

# THE SUSTAINABLE IMPORTANCE OF REMITTANCES AND THEIR ROLE IN ECONOMIC DEVELOPMENT. THE CASE OF ROMANIA

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**A**bstract. *The increasing amplitude of migrants and remittances in the last years, especially toward the developing countries has positive effects on development in the countries of origin. Empiric research outline the potentially significant effect of remittances on the economy of a country in various ways, as a source of external financing, contributing to the growth and economic development, to the increase of the national income and stimulation of consumption, and at the same time, important in financing households, contributing to poverty decrease. These challenges are a priority for Romania, an emigration country that receives every year an important volume of remittances, but, at present with a preponderant role in the consumption.*

**Keywords:** *international migration, remittances, economic development*

**JEL Classification:** *J0; J6; R23; O16*

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## **1. The sustained dynamics of remittances during 2002-2007 worldwide and in Europe**

The international migration has been for a long time “the Cinderella” of the third wave of the contemporary globalization process, dominated by the international commercial and capital flows. After the Second World War, the rate of growth of the international migration was constant, still the phenomenon was not the most dynamic one. At present, only 3% of the world population is migrating population, the rest of 97% not being involved in this process. According to the World Bank estimates, economic migration represents 93% of the global stock of immigrants, the trend being an accelerated one during the last decade, especially between developed and the developing worlds (Ratha, 2007). This is influenced by such factors as an increasing interdependence among countries, easier availability of means of transport (including its cost reduction), the great discrepancies between the incomes in various countries or demographic increase. The amplitude, dimension, economic, social and political effects, as well as the complexity and difficulties in managing the increased stock of immigrants in general, and foreign labour especially, have drawn the attention of the political decision makers, of the international organizations, union leaders, associations of employers, civil society as well as several analysts. All of them have properly become preoccupied by the problem of this phenomenon of international human mobility, trying to identify solutions to balance its positive and negative externalities, including the optimisation of economic and social advantages of migration in the receiving and home countries.

The literature in the field is concerned with the important role of migration and labour in promoting the process of economic development of the receiving countries, home or transited countries, both on macro and micro-economic level and on the migrants and population in general, the findings being, however, rather controversial. The impact studies of international labour mobility on development (especially for the destination countries) point out results with a high degree of uncertainty (especially concerning the whole countries) (Faini, 2006; Martin, 2006). The results of the studies on specific cases, are sometimes quite opposite, outlining effects considered contradictory, as the result of a complex equation of costs and advantages of labour mobility. The obvious effects are very different, depending on the country, on the time interval considered (short-term, long-term), by the characteristics of the immigrant and the local conditions (work, access to education, finance, and various other services, etc.), by the policies of the home countries and the receiving countries, including also those of the regional or international institutions. Therefore, the studies insist on the

potentially incentive role of migration on the economic development of the receiving, transited, and home countries of the immigrants (Dayton- Johnson, Katseli, 2006; Dayton-Johnson, Katseli, 2007). “Remittances provide a tangible and non-controversial link between migration and development” (Ratha, 2007).

Empiric research outlines the potentially significant effect of remittances on the economy of a country in various ways, as a source of external financing, contributing to the growth and economic development, to the increase of the national income and stimulation of consumption, and at the same time, important in financing households, contributing to poverty decrease. Among the positive effects of migration on development in the country of origin, the most important and often mentioned refer to the improvement of welfare of the home communities due to the money transfer from the immigrants, the increase of investments, of commercial exchanges and know-how transfer, etc. Even though remittances may directly contribute to the population welfare, but as they could be also non-institutional flows or, moreover, for lack of any data concerning the informal remittances, their efficient capitalisation aiming at development is still difficult to assess.

**Table 1**

**Remittance flows to developing countries, 2002-2007  
(in US\$ billion)**

INFLOWS	2002	2003	2004	2005	2006	2007	Change 2006- 2007	Change 2002- 2007
World	170	206	234	266	303	337	11%	99%
High income OECD	53	61	67	68	72	81	12%	54%
High income non- OECD	1	2	3	4	4	5	7%	304%
Developing countries	116	143	163	194	226	251	11%	118%
Middle-income countries	100	127	143	169	197	218	11%	118%
Europe and Central Asia	14	16	23	32	39	47	22%	246%

**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaksmi, Z. Xu, *Tendances des envois de fonds en 2007, Migration and Remittances Factbook*, World Bank 2007-200. 8

The immigrant remittances are often considered as the most obvious connection with the process of economic development, their volume increasing significantly

during the last five years. The official grand total of worldwide remittances was, in 2007, \$ 318 billion, 11% more than in 2006 and 99% in comparison with 2002 (\$ 170 billion). The data reviewed by the World Bank for 2007 concerning remittances reveal that \$ 251 billion were sent to the developing countries, increasing by 11% in comparison with 2006 (Ratha, Mohapatra, Vijayalaksmi, 2007).

Various factors have contributed to the doubling of remittances to the developing countries from 2002 until 2007: from a better estimation and statistical evaluation, to the delivery cost reductions, or the increase of the immigrants' incomes, as well as the number of those coming from poorer countries. All the above mentioned led to the conclusion that since 2000, the developing countries have received 70-75% of the remittance inflows. Basically, during the last decade they represented a second important source of foreign funding, along with foreign direct investment (FDI), but becoming more important than official development assistance (ODA). After 2000, they have gradually increased over 15% annually, revealing themselves even counter-cyclical and at the same time more regular foreign currency inflows than FDI.

**Table 2**

**Net capital flows to developing countries  
(in US\$ Billions)**

	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007e
Remittances	31	57	62	71	73	77	84	95	116	143	163	194	226	251
FDI	25	105	128	169	170	178	166	173	161	162	226	289	368	460
Private Debt and Portfolio Equity	33	122	144	122	23	18	19	(17)	9	109	196	292	393	543
ODA	54	59	56	49	52	53	54	52	58	69	79	107	104	104

2007: estimations.

**Source:** World Bank Migration and Remittances Factbook, 2007-2008.

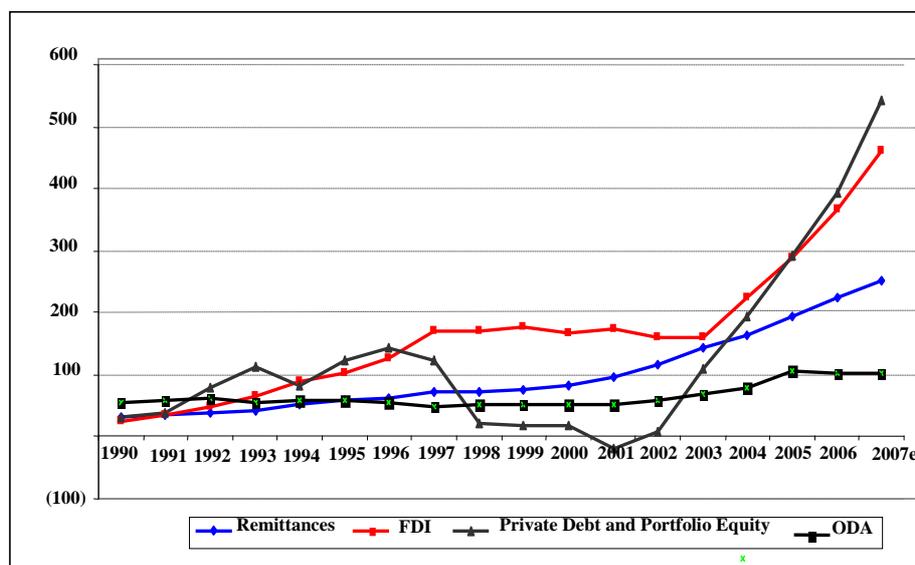
The following graph outlines the top levels of the 2000's of these remittances from abroad of the immigrants. The remittances from foreign labour are, in reality, much higher if the informal transfers would be considered, the true dimension of the remittance flow could be much higher, maybe over 50% (World Bank, 2006).

In spite of these circumstances, the grand total of remittances was very close to the volume of foreign direct investments; in some developing countries they were

even higher. Moreover, in the short run, it was estimated that, for the national economy and for the people involved, temporary labour “export” is more efficient (World Migration, 2003).

**Graph 1**

**Remittances and Capital Flows to Developing Countries  
(in US\$ Billions)**



**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaksmi, Z. Xu, „Tendances des envois de fonds en 2007”, Migration and Remittances Factbook, World Bank 2007-2008

Every year, the European Union attracts an important volume of remittances. In 2007, the volume of remittances in the EU-27 countries was \$ 78.35 billion, representing about 23.3% of the world volume, out of which the input in the EU-15 countries was \$ 60.51 billion (77.23% of the Community total and about 18% of world total) and in NMS-12 of \$ 17.84 billion (22.77% of the total EU inflows and 5.3% of world inflows).

Table 3

## Remittances, foreign direct investment and exports in the EU27

Country	GDP/ cap \$, 2007	Remit- tance 2007, \$ mil.	Remit/ cap \$	% remit. in GDP	FDI, 2006 \$ mil	Export 2006, \$ mil.	% in ex- port
Austria	45,181	<b>3,492</b>	421.89	0.93	248	162,204	2.15
Belgium	42,557	7,220	677.30	1.59	71,997	432,327	1.67
Bulgaria	5,186	<b>1,854</b>	242.76	4.68	5,172	18,450	10.05
Cyprus	27,327	172	220.51	0.81	1,492	1,394	12.34
Czech Rep.	17,069	1,300	126.58	0.74	5,957	122,414	1.06
Denmark	57,261	869	159.54	0.28	7,032	103,307	0.84
Estonia	15,851	442	329.36	2.08	1,674	10,920	4.05
Finland	46,602	698	132.75	0.28	3,706	89,656	7.78
France	41,511	12,500	202.67	0.49	81,076	552,193	2.26
Germany	40,415	7,000	85.16	0.21	42,870	1326,521	0.53
Greece	28,273	1,543	138.66	0.49	5,363	23,574	6.55
Hungary	13,762	363	36.10	0.26	6,098	94,160	3.85
Ireland	59,924	532	123.29	0.21	12,811	121,068	0.44
Italy	35,872	2,626	44.76	0.12	39,159	491,532	0.53
Latvia	11,985	500	219.20	1.83	1,634	8,248	6.06
Lithuania	11,354	650	192.48	1.70	1,812	17,173	3.78
Luxembourg	104,673	1,480	3089.77	2.95	29,309	22,573	6.56
Malta	18,088	34	63.41	0.46	1,757	2,919	1.16
Netherlands	46,261	2,600	156.47	0.34	4,371	550,636	4.72
Poland	11,041	5000	131.354	1.19	13,922	137,609	3.63
Portugal	21,019	3,750	352.97	1.68	7,371	50,994	7.35
<b>Romania</b>	<b>7,697</b>	<b>6,800</b>	<b>315.34</b>	<b>4.10</b>	<b>11,394</b>	<b>40,257</b>	<b>16.89</b>
Slovak Rep.	13,857	424	78.36	0.56	4,165	58,082	0.73
Slovenia	22,933	300	149.25	0.65	363	30,004	9.99
Spain	32,067	8,863	197.51	0.62	20,016	241,962	3.66
Sweden	49,655	336	36.64	0.07	27,231	168,223	1.99
United Kingdom	45,575	7,000	115.06	0.25	139,543	435,615	1.61

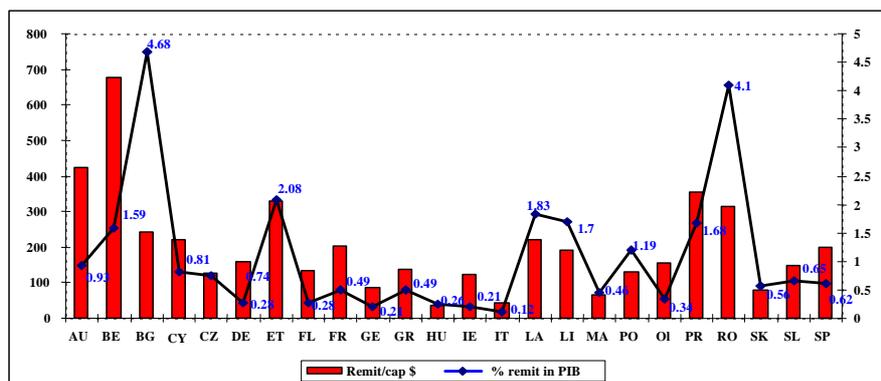
Source: D. Ratha, S. Mohapatra, K.M.Vijayalaxmi, Z. Xu, „*Tendances des envois de fonds en 2007*”, *Migration and Remittances Factbook*, World Bank 2007-2008; International Monetary Found, *World Economic Outlook Database for April 2008*, [www.imf.org](http://www.imf.org); UNCTAD, *WIR 2007*; WTO, *Yearbook of statistics*, 2007-2008

Some of the EU-27 countries are receiving recipients of some important remittance inflows, including both old Member States (UK, Spain, Germany, Portugal), as well as many new Member States (Poland, Romania). As a rule, the

remittances come from other Member States and not from non-EU countries. Over 64% of the total remittances sent in 2006 by the EU countries are intra-EU flows. Romania and Poland have been sent about 80% of the total remittances from EU countries (Eurostat, 2007). If in EU-27 as a whole, remittance represented in 2007, on average, 0.46% of GDP, from this point of view there are big differences between Romania and Bulgaria and the rest of the Member States. Consequently, if for EU-15, the percentage of remittances of GDP was only 0.38% and for NMS 10 – 0.15%, in Romania and Bulgaria appreciated at over 4.20% of the GDP of these two countries (in 2007), proving the potential role in their economic development.

**Graph 2**

**Remittances per capita and remittances per GDP in EU-27 countries, 2007**



**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaksmi, Z. Xu, „Tendances des envois de fonds en 2007”, *Migration and Remittances Factbook*, World Bank 2007-2008; International Monetary Fund, *World Economic Outlook Database for April 2008*, [www.imf.org](http://www.imf.org).

Considering the correlation between GDP per capita and remittances, the resulting determination coefficient  $R^2$  is very low (0.0016), which indicates a very weak correlation in general for the EU countries. The four squares reflect four country groups as follows:

1. Countries with high GDP per capita and low remittances: LU, IE, NL, AU, DK, SW, FI (Nordic countries);
2. Countries with high GDP per capita and high remittances: IT, GE, BE, UK, SP, FR (Central-European countries);



as a country of transit to other EU country. The most recent expansion of the EU, on January 1 2007, has brought about important changes concerning the access to Community markets including labour market. The following table shows the present emigration of labour force out of Romania towards former and new Member States, before and after joining the EU. Statistics show that the number of immigrant workers who preceded our joining the EU is over the movement after the process. Except for Spain and Italy, the number of Romanian workers is not significant on the markets of the other EU Member States. However, in 2007, on the whole, their percentage in the number of total residents within the working age population in EU-27 was 0.4%. Spain and Italy are by far the present interesting destinations for Romanian citizens, in 2007 862.000 people within the working age population being settled in the two countries (81.9%). In comparison with 2005 the growth was more significant during the last two years, their number being almost double in 2006 and 2007, and this dynamics being more obvious once joining the EU was unquestionable.

**Table 4**

**Romanian citizens of working age and active citizens residing in EU-27 countries, (thousands)**

	Romanian citizens working age residents in EU-27 countries			Active citizens working age residents in EU27 countries		
	2005	2006	2007			
EU-27 (thousands)	602	880	1052	403	702	845
% from total residents	0.2%	0.3%	0.3	0.2%	0.3%	0.4%
Spain	336	445	556	285	308	463
Italy	--	273	306	..	214	241
Germany	63	46	64	43	31	46
Greece	16	16	20	14	13	16
France	--	23	24		17	..
United Kingdom	16	12	17	11	11	15
Hungary	22	21	21	15	14	15
Austria	18	17	14	..	..	
Portugal	7	12	12		..	7
Belgium	..	5	10	2	2	..
Cyprus	2	2	2	..	..	..
Ireland	5	..		..	..	..

.. not available or not significant.

**Source:** Eurostat Labour Force Survey, spring results, November 2007.

Out of the 1,052,000 Romanians within the working age population residing in the EU27 countries in 2007, graphs indicate a percentage of almost 80% of the active ones on the labour markets of the host countries, 1,001,000 people in 2007, twice as much as in 2005. The percentage of 0.4 of the active resident population in UE-27 is constant, with significant variations in each country, as there are some preferred destinations in South-East Europe. The most important inflow of Romanian immigrants was in 2006 and not in 2007, following the trend which has also been noticed in the case of other countries in the pre and post enlargement period. Basically, January 1<sup>st</sup>, 2007 was not a landmark for the Romanian immigrants on the European labour market even if the flow has increased towards certain countries that granted civil rights by legalising foreign labour. This is the case of Spain and, partly, of Italy. The increased number of Romanian workers inside the Mediterranean area may be explained by their involvement in seasonal labour, competing with North-African workers. Basically, labour force mobility within the Community area is still limited among the EU countries. Consequently, between 2000-2005 the average labour mobility rate in the intra-Community territory was 1% per year, much lower than the average of the Australian territories (over 3%) or the USA (over 2%) (Commission Européenne, IZA, 2008).

Remittance inflows to Romania from workers abroad have increased during the last three or four years. According to some statistics, about 50% of the Romanian immigrants send money every 2-3 months (Houle, Schellenberg, 2008), the variation depending on the home country and it is more than obvious.

In 2007 about 68% of remittances have come from Romanians working in Italy and Spain, countries where the greatest stock of Romanian labour is to be found. However, the greatest corridors in 2006 and 2007 where: **1) from Italy to Romania** (1.6 billion, 2.1 billion euros, respectively), **2) from Spain to United Kingdom** (1.17 billion in 2005) and **3) from Spain to Romania** (1.0 billion, 1.3 billion euros, respectively) (Eurostat, 2007, Lazea, 2008). Only during 2005-2007 the remittance inflows in Romania were estimated at \$ 18,240 million while the FDI inflows were \$ 27,711 million, thus, during the last three years remittances represented between 4-5.5% of the GDP, and FDI between 5.9-9.3% , the present trend being a faster growth of remittances than the FDI flows.

Table 5

## Remittance inflows in Romania, by country of origin

Remittance flows		2000	2001	2002	2003	2004	2005	2006	2007
World Bank Data	Total (US\$ million)	96	116	143	124	132	4,733	6,707	6,800
BNR Data	Total (million €)						3,033	4,358	4,987
by country of origin	Italy						1174	1599	2092
	Spain						656	1019	1299
	USA						294	545	176
	Germany						216	137	226
	United Kingdom						126	216	267
	France						78	102	139
	Greece						63	95	140
	Portugal						57	74	74
	Ireland						48	73	81
	Austria						29	38	94
	Switzerland						27	56	29
	Netherlands						25	36	50
	Israel						24	26	n.a.
	Canada						23	47	n.a.
	Belgium						23	41	72
Other							170	253	268

**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaxmi, Z. Xu, „Tendances des envois de fonds en 2007”, *Migration and Remittances Factbook*, World Bank 2007-2008; V. Lazea, *Impact of Remittances on Romania a Balance of Payments*, National Bank of Romania, 2008.

Table 6

## The volume and the relevance of remittance inflows and foreign direct investments in Romania during 2005-2007

Year	GDP \$ billion	FDI \$ billion	% FDI in GDP	Remit. \$ billion	% remit. in GDP
2005	98.861	6.483	6.56	4.733	4.79
2006	122.653	11.394	9.29	6.707	5.47
2007	165.983	9.834	5.93	6.800	4.10

**Source:** World Bank (2008) and own calculations.

Remittance (calculated by the foreign workers' incomes and the transfers from abroad of the employees, in the balance of payments) has constantly increased recently – from \$ 2.06 billion in 2003 and \$ 3.21 billion in 2004 (according to the Romanian National Bank) to \$ 6.8 billion last year (2007). Compared to the amount received in 2005, in 2007 remittance inflows to Romania were also significantly higher (over 43.7%). According to the data in Table 5 one can estimate that the percentage of money transfer in overall export is higher than in most EU countries, the closer values being recorded in Poland.

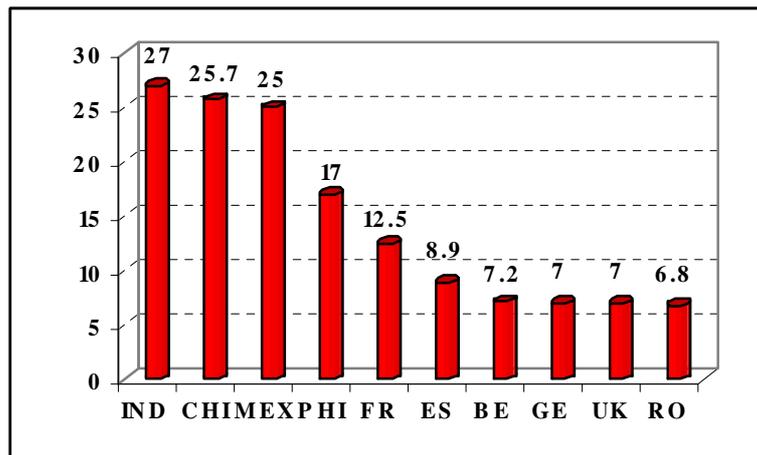
*Worldwide remittance flows* from Romania amounted in 2006 to \$ 44 million, representing 0.05% of the GDP (\$ 6 million were remittances of the emigrant workers, \$ 42 million compensations for the foreign employees and \$ 8 million remittances of the immigrants in the long-run).

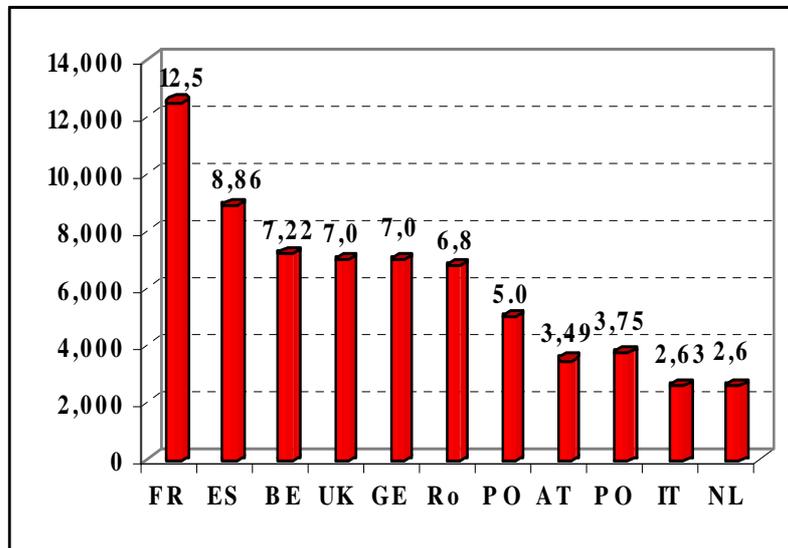
In 2007 Romania was the 10<sup>th</sup> most important remittance destination globally, its value amounts at about \$6.8 billion. Among the EU-27 countries Romania got about 8.7% and, according to the data from the World Bank, it was the first among the new Member States (Romania received 38.12% of inflows in NMS12). Remittance inflows to Romania originate at present in Italy, Spain and the USA (Eurostat, 2007).

Cross-country comparisons reveal that Romania is the highest recipient of remittances in EU 27 New Member States, whether measured relative to GDP or per capita.

**Graph 4**

**Remittance inflows: world top and EU-27 top  
(\$ billion)**





**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaxmi, Z. Xu, „Tendances des envois de fonds en 2007”, *Migration and Remittances Factbook*, World Bank

According to the definition included in BPM6, *personal remittances* include *worker's remittances (WoR)*, *compensation of employees (CoE)* and *migrants' transfer* (UN, 2006). The first two categories appear on the current account of the balance of payments, while the third (typically lower) is included in the capital account.

Viewed by the main components, during 2006 *remittance inflows* to Romania were \$ 5.506 billion (representing 82% of total remittances) and the *net compensations* for the incomes of the people who are not immigrants in the long run (according to UN definition, temporary immigrants, cross-border workers), amounted up to \$1.157 billion (17% of the total). Only unimportant remittances from long-term immigrants were sent to foreign families (underestimated data).

Table 7

## Remittances in Romania (\$billion)

Remittance flows	2000	2001	2002	2003	2004	2005	2006	%	2007
Inward remittance flows	96	116	143	124	132	4,733	6,707	100	6,800
of which:									
- Workers' remittances*	2	4	7	14	18	3,754	5,506	82.1	
- Compensation of employees**	94	112	136	110	113	954	1,157	17.2	
- Migrants' transfer					1	25	44	0.6	

\* Wages of non-resident workers/ short-term migrants.

\*\* Income of long-term migrants.

**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaxmi, Z. Xu, „Tendances des envois de fonds en 2007”, *Migration and Remittances Factbook*, World Bank

Analysing the balance of remittance inflows and outflows respectively, one notices that:

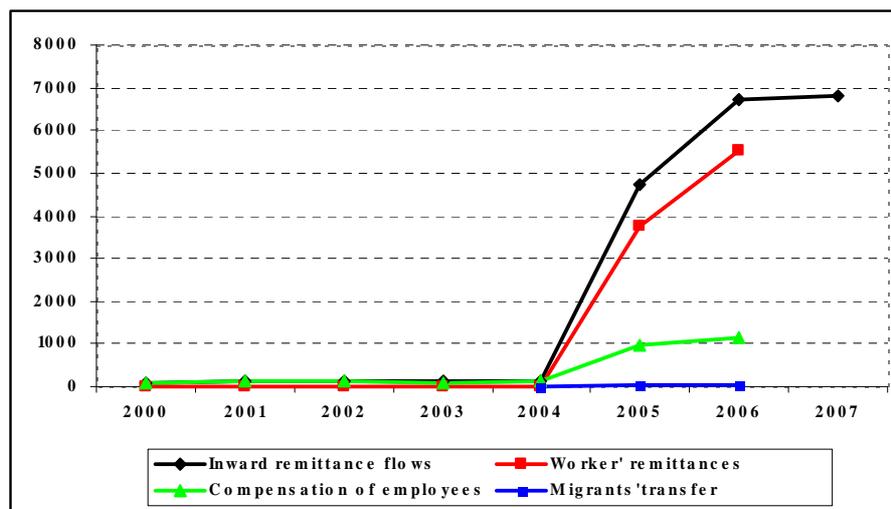
- in the case of remittance inflows to Romania, the highest percentage is represented by money transferred by workers from abroad (over 80% in 2006- 2007);
- on the contrary, in EU-27 countries their percentage in 2006 was 29%, most of it being wages (58.9%) and not remittances from workers;
- worldwide remittance flows from Romania are insignificant, EU-27 countries amounting to 33.8% of the total world remittance flows on global scale (over \$ 70 billion).

The increased remittance inflows to Romania from workers are connected to dynamics of immigration, indicating, at least so far, the sustainable trend of emigration. The graph made up according to the data from the World Bank, show a 50 times increase of remittances in 2007, in comparison with 2004, and one should consider the fact that these graphs represent only the official remittances. As a trend, e-transfer of money is growing in Romania, where 50.8% of the Romanian workers abroad come from the countryside, indicating an adaptation to the modern methods of payment, still not fully used. Moreover, we still do not have all the data (not only on Romania, but also for the rest of the countries), because lack of clarity on what should be included in remittance statistics,

inconsistency in methods of collection and reporting influence on available data, lack of clarity on what should be included in remittance statistics, inconsistency in methods of collection and reporting influence available data.

Graph 5

### Inward remittance flows to Romania



**Source:** D. Ratha, S. Mohapatra, K.M.Vijayalaxmi, Z. Xu, „Tendances des envois de fonds en 2007”, *Migration and Remittances Factbook*, World Bank

Remittance flows may have significant macro- and micro-economic impacts, both economically and socially concerning: diminishing poverty, financing investments in households, the economic development of a country, increase in the national income and consumption. Remittances promote the development of financial services in the home countries, as money transferred by official channels (via various financial institutions) represents a support for those who receive it by accessing some financial products and services (loans and deposits), which otherwise could be more difficult (still remittances cannot increase the deposits if they are spent soon). The remittance inflows to the immigrants' countries are mainly used for: **a.** current consumption in the household, on the domestic market (family support, expenditures on education, health); they may be found (but not explicitly) in the final consumption of the population; **b.** part of the remittance is allotted to savings and investments such as: houses, land, long-term consumer goods, cars, etc. since some of these (houses) bring their

contribution to the national assets; **c.** starting and developing some small businesses, or setting up some family businesses (in agri-tourism, cultural tourism, making use of the local natural assets, services in urban and rural areas, collecting some agricultural products and processing the in small factories located in the countryside, etc).

Due to their considerable amount, the impact of the remittances could be very important, with a great impact on the social and economic development of the country, including some macro-economic indicators, such as: GDP, export and import, direct foreign investment, foreign currency reserve. In order to see whether the economic development is influenced by such values, which involve a high degree of market liberalisation, we have suggested a model of regression, in which the dependent variable is the *GDP per capita*, and influencing variables represent the *foreign direct investments*, *exports* and *imports* of commodities and services, as well as *remittance inflows*.

The equation of the model is (on logarithmic values, with natural logarithm):

$$GDP/capita = \beta_1 * Remit\_RO + \beta_2 * Em + \beta_3 * Im + \beta_4 * Es + \beta_5 * Is + \beta_6 * ISD + \beta_7 * T\_emp + \varepsilon_i$$

where:

- *Remit\_RO* Remit\_RO stands for remittances;
- *Em* stands for commodity exports;
- *Im* stands for commodity imports;
- *Es* stands for service exports;
- *Is* reprezintă importurile de servicii;
- *ISD* stands for direct foreign investment;
- *T\_emp* stands for total employment;
- $\varepsilon_i$  stands for the residual variable which means the impact of variable factors.

The results of the model are represented as follows:

Table 8

## Regression Statistics

Multiple R	0.999998034	Dependent Variable: <i>GDP/capita</i> Dependent Variable Mean: 8,875			
R Square	0.999996069	Independent Variables: <i>Remit, RO, Em, Im, Es, Is, ISD, T_emp</i>			
Adjusted R Square	0.857135556	Method: <i>Least Squares</i>			
Standard Error	0.02489651	Annually observations: 14			
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F critical</i>
Regression	7	1103.631475	157.6616393	254360.1662	2.483725741
Residual	7	0.004338853	0.000619836		
Total	14	1103.635814			
<i>Estimated Coefficient</i>		<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	
$\beta_1$	-0.00512017	0.008724252	-0.58689003	0.57570836	
$\beta_2$	0.31981206	0.175734475	1.819859548	0.111591508	
$\beta_3$	0.16999853	0.198585559	0.856046785	0.42030647	
$\beta_4$	-0.00941138	0.121121945	-0.07770174	0.940239697	
$\beta_5$	0.024807448	0.138910827	0.178585417	0.863321944	
$\beta_6$	-0.02933012	0.020712013	-1.41609223	0.199671335	
$\beta_7$	0.464936458	0.044432983	10.46376879	1.58552E-05	

**Source:** Own calculations.

By interpreting the statistical result, one comes to the following conclusions:

- ✓ *Multiple R (correlation coefficient) and R Square (determination coefficient)* have values very close to 1, indicating the fact that the seven influence factorial variables have a very strong impact on the economic development. The values of the two coefficients represent the cumulated powerful influence of the seven factors. *Adjusted R Square* has a similar interpretation, but its calculation equation is different as it is influenced by the degrees of freedom and always lower than *R Square*;

- ✓ The better the *Standard Error* of the model, the better the model, the former showing the mean rough estimation of it which is lower in comparison with the resulting variable mean (*Dependent Variable Mean*). In our case the rate GDP/logarithmic capita is equal to 8.875 which means that *Standard Error* of 0.02489651 is very low, and a very relevant model from the statistical point of view will result;
- ✓ The ANOVA test allows the study of model quality by comparing the regression components (development variation due to the impact of the seven influence factors) and *Residual* (development variation due to the hazardous factors,  $\varepsilon_i$  in the model equation). The higher the value of *F* opposite to the value of *F critical*, the stronger the influence of the factorial variables (independent) in comparison with random effect. One may notice in the case of our model a very high *F* compared to *F critical*, which indicates a significant model from the statistical point of view;
- ✓ The  $\beta_1 \dots \beta_7$  model parameters indicate the direction and the influence of each factorial variable on GDP/capita. The positive values of the parameters indicate a direct ratio to the economic development (*Em; Im; Is; T\_emp*), and the negative values point out to the reverse ratio to the economic development (*Remit\_RO; Es; ISD*). The highest values (0.464 and 0.319) are to be found next to *Total employment* variables and export commodities, which indicate the strong impact of the two variables on the economic development. ISD and commodity imports follow, the other variables being less relevant (Remittances, Is and Es). The ranking is dependent on the *t Stat* values, which represent the calculated values of the test "Student of checking the significance of  $\beta_1 \dots \beta_7$  parameters". The higher these values, the higher the parameter relevance. The *t Stat* values are calculated as a ratio of the estimated values of the parameters (*Estimated Coefficient* Column) to the standard errors of the parameters (*Standard Error* Column).

In Romania, remittances are mainly used for consumption, about 65% being used to this end, about 35% of remittances are for investments in long-term consumer goods. According to a survey on a representative sample made by the Foundation for an Open Society in urban area, 22% of the people receiving money from their relatives working abroad invest it in building houses; 11% in starting a business; 4% in buying machinery; 3% in buying lands (Sandu *et al.*, 2006). This type of investment is not exactly a new one; in a survey made by the Romanian European Institute it is mentioned: "it is common knowledge that most of such remittances are spent in Romania for current expenditures, stimulating the domestic demand for goods and services, but mainly imports oriented and

not the national products, which are less competitive, owing to their quality/price (Constantin, Vasile, Preda, Nicolescu, 2004). Even if the impact of remittances on development is difficult to estimate, by analysing the balance of payments of Romania during the last two years, we can say remittances have an important contribution to the reduction in current account.

**Table 9**

**Romania Current Account, (million EUR)**

	<b>2006</b>	<b>2007</b>
Trade Balance (commodities)	-11759	-17665
Services	4	232
Income	-3246	-4416
Current transfers	4845	4899
Net Current Account	-10156	-16950

**Source:** BNR, Annual Report 2007.

The contribution of net current remittances to the commercial deficit was 41.2% in 2006, going down to 27.7% in 2007. This is the consequence of the significant decline in the commercial deficit, by over 50% in 2007 in comparison with 2006. Consequently, the percentage of the current account deficit of GDP was 14% in 2007 as compared to 10.4% in 2006. However, in 2007 the current account deficit might be higher (about 20.9% of GDP) unless these remittance inflows to Romania had been sent.

The growing role of remittances and mainly the possibility of turning to account the positive externalities of migration, in general, and remittance inflows, in particular, lead to complex questions, which require an institutional cooperation and stimulating the migrants for a real involvement in the process. In this respect, some elements of first aid could refer to problems such as: (i) clarifying the definition and remittance components, including the aspect of similar data collecting, globally or regionally (at least for comparability); (ii) as the dynamics of immigration will slow down, the volume of remittance inflows will also go down. Consequently there is a need for reducing the transfer tasks and attracting more potential beneficiaries of remittances (including developing the confidence of the population from the countryside in the banking system) and increasing the transparency policy concerning the money sent from abroad. (iii) Granting support of any kind for remittance beneficiaries so as to start some local businesses; (iv) promoting programmes which are meant to improve knowledge necessary in the field; (v) Partnerships among governmental institutions and banks so as to improve access to banking services, etc.

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