EuroEconomica

Issue 2(32)/2013 ISSN: 1582-8859

The Effect of Remittances in Republic of Moldova

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Abstract: Republic of Moldova, a country with 3.6 million inhabitants, 22% of which chose to cross the border in hope of a better living, experiences a wide phenomenon of emigration associated with a considerable influx of remittances, that in Republic of Moldova reached 23% of GDP. This source of income is used mostly for individual consumption and just 6% are invested productively. The remittances affect the GDP and have a positive effect in the short term. In the long term, the remittances have an ambiguous effect, being a subject of moral hazard with negative externalities for the national economy.

Keywords: Remittance; migration; emigrants; remitter; recipient; Republic of Moldova

1 Introduction

"In conditions when the principles of international division of labor are applied, the workforce has either to attract the capital (investments) *either to move towards the capital* (emigration)*".* (Rosenstein-Rodan, 1943) It seems that the Republic of Moldova choose the second way, being the first representative of the CIS (Community of Independent States) where the emigration phenomenon reached the maximum level. With a population of 3.6 million inhabitants, 22% of them emigrated to CIS (particularly Russia, 61.7% of migrants in 2010) and to EU (particularly Italy, 18.8% of migrants in 2010). Other important destination countries host up 3% and include, by decreasing order, Turkey, Israel, Ukraine, Portugal, Greece and Romania.

Moldova has ranked 3rd in the world by amount of remittances from abroad to the GDP level (2004). Over 1/5 of households in Moldova benefit from remittances, the share of remittances in the household's disposable income is considerable and represents around 60%. A larger share of households receiving remittances is found in rural areas with 29.5% compared to urban aresa with 22.6% registered in 2008. While remittances have contributed to decreasing poverty for the benefit of households, and have increased access to education, less than 10% of remittances are invested productively, most of it being used for consumption and the acquisition of real estate.

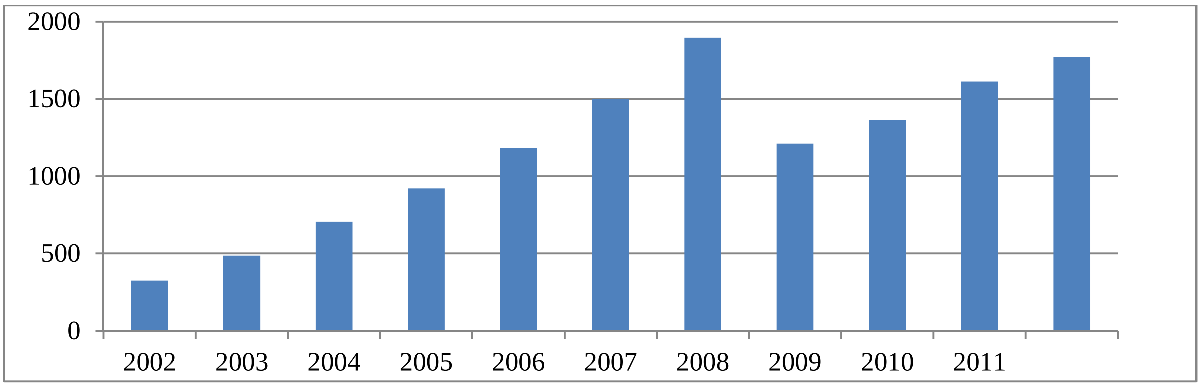

Figure 1 Received remittances in Republic of Moldova ($ millions)
Source: World Bank, Annual remittances data

2 Review of Literature on Remittances

In conditions of globalization when labor migration and international finances flows intensify, the term of "remittances" is defined in the economic theories as *"a cross-border person-to-person payment of relatively low value. In practice, the transfers are typically recurrent payments by migrant workers (ex. who send money to their families in their home country every month). The term "remittance transfer" is used for simplicity (it is assumed the transfer is international)"*[1].

According to the 5th edition of the Balance of Payments Manual (IMF, 1993), the remittances, the so-named migrants' transfer, are contra-entries to the flow of goods and changes in financial items that arise from individual's change of residence from one country to another, and are recorded in the Capital Account of the Balance of Payment under Capital Transfers of Nongovernment Sectors. (Lucas & Stark)

Despite their aggregate size, remittances are composed of millions of individual, private, non-market income transfers. The remitter and the recipient of the transfer are separated by long distances for long periods of time, that implies an asymmetric information between the one that earns and the one that spends. Even the economic asymmetry is being partially compensated by phone calls, letters and visits, the remittances still are a subject of moral hazard problems. The motivation that generates the remittance transfer is "certainly the most obvious motive for remitting which is pure altruism – the care of the migrant for those left behind" (Lucas & Stark), also altruism can be seen as "a mechanism by which independent agents find partners with whom to enter into risk-sharing arrangements". The remittance transfers can be also a result of the investment that the family chose to do for sending abroad the most capable member to integrate in the labor market, so it will share the risks that come from natural disasters or business-cycle shocks.

The flow of the money that the migrants send back to their families, in their home country is an important source of income in many developing countries. The recipients use the remittance to cover day-to-day expenses and sometimes to fund small investments. In the theory of remittance, there are 3 general directions of utilization: a) most remittances are used for the individual consumption; b) a smaller part are saved or invested; c) the remaining remittances are used for purchases of houses, land, jewelry, which are not necessarily considered to be productive investments, in terms of the overall economy[2].

The term of "investment" is used here as "productive investment", that in general can be classified as investment in an asset or activity that produces a positive flow of income. Any decision of spending money for the acquisition of assets that will bring liquidities to create and increase the wealth of the firm's owners is an investment decision. Though, the opinions regarding the productive investments are not commonly accepted. Some of the authors consider that remittances used for building or repairing a house, purchasing land or long term consumer goods, can be considered productive investments, while other authors affirm the contrary.

3 Macro-Economic Impact of Remittances-Econometrical Analysis

The standard Keynesian macroeconomic model[3] describes the remittances economic effects:

1. $\mathrm{C} = \mathrm{C0} + \mathrm{cYd} + \mathrm{e1}$
2. $\mathrm{T} = \mathrm{T0} + \mathrm{tY} + \mathrm{e4}$
3. $\mathrm{I} = \mathrm{I0} + \mathrm{bY} + \mathrm{e2}$
4. $\mathrm{Yd} = \mathrm{Y} - \mathrm{T}$

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[1] Bank for International Settlements and The World Bank, 2007.
[2] Chami, R., *„Are immigrant Flows a Source of Capital for Development?"*, IMF Institute 2003
[3] (2002). *A study on remittances inflows and utilization,* Dhaka: IOM. November. p. 6

5. $M = M0 + mY + e3$
6. $Y = C + I + G + Rm + Ex - M$

The model implies 6 endogenous variables:

1. Private Consumption (C)
2. Private Investment (I)
3. Imports (M)
4. Tax revenue (T)
5. Disposable income (Yd)
6. GDP (Y)

and 3 exogenous variables:

7. Government expenditure (G)
8. Remittances (Rm)
9. Exports (Ex)

Equation 1 states that consumption expenditure depends on disposable income (Yd), where C0 is the autonomous expenditure and c is the marginal propensity to consume out of disposable income (Yd).

Equation 2 describes a private function in terms of national income (GDP) where I0 is autonomously determined and "b" is the marginal propensity to invest.

Equation 3 describes an import function in terms of GDP where M0 is autonomous and measures marginal propensity to import.

Equation 4 is the tax function where T0 is autonomous and t is the marginal propensity to tax out of national income.

The endogenous and exogenous variables influence each other and remittances influence the GDP as follows:

Remittances are a component of the disposal income Yd. Fluctuation of remittances will influence in the same direction the Yd, and in turn the private consumption C. Hence, the fluctuation of remittances directly affects the private consumption.

Investments are also influenced by remittances, as marginal propensity to invest is determined by national income Y (that implies remittances).

Remittances influence indirectly the imports by the marginal propensity for imports (mY).

Tax revenue will also increase once the remittances will increase the GDP, respectively the marginal propensity for taxation (tY).

4 The Implications of Remittances in Economy

Migration and remittances have a very complex impact on the sending country, on both, microeconomic and macroeconomic plan. The time factor is considered to be very important, as many empirical findings show that remittances have positive impact in short run but negative in a long run perspective.

In financial terms, remittances manifest less volatility than other financial flows (portfolio investment, direct investment, official assistance) and can be counter-cyclical (remittances grow in period of economic recession). In the case of Republic of Moldova the counter-cyclicality character of remittances was proven in 2008, registering its maximum volume of remittance transfers with $ 1.897 million in the period when the global crisis registered its lowest point.

Remittances directly increase the disposable income (Yd) and respectively the private consumption that boosts the entire economic mechanism trough its multiplier effect. According to the Keynesian macroeconomic model, diminishing the consumption, investments and government expenditures, adding the multiplier effect, will lead to a decrease in the GDP a respective economic fall.

In the Republic of Moldova, analyzing national surveys data, about 90% of all remittances are used for daily expenses[4]. The households' consumption can be divided in general into two components: consumption of domestic products and consumption of imported goods. During 1998-2009 the average real growth rate of imports (nearly 9%)[5] exceeded the average real growth rate of households consumption (nearly 7.4%). In conclusion, the increase in consumption is mainly oriented towards imported goods. It should be noticed that the option of remittance recipients to consume more from national production will support growth, rather than consuming from imports, which is known to diminish the GDP.

The inflow of foreign currency from remittances leads to an appreciation of the national currency, known as the Dutch disease effect. (Singh, 2009) This hampers GDP growth, affecting exports, decreasing the value that recipients obtain when exchange remittances, and other side effects.

As an aggregate effect, remittances can lead to a stability increase of the entire economy. Using a sample of 70 countries, including both advanced and developing economies, there is supporting evidence that remittance flows provide a stabilizing influence on output. The results however indicate a threshold effect, suggesting that this stability-enhancing contribution is achieved rather quickly and would not be very significant in countries receiving large flows of remittances. (Singh, 2009)

Remittances have a consistent implication in the public sector too. An aspect is the increase of the income from the taxes on imports (VAT), imports that are financed by remittances. Also, the inflow of foreign currency will lead to a real appreciation of the national currency that will ease the disbursement of the public debt. The National Bank will accumulate reserves easier and cheaper, due to the influx of foreign currency. (Culiuc, 2007)

In the same time while remittances lead to growth, in the short term, they also decrease the performance of public institutions. Remittances offer, with no effort from the administrative apparatus, an increase of the budgetary revenue, improving the external financial position, and growth of the foreign exchange reserve. These achievements do not motivate a government to make structural reforms to solve the economic problems which in fact was the cause of the mass emigration of the active population.

The IOM study also demonstrates that in Republic of Moldova over 35% of the population resides in households that receive remittances, with the majority of these flows being used to fund basic household consumption, consumer durables, purchase of housing, and debt repayment. In a CBS-AXA research study[6], only 6% are used to finance business investments, and as little as 5% are deposited into savings accounts. This fact shows that there is a lack of confidence in the banking and financial structures and so instability of the investment climate, powered by the political conflicts that mark the Moldavian economic transition.

The price of remittance is also significant, that has its own effect in saving and investment decision. When the cost of remittance transfer is low, more disposable income remains for the remittance recipient. The price of the remittance is composed of multiple fees (tax for the sent amount, tax for conversion, tax for the recipient). Transparency and knowing the remittance price amplifies the competition and respectively the price will decrease, for the remitter and recipient benefit. There will be a subsequent increase in the preference for using formal channels to transfer remittances. In 2008, the G8 (and later in 2011 the G20) countries committed to reducing the global average remittance cost by 5 percentage points in 5 years. The average remittance cost, for the top 20 largest bilateral

[4] (2007). The Moldavian National Public Opinion Survey on remittances.
[5] *National Bureau of Statistics,* Republic of *Moldova.*
[6] http://www.cbs-axa.org/

remittance corridors has declined from 8.6% in 2008 to about 7.5% in the third quarter of 2012[7].

The cost of remittances is calculated in part for each country or corridor. In the Moldavian case, Russia being the cheapest source country with a weighted average remittance cost of 2%, comparing it to the EU corridor, pointing to Germany, that transfer costs consume, on average, about 14% of the remittance amount.

Decreasing the price of remittances is an indirect way to push up productive investments of households. If the remittance transfer is cheap, more migrants would prefer to use the formal channels rather than informal ones and that would increase the financial system performance. The more bank customers place their funds into the financial system, even for short time, is beneficial for the banks, that having more liquidity, will be more likely to lend money in advantageous conditions, to migrant or non-migrant customers. (Carling, 2005) For this case, financial intermediation and financial products are essential.

In general remittances can be transformed into investment in 2 ways (Stratan, 2011):

1. directly by investments in entrepreneurial activities;

2. indirectly through savings and/or financial system (financial intermediation).

Undoubtedly driving remittances into productive investment is a desirable thing but the government is incapable of deciding how the remittances will be used, as these are private and uncontrollable financial flows. The government has control over tax revenue, foreign aid funds, and relatively over foreign investors but cannot force the hand of remittances recipients to invest. It can influence the saving and investment decision trough some indirect measures and reforms. Internally, it can make regulatory reforms, imposing zero reinvested profit tax, fiscal, capital amnesty. Externally, it can inform the diaspora from the destination countries about the investment opportunities from the origin country, accompanied by training programs for entrepreneurial abilities of the recipients and also about co-financing programs for new business plans.

International good practices of countries of emigration can inspire governments to design suitable policies for driving remittances into productive investments.

The Republic of Moldova is a relatively new country experiencing mass emigration and remittances issues. It can be inspired by other country's good practices to drive remittances into investments. A good example on this subject is given by Mexico (the biggest country of emigration). Here the government stimulates investment of remittances in collaboration with so-called Hometown Associations, by giving informational support, helping the associates to decide about what kind of projects to invest in. A study of Woodruff and Zenteno specifies a growth of 40% of the Mexican investments for SMEs. (Woodruff & Zenteno, 2007)

Another interesting program is "3 to 1", based on matching funds, 1 dollar that came from remittances was supplemented by 3 dollars from the budget and aimed to finance different infrastructure and social projects. A similar program was launched in Moldova „PARE 1+1" 2010-2015, financed by EU and implemented by IOM, to attract the remittances into private business sector. Each 1 LEU invested by a household is supplemented by 1 LEU from the grant.

The program "Mi Comunidad" supports creation of joint enterprises with state associations. (Stratan & Chistruga)

The Pakistan government attracts investments of the migrants to the export processing industries, offering a non-reparable scheme and advisory for business start-up. (Lucas, 2003, Chapter 5, p. 43)

Micro-finance institutions can have a serious contribution for attracting remittances to the investment flow. A study of a micro-financial institution in Mexico showed that remittances were responsible for 27% of the capital invested in micro-enterprises and 40% of the capital in the major remittance

[7] (2012). World Bank, *Migration and Remittances Unit, Development Prospects Group,* Nov 20.

receiving areas of the country. (Orozco, 2004, p. 26)

During the 1970s, the Turkish Government also tried to channel remittance savings into employment generating activities through programs like “Turkish Lira Loans for Homes, and Farms and Small Businesses”, aiming to attract the foreign currency savings of the migrants by establishing accounts with one of the designated Turkish banks.[8]

The implications of remittances over GDP growth is considered to be negative in the long run from the perspective of labor efficiency. Remittances as compensatory funds for recipients are a subject of moral hazard problem that emerges between remitter and recipient. It is manifested by the recipient’s preference to use remittances instead of wages that implicitly decrease their labor force participation, reduce labor effort in the existent enterprises and in general a relaxation in their entrepreneurial behavior, for future economic projects and in the Moldavian case there was a 10% drop of employment rate in the last 5 years[9]. If there is a lack of labor participation, firms will increase wages to meet its labor need. Increased wages negatively affect the output of the firms. All these lead in general to poor economic performance, in both the public and private sector.

Moreover, substituting wages with remittances increases the risk of exposure in cases of economic shocks. If the migrant stop sending remittance, because of various causes, the recipient will be more affected than a worker that lost his job. The worker will still have a revenue from the unemployment compensation.

A drop in the labor participation, due to one’s decision or to economic shock, is associated with an increase in financial dependency of the inactive population toward the active population and a pressure over the social insurance system in the public sector.

Remittances lead to short-term economic growth, but a consumption based economy without investments in the national production will not have a sustained growth. Returning home, the migrants will be of an age that will make them inactive for the labor market. Spending their savings in a short period of time, naturally they will count on the support of the social insurance system that will have to cover a large segment of the ageing population. Because of a lack of contributions from the private sector, the social insurance system will be weakened and underdeveloped; nevertheless it will experience an enormous pressure from the aging population.

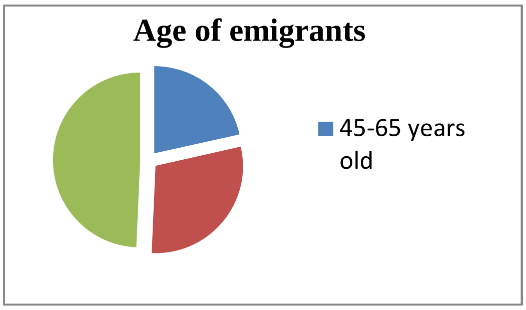
Moreover, during 1998–2007 the young population rate (aged 0–14 years) declined by around 33%, one of the steepest declines in the young population in the CEE countries. Therefore, in the next decade the working-age population in Moldova will start to decline rapidly, while the ageing of the population will increase rapidly. Taking in consideration the emigrated population, that will return in the country as ageing population, will be in need of pensions, regardless of their contributions to the public sector trough their life activity. This confirms that the ageing of Moldova’s population will soon become a very serious problem that has negative implications for the social insurance and health systems.[10]

When a poor country’s economy follows a growth path, emigration increases, due to acknowledgment of the exterior opportunities. When a rich country experiences economic growth, emigration tends to decrease.

A convincing example is offered by the southern Europe countries, Portugal, Spain and Italy that in the past decades from immigration countries turned into emigration countries. (King, Fielding, & Black, 1997, pp. 1-25) Following the same concept, the Republic of Moldova as a poor country that experiences economic growth can expect an increase of emigration in the future. The assumption that the emigration will continue can be reinforced by the concept of family reunion. A migrant can chose to merge with the family by returning to his country or taking his family out of the country. (Oleinic,

[8] Osman, T. A. *Determinants of Workers’ Remittances: The Case of Turkey*, p. 10
[9] National Bureau of Statistics, Republic of Moldova.
[10] (2009). Moldova Country Report

2012) In the Republic of Moldova the young migrants mostly tend to create a new family in the host country.



Source: IASCI/CIVIS, 2010

In the next years the emigration of Moldavian citizens and remittances transfers may not exceed the actual frequency but it will still remain an important source of income for the economy. The phenomenon is very much likely to continue due to several reasons; The host countries are rich economies but face an increase in ageing population; Moldavians will prefer to emigrate and work in these countries for the high wages; the Republic of Moldova is not yet capable to create enough jobs for all its active population, from the country and from abroad. Emigrants and remittance will continue to contribute generously to GDP but the main problem is to design good policies that would maximize their economic benefits in the long run.

5 Conclusions and Policy Discussions

After gaining its independence in 1991, the Republic of Moldova started a difficult process of transition. With no experience in a market economy the situation in the country deteriorated extremely util it reached the highest rate of poverty in Europe. In order to surmount the poverty, population emigrated toward exterior economies. The emigration and remittances supported the economy considerably, as solution to the lack of jobs, low wages and global crisis shocks, generating a sustained financial flow that stabilized the economy on the macro level.

The influence of remittances over GDP and over economy in general, is positive in the short run, but negative on long run. In the short run remittances sustain the private consumption, finance imports, contribute to government revenues, facilitate the public debt repayment and stabilize the economy. In the long run there is a "remittance trap" that negatively affects the economy. It implies "moral hazard" problems that lead to negative growth rates. As it happened in Moldova, remittances substituted wages and affected the labor participation. A decrease in labor effort is directly correlated with a decrease of productivity and output, negatively affecting exports and contributions to the public sector. Being less competitive than the national production, imported goods are preferred for private consumption, resulting in an increase in the current account deficit, and in the case of Moldova 90% of remittances are consumed for daily expenditures. The private sector is poorly developed because of several causes: 40% of the active population is abroad, implying the "brain drain" problem within it, unstable political environment that hampers FDI, lack of infrastructure, reduction of labor participation and of business initiatives. The low participation of the private sector to the public sector revenues will be most felt when the returned migrants as ageing population will need to be provided with pensions.

The remittances must be viewed as an alternative measure to stabilize an economy and not as the main lever. As small, private financial flows, the remittances must be driven into productive investments, for targeted sectors that would increase exports and absorb labor force. In the past 10 years, the growth rate of agriculture and exports was inferior to the growth rate of services and imports, 80 % of the new created jobs coming from non-exporting sectors. The Republic of Moldova must take into consideration its comparative advantage - the agricultural potential, with 50% arable land, the biggest coefficient in the Europe. An export strategy based on agriculture and light industries requires suitable policy improvements.

First of all there should be coordinated efforts between government and remittance beneficiaries, to merge the interests of the country with the individuals'. The government must drive its public investments in infrastructure that would help households flourish their business. In order to design policy of using remittances for a healthy and sustained growth, the government should establish more formal links between the Moldavian society and the Diaspora; programs that stimulate collective investments programs like Hometown Associations and SME's development; increasing the volume of deposits due to remittances and decreasing the interest rate for long-term credits; diversification of financial products offered to migrants and their families; export incentives for targeted groups of production; encouraging the "brain gain" and invest in human capital.

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