

# REMITTANCES CONTRIBUTION TO SUSTAINABLE ECONOMIC DEVELOPMENT: CASE OF REPUBLIC MOLDOVA

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## Abstract

Despite the magnitude and in, some cases, the major role remittances do have in many economies all over the world, the monitoring and estimation of these flows, as well their impact on home economies pose a lot of challenges for specialists in this area. We found that, concerning Republic of Moldova, no data exists on the real volume of the money transfers made by Moldovan emigrants to the country. All data rely on indirect measures produced by local and international institutions and think tanks that can be used to make an approximation of the volume of these flows, their structural characteristics and spillovers on country's social and economic development. The main sources in this context are: the Balance of Payments elaborated by the National Bank of Moldova that is considered the most relevant source to make an estimation of remittances' volume; the Household Budget Survey carried out by the National Bureau of Statistics (NBS) that presents data on remittances share on resident households income.

**Keywords:** economic growth, exports, exchange rate, imports, investments, inflation, remittances

**JEL classification:** F24, F43, E24

## Introduction

Migration exists for a very long time. However its dimensions and the great impact it has on the home country of migrants, through the money they transfer to their families, relatives, friends, term known in existing literature as remittances, makes it a topic of special interest for many researchers. In Republic of Moldova remittances became a very discussed and analyzed subject, taking account that the country ranks among the economies with the highest share of remittances in GDP. More than that, this external economic flow, unlike FDI, external trade and others, seems to have a significant impact on economic growth.

One of the most relevant mean by which migration is supposed to have a great impact on the national economy are remittances.

Remittances, as the literature clearly shows, generally have a multilateral impact on key aspects of development. Although the migration process in Republic Moldova has been studied, much less attention has been paid to remittances as a complex phenomenon.

## Description of the problem

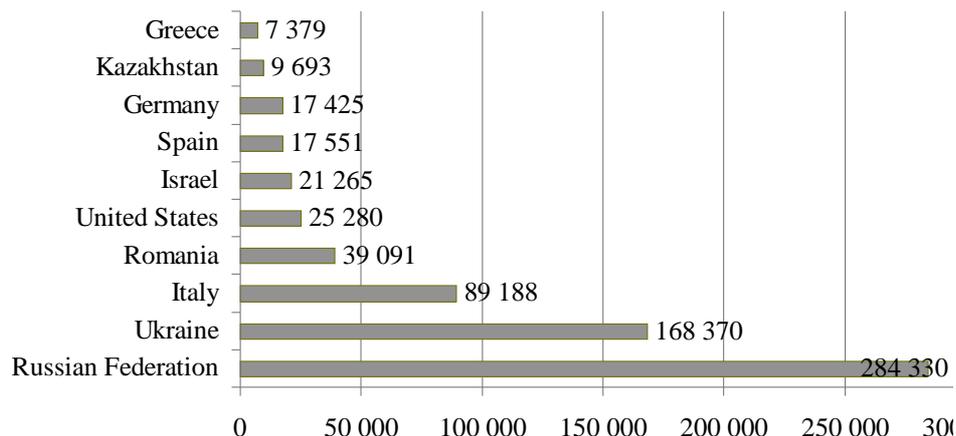
Within the present work have been made an attempt to capture the positive and negative spillovers migrants' remittances may have on country's socio-economic development.

Even from the soviet period, the Republic of Moldova was involved in migration flows within the Soviet Union, witnessing various forms of labor migration. The mobility of Moldovan people within the USSR was mainly determined by people searching for higher revenues in other regions of the Soviet Union, such as the Far East, Siberia and the Far North. At the same time, inhabitants of other soviet republics used to come to Moldova to participate in the country's industrialization process. Both volunteer and non-volunteer migration strategies were used for this purpose (Zwager, Gressmann, Sintov, 2010).

The increased complexity of the customs control procedure, as a result of the visa regime introduction, in tandem with the balanced prices in the former communist states, decreased the profitability of commercial migration for individual migrants. As a consequence, the commercial migration was replaced gradually by the labor migration after 2000 (Mosneaga, 2009), boosted by the low standards of living and lack of means of subsistence determined by extremely small salaries, due to a low demand.

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**Figure 1. Emigrants stock in top 10 countries of destination, 2010**

Source: World Bank, Bilateral Migration and Remittances Database, disposable at: <http://www.worldbank.org/html/extdr/thematic.htm>

The connection between migration and the social-economic state of migrants on their health status shows that at the study moment the migrants group had the highest employment rate on the labor market, with 77.3% of them being employed fully or partially (IOM Report, 2010). Another differential aspect is that most migrants identified themselves as employed abroad (61.9%). In comparison with them, the employment rate of the family members that do not receive remittances was 43.6%, with the lowest employment rate among the family members that receive remittances - 38.5%. In terms of age structure, the migrants group is much younger, two thirds of them being under the age of 40 years. The average age is 36 years in case of migrants, 43 years in case of family members that receive remittances, and 47 years in the third group.

The same study shows that 6.5% of those who avoided seeing a doctor abroad stated that they were afraid to be seen by someone going to the doctor, most probably by representatives of authorities. The migrants, especially the illegal ones, are afraid that the employer will not employ them or will dismiss them when they hear about their health problems. Money is another aspect. The problem is not only the fees for medical services, but also the fact that one or even several working days might be lost when seeking medical care - a loss that a migrant cannot afford, as his/her main purpose is to earn money.

### Methodology and data sources

The main sources in this context are: the Balance of Payments elaborated by the National Bank of Moldova that is considered the most relevant source to make an estimation of remittances' volume; the Household Budget Survey carried out by the National Bureau of Statistics (NBS) that presents data on remittances share on resident households income.

In spite of the fact that remittances inflows are very difficult to be estimated, due to the complexity of the phenomena, some data sources exists that can be relevant in analyzing them. The main source in this context is the Balance of Payments that is used most often to account the value of remittances, it being considered as well the most reliable. The BOP is elaborated by the National Bank of Moldova and published quarterly and annually online<sup>4</sup>.

In the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual (BPM 6) and International Transactions in Remittances: Guide for compilers and users (IMF, 2009), IMF proposes new recommendations on estimating personal remittances. However, taking into account that NBM is still elaborating the Balance of Payments based on the fifth edition (except the SDR allocations item that is recorded according the Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual) (NBM, 2010) recommendations, remittances in Republic of Moldova are calculated taking into consideration the following three components of the BOP:

<sup>4</sup> [http://www.bnm.md/en/balance\\_of\\_payments](http://www.bnm.md/en/balance_of_payments)

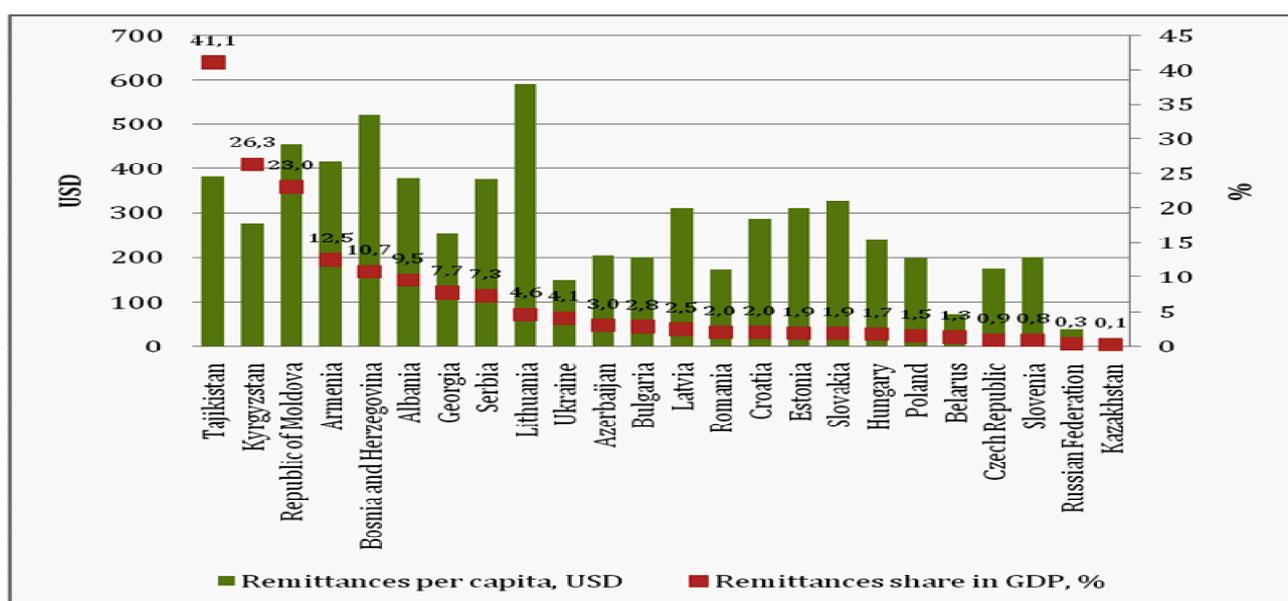
- Personal transfers (component of the current account). These transfers are one direction transfers and consist of current transfers made by migrants who are employed in new economies and considered residents there;
- Compensation of employees (component of the current account). The chapter includes the income of border, seasonal, and other short-term workers who work in an economy where they are not resident as well as the income of resident workers who are employed by a nonresident entity in the home country;
- Migrant transfers (component of the capital account). It refers to capital transfers of financial assets of migrants while moving from one country to another and intending to stay more than a year (Reinke, 2007).

Remittances are defined as “household income from foreign economies arising mainly from the temporary or permanent movement of people to those economies.” (IMF, 2009) A similar definition can be found at International Organization for Migration (IOM) that associate migrant remittances to monetary transfers that a migrant makes to the country of origin or in other words, financial flows associated with migration. Considering the above definitions and the existing methodology for evaluating remittances at the national level, some shortcomings can be identified:

1. First of all, the remittances inflows counted according the BOP accounts reflect only the official transactions, while a great part of remittances’ inflows are supposed to take place through informal channels;
2. Into the compensation of employees category are included as well wages received by residents working in nonresident organizations in the home country, embassies etc., that cannot effectively be qualified as migrants. As well, the total amount of employees compensation is recorded within this subcategory, it may be not remitted entirely in the home country;
3. Personal transfers include all individual to individual transfers between residents and nonresidents, so they are not limited to migrants’ transfers that can overestimate the volume of remittances.

### Results obtained

Another link between migration, training system and education and labor market outlines that there are relations of cooperation between the international and local organizations, aiming at providing theoretical and technical assistance to the returned emigrants with the view of developing their entrepreneurial skills. As a rule, the returned migrants do not have practical knowledge to start up a business and need training in accounting, management, marketing and legal issues.

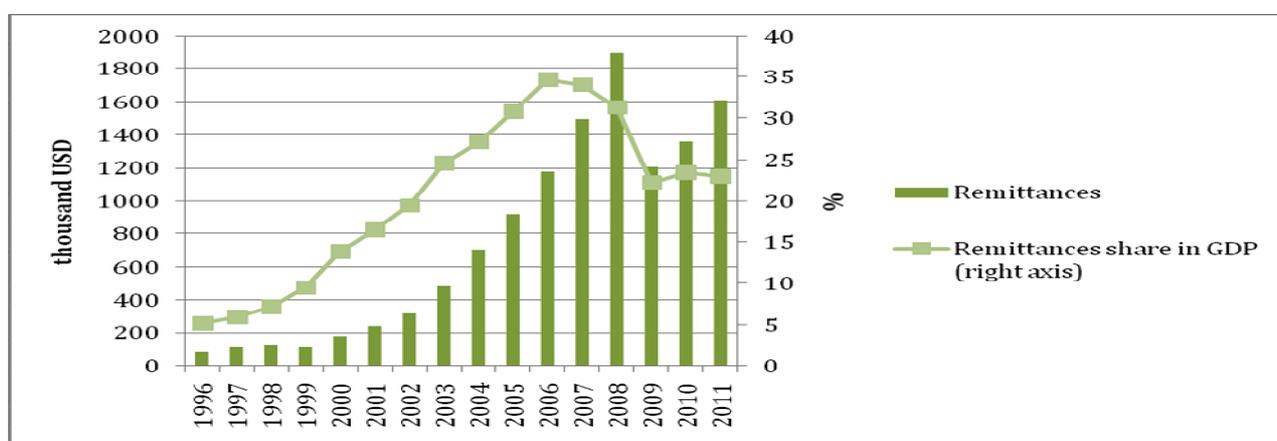


**Figure 2. Comparative aspects regarding the remittances’ share in GDP and their per capita value in the countries from Eastern Europe and Central Asia**

Source: UNCTADSTAT, <http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx>

Omar Mahmoud et al. (2011) analyze the impact of emigration on the electoral results in the Republic of Moldova. The authors test the hypothesis that the emigration to West decreases the number of supporters of the Communist Party. For this purpose, authors analyze the correlation between the voting results at the parliamentary elections of 2009 and the emigration rates (separating the emigrations to the East from those to the West) at the community level. The analysis results show a significant negative statistical correlation between the votes for the Communist Party and the number of emigrants to the West: the communes with more emigrants to the West have voted to a lesser extent for the Communist Party. This analysis suggests that the countries of destination could accelerate the rate of political changes abroad through specific migration policies (Berlinschi and Clipa, 2011).

Republic of Moldova ranked among the leader economies in the world as concerns the remittances share in GDP and their per capita value in 2011. Also should be mentioned that since the second half of the last decade Moldova has witnessed a noticeable decrease on its remittances share in GDP. In the first half of the last decade remittances increased at a remarkable annual average of 42.5%. Since 2004, excepting the 2009 crisis year when a drop of 36% have been recorded, they have continued to increase, but at slower rate, along with a moderation or even decrease of migrants outflow in some years.



**Figure 3. Trend of remittances inflow to the Republic of Moldova**

Source: National Bank of Moldova and National Bureau of Statistics of Republic of Moldova

Remittances represented in the last years an important inflow of foreign currency in the economy – their value being significantly higher than FDI and official development assistance inflows, and according to 2011 data constituting 72.5% of exports value and almost 51% of the FDI stock. More than that, due to their relative rigidity to the external shocks, remittances seems to alleviate the negative evolutions of other flows of foreign currency that are more volatile.

Among studies dedicated to relationship between remittances and economic growth there are no common point of view. The main debates about the impact of remittances on growth refer to the use of remittances for productive investment that would contribute to long-run development. But, impact on economy should be viewed not only from the point of view of remittances-investment relationship. As pointed out remittances can affect positive economy in some of following ways (Glytsos, 2005):

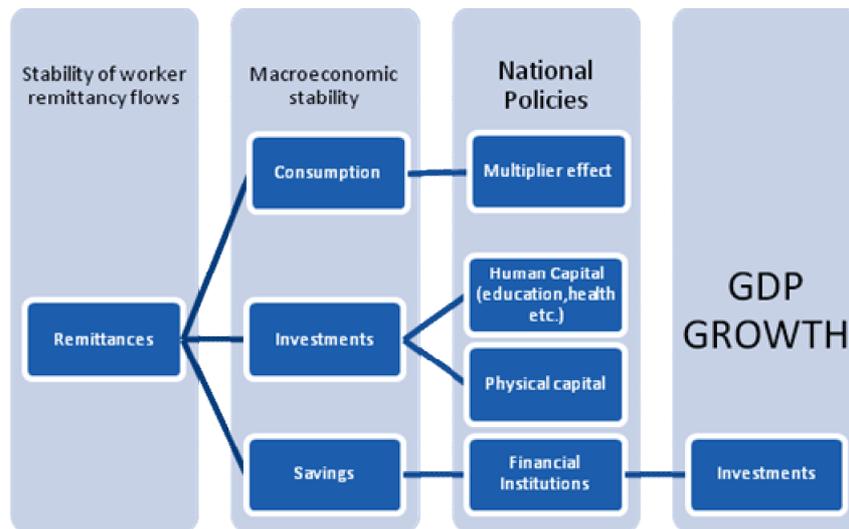
- management of remittances (e.g. by banks);
- extension of investment credit allowed by the increase in the liquidity of banks from remittance deposits;
- investment in human capital in the form of spending on certain consumption items (e.g. education, health);
- purchase of more investment goods from abroad, made possible by remittances;

And to this we add some more:

- smoothing income inequality in short term;
- diversification;

- improving financial intermediation and improving other institutions;
- growth of investment as a result of the multiplier effects of spending on consumption.

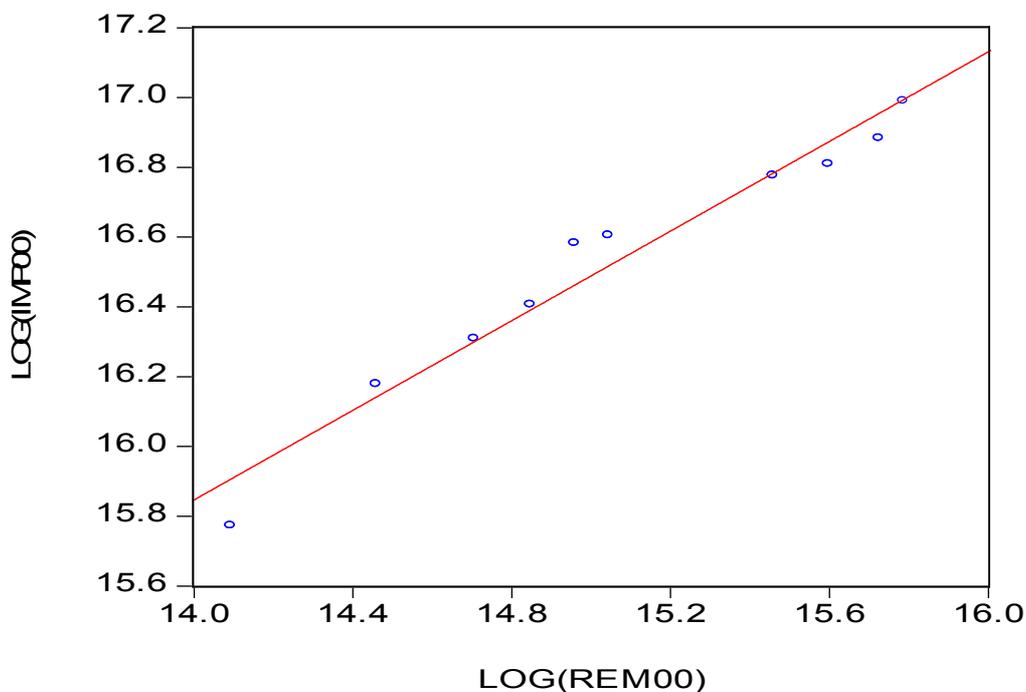
Summarizing we can make the following chart:



**Figure 4. Influence of remittances on GDP**

Source: author's elaboration (Stratan and Chistruga, 2010)

Summarizing, for Moldova, remittances influence economic activity through labor market by reducing labor supply and as consequence increasing wages. Remittances influence disposable income directly, influencing savings, investments (including in education and other social services) and consumption. This in turn influences tax collections and fosters internal demand. Moldova does not have the productive capacity to meet the increasing aggregate demand. The huge increase in imports is driven mainly by the boom of the aggregate consumption. An analysis of the situation reveals that workers' remittances are financing a large part of the trade deficit (Figure 5).



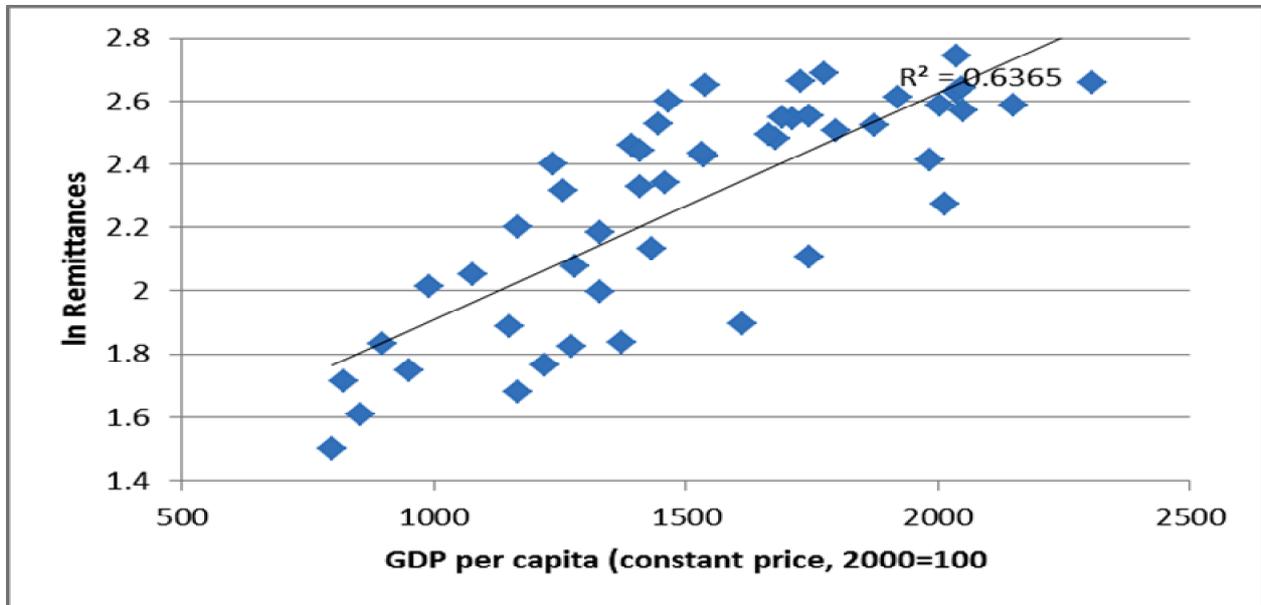
**Figure 5. Correlation between imports and remittances in the Republic of Moldova**

Source: author's calculations according to National Bureau of Statistics data

However, it is important to note, that the majority of the findings related to Moldova are based on CGE modelling, which has a serious drawback, it a static model and the dynamics are hard to

capture. Especially, if we are looking to see whether remittances influence or not economic growth and investments.

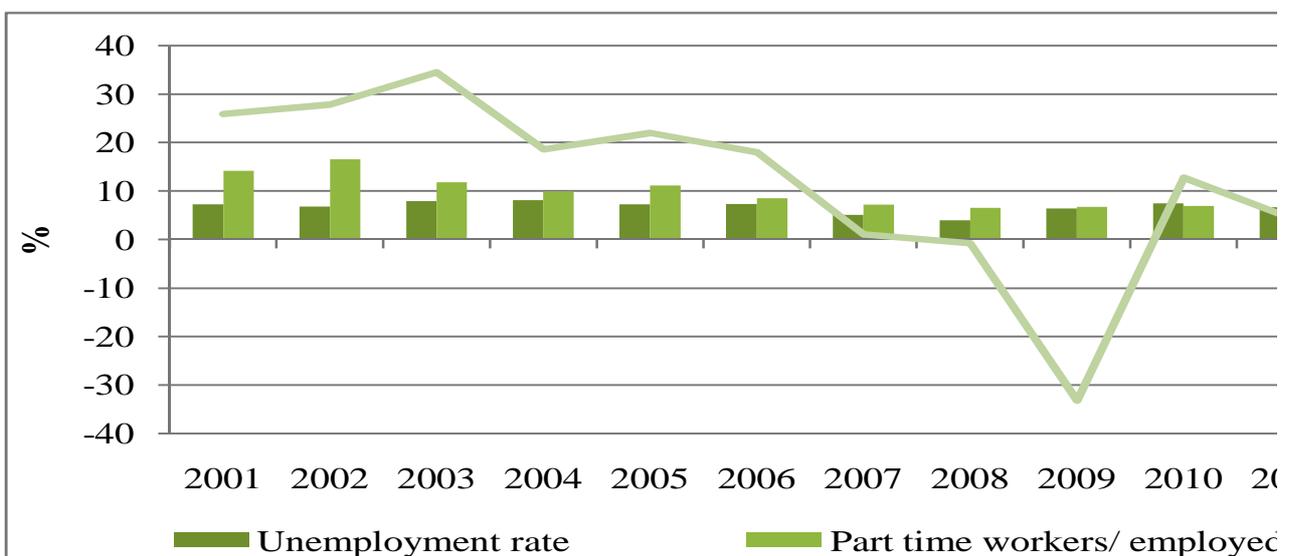
First let us see if there is any correlation between growth and remittances (aggregated from Balance of Payments according to IMF methodology). The results represented in the figure 6 are in line with our previous arguments and shows a clear correlation between remittances and GDP in Moldova. Pearson correlation coefficient is 0.76. Note, that remittances influence disposable income and afterwards consumption and through aggregate expenditures, GDP.



**Figure 6. Correlation between remittances as share of GDP and GDP per capita, Q1 2000 - Q1 2012**

Source: author's calculations based on NBM and NBS data

In case of Republic of Moldova we analyze the impact of remittances on labor market from 2 perspectives: influence on unemployment rate and on part-time employment. The members of households who receive remittances and decide to not become a full-time employee can select between part-time job or unemployed status, thus affecting labor market.



**Figure 7 – Remittances and employment indicators**

Source: elaborated by author using data from <http://www.statistica.md/index.php?l=en>

The growth rate of remittances has a very volatile evolution. During 2001-2008 periods it oscillates between 34.5% and -33.2%. There is no stable evolution of unemployment rate. It decreased till the crises of 2009 year, taking minimal value of 4% in 2008. After 2008 was an increase in employment rate, it varies between 6.4-7.4%. The share of part-time workers in employed

population has a more stable evolution, being characterized by downward trend, between 2001 and 2011 it decrease from 14.2% in 2001 to 7.3% in 2011.

In relationship between remittance and inflation it is important to know which way the direction of causality is running.

In order to analyze the presence of mutual causality between remittances and price level was used a VAR model. Two variables were included in the model: quarterly remittances and quarterly CPI, for the period of Q1 2000 - Q1 2012 (base period is Q1 2000). Time series which represent evolution of remittances and CPI was seasonally adjusted using TRAMO SEATS techniques. Further logarithmic data was differentiated, and as a result time series became stationary.

According to VAR model, 1% shock in inflation leads to a rise of remittances in second quarter by 1.4%, after that effect fade out. On the other hand the influence of remittances on inflation is marginal - the maximum effect of shock in remittances by one per cent has an impact on the prices in second quarter, only by 0.015%.

**Table 1.**

**The response of inflation and remittances to shocks**

	Q1	Q2	Q3	Q4	Q5	Q6	Q7
<b>Response of inflation to 1% shock of remittances growth, %</b>	0	0.015	0	0	0	0	0
<b>Response of remittances to 1% shock of inflation growth, %</b>	0	1.44	-0.08	0.12	-0.01	0.01	0

Source: elaborated by author

The explanation of low statistical influence of remittances on price level can be explained by some reasons. There are small share of non-tradable goods in composition of CPI and their evolution capture only small influence from transmission mechanism through increasing consumption of non-tradable goods.

There are opinions that monetary factors in the Republic of Moldova have a small impact on inflation. IEFS (2011) estimated on the base of VAR model that 1% increase in monetary aggregate M0 has a maximum effect in 3 months generating an inflation of 0.06%. In the same context should be mentioned that remittances influence inflation from demand side, while in Republic of Moldova the price level is more sensitive to supply or structural factors. Important influences on prices have variables like: low productivity in the sectors of national economy, inefficient management of state enterprises or lack of competition.

Import prices, also have a great impact on inflation. There was elaborated a regression with inflation, expressed as differentiated logarithm of CPI, as independent variable and unit value of import and trend as explicative variables. Data about CPI, remittances and unit value of import was taken from National Bureau of Statistics. All variables were expressed in prices of 2000 years. Regression shows that changes in the value of imported goods by 1% contribute to a 0.47% increase of price level.

The evolution of some non-tradable sectors shows that Moldavian economy had symptoms of Dutch disease. We assume that a part of increased consumption, caused by larger inflow of remittances was directed to non-tradable and as result in 2006-2008 (period with higher share of remittances in GDP) some non-tradable sectors had higher growth than tradable.

**Table 2**

**Growth rate of Moldavian economic sectors, %**

SECTORS		Average growth rate 2003-2005	Average growth rate 2006-2008	Average growth rate 2009-2011
TRADABLE	Agriculture	3,6	1,1	1
	Industry	9	-0,8	-1,3
NON-TRADABLE	Constructions	15,4	13,3	-3,1
	Real estate	8,3	13,7	3,6

Source: elaborated by author using data from <http://www.statistica.md/category.php?l=ro&idc=191&>

Other effect of larger inflow of remittances is the appreciation of exchange rate, which deteriorates the current account (imports became cheaper and more attractive) and affects negatively the competitiveness of exports (by making national products more expensive in relative prices). But in Republic of Moldova huge share of negative net export in GDP determines depreciation of national currency and compensate appreciation pressure from remittances inflow. In 2003-2010 NEER had an insignificant appreciation by 0,3%, and REER had a small strengthening by 3%.

## Conclusions

In case of Moldova the analysis of relationship between growth, investments and remittances, proved that the growth model based on remittances does not yield in the long-run. Moreover, it argues that the relation between remittances and growth is ambiguous in Moldova. Economic growth proved to be not sustainable in medium to long term, it is necessary to identify and develop other engines of economic growth. Although, the influence of remittances in Moldova to other sectors, especially in reducing the poverty may have a positive result, the influence on economic growth, in a straightforward relationship, is proved to be unclear. A more positive result is in regards to investments, but lack of a well performing financial sector, does not allow for Moldovan economy to benefit from remittances.

In this context, in order to benefit from remittances and encourage a sustainable GDP growths there are some pylons/conditions to be met. First, it is important to assure the stability, at least for medium-term period, of these flows, because of their importance to the disposable income and poverty. Secondly, macroeconomic stability is another goal of the policy makers. In addition, finally, sound national policies that encourage the development of quality factors of economic growth (factors that are shifting the potential GDP). Speaking in the terms of economic growth theory, remittances may appear to be similar to FDI (other private international capital flows) and/or influence capital accumulation, labor force growth, TFP. In any case, in order to ensure sustainable growth, Republic of Moldova is obliged to perform reforms that improve business climate.

Other direction of action for policy makers is creating the appropriate conditions for remittances' transfers, including lowering the costs of international transactions via banking system. It could produce multidirectional effects: increasing the money transfers through formal channels and thus improving statistics data on remittances; increasing the disposable income of households that receive money from abroad.

Summarising, main constraints in using remittances in a more productive way are associated with little transfer sums, limited access to the financial market, market failures, too little knowledge about migrant's needs and investment climate.

For Moldova we recommend: stimulating collective investment programs, launching Hometown Associations, fortifying the influence of Moldavian Diaspora, the implementation of specialized international financial products, diversification of financial products offered to migrants and their families, launching programs that stimulate SME's development.

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