

# Does Emigration Affects Wages? A Case Study on Romania

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*Abstract. The migration phenomenon in Romania is characterized by emigration; the number of Romanian migrants skyrocketed after the Romanian accession to the European Union in 2007. With the economic and financial crisis outlook and with the labour market liberalization across the whole European Union for the Romanian workers starting this year the number of Romanian migrants is expected to increase further. Against this background this paper analyses the effects of emigration on wages in Romania. It is found that emigration has a positive impact on wages in Romania.*

**Keywords:** immigration, emigration, labour market, average wage

**JEL Classification:** F22, J61, J31

## 1. Introduction

International migration is a topic that is increasingly debated across the globe especially as the most countries are still showing timid signs of recovery after being hit hard by the recent economic and financial crisis. The unemployment rate in Europe has rapidly increased in the past few years showing uneven signs of recovery. With a growing nationalist sentiment among some member states the immigration policy across the European Union is high on the agenda. Also, starting January 2014 the last restrictions on the labour market imposed by some western member states for the Romanian and Bulgarian workers had been raised. In this paper we examine the effects of emigration on wages in Romania.

In the next section we review some of the literature on labour market effects of emigration and immigration. It is showed that the literature has mixed outcomes about the impact of migration. In section 3 it is described the Romanian labour market and we analyse the evolution of Romanian stock of emigrants to EU for the 1998-2012 period and argue that the late increase in the stock of migrants from Romania could be put on the fact that family reunification is one of the crisis effects among the Romanian migrants. In section 4, using a multivariate regression analyses we argue that the emigration phenomenon in Romania has a positive impact on wages and in the last section we discuss the conclusions of this paper.

## 2. Brief literature review

The literature on migration is rich with an emphasis on immigration effects on the receiving countries. Regarding the labour market effects of emigration there are only a handful of studies.

Docquier et al. (2013) using a simple aggregate model of labour demand and supply in each OECD country simulated the long-run employment and wage effects of immigration and emigration. In all cases the authors found that immigration in the 1990's had a positive effect on the wage of less educated natives and it also increased or left unchanged the average wage in OECD countries. It also had a positive or null

effect on native employment. To the contrary, emigration had a negative effect on the wages of native less educated workers and it contributed to increase inequality in all OECD countries.

The results of a cross sectional study on Jamaica conducted by Kim (2007) confirms that emigration has a strong impact on labour participation, i.e. households with a remittance income have a higher reservation wage and reduce labour supply by moving out of the labour force.

Son and Noja (2012) found that emigration has a significant negative impact on labour market supply, i.e. significantly reducing it, especially the high skilled labour supply. The study covers seven Central and Eastern European countries, which adhered to the European Union in 2004 and 2007 with the envisaged period for 2000 - 2010.

Gagnon (2011) found that a 10% increase in emigration yielded an increase in wages of around 10% in the case of Honduras, suggesting that emigration generates a redistribution of wealth from capital to labour in the country of origin.

Thaut (2009) analysed the emigration effects on Lithuania. The author concluded that emigration consequences are mixed. The free movement of workers drove down unemployment, increased wages and the remittance rate to Lithuania. However, emigration has introduced labour market shortages and increased the likelihood of brain drain.

The links between migration and bilateral trade flows have been explored by Javorcik et al. (2006). The authors have analysed the connection between the immigrants established in the United States and the foreign direct investments of United States in 56 countries. It was found a positive connection between the United States foreign direct investments and the immigrants countries of origin established in the United States. Also, the connection is stronger when the migrants have a higher level of education.

Also, Haider (2012) found a significant and clear link between emigration and enhanced bilateral trade flows between Bangladesh and its trading partners.

Regarding immigration effects on the United States labour market, Borjas (2006) shows that an immigrant influx that increase the supply of workers in a particular level of education group by 10 percent lowers the wage of natives in that group by 3 to 4 percent.

Another interesting study on immigration impact on the labour market is the one of Sinning et al. (2011). The authors found that immigration has very small or no effects on the German labour market.

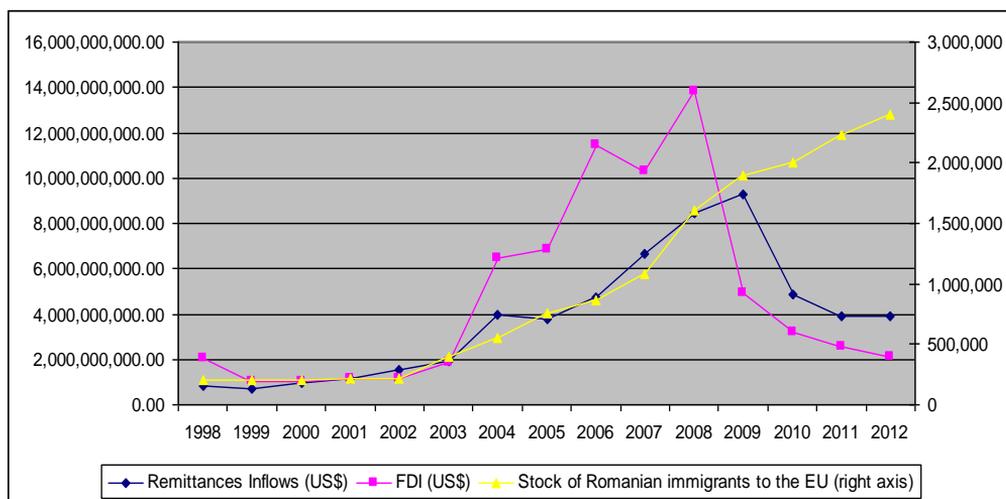
### **3. Romanian migration and labour market**

#### **3.1 Romanian migration phenomenon**

According to International Organization for Migration, after the fall of communism, in Romania have been three migration phases: 1990-1995 (emigration based on ethnic criteria, i.e. 75 percent of emigrants had German, Jew and Hungarian ethnicity), 1996-2001 with Spain, United States and Canada as main destinations and 2001-2006 with Italy, Spain and Germany as main destination countries (last two phases having economic reasons for migrating). The following period is linked with the Romanian accession to the European Union in 2007 and the free movement of people inside the Union. It is worth mentioning that United Kingdom and Malta posed restrictions for Romanian and Bulgarian workers and that some other member states (Belgium, Germany, Spain, France, Luxembourg,

Netherlands and Austria) only for some labour sectors, restrictions that had been raised in January 2014.

In these conditions, 14 percent of Romanian population has emigrated (around 3 million persons). The main destination countries for Romanian migrants are Italy and Spain, where they represent the largest foreign community. According to the Eurostat, there were 1.072.342 Romanian immigrants in Italy at the end of 2012, and 865.572 in Spain for the same period. The stock of Romanian migrants in these two receiving countries has risen steadily in the past few years (e.g. in 2012 by 10.7 percent and respectively 2.5 percent compared with the previous year), suggesting that family reunification is one of the crisis effects among the Romanian migrants. Starting 2008 the level of money remittance inflows, although it rapidly dropped, is higher than the level of foreign direct investment flows representing a substantial contribution to balancing negative current account.

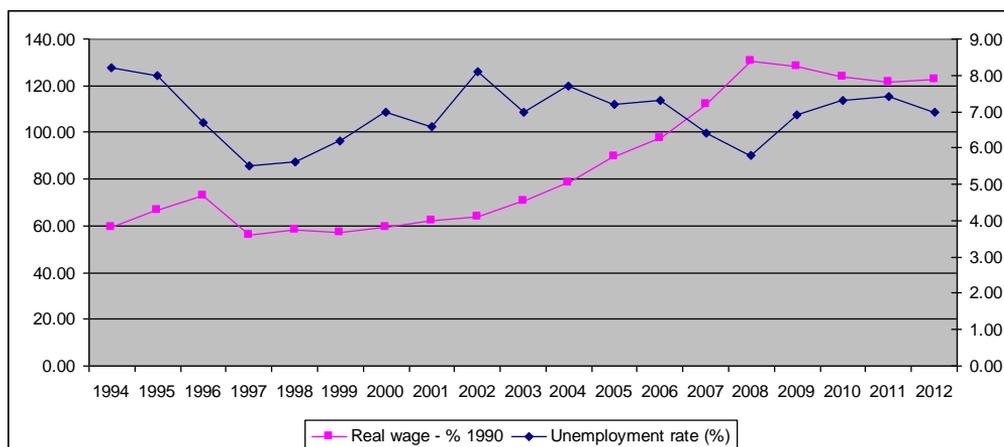


**Figure 1.** Evolution of EU stock of Romanian migrants, remittances inflows and FDI  
 Source: <http://epp.eurostat.ec.europa.eu>

The immigration phenomenon in Romania is rather inexistent, the number of foreigners requesting a work permit being insignificant. The asylum request has risen in 2012 (1457) compared to previous year (553) due to the recent military conflicts in North Africa and Middle East. The most immigrants are originating from Moldavia, Turkey, Italy, Germany, France and China. According to the Immigration Office in Romania, the numbers of registered foreigners in 2012 were around 100.000 (0.5 percent of the Romanian population), most of them being established in Bucharest (almost half of them are originating from the European Union).

### 3.2 Romanian labour market

Romania's labour market in the past several years has not experienced high rates of unemployment. Actually the unemployment rate registered in 2012 (7 percent) is well below the level registered at the European Union level (10.5 percent) or in the Eurozone (12 percent). In the past decade the labour force and the labour participation rate have been remaining steady after a high decline in both indicators at the end of 1990 with the labour cost as one of the lowest across the European Union.



**Figure 2.** Unemployment rate (right axis) and real wages – base year 1990 (left axis)  
Source: <http://epp.eurostat.ec.europa.eu> and Romanian National institute of Statistics

Starting 1990 the real wages had dramatically fallen amid economic recession along with high inflation that eroded Romanians purchasing power. After the Romanian economic crisis in the late 1990 ended, the level of real wages started recovering slowly, to exceed the level registered in 1990 only in 2007.

#### 4. Emigration effects on wages in Romania

The main reason Romanians migrate is the wage differentials between the levels registered in their home country and the ones across European Union western member states. A decrease in labour supply in the country of origin should increase wages, as the labour market finds its equilibrium. This study examines the effects of emigration on wages in Romania by using ordinary least squares method. The form of the regression equation is given below.

$$WAGES = b_0 + b_1 * MIGRANTS + b_2 * GDP pc + b_3 * FDI \quad (1)$$

where:

WAGES = natural log (second difference) of real wages indices with 1998 as base year;

MIGRANTS = natural log (second difference) of the stock of Romanian emigrants to EU;

GDP pc = natural log (second difference) of GDP per capita, measured in constant 2005 US dollars;

FDI = natural log (second difference) of foreign direct investments net inflows.

All the observations in the data set are annual observations for the period 1998-2012. The data are taken from the World Bank online database, from the Romanian National Institute of Statistics and from Eurostat. The expected signs of the parameters are according to our assumptions except for the *FDI* coefficient, which is also insignificant. We also determine WAGES for the stock of Romanian emigrants to EU and GDP pc, thus eliminating the *FDI* variable. The estimation results are reported in Table 1 below.

**Table 1.** Ordinary least square results (t-statistic in brackets)

Independent variable	WAGES	WAGES
<i>MIGRANTS</i>	0.186131 (3.498552)	0.174048 (3.279910)
<i>GDP pc</i>	0.970142 (2.512513)	0.598787 (2.728030)
<i>FDI</i>	-0.034781 (-1.159796)	-
R <sup>2</sup>	0.712473	0.669499
Adjusted R <sup>2</sup>	0.616630	0.603399

The results indicate that emigration has a positive impact on wages in the country of origin. Both the stock of Romanian emigrants to EU and GDP per capita have positive and significant effect on real wages.

## 5. Conclusions

While the immigration is rather inexistent in Romania, the emigration phenomenon has gain momentum with the Romania's accession to the EU. Although the crisis hit hard the main destinations countries of Romanian migrants it seems that they are better off staying abroad than returning to their country of origin suggesting that family reunification is one of the crisis effects among the Romanian migrants. The results of our study show that workers staying behind are also benefiting from migration, emigration having a positive impact on wages. Migration has helped relieve the pressure on the labour market, drive down unemployment, place upward pressure on wages and increase the workers money remittance inflows. However, on the long run emigration could drive to labour market shortages, increase the likelihood of brain drain and put further demographic pressure on the country.

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