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policy analysis on growth and employment



## Voucher system for social protection of the socially vulnerable remittance receivers in Macedonia

RESEARCH PROPOSAL

Presented to

**Partnership for Economic Policy (PEP)**

By

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**Macedonia**

1-Apr-14

## SECTION A – For all projects

### 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.

The objective of the proposed research is to investigate if remittances sent to Macedonia serve an informal social protection for household members left behind and to suggest an instrument for transforming them into a formal social protection. Macedonia receives about 20% of its GDP in private transfers per year, out of which it is estimated that at least half are pure cash remittances directly contributing to the living conditions of (poor) households of the Macedonian citizens. While unemployment, poverty and social vulnerability remain high, and the formal social assistance exerts limited effect on poverty reduction, the question is if remittances prevent social unrest, i.e. informally socially protect vulnerable poor people. The literature has been rich in investigating the standard social protection schemes, but very scarce in tackling how informal protection mechanisms, like remittances, may alleviate households' social strains. We propose to address this gap in the literature. On the methodological front, we will regress an index of social vulnerability on a group of individual, household and community indicators, and an indicator of if a household receives remittances. We will use the Remittances Survey 2008 – a nationally wide and rich dataset on migration and remittances – and will mainly rely on Roodman's (2011) conditional mixed process estimator to tackle the endogeneity of a binary variable in a probit regression. Based on the findings, we propose to develop a voucher system giving rights for health and pension insurance to remittance receivers in the amount of 20% of the remitted money, should they receive remittance through a bank and set aside a 10% of the remitted money as personal term savings in the bank. At the end, we will develop an ex-ante simulation analysis to judge the potential effects of the voucher system.

### 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?

Poor households in Macedonia, as elsewhere, face risks from different origin, but the most prominent being the lack of or limited access to formal social insurance and formal credit finance. Dercon (2002) argues that such households rely on informal agreements so as to handle these risks. **The objective of the proposed research** is to investigate how one such informal agreement – that is, emigration and the money it sends – may serve an informal social protection for household members left behind and to suggest an instrument for transforming it into a formal social protection. Specifically, the objective of the research is twofold: first, to investigate if and to what extent remittances determine the condition of social vulnerability of a person, i.e. to estimate the impact of remittances on individual's probability to be classified as a socially vulnerable person; and ii) to devise a mechanism for transforming this potentially sheltering role of remittances into a formal mechanism for social protection.

**Macedonia receives about 20% of its GDP in private transfers per year**, out of which it is estimated that at least half are pure cash remittances directly contributing to the living conditions of (poor) households of Macedonian citizens (Petreski and Jovanovic, eds., 2013). Petreski and Jovanovic (2013) find that remittances sent to Macedonia significantly reduce poverty and increase income equity, while Petreski and Mojsoska (2014, forthcoming) find that while they could overall deter people from investing, the opposite holds for youth in households receiving remittances. Hence, the available studies for Macedonia document a large developmental potential of remittances, which is still largely unused. Only in the last year or so, the

topic of remittances gained attention in the academia, media and the public, while the government, despite showing interest, has not initiated discussions about framing them into systematic economic policy. On the other hand, the economy is still diving into flagrant unemployment of 29% and a poverty of 27%. Some estimates suggest that the rural poverty rate reaches up to 40%, while the rate of social vulnerability ranges up about 30%. Only 9% of households receive formal social financial assistance from the government, and it reduces the incidence of poverty by only 3 percentage points (State Statistical Office, 2012). In addition, Mojsoska et al. (2013) argue that the assistance triggers inactivity and laziness. *So, it is likely that the formal social assistance does not exert (large) positive role in Macedonia.*

However, these figures reflecting facets of economic development do not take into account the effect of remittances. Remittances are not a part of the official regular surveys and policies. They are frequently channeled through unofficial-unregistered channels (about 50% of them; Petreski and Jovanovic, 2013). Hence, the bold question arising is **if remittances are those preventing social unrest**. It could be that remittances act as **informal social protection mechanisms** as the incidence of social vulnerability concurs with the incidence of remittances receivers. According to Petreski and Jovanovic (2013), the average remittance-receiving household is the rural one, usually female-headed, with many children and/or dependents and without or with very low income from regular labour. On the other side, the National Strategy for Poverty Reduction (2010) defines socially vulnerable people as those who are the following: long-term unemployed (unemployed for more than a year); employees with especially low-income (below cca. 80 EUR per month), rural poor, unemployed women from ethnic communities living in rural areas, children from larger families (3 or more children) especially with unemployed parents and children living in institutions.

The **theory** behind the role of remittances and migration as informal social protection for households dates back to the new economics of labour migration (Stark, 1978, 1991). This strand of theoretical underpinnings link the causes and consequences of migration explicitly, so that both positive and negative development effects are possible. Particularly, this strand of literature puts the household, not the individual as the decision-making unit with regard to the migration decisions (Taylor, 1999). Hence, if the households is exposed to social risks and income shocks, it will opt for diversification of its labour resources so as to minimize these risks (Stark and Levhari, 1982). This is done by sending a migrant abroad, so that the incidence of income shocks and hence falling into social vulnerability condition is minimized by diversification of income sources and remittances serve as (informal) social insurance at origin (Lucas and Stark, 1985). Therefore, this approach adds the household-level decisions to the individual-level decisions, as the latter are mainly driven by the self-interest, i.e. the objective to maximize the personal income.

**At the empirical literature front**, the consumption and investment effects of remittances have been widely investigated. Petreski and Jovanovic (2013) make an extensive reference to this stand of literature: some papers date back to 1987, like Lucas, while others are quite recent, e.g. Javid et al. (2012), suggesting that the topic of remittances has not lost of its warmth over the decades. However, the potential of remittances to act as informal social protection and insurance mechanisms has been rarely investigated. Mendola (2010) makes a pioneering attempt to investigate a related issue, i.e. how migration affected the informal social networking among remittance-receivers and find that the latter are more likely to join groups that provide social insurance. Similarly, Gallego and Mendola (2013) find that households with more migrants are less likely to have members associated with informal risk-sharing groups, while households who receive remittances are more likely to have members joining such groups.

In a broader context, the literature acknowledged the exposure of developing-countries households to high social risk (Morduch, 1995; Fafchamps, 2005) and that the poorest ones are typically least insured against shocks and large part of income shock is directly transferred onto their consumption (Ravallion and Jalan, 1999). The incidence of these shocks and their devastating effects for the individuals, households and the society have been dwelling for setting social safety nets or social insurance mechanisms. While some countries practice mutual assistance through groups and networks (see in Mendola, 2010), others, where

Macedonia belongs, devised formal systems for social protection. Social financial assistance, child health care, pensions and other forms of social protection soften the incidence of social vulnerability. The literature on the poverty and, hence, social vulnerability effect of standard social schemes is vast: Crook (1997); Stigler (1970); Buter and Kondrtatas (1987); Murray (1984); Kenworthy (1998) and the references therein. However, *the effects the literature identifies of the standard social protection schemes for poverty and social vulnerability remain divided.*

When it comes to linking remittances with the formal social protection, literature is scarce (Sabates-Wheeler and Waite, 2003). Essentially, bulk of the literature relates migration and formal social protection only from the migrants' perspective and the protection options they have in different stages of the migration process. On the other hand, as Sabates-Wheeler and Waite (2003) clearly point out (p.17), migration and hence, remittances have only informal protective role for migrant's family at origin, if not framed by the government in a specific policy. This is also the highlight of De la Briere et al.'s (1997) models of remittances' role: "...migration may be conceptualized as an informal preventive social protection strategy used by migrant households for insurance and risk diversification" (Sabates-Wheeler and Waite, 2003, p.19). However, to the best of our knowledge, remittances have not been framed by governments in specific formal social protections mechanisms.

In conclusion: 1. Formal social assistance in Macedonia exerts limited role for reducing poverty and alleviating social vulnerability; and 2. The literature is rich in investigating the role of formal social protection for poverty and social vulnerability, but the documented effects have been divided. On the other hand, little has been researched on the effects of remittances for informal social protection. In addition, remittances may be preventing social unrest in Macedonia at present, but their insurance effect over the longer term may be unwarranted if not properly channeled. To our knowledge, there has been no study investigating how migration and remittances may potentially serve informal social protection through reducing the probability that a person finds himself/herself in a condition of social vulnerability. **This is where this study will position and add to the current sparse of literature.**

We will utilize the information on social vulnerability and will investigate if remitted money make receiving persons and their households less socially vulnerable. By doing so, we will recognize the potentially informal protective role of remittances and will propose an instrument to transpose this role into a formal one with potentially longer-term benefits for individuals and the society (see section 2.2).

- 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.

**At the policy front**, as explained, there is no framed systematic government policy treating remittances. This has been our concern since starting treating remittances in our research agenda 3-4 years ago. However, what has changed since then is the interest and consciousness both among policymakers and society that these are money with huge potential which should be channeled into productive ways, as there is no guarantee that they will flow into the economy to infinity. The team behind this proposal held two important meetings with policymakers and triggered their interest; the Ministry of labour and social policy has been represented at a recent conference in Skopje, whereby Finance Think have been invited to attend. Media show tremendous interest for remittances, which may be a critical factor for expanding policymakers' interest further.

On the other hand, the government widely treats the problem of social vulnerability within the National

Strategy for Poverty Reduction, whereby a couple of measures have been proposed to cope with this problem: obtaining additional qualifications or changing qualification of socially vulnerable persons; supporting firms (through tax subsidies) for job vacancies targeted at socially vulnerable; offering public work; offering state agricultural land for usufruct and so on. None of the actions of the Strategy though acknowledges the potential of remittances as informal social protection, let alone devising a strategy of utilizing their potential in a formal way. **This is the policy gap that this proposal identifies.**

To address the policy gap, we propose devising a **voucher system for transforming remittances' informal into formal role for social protection**. The policy recommendation may be, though, conditional, on our finding from the econometric work, as specified under section 3. The proposed system envisages that each individual who falls in the Strategy's definition of social vulnerability and who either receives remittances or his/her next of kin in the same households receives remittances through official channels (bank or money transfer agency), obtains a voucher from the government in the value of, e.g., 20% of the value of the remitted money, but not exceeding 400 EUR per year, conditional on setting, e.g., 10% of the remitted money on a term savings account with the bank. Petreski and Jovanovic (2013) find that the average remittance obtained per household per year is 2000 EUR, hence the positioning of the maximal amount of the voucher may be at 400 EUR. The voucher will entitle the holder to a health insurance and potential pension insurance. Namely, the sum of the vouchers of up to 200 EUR will be directly paid by the government on behalf of the voucher holder to the Health Insurance Fund (hence issuing to the holder the right of health protection), while any value exceeding 200 EUR will be paid to the Pension Insurance Fund (hence issuing to the holder the so-called "tenure" and potential right for obtaining pension after retirement should the total amount of tenured years at retirement age exceeds 15 years, as is the present regulation stating). This solution envisages that the persons eligible for the voucher who at the same time obtain social assistance do not lose the right of social assistance as long as the amount of remitted money does not exceed certain amount of money per year, per household. While, the savings account with the bank established by remitted money would not be possible to be withdrawn until it reaches 2400 EUR (on average, for a year).

The solution has manifold benefits. For the **remittance receivers**:

- It will provide formal social protection, primarily health protection, but also pension protection;
- It will provide savings in a bank, as an additional insurance mechanism against income shocks;
- It may support their financial literacy, as the solution is conditional on obtaining the funds through and interacting with a financial institution;
- It will support the indirect inclusion of these people in the society, since as they will have health and likely pension insurance, they may become eligible for other public or private forms of financing;
- In the long run, it may bring more productive and healthier nation and extend the life expectancy.

For the **government**:

- It will reduce the incidence of social vulnerability and exclusion;
- Despite cost has been generated, it does not require cash payments, but may reduce the pressure onto social items in the budget, as it may lead to better targeting of socially vulnerable people.

For the **overall economy**:

- It will give more accurate answer to the question how much money from remittances enter the economy by minimizing the amount sent through informal channels;
- It may increase savings, as money will be transferred in an official way and partially saved;
- It may subsequently increase investment, not only because the pull of savings increased, but because these people having being more societally integrated, will have decided at one point to invest the accumulated money into own business and hence secure their self-sufficiency in the medium run.

### 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 analyses, we will draw detailed **descriptive statistics** so as to build intuition on the proposed problem of research. The descriptive analysis will portray both the migrant and the remittance-receiving household. This information will be cross-analyzed with the incidence of social vulnerability, i.e. specially portrayed will be those households who receive remittances and who have socially vulnerable members. This preliminary phase will help in identifying the main features characterizing the socially vulnerable members who live in a household receiving remittances.

The econometric part consists of two parts.

To reach our objective - if remittances serve an informal social protection for household members left behind – in the first part of the empirical work, we will establish **an economic model** relating the person's condition of social vulnerability to individual and household attributes, including remittances and migration, and community-level characteristics. We specify the condition of social vulnerability for person  $i$  in the community  $j$ ,  $Y_{ij}$ , as follows:

$$P(Y_{ij} = \Theta) = \alpha_0 + \alpha_1 I_{ij} + \alpha_2 H_{ij} + \alpha_3 C_{ij} + \beta_1 R_{ij} + \varepsilon_{ij} \quad (1)$$

Whereby  $P(Y_{ij} = \Theta)$  is the probability of observing  $\Theta = \{0,1\}$  outcome of the dependent variable, conditional on vectors of individual, household and community characteristics ( $I$ ,  $H$  and  $C$ , respectively), and on the variable of interest,  $R_{ij}$  – if the person or his next of kin is a receiver of remittances from international migration ( $R_{ij} \in [0,1]$ ). The dependent variable is a dummy variable measuring social vulnerability and taking a value of one if at least one of the following condition prevails: long-term unemployed (unemployed for more than a year); employees with especially low-income (below cca. 80 EUR per month), rural poor, unemployed women from ethnic communities (predominantly Albanian) living in rural areas, children from larger families (3 or more children) especially with unemployed parents and children living in institutions. While the definition of socially vulnerability is neither universal nor common in the literature, we hereby rely on the classification of socially vulnerable individuals through the definition provided in the National Strategy of Poverty Reduction (2010). As we are talking here about the social vulnerability as exposure to income shocks, it makes sense for the income to prevail in the definition of socially vulnerable people, as the definition presently involves those at the verge of deprivation, i.e. those who lack any kind of income and could hardly obtain any labor or non-labor income. In addition, this grouping is aligned with the World Bank' definition of social protection. During the research, we may try different compositions of the variable (i.e. groups dropping or entering the definition).  $I_{ij}$  includes individual characteristics like age, education, ethnicity, marital status, employment status, amount and type of income the person receives (wage, pension, social assistance, none) and the like;  $H_{ij}$  includes household characteristics like number of members, dependent members, possession of property and the like; while  $C_{ij}$  includes community characteristics, like the number of banks/affiliations operating, percent of urbanization, access to sanitation and health services and the like. **Note that the research will make a special reference to age, gender and ethnicity:** Petreski and Mojsoska (2014, forthcoming) documented that youth remittance-receivers behave differently in their business decisions; ethnicity is an important issue in a country with a backlog of ethnic tensions; while gender is ever important aspect given the share of female-headed receiving households in Macedonia. Because of these, the research will shed special light on the three specified aspects: age, ethnicity and gender.

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As the dependent variable is a binary one, we will start estimating the model by a **probit estimator**. A

similar approach is followed by Mendola (2010). However, even Mendola (2010) criticizes that this approach may be problematic. We may consider the relationship between household wealth, personal characteristics, remittances, and social vulnerability status. Poorer households involving persons at social risk may be less able to send migrants abroad. If we do not observe all facets of household wealth and personal characteristics, there would be omitted variables correlated with both remittances (which are the 'product' of migration) and social vulnerability. Hence, remittances would tend to be correlated with the unobserved determinants of social vulnerability, biasing the OLS estimate (Hanson and Woodruff, 2003). The endogeneity stemming from both simultaneity and omitted variables (unobserved variables) is well documented in the literature (see, e.g. Wooldridge, 2002). Hence, the endogeneity between remittances and social vulnerability is a major methodological concern. **Instrumental variable estimators** have been widely documented and applied for resolution of this problem (e.g. Amuedo-Dorantes and Pozo, 2006; Hanson and Woodruff, 2003; Cameron and Trivedi, 2005). The **instrumental variables** used to correct the remittances' endogeneity should not affect the social vulnerability condition of household members other than through their effect on the remittance income (see Wooldridge, 2002, pp.621). Though it is hard to find such instruments, candidates include variables such as the existence of migrant network; an indicator of whether there is other member(s) of the broader family already having migrated before; the number of male household members in their working age; an indicator of non-economic motive to migrate; an indicator of the wealth of the migrant once he/she settled in the foreign country; whether household migrants have a permanent job-contract at destination and so on (Hanson and Woodruff, 2003; Mendola, 2010). These variables are suitable candidates since while they affect the decision to migrate and/or the fact that remittances have been sent, they do not affect the condition of social vulnerability directly, except through remittances.

**The IV probit has still its own drawback.** It assumes that the endogenous regressors (remittances) are continuous, and not binary as in our case. Hence, the instrument regression in the IV approach uses OLS instead of limited dependent variable estimator, rendering estimates biased and inefficient (Wooldridge, 2007). Recently, Roodman (2011) proposed the so called Conditional Mixed Process (CMP) estimator which allows mixing the standard limited dependent variable models in multi-equation systems. CMP method is a parametric one, meaning that distributional assumptions are imposed to the model which leads to higher efficiency. On the other hand, the standard IV approach does not, i.e. there is an implied trade-off between both estimators. CMP method is appropriate for two broad types of estimation situations: 1) those in which a truly recursive data-generating process is posited and fully modeled; and 2) those in which there is simultaneity but instruments allow the construction of a recursive set of equations, as in two-stage least squares (2SLS) (Roodman, 2011). In the first case, CMP is a full-information maximum likelihood (FIML) estimator, all estimated parameters being structural. In the latter, it is a limited-information (LIML) estimator, and only the final stage's (or stages') parameters are structural, the rest being reduced-form.

So, given we have grounds for concern that both simultaneity (i.e. reverse causation) and the omitted variables (due to unobserved variability) probably make remittances endogenous in our framework; and, in addition, due to the IV probit's disadvantage in dealing with continuous endogenous regressors, we will proceed with the CMP approach. The technique dovetails in the broader field of **impact analysis methods**, and, to our knowledge, has been rarely applied in the remittances literature. Therefore, our approach will contribute to the current sparse of knowledge and applications in this specific domain.

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The second part of the empirical work conducts a **simulation**. As the bulk of our formal social protection mechanism – the voucher – relates to health protection, with the simulation analysis we would be interested if increasing the health status of remittance receivers will reduce their incidence of social vulnerability. Hence, our sample here comprises only remittances receivers and counts about 970 individuals residing in households receiving remittances. We will conduct the simulation exercise in the following manner. *First*, to the probit regression (1) above, we will add the health status of the individual. Within our survey, it is

measured on a scale from 1 (excellent) to 5 (very poor). *Second*, we will obtain the predicted values of social vulnerability from equation (1) with the added health status. *Third*, we will assign to half of our households a voucher, which we will assume would increase the health status by one gradient (from very poor to poor; from poor to neutral and so on). Although we may claim that the marginal effect of going from very poor to poor health status may be different for the condition of social vulnerability than compared when going from good to excellent status, we will disregard these considerations for the sake of simplicity of the simulation exercise. The assignment of the treatment, i.e. of the voucher providing health protection will be done **randomly**, so as to avoid committing a selectivity bias. *In the fourth step*, we will re-estimate (1) with the new health variable, whereby treated individuals have improved health status by one gradient. *In the final step*, we will compare the incidence of social vulnerability under the basic estimation (no treatment) and under the treatment estimation. **The difference could be assigned to the work of the voucher system**, under the assumption that the provided social protection to remittance-receivers will improve their health. We will repeat this procedure (assigning vouchers randomly) few times (20-30), so as to be able to obtain a confidence estimate of our treatment effect a-la Rubin's (1987) repeated imputations.

We will conduct some **further analysis**. As we assume the voucher holder to have to set aside 10% of their remittances on a savings account, we will repeat the procedure by reducing the amount of remittances by 10%. This will help us understand if and to what extent this may reduce the health-improving effect of the voucher. We may also check the robustness of the findings by adding and dropping some of the explanatory variables.

In the final part of the exercise, we will enable a **non-random assignment** of the treatment and will provide vouchers only to those individuals where remittances have been already obtained through banks or wire agencies. However, this may impose a selectivity bias, given that those who get money in a formal way may differentiate from those who do it through informal channels (friends, post etc.). To control for the selectivity bias, in pursuing the proposed procedure in the preceding paragraphs, we will use the Heckman (1979) two-stage procedure, and will use variables such as distance between Macedonia and migrant's country or possession of a financial account, as exclusion restrictions in the selection equation. The idea is that these variables should be associated with the decision to obtain these money through formal channels but not with the condition of social vulnerability.

#### 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 Remittance Survey 2008. It is a relatively new dataset compiled on a representative sample of 1,211 households in Macedonia, covering all geographical regions and considering gender, ethnic and geographic representativeness. It is comprised of 4,173 individuals, which is the sample size we will work with. The survey has been conducted for examining remittances, in particular, as standard surveys as HBS, SILC or LFS do not contain data on remittances, although these remain the hottest topic in Macedonia. The Survey comprises information about the demographic and social characteristics of the household and its members (the usual information contained in Household Budget Surveys) plus information on the amount of remittances received, their spending pattern, the relationship with the household labour market decisions, and so on. Therefore, the dataset based on this survey will give sufficient information for answering the above questions.

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

- 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 institution
- 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.

<b>Institution</b>	<b>Contact</b>	<b>Target</b>
Ministry of Labour and Social Policy	Goran Veleski Advisor, Labour Department <a href="mailto:gveleski@mtsp.gov.mk">gveleski@mtsp.gov.mk</a>	To implement the voucher system for enabling social protection to socially vulnerable remittance receivers
Ministry of Finance	Nedzati Kurtisi Macroeconomic Policy Dept. <a href="mailto:nedzati.kurtishi@finance.gov.mk">nedzati.kurtishi@finance.gov.mk</a>	To devise and implement potential fiscal implications of the voucher system
Ministry of Economy	Valjon Saracini Minister <a href="mailto:minister@economy.gov.mk">minister@economy.gov.mk</a>	To potentially target remittance receivers – socially vulnerable with other measures involving those of how to channel remitted money into small micro-businesses
National Bank of Macedonia	Sultanija Bojceva Terzijan Research and Statistics Dept. <a href="mailto:bojcevas@nbrm.mk">bojcevas@nbrm.mk</a>	To implement measures for proper registration of income of migration

### **Policy needs and consulting policymakers**

As is PEP already informed, the institution behind this team has been granted a PEP grant before and therefore the communication channels with the policymakers have been established and working with full capacity. The institution has been holding regular meetings with domestic policymakers (direct tet-a-tet meetings), but also exposed the ideas at the international scene (policy dialogue in Vienna, and other academic international conferences). Hence, all institutions and the specific contacts have been informed about the project and they all further expressed their interest in participating and helping in channeling the positive effects that the results’ implementation may bring. In particular, the reviewers and decision-makers w.r.t this proposal must know that the team identified lack of policy in the area of remittances and this is why it decided to further propose such a research for funding. The team members Blagica Petreski, Despina Petreska and Aleksandar Kostadinov are presently working on a project supported by USAID on “Mind the gaps between the budget lines and the National Strategy for Poverty Reduction” which essentially gave the impetus for this proposed project. Blagica and Despina established firm contacts with the policymakers in the Ministry of Social Policy and the Ministry of Finance. The previous PEP grantee who pro-bono accepted to advise this proposal, Dr. Nikica Mojsoska-Blazevski is the principal advisor of the Minister of Labour and Social Policy. As such, she participated in the preparation of the National Strategy for Poverty Reduction, a standing point expected to be crucial for channeling policy recommendations into action.

### **Dissemination channels**

**Dissemination with the policymakers.** The project lifecycle envisages three meetings with the concerned

stakeholders: a kick-off meeting; midterm meeting and final meeting. The kick-off meeting will opt to inform the policymakers about the current state of the issue explored and outlined in this proposal. Their consent for active participation in all stages of the research will be required (though implicitly already obtained), which essentially means them being informed (by written communication) of all steps and hurdles of the process. During this meeting, all possibilities for embedding research findings into the respective strategic documents will be thoroughly discussed. Potential documents whereby policy measures may be implemented and progress observed may include: National Strategy for Poverty Reduction (Ministry of Labour and Social Policy), Annual Plan for Social Protection and Operational Plan for Active Policies (same ministry); Strategy for Regional Development (Ministry of Finance) and so on.

The mid-term meeting would opt to present preliminary findings. Out of the preliminary findings, the policymakers would have the opportunity to understand which of them are relevant for their institution and which are of the utmost importance for implementation so as priority is given. At that point, we will offer to policymakers devising of a joint policy briefs which should then feed into the strategic document as outlined before. The objective of the joint policy briefs would be to: i) declare the joint effort that the recommended policy actions see the light of the day; ii) present to the public that in Macedonia, being a developing country, as well as an EU candidate country, research and policy could work together for better living standard of citizens; and iii) inform the wider public of the planned activities and the expected results that may bring. Once policy briefs have been completed, the final meeting will opt to present the findings and the policy actions to the wider public. Afterwards, the objective would be to ensure that policy recommendations as specific policy actions have taken place in various government documents.

Finally, at the project end, national policy conference will be held whereby findings and recommendations will be publicly debated with the policymakers, academia, media and the wider public.

**Dissemination with the media.** The Association for economic research “Finance Think” has developed channels for communication with the media and the wider public. These include the two blog platforms, policy briefs, commentaries, graphometrix and the regular presence of the economists in the media (for statements and interviews). This communication will be ongoing. Note that the topic of remittances is very hot in Macedonia, as media show tremendous interest. Therefore, their ‘participation’ in the project is warranted.

**International dissemination.** The team has been participating at the international scene within the previous two projects on remittances, both at policy-related events (like policy dialogues) and academic events (like regular academic conferences). The results of this project will be presented at such events in the same fashion as before.

## 6. List of team members

Indicating their age (or whether they are under 30), sex, as well as relevant/prior training and experience in the issues and research techniques involved (start with lead researcher).

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** 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
Blagica Petreski	29	F	PhD candidate in Economics Trainings in economics and banking 6 years of experience in the banking system on micro-

			data analyses Active researcher for 5 years
Despina Petreska	27	F	MSc in Economics Trainings in economics Active researcher for 3 years
Aleksandar Kostadinov	33	M	MSc in Economics Experience in social policy and microeconometrics
Darko Tumanoski	29	M	BSc in Economics
Natasa Jagurinoska	24	F	MSc candidate in Economics

## 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.

The research in social sciences in Macedonia is at extremely low level. The Association for economic research “Finance Think” tries to change the social-sciences research picture by stimulating the research environment. The institution has been deeply engaged with investigating remittances. Two research projects are prominent in this area: [“Remittances and development in the Western Balkans: Evidence from Macedonia, Bosnia-Herzegovina and Kosovo”](#), funded by the Swiss Agency for Development and Cooperation (closed in November 2013); and [“Mind the gaps between the budget lines and the programs of the national Strategy for Poverty Reduction”](#), funded by USAID (active till June 2014). The two projects have been oriented at policy and widely communicated so as to set the scene for framing remittance into well-thought policy in Macedonia that may bring or support the development of the country. The current proposed project adds to the objective to build a first-class research capacity, besides enabling impact onto policymaking. The team members possess another advantage – knowledge of microeconomic methods. Until recently, their application in Macedonia was impossible due to data unavailability also. The proposed team builds on these identified gaps.

**For the present work, we propose a team of two persons-females and one additional analyst-male, to be added before the final approval of the projects (due to the required changes by PEP in the team composition, the team need some time to decide on the best solution for a third analyst). The team has the support of two advisors – former PEP grantees – who do not have financial claims from this project.**

Name	Task
Leader of the project – Senior researcher	
Blagica Petreski	Blagica is currently a PhD candidate. She will lead the project. She has strong skills for analysis of micro phenomena including poverty, inequality, social exclusion and alike. Formerly she was affiliated with the banking system and as such she has acquainted knowledge and skills for managing (large) datasets. In addition, she has much advanced in the usage and analysis of micro-data within a couple of recent projects. We expect she will improve her capacity in the econometric part further through this project.
Despina Petreska	Despina holds an MSc in Economics. She will benefit from being included in all

	stages of the research: literature review, econometric applications and devising policy recommendations. The other members of the team will benefit from her skills in reviewing the literature and the econometric skills.
Aleksandar Kostadinov	Aleksandar is an MSc graduate in Social policy. He will benefit from being included in the literature review and handling micro data. The other members of the team will benefit from his skills for devising policy recommendations.
Darko Tumanoski	Darko is a BSc graduate in Economics. He will extensively benefit from being included in all stages of the project.
Natasa Jagurinoska	Natasa is a MSc student in Economics. She will extensively benefit from being included in all stages of the project.
<i>Advisors</i>	
Marjan Petreski	Marjan has purely advisory role given his former experience will PEP. He has a broad experience is applied research work, especially in analysing remittances.
Nikica Mojsoska Blazevski	Nikica has also purely advisory role given her former experience will PEP. She has a broad experience is applied research work.

## 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

<b>Name of funding institution</b>	<b>Title of project</b>	<b>Team members involved</b>
The World Bank (pending)	MULTIGRED: Implementation and evaluation of new teaching methods for improving performance of multi-grade cohorts in the primary education in Macedonia	Blagica Petreski Despina Petreska
Scopes – Swiss Development Agency (pending)	Network of Young Researchers for Assessing the Informality-Entrepreneurship Nexus and the Role of Cleavages in the Agricultural Sector (NETYOUNG)	Blagica Petreski
World Trade Organization (pending)	SYNTRADE: Creating synergies between academia, policymaking and the wider public in Macedonia, through enhancing knowledge, research skills and awareness of trade-related issues	Blagica Petreski
USAID (pending)	Improving living standard and social inclusion of hard-employable housewives in Krusevo through association for production, sale and promotion of traditional and ecological products	Blagica Petreski Despina Petreska
USAID (ongoing)	Mind the gaps between the budget lines and the programs of the National Strategy for Poverty reduction	Blagica Petreski Despina Petreska
Global Development Network (ongoing)	EdPlaCo-MK: A tool for greater gender wage equality in Macedonia	Blagica Petreski
Regional research promotion program - Swiss Development Agency (concluded)	Remittances use in Western Balkans, with reference to ethnicity, gender and age	Despina Petreska
Regional research promotion program - Swiss Development Agency (concluded)	Making Work Pay policies in Serbia and Macedonia	Despina Petreska

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

The project has not ethical, social or environmental issues. The gender balance is maintained by having one male and three females in the team. Other risks (like obtaining data, available literature, policy reach and so on) have been minimized as data and literature have been secured, while policymaking institutions informed and their interest obtained.

**10. References**

- Amuedo-Dorantes, C. and Pozo, S. (2006) Migration, Remittances, and Male and Female Employment Patterns. *The American Economic Review*, 96(2), p.222-226.
- Butler, Stuart, and Anna Kondratas. (1987) *Out of the Poverty Trap*. Free Press.
- Cameron, A.S. and Trivedi, P.K. (2005) *Microeconometrics: Methods and applications*. Cambridge: Cambridge University Press.
- Crook, C. (1997) The Future of the State. *The Economist*, 20 September: S1-S48.
- De la Briere, B., De Janvry, A., Lambert, S. and Sadoulet, E. (1997) Why Do Migrants Remit? An Analysis for the Dominican Sierra, International Food Policy Research Institute, Food Consumption and Nutrition Division, Discussion Paper No. 37.
- Dercon, S. (2002) Income Risk, Coping Strategies, and Safety Nets. World Bank Research Observer, Oxford University Press, vol. 17(2), pages 141-166, September.
- Fafchamps, M. (2005) Development and Social Capital. *Journal of Development Studies*, 42 (7), p.1180-1198.
- Gallego, J.M. and Mendola, M. (2013) Labor Migration and Social Networks Participation in Southern Mozambique. *Economica*, 80(320), p.721-759.
- Hanson, G.H. and Woodruff, C. (2003) Emigration and Educational Attainment in Mexico. UCSD working paper, 2003.
- Heckman, J. (1979) Sample Selection Bias as a Specification Error. *Econometrica*, 47, p.153-163.
- Jalan, J. and Ravallion, M. (1999) Are the poor less well insured? Evidence on vulnerability to income risk in rural China. *Journal of Development Economics*, 58(1), p.61-81.
- Javid, M., Arif, U. and Qayyum, A. (2012) Impact of remittances on economic growth and poverty. *Academic Research International*, Vol. 2, No. 1.
- Kenworthy, L. (1998) Market and Nonmarket Determinants of Income Growth in the U.S. States. Unpublished manuscript. Department of Sociology, East Carolina University.
- Lucas, R.E.B. (1987) Emigration to South Africa's Mines. *American Economic Review*, 77(3), p.313-330.
- Lucas, R.E.B. and Stark, O. (1985) Motivations to Remit: Evidence from Botswana. *Journal of Political Economy*, 93(5), p.901-918.
- Mendola, M. (2010) Migration and Informal Social Protection in Rural Mozambique. Paper prepared in the framework of the European Report on Development 2010.
- Mojsoska-Blazevski, N., Petreski, M. and Petreska, D. (2013) Increasing labour market activity of poor and female: Let's make work pay in Macedonia. EUROMOD Working Paper Series, EM16/13.
- Morduch, J. (1995) Income Smoothing and Consumption Smoothing. *Journal of Economic Perspectives*, 9(3), p.103-14.

- Murray, Charles. (1984) *Losing Ground: American Social Policy, 1950-1980*. Basic Books.
- Petreski, M. and Jovanovic, B. eds. (2013) *Remittances and Development in the Western Balkans: The cases of Macedonia, Kosovo and Bosnia-Herzegovina*. Scholars' Press.
- Petreski, M. and Jovanovic, B. (2013) Do Remittances Reduce Poverty and Inequality in the Western Balkans? Evidence from Macedonia. MPRA Paper 51413.
- Petreski, M. and Mojsoska, N. (forthcoming) Youth self-employment in households receiving remittances in Macedonia. PEP report.
- Roodman, D. (2011) Fitting fully observed recursive mixed-process models with cmp. *The Stata Journal*, 11(2), p.159-206.
- Rubin, Donald B. (1987) *Multiple Imputation for Nonresponse in Surveys, Wiley Series in Probability and Mathematical Statistics*. Wiley & Sons, New York.
- Sabates-Wheeler, R. and Waite, M. (2003) Migration and Social Protection: A Concept Paper. Working Paper of the Institute of Development Studies, Sussex.
- Stark, O. (1978) *Economic-Demographic Interactions in Agricultural Development: The Case of Rural-to Urban Migration*. Food and Agriculture Organization of the United Nations, Rome.
- Stark, O. (1991) *The Migration of Labor*. Blackwell, Cambridge and Oxford.
- Stark, O. and Levhari, d. (1982) On Migration and Risk n LDCs. *Economic Development and Cultural Change*, 31(1), p.191-196.
- State Statistical Office (2012) *Laeken Indicators of Poverty*. Skopje: State Statistical Office. Available online: <http://www.stat.gov.mk/PrikaziSoopstenie.aspx?rbtxt=115>
- Stigler, G. (1970) Director's Law of Public Income Redistribution. *Journal of Law and Economics*, 13, p.1-10.
- Taylor, J.E. (1999) The New Economics of Labor Migration and the Role of Remittances in the Migration Process. *International Migration*, 37(1), p.63-88.
- Wooldridge, J.M. (2002) *Econometric Analysis of Cross Section and Panel Data*. London: The MIT Press.
- Wooldridge, J.M. (2007) *Introductory Econometrics: A Modern Approach*. London: The MIT Press.