using SRMOD) to estimate the probability of each of the

labour market choices in the post-reform scenario: non participation, part-time and full time.

We estimate employment effects of the IWB reform by comparing the predicted probabilities of the three choices under the pre-reform (current tax-benefit system) and post-reform conditions (after the introduction of an IWB).

Introduction of the new benefit aimed at increasing parental employment incentives (in-work benefit) will require additional budgetary resources in the static analysis, that is, before labour supply effects are taken into account. However, it could be that the introduction of the new benefit will have such an impact on the employment (new employment would bring additional revenues from income tax and social security contributions) that effects on the budget would be even positive.

Finally, in order to analyse likely impact of the introduction of IWB on informality, we will use an extension of the labour supply model, the so called 'switching' model (as we are interested to assess how many people would switch from informal to formal sector due to benefit introduction). This model is different to the previous one only to the alternatives 'available' to the person. A person can choose among three 'sectors': inactivity, informal, or formal work, and thus earn zero, informal, or formal wage respectively. We then calculate his/her disposable income for the three alternatives and estimate the income-leisure preferences and calculate the probabilities of the choices. By comparing the predicted probabilities of the informal and formal employment under the pre-reform (current tax-benefit system) and post-reform conditions (after the introduction of the IWB), we estimate the impact of the benefits on the formalization of the employment.

Similar models have been used in other countries with large informal labour market: De Hoyos, R. (2012) for Mexico; Bucheli and Ceni (2010) for Urugvay; Marcouiller et al. (1997) for Mexico, El Salvador and Peru and Saavedra and Chong (1999) for Peru.

4. Data requirements and sources

This is a critical part of the proposal. The key issue is to explain the reason for the use of the particular data. You must establish that they are ideal for the question you wish to address. Please consult the "**Guide for designing a research project proposals**" for more detail.

The proposed research will use the most recent data from the Survey of Income and Living Conditions (SILC), which was conducted for the first time in Serbia in 2013 by the Statistical Office of Serbia on the representative sample of households. The sample covers 8000 households and collects information on their activity, income, poverty, social exclusion and living conditions, based on the Eurostat methodology. SILC is the main source for statistical data on income and social transfers at the European level. Serbian SILC provides all necessary information for assessing how change in the design of major child benefit and social assistance in

Serbia could improve the coverage and targeting of these transfers. The latest research on targeting and coverage of child allowance and social assistance in Serbia (Matkovic and Mijatovic, 2009; 2011) was based on Household Budget Survey data, which is mainly designed to capture expenditures, not incomes. HBS data did not fully cover all types of social transfers, as they are not individually recorded, only within the larger groups. Preliminary research based on 2013 SILC data (Krstic, 2014) shows that estimated effects of social transfers in reducing at risk of poverty rate are higher than when the effects are estimated using HBS data, primarily due to underreporting of social transfers in HBS. For the first time, since the last round of Living Standard Measurement Survey (LSMS) was conducted (2007), we will be able to assess the effectiveness and efficiency of child allowance and social assistance, perform detailed profiling/mapping of child poverty and provide empirically tested policy proposals using the best source of data for this kind of research i.e., SILC. (We used LSMS when conducting ex-ante analysis of the impact of the new Social Welfare low on poverty and income inequality for the World Bank. See: Arandarenko e. al (2013)). Furthermore, Serbian SILC also provides information on labour market status of the working age population (ILO definition and self-assessment), allowing us to assess the extent to which child poverty can be reduced by policies which successfully promote higher parental employment. Bearing in mind that SILC is the only source of data (besides LSMS) where incomes can be linked with labour market status of individuals, we will be able to assess the effects of informal employment to the current coverage and targeting of child allowance and monetary social assistance.

5. **Policy influence plan (or research communication strategy)**

- Referring to the policy context described in section 2.1., identify potential users of your research findings, including policymakers and other key stakeholders. Provide a list of institutions and, whenever possible, specific individuals to be targeted for effective policy influence. Please also indicate whether you have already made contacts within the institutions

- How, in the elaboration and execution of your project (from design to dissemination), will you consult/communicate with these users to both gather their inputs and keep them informed of your project (expected contributions and uses), in order to increase chances of your findings to be taken-up into policymaking?

You can refer to **PEP's research communications strategy and guidance** to have a better idea of what is expected in terms of activities for policy outreach and dissemination.

Institution	Contact	Target
Ministry of Labor,	Mrs Ljiljana Dzuver, Assistant Minister	To implement in-

Social Affairs and Veterans Protection	for Employment, Ministry of Labour and Social Affairs. ljiljana.dzuver@minrzs.gov.rs	work benefit policies as an instrument to promote parental employment.
World Bank's Europe and Central Asia unit	Mr Johannes Koettl, Senior Economist at the Human Development Department of the World Bank's Europe and Central Asia unit. jkoettl@worldbank.org	To work with the government, in particular Ministry for Labour and Social Affairs, in implementing changes to the social benefits design in order to improve their targeting and increase incentive for parents to take up formal jobs.
Ministry of Finance	Mrs Irina Stevanović-Gavrović, Assistant to the Minister of Finance, in charge for fiscal system. irina.stevanovicgavrilovic@mfin.gov.rs	To present to the Ministry of Finance alternative policy solutions that could increase efficiency of existing benefit schemes with the same amount of government expenditures.

Policy needs and consulting policy-makers

Working at university based think tank, Foundation for the Advancement of Economics (FREN), senior researchers in this project proposal have built their capacities to conduct policy relevant research and have established numerous contacts with high ranking government officials.

Given that proposed project will coincide with the reforms in the social policy sector, as announced in the Fiscal Strategy of Serbia for the 2014-2016 period, the results of our research may be very important and useful to the policy makers, particularly bearing in mind that the capacities of government institutions in Serbia to create evidence based policies are relatively weak. Since Dr Sasa Randjelovic was engaged as the advisor to the former Minister of Finance he will be in charge to keep the Ministry updated on our findings regarding this project.

Proposed research is also relevant for the Ministry for Labor and Social Affairs. Dr Jelena Zarkovic Rakic, as researcher and director of FREN, has been cooperating with Assistant Minister in this Ministry for several years. Assistant Minister, Mrs Dzuver, is familiar with our previous work on in-work benefit schemes. She expressed her interest to include this topic in the new National Employment Strategy for the 2015-2020 period. We will make sure that special interest is given to the employment opportunities of the families with children.

During her work on the project "Shadow Economy, dr Gorana Krstic, as a project leader has established many contacts with representatives of the two abovementioned ministries. Both institutions have expressed great interest in policies that could reduce informal employment.

Dissemination channels

Our dissemination strategy will be divided into several phases and comprised of different activities:

- The first event will gather representatives from the relevant ministries, researchers from other universities and think tanks, and media at the somewhat informal gathering called Policy Café. The intention of this event is to mark the beginning of our project and, by issuing a short note, inform participants about the main objectives of our research. This will be a good opportunity to network, exchange ideas and to identify other possible directions in our research and ways of getting it into policy and practice.

- In the next phase of the project, we will print a policy brief for workshop in order to present preliminary findings of our research to the similar type of audience. Additionally, our results will appear in the Quarterly Monitor (bulletin of economic trends and policies in Serbia widely distributed among government institutions, private sector and non-governmental organisations). In this phase of the project it would be important to communicate our findings at the Working Groups for the National Employment Strategy and Fiscal Strategy in order to get timely feedback from policy makers which policies have highest chances to be implemented. If the empirical results show that social transfers reform together with the introduction of in-work benefit scheme may have considerable impact in terms of poverty reduction and labour market activation, we expect that the World Bank will be willing to include some of these policy recommendations in the mid-term reform agenda for Serbia. This could considerably increase chances of implementation of such reforms. Therefore, once we have the preliminary results we will communicate it with the World Bank office in Belgrade and discuss on the possibility and manners to ensure implementation of such reforms.

- At the end of the project, round table will be organized where our team will

present final results of the research to policy makers and policy practitioners from government institutions, experts from international institutions such as the World bank Office and UNICEF in Belgrade, experts from other civil society organizations (research think tanks, parental organizations) and journalist specialized in this field.

6. List of team members

Indicating their age sex, as well as relevant/prior training and experience in the issues and research techniques involved (start with team/project leader).

Note that PEP favors gender-balanced teams, composed of one senior (or experienced) researcher supervising a group of junior researchers, including **at least 50% female researchers,** all contributing substantively to the research project. PEP also seeks gender balance in team leaders and thus positively encourages female-led research teams. (Each listed member must post an up-to-date CV in their profile on the PEP website – refer to "**How to submit a proposal**")

Name	Age	Sex (M,F)	Training and experience
Jelena Zarkovic Rakic	35	F	PhD in Economics (public economics) 10 years in teaching Active researcher for 5 years, with focus on tax and benefits impact on inequality, poverty and labour market incentives with focus on labour market and social policy issues Consultant for World Bank since 2009 (on short-term basis) Training for government analysts on the use of micro-simulation methods in ex-ante policy evaluation
Gorana Krstic	47	F	PhD in Economics 6 years in teaching Active researcher for 23 years, with focus on labour market, poverty reduction and shadow economy 5 years World Bank consultant
Sasa Randjelovic	32	M	PhD in Economics (public economics) 7 years in teaching Active researcher for 5 years, with focus on tax and benefits issues 1 year advisor to the Minister of Finance, in charge for fiscal policy and employment issues 2 years of tax advisory with KPMG Training for government analysts on the

			use of micro-simulation methods in ex-ante policy evaluation
Marko Vladisavljevic	31	M	MSc in Economics, PhD student Active researcher for 3 years, with focus on labour market and econometric analysis 3 years in teaching
Aleksandra Anic	26	F	MSc in Economics and PhD student 3 years in teaching Active researcher for 1 year, with focus on labour market and econometric analysis

7. Expected capacity building

Description of the research capacities that team members (and potentially their affiliated institutions) are expected to build through their participation in this project.

This is an important aspect in the evaluation of proposals and should be presented in some detail. What techniques, literature, theories, tools, etc. will the team and their institutions learn (acquire in practice) or deepen their knowledge of? How will these skills help team members in their career development? Also indicate which specific tasks each team member would carry out in executing the project.

As in other post-socialist countries, the level of research in social sciences in Serbia is relatively low. Therefore, one of the FREN's missions is to contribute to increase in the overall level and quality of research in economics in the country, with particular focus on labour market, taxation and social welfare issues. Since FREN is founded by the Faculty of Economics (University of Belgrade) and located in its premises, the most of FREN fellows are professors and/or PhD students/teaching assistants at Faculty of Economics. This possibility to use research resources of the Faculty is considerable advantage of FREN relative to other research institutions in Serbia. At the same time, involvement of young professors and PhD students at FREN's research activities makes the capacity building efforts crucial for FREN's long term development.

In this project four researchers will be engaged – the project leader, two senior researchers and two junior researcher, who are identified in a need of capacity building.

Name	Task/contributions
Project leader	
Jelena Zarkovic Rakic	Dr Jelena Zarkovic Rakic (*Assistant Professor, Faculty of Economics - University of Belgrade and director of FREN*). Her research covers subjects in public/labour/family economics, with a particular interest in intra-household inequalities, optimal taxation, labour supply and the efficiency-equity analyses of tax-benefit systems. Jelena will give the spur to the work, she will manage activities of

	the team members and guide the theoretical positioning of the research and she will be in charge of devising and communicating the policy recommendations.
Senior Researchers	
Sasa Randjelovic	Dr Sasa Randjelovic (*Assistant Professor, Faculty of Economics - University of Belgrade and researcher at FREN*) is public sector economist, particularly interested in economics of taxation and social welfare policies. He has a broad experience is applied research work. His primary role would be to lead (together and Jelena) micro-simulation modeling of the new design of social transfers schemes and to write up research results and devise policy recommendations. Also, together with other team members, he will be engaged in outreach activities.
Gorana Krstic	Dr Gorana Krstic (Associate Professor, Faculty of Economics - University of Belgrade and researcher at FREN). Her research covers subject in formal and informal labour markets, shadow economy analysis and its effect on economic growth, social protection and social inclusion, economic growth and poverty reduction. Gorana would be in charge for analysis of impact of informality on effectiveness of redesigned tax-benefit policies, in terms of children poverty reduction. Due to her extensive experience with publishing in international journals, she would also be dealing with the structuring of the report and policy brief, its preparation and final polishing.
Junior Researcher	
Marko Vladisavljevic	Marko Vladisavljevic (junior researcher at FREN), interested in a wide range of applied labour issues, with a focus on poverty, gender impact, and labour market policies. In this project Marko will be mostly in charge of the data management (cleaning and preparing the SILC dataset for micro-simulation and econometric analyses). Marko will also be working on the estimation of respective econometric models, led by Gorana Krstic, and will be assisting Jelena and Sasa with the modeling new policies in SRMOD/MKMOD. Engagement on this project will help Marko improve his econometric skills. He will also improve his writing skills.
Aleksandra Anic	Aleksandra Anic (Teaching assistant, Faculty of Economics –University of Belgrade and junior researcher at FREN) is currently a PhD candidate at the Faculty of

	Economics –University of Belgrade, with one year of research experience. While her research experience was mainly focused on macro-econometric analysis of the labour market in Serbia, participation in this project will help her develop her skills in the micro-econometric analysis. She is also interested to improve her writing capacities particularly for the policy relevant research.

8. List of past, current or pending projects in related areas involving team members

Name of funding institution, title of project, list of team members involved

Name of funding institution	Title of project	Team members involved
European Commission Directorate-General for Research and Innovation	*FP7 - Enabling the Flourishing and Evolution of Social Entrepreneurship for Innovative and Inclusive Societies*	*Jelena Zarkovic Rakic Gorana Krstic*
Swiss Agency for Development and Cooperation	*Migration as social protection: Analysis of Macedonian, Albanian and Serbian remittance-receiving households*	*Jelena Zarkovic Rakic Aleksandra Anic*
United States Agency for International Development	*Policy Measures to Formalize the Shadow Economy and their Effects on Economic Growth in Serbia*	*Sasa Randjelovic Gorana Krstic*
Swiss Agency for Development and Cooperation	*Making Work Pay in Western Balkan Countries: The Case of Serbia and Macedonia*	*Jelena Zarkovic Rakic Sasa Randjelovic*
Social Inclusion and Poverty Reduction Unit– Government of the Republic of Serbia	*Policy Impact Analysis – From Inactivity to Employment*	*Jelena Zarkovic Rakic*
United Nations Development Program	*Position of the most vulnerable groups on the labour market*	*Gorana Krstic*
Social Inclusion and Poverty Reduction Unit– Government of the Republic of Serbia	*Evidence-Based Policy Making Initiative in Employment*	*Gorana Krstic*
United States Agency for International Development	*Econometric Assistance to the Ministry of Finance*	*Sasa Randjelovic*
Fund for an Open Society Serbia	*SRMOD, a micro-simulation tax and social contributions*	*Jelena Zarkovic Rakic Sasa Randjelovic*

mode	Marko Vladisavljevic

9. Describe any ethical, social, gender or environmental issues or risks that should be noted in relation to your proposed research project.

There are no ethical, social or environmental issues related to this project. The gender balance is ensured by having two male and three females in the team. Other risks (e.g. data collection, literature, policy reach, etc.) have been mitigated as data and literature have been provided, while policymaking institutions informed and their interest obtained.

References and plagiarism:

Applicants should also be very careful to avoid any appearance of plagiarism. Any text that is borrowed from another source should be carefully contained between quotation marks with a reference to the source (including page number) immediately following the quotation. It is essential that we be able to distinguish what you have written yourself from what you have borrowed from elsewhere.

Note also that copying large extracts (such as several paragraphs) from other texts is not a good practice, and is usually unacceptable. For a fuller description of plagiarism, please refer, for example, to the following website:

- http://writing.yalecollege.yale.edu/advice-students/using-sources/understanding-and-avoiding-plagiarism

PEP will be using a software program to detect cases of plagiarism.

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