



The Role of Precarious Employment in Emigration Flows from Croatia

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ABSTRACT

Current global economic trends, trade competition and technological change, have greatly expanded the complexity of labour market contracts and increased the number of employees working under temporary work status and non-standard forms of employment. Part of economic theory tries to explain the influence of those labour market trends on migration. This is particularly important in the case of Croatia, which has been experiencing a large scale of emigration in recent years. The number of people that left abroad increased four times from 2012. The aim of this paper is to investigate the role of precarious employment in international migration movements, especially from Croatia, but also from Central and East European countries (CEEC). Data on migration, wages, employment quality, GDP and unemployment used in this paper come from the Croatian Bureau of Statistics for Croatia and Eurostat databases for the rest of the sample. The choice of methodology is driven by the characteristics of the dataset that requires a suitable estimator in the family of the panel estimators. The results suggest that traditionally wage differentials influence emigration, which is consistent with conventional economic theory. However, precarious employment, measured as a share of short-term contracts in total employment, also has an important role in explaining international movements which support newer economic-migration theories.

INTRODUCTION

Current global economic trends in developed and developing countries, trade competition and technological change, have greatly expanded the complexity of a labour market which was already characterised by many employees working under temporary work status and job insecurity (Menéndez et al., 2007). Global crises reflected in labour markets and unemployed workers may have been forced to accept flexible contracts more often than before.

In the context of the increasing number of unfavourable contracts, many people looked for another solution of resolving their labour market status, such as inactivity or migration, both internal

and international. Recently, Croatia has experienced a large scale of emigration with the tendency to increase even more in the future. In the previous years, the number of people left abroad almost quadrupled, from 12877 in 2012 to 47352 in 2017. Many theoretical models were designed to explain what triggers external migration. Wage differences between countries are the most common reason analysed in neoclassical economic theories, while more recent migration theory broadens the analysis including a variety of determinants in migration decision (Taylor, 1999). These new theories suggest that migration does not stop at the moment of wage equalisation, but continue to exist even if returns in different markets are similar if the labour market in sending country does not work properly (Porumbescu, 2015).

One of the labour market disadvantages that can motivate individuals to look for better opportunities internationally is insecure, precarious employment. Given its multidimensional nature that differs across countries, the economic and social structures of the labour markets, there has not still been universal agreement on the definition of precarious employment (Moscone et al., 2016). However, it is a distinctive form of work with low levels of security, hard working conditions, low wages and/or limited social security privileges. It could be considered as employment where the employee's influence on creating work conditions is almost impossible (Benach et al., 2014). The emergence and spread of precarious jobs are related with numerous changes, including the growth of the service sector and the weakening of industrial employment, changes in technology, work corporate organisation, employers' strategies, in progress privatisation, marketisation, and individualisation (Keune, 2013). One of the consequences of this development is that the quality of work decreases and job insecurity or precariousness becomes a significant part of each work (Peña-Casas and Pochet, 2009; Greenan et al. 2010). Rodgers (1989:3) stated that the characteristics of precarious jobs are:

- they have short time horizons, are of limited duration or have a high risk of termination;
- there is a lack of control over working conditions, the pace of work and wages;
- there is a lack of protection in employment; and they are characterised by low incomes at or near defined poverty lines (Burgess and Campbell, 1998).

Since Croatia has experienced a large scale of emigration within the last several years, the aim of this paper is to explore the role of labour market indicators in recent migration movements. Although Croatia is the main focus of our research, selected CEE countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia) are also used in the empirical part of the paper to extend the analysis and to obtain stronger results on emigration determinants. The paper is divided into seven sections. Following this introduction, the second section provides the theoretical framework considering economic migrations. Precarious employment is discussed in the third section, while the fourth presents some stylised facts on migration flows and labour market indicators in Croatia. Part five and six include data description, methodology, research results and the discussion of findings. The final part of the paper draws certain conclusions and directions for future research.

1. MIGRATIONS IN ECONOMIC THEORY

International migration literature distinguishes two approaches: the ones explaining the initiation of movement and those explaining the persistence of migration flows (Massey et al., 1993). Neoclassical migration theory pioneers in analysing economic migration and emanates from neoclassical economics which means that it is based on the assumptions of rational choice, utility maximisation, expected net returns and factor mobility (Arango, 2016). According to this theory, international migration happens due to geographical imbalances in demand and supply of labour. In other words, low-wage countries are characterised by a large endowment of labour relative to capital, while high-wage countries usually have a limited endowment of labour relative to capital what creates a wage differential across the world. In that context, the decision to migrate is

an individual decision made after weighing the utility of migrating and utility of not migrating - individuals tend to move from low-wage to high-wage countries seeking for higher returns to maximise the incomes. Consequently, the elimination of wage differentials would reduce labour migration. Another theory explaining migrations is Dual labour market theory (Piore, 1979) which argues that movements happen because of pull-factors in developed receiving countries. Receiving labour markets are segmented into the capital-intensive sector with high-skilled labour and a labour-intensive segment with predominantly low-skilled labour. Labour intensive sector needs workers and creates labour demand, which is to be met by employing foreign workers.

The new economics of labour migration (Taylor, 1999; de Haas, 2010) suggests that decision on leaving a country is a decision made by the whole family or household, not only by one individual who is moving. Households bring a decision on a family member migration to minimise the risk of insufficient household income. By doing so, some members of a family can stay and work at home, while some members emigrate to protect the family's income from the risks that may happen in the home country. The member working abroad usually sends remittances, which not only increase the home budget but also have a positive impact on the economy of a sending state. The vast amount of researches explored migration trends and tried to create theoretical models explaining the motives and persistence of labour movements. New theories formulated a set of determinants of migrations (Massey et al., 1993) since wage differentials are not a necessary condition for international migration to happen nor for migration to stop when wages are equalised. If markets in sending countries do not work well, reasons causing movements continue to exist. Moreover, emigration can be seen as the only way to improve employment and living conditions if one is faced with poor, insecure employment prospects and a lack of hope (Carmo et al., 2014).

2. PRECARIOUS EMPLOYMENT

To capture the multiple dimensions of precarious work and the way it changes over time, Goldring and Landolt, (2011) developed the Index of Precarious Work (IPW). Table 1 classified eight indicators of precarious work.

Table 1. Indicators of precarious work

<i>Dimension</i>	<i>Precarious</i>	<i>Not Precarious</i>
<i>Unionisation</i>	Non-union	Unionised
<i>Contract type</i>	No contract, verbal contract, short-term contract	Contract (long-term)
<i>Terms of employment</i>	Day labourer, home-based worker, seasonal work, hired through a temp agency, unpaid family worker, part-timer, short-term contract work, self-employed with and without employees	Full-time employee
<i>Predictability of schedule/control</i>	Never or rarely can plan schedule a week in advance	Can plan schedule a week in advance always, usually, or at least half of the time
<i>Basis for pay</i>	Piece-work, for the job or contract	Salary or hourly wage
<i>Benefits</i>	No deductions for benefits	Deductions from pay for benefits
<i>Place of work</i>	Employer's home, own home, multiple sites	Single location, not employer's home or own home
<i>Cash payment</i>	Paid in cash (always or mostly)	Not paid in cash

Source: Goldring and Landolt, 2011

The precarious employment is a result of the deregulation of labour standards and increased competitiveness to adjust the labour market flexibility. It consists of part-time, temporary and contingent work, and it is characterised by poor working environment, low pay, lack of social and financial security and benefits. As consensuses of this form of work and in regards of the individual risks of precariousness, five subdomains of a potential risk of precariousness can occur (Eichhorst and Tobsch, 2017):

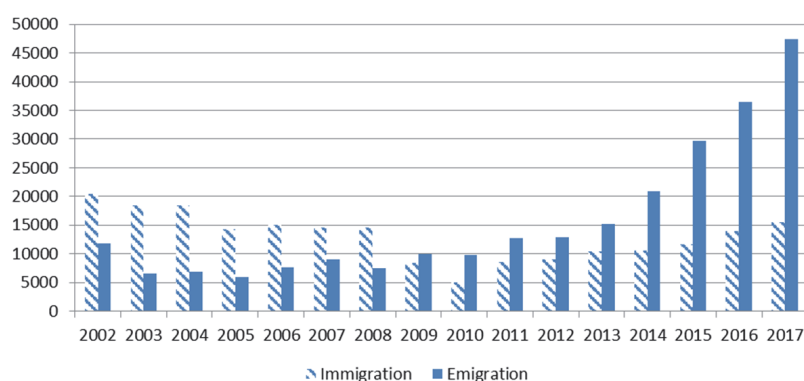
- low pay,
- job insecurity,
- stress and health,
- career development and training,
- low level of collective rights.

The companies increasingly explore labour standards to maximise profit and globalise their competitiveness. Precarious employment occurs in the informal economy and also in the formal sector. That form of work can appear in any employment contracts and for any working person, but it mainly affects certain groups, because of their nationhood, race, vocational qualifications, gender, age or social status. Women and minority workers, such as immigrants tend to be precarious workers in both developed and developing countries (Fudge and Owens, 2006). Lewchuk, W. (2017) stated that young workers and the especially growing number of immigrants searching for better work opportunity and conditions in other regions and countries. But in most of the cases, these workers such as young people, women and migrants are excessively considered as the most precarious groups in society.

3. MIGRATION, ECONOMIC AND LABOUR MARKET AND TRENDS IN CROATIA, 2002-2017

The statistical definition of an international migrant used in this paper is taken from Croatian official statistics, and it is based on the concept of usual residence, meaning that immigrants from abroad and emigrants to foreign countries are persons who have changed their country of usual residence for at least one year. Official migration statistics should be taken with caution since they are published with a disclaimer that the numbers on emigration are based on the self-reporting by emigrants themselves, which is a process discouraged by a relatively complicated procedure. Migration trends of the 2002-2017 period are shown in Table 2.

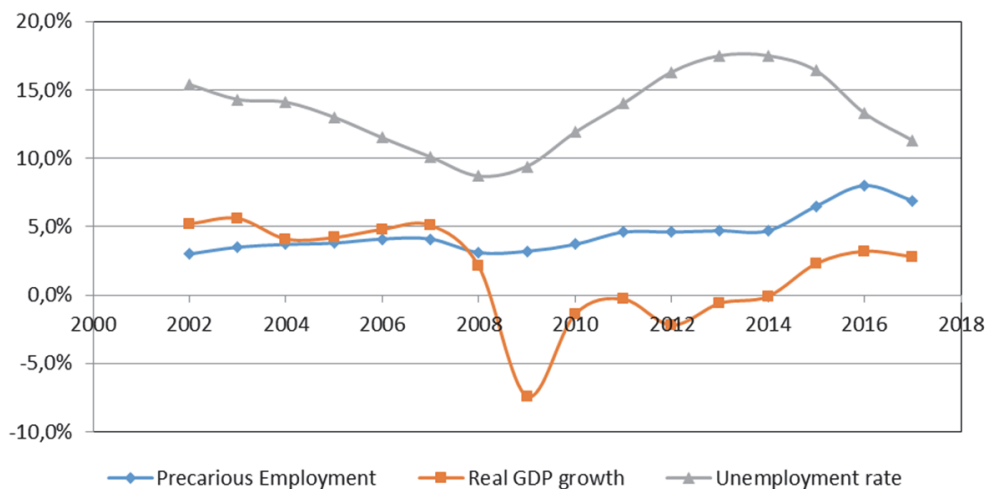
Figure 1. Migration trends in Croatia 2002-2017



Source: CBS

For many years both immigration and emigration had been increasing in Croatia, but since the crisis in 2008, and especially since EU accession in 2013 the increase in emigration is more pronounced what reduces net migration more and more each year. Several authors, such as Šonje (2018), Jurić (2017), Župarić-Ilijć (2016) and Strielkowski W. et al. (2013) also estimated emigration flows from Croatia, showing even worse situation than official statistics do. In each case, large labour outflows from Croatia are representing a challenge to resolve and a hot topic for policymakers in Croatia. We also provide some economic indicators for Croatia. The period of 2002-2017 has been a period in which Croatia firstly experienced GDP growth up to 2008, then six-year recession and again recovery in 2015. The crisis that started in 2008 had repercussions in all the spheres of the economy, including the labour market (Figure 2).

Figure 2. Precarious employment, growth and unemployment trends in Croatia



Source: EUROSTAT

Following the theoretical framework described in previous sections, we can assume that the poor labour market environment can provide strong incentives for workers to search for better work opportunities and conditions in other regions and countries rather than the home country. As can be seen from the above figure (Figure 2), since the beginning of the crisis in the 2008 unemployment rate has increased continuously and has reached almost 20% in 2013 and 2014. Not only that the unemployment grew, but the structure of employment changed with the continuous increase in precarious employment. The increase was not as sharp as the rise in unemployment, but the share of precarious employment has steadily increased from 2% in 2008 to 8% in 2016. In this paper, we use a precarious employment rate defined by Eurostat as a percentage of employees with a short-term contract of up to 3 months.

4. DATA AND METHODOLOGY

To trace the evolution of emigration movements from Croatia, the database is constructed from two sources: Croatian Bureau of Statistics and Eurostat. Dataset consists of the data collected for the period 2002 -2017. Research is limited only to this time frame since the data on precarious employment for Croatia are available only from 2002. Croatia is the centre of our research, however, time series of only 16 years provide limited framework for the analysis and that is why we extended data on selected CEE countries to obtain stronger results on emigration determinants.

The countries are Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. All of these countries also experienced periods of emigration flows after EU accession and during crisis. Although pertaining to the group of CEECs, Bulgaria and Romania were omitted from the research due to the lack of data on emigration for most of the years.

Migration trends from Croatia and CEECs are investigated by a model that encompasses factors and forces recognised in the existing literature as determinants of migration. The starting point in the building of this model is the thesis that the wage differentials, although commonly accepted as the initial factor encouraging the decision to leave the country, are not the only factor influencing emigration. As we already discussed, poor labour market conditions could also affect individual choices to search for better opportunities somewhere else rather than in the home country. That is why some additional variables are included in the model to extend it and to investigate the role of precarious employment in the persistence of migration flows.

The choice of methodology is driven by the characteristics of the dataset and model. The nature of the dataset requires looking for a suitable estimator in the family of time panel data estimators. To explore what labour market elements generally influence migration trends from CEECs, the following relationship has been established:

$$\text{Emigration} = f(\text{quality of employment}(\text{precarious employment, long working hours}), \text{real GDP growth, unemployment, average wage difference comparing to EU15})$$

The dependent variable is the natural logarithm of the number of emigrants. Independent variables are:

- *Quality of employment* statistics, reflecting labour market working conditions, available at Eurostat:
 - *precarious employment*; although precarious employment can be looked at from numerous standpoints, Eurostat quantifies it as a percentage of employees with a short-term contract of up to 3 months;
 - *long working hours* are also one of the indicators of employment quality. It is measured as a percentage of people who work long in total employment
- *unemployment (UR)* is measured by the unemployment rate each year;
- *the real GDP growth* is the percentage change in real GDP each year;
- *average wage difference* variable is expressed as a natural logarithm of the difference between individual country and EU15 annual average wage:

$$\text{wagediff} = \ln(\text{average annual wage in EU15} - \text{average annual wage in home country})$$
- As an additional variable, we added a lag of dependent variable with the assumption that emigration today depends on previous movements – people already left are attracting new ones to come.

Separate regressions are made, including firstly GDP and then unemployment because of the strong correlation between them. The formal model then looks like this:

$$\ln_emigration_i = \beta_0 + \beta_1 \ln_emigration_{(t-1)i} + \beta_2 \text{precarious}_i + \beta_3 \text{workhour}_i + \beta_4 \text{GDP}_i + \beta_5 \text{wagediff}_i + u_i$$

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5. RESULTS AND DISCUSSION OF FINDINGS

Several methods are used to examine whether precarious employment encourages people to leave the country: pooled, least square dummy variables model and panel regression and they all give the same positive coefficient sign for precarious employment. Results of regression are shown in Table 2.

Table 2. Results

<i>Dependent variable:</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Natural log of emigration</i>	<i>Pooled model</i>			<i>LSDV model</i>			<i>Panel</i>		
Precarious Employment	0.135* (2.14)	0.0383* (2.02)	0.0380* (2.14)	0.130* (2.12)	0.140* (2.51)	0.148** (2.92)	0.132* (2.20)	0.0383* (2.02)	0.0380* (2.14)
Long Working Hours	0.0156 (0.76)	0.0026 8 (-0.45)	0.0019 0 (0.31)	- 0.115** * (-5.60)	- 0.0163 (-1.01)	0.0087 7 (0.54)	- 0.107** * (-5.31)	0.0026 8 (-0.45)	0.0019 0 (0.31)
Emigration from previous year		0.937** * (36.92)	0.931** * (38.67)		0.846** * (14.68)	0.830** * (15.31)		0.937** * (36.92)	0.931** * (38.67)
Real GDP growth			0.0138* (-2.39)			0.0198** (-3.09)			0.0138* (-2.39)
Unemployment Rate		0.0036 2 (-0.49)			0.0031 1 (-0.32)			0.0036 2 (-0.49)	
Annual Wage Difference from EU15		0.361 (1.21)	0.536 (1.84)		0.0653 (0.11)	0.739 (1.24)		0.361 (1.21)	0.536 (1.84)
Croatia				2.995** * (-11.68)	-0.406* (-2.00)	- 0.552** (-2.76)			
Czech Republic				-0.633* (-2.12)	0.305 (1.24)	0.0515 (0.21)			
Estonia				3.549** * (-9.93)	- 0.0511 (-0.33)	- 0.0906 (-0.61)			
Hungary				3.242** * (-10.85)	-0.261 (-1.60)	-0.398* (-2.54)			
Latvia				2.155** * (-7.36)	- 0.0345 (-0.24)	-0.202 (-1.43)			
Lithuania				- 2.274**					

				*					
				(-6.08)					
Poland				-	0.0351	-0.362			
					(-0.12)	(-1.28)			
Slovakia				-	4.063**	-0.220	-0.440*		
				*		(-1.07)	(-2.19)		
				(-					
				14.76)					
Slovenia				-	2.680**	-0.376	-0.462		
				*		(-1.40)	(-1.84)		
				(-					
				11.85)					
_cons	9.227**	-2.893	-4.572	12.77**	0.859	-5.640	10.30**	-2.893	-4.572
	*			*			*		
	(37.30)	(-1.02)	(-1.65)	(30.48)	(0.15)	(-0.99)	(22.11)	(-1.02)	(-1.65)
N	140	113	113	140	113	113	140	113	113

Source: Authors' calculations

As it can be seen from the table above, short-term contracts of up to 3 months provide incentives for people leave the country since coefficient on precarious turned out to be statistically significant and positive (although small) in each equation that we used in the analysis, with and without control variables. The positive and highly statistically significant coefficient on emigration from the previous year implies that high emigration creates a new departure from a country. Insecure labour market conditions are in this case push factors, and connections abroad pull factors in migration trends from Croatia and CEECs.

Another statistically significant element influencing emigration is real GDP growth what seems straightforward. Negative coefficient implies that GDP growth decreases emigration, however, increase in Croatian GDP is mostly because of tourism and tourism increases seasonality in employment and the share of short-term contracts so one should be careful in interpreting and using these results.

Since the labour market environment seems to be an element influencing emigration, it is essential to include improvement of employment quality in policies aiming at reducing migration flows from Croatia. Boonstra, Keune and Verhulp (2011) list some instruments that labour unions can use to help government dealing with precarious work:

- addressing precarious work in collective agreements to improve the terms and conditions of precarious workers;
- influencing the legislative process at the central level through social dialogue or industrial action to improve the legal rights of precarious workers;
- mobilising and organising precarious workers in trade unions; and
- media campaigns to influence public opinion

Another issue popping out here is the existence of significant groups among precarious workers in Croatia who are not covered by any agreements. The collective bargaining coverage in Croatia is only about 53% (Bagić, 2015) and it is lower than in 2009 when it was 61%. We can also see that this reduction coincidences with an increase in both precarious employment and emigration.

CONCLUDING REMARKS

Croatia is a country with continuously negative net migration trend since 2008. Each year the number of people leaving the country is rapidly increasing what represents not only demographic problem, but also economical one. The problem worsened after Croatian EU accession in 2013 and in 2017 almost 50000 people left the country. At the same time, following the global trends the share of precarious employment in total employment increased from 3,2% in 2008 to 6,9% in 2017, what means that labour market insecurity increased rapidly in ten years. However, the wages did not increase at the same pace, although increasing.

Different theories give different explanations why people move and the aim of this paper was to investigate what theory explains the best Croatian situation: are the wage differentials the reason for departure or something else, such as poor labour market conditions. Why do people leave the country? The results suggest that new theories fit better to Croatian framework. Precarious employment, in this case short-term contracts seem to be important element pushing people from the home country. In this sense, policymakers should be aware that a part of resolving emigration issue should include resolving labour market insecurities and creating environment for higher quality employment.

GDP growth also contributes to the reduction of emigration flows but the problem for Croatia is high share of tourism in that growth. On the one side, tourism increases GDP and reduces emigration. On the other side, it increases seasonality in employment and it is related to high number of short-term contracts, what creates insecurity and incentives for departure. Policy-makers aiming at keeping people in Croatia should, not only create framework for higher job quality, but also provide incentives for other industries what could provide more security for workers.

In resolving the issue of labour market insecurity, labour unions could have an important role in improving the terms and conditions of work contracts. However, large share precarious workers in Croatia are not covered by any agreements.

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