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Impact of the Rise in Immigrant Unemployment on Public Finances*

by

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DOCUMENTO DE TRABAJO 2008-15

Serie Inmigración

CÁTEDRA Fedea – Banco Popular

March 2009

- * This study has been funded by the Bureau of European Policy Advisers of the European Commission.
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ISSN:1696-750X

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Abstract

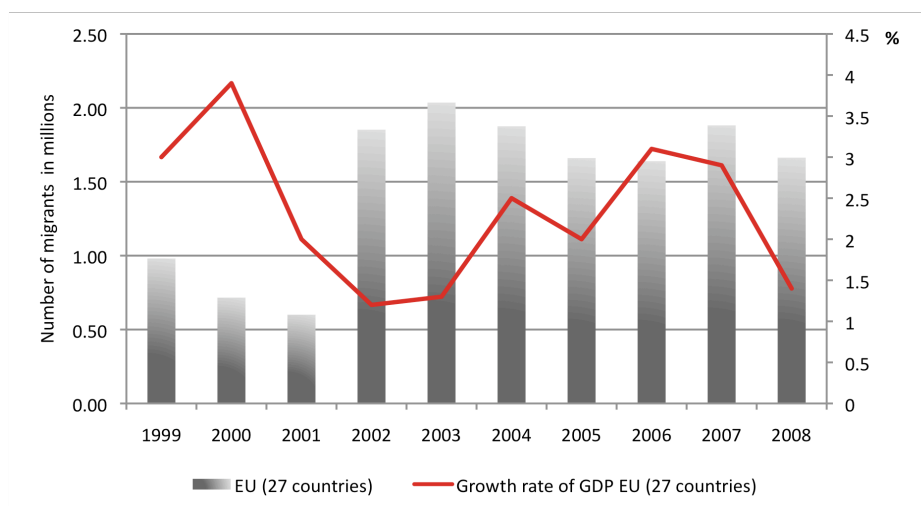
The current slump is having a heterogeneous impact on the EU economies regarding their GDP and employment growth responses. The impact of immigrants' unemployment on public finances of EU countries depends on three factors: (i) the sensitiveness of the economy to the business cycle, (ii) the share that migrants represent over total labour force population and (iii) the benefits structure of their unemployment benefits programs. Our results confirm that the impact of the rise in immigrants' unemployment on the unemployment benefit burden during the next few years is likely to be sizeable. Unemployment benefit burden is expected to peak in 2009 after an increase in 2008, and to slow down slightly in 2010. We find that Latvia, Estonia and France are the ones more likely to suffer a higher public finance burden from the rise in immigrants' unemployment. Other economies such as Germany, Finland, Spain, Ireland, Italy or Austria would also register a noticeable increase in their public burden although to a lesser extent.

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1. INTRODUCTION

International migration has been drawing increasing attention from policy makers in the EU, reflecting the impact that this phenomenon has on the economy, foreign affairs and society in general. The net number of immigrants in EU-27 has increased threefold during the last decade leading to heterogeneous patterns across the member states which range from long-standing destination countries, to new gateway destination or even new net immigration countries.

Figure 1: Evolution net migration to the EU



The pattern of the recent immigration wave is somewhat different to the previous ones: immigration from countries outside the EU appears to be much more sizeable than intra-EU flows. Moreover, migration towards southern countries has hastened considerably during recent years, making them as important as the more traditional immigration countries. EU destination countries have relied on immigration as a device to lessen, or at least to postpone, their ageing population problem, to offset shortages regarding specific skills and to improve overall labour market flexibility. However, higher migrant workers' flexibility often implies higher volatility regarding their labour status: immigrants' employment and unemployment rates exhibit higher fluctuations than natives' response to changes in the business cycle. In the current context of economic downturn driven by the global financial crisis, this fact plays not only against migrants – who experience a surge in their unemployment hazard rate and a worsening of their standard of living in

case of becoming unemployed - but also against the host economies whose public budgets are hit as a result of the subsequent increase in the unemployment benefits burden.

Quantifying the increase in unemployment benefits paid to immigrants in the context of the current slump is the goal of this document.

It is important to start by highlighting that the EU countries are rather heterogeneous in terms of the factors that comprise expenditure on unemployment benefits. First, despite the fact that the global crisis is having negative repercussions for all the EU economies, its impact will differ across member states depending on their openness to global markets, country-specific characteristics and domestic-adjustments needs. These heterogeneous features could lead to different patterns in the evolution of unemployment rates and therefore to disparity in the financial burden caused by the automatic stabilizers, such as unemployment benefits.

Secondly, the size of the unemployment benefit burden caused by immigrants hinges not only on the relative business cycle position of the EU economies but also on the specific characteristics of their unemployment benefits systems - degree of generosity and qualifying conditions required to be covered- and the socioeconomic characteristics of immigrants currently working there and in the future -number of migrants, years since arrival, skills and legal status.

In the next section we estimate the increase in the unemployment benefit burden among the different EU countries based on current prospects about their GDP growth⁶, under alternative hypothesis about the characteristics of the migrants that become unemployed as a result of the crisis.

These alternative scenarios are based on the assumption that virtually no net migrant's flow towards EU countries will take place in the next few years. Given certain data shortages, additional assumptions are needed about the average immigrant's characteristics. Specifically, we assume that these average characteristics and their average unemployment benefits claims remain unaltered from 2006 to the end of the outlook horizon period.

⁶ The Commission's economic forecast published in November projects EU economic growth to drop sharply to 1.4% in 2008. It was 2.9% in 2007. In 2009 the EU economy is expected to grind to a stand-still at 0.2% before recovering to 1.1% in 2010. The equivalent figures for the euro area for the period are 1.2%, 0.1% and 0.9%. In 2007 it was 2.7%.

Risks seem to be tilted toward the downside. A sharper than expected adjustment could lead to higher unemployment rates and therefore higher migrant's unemployment benefits burdens. Further, it is possible that the global economic downturn, rather than having no lasting impact on the pace of net immigration towards the EU countries, it may exacerbate it, if other traditional destination countries outside the EU experience more acute adjustments in the forthcoming future that discourage immigration towards them.

2. DESCRIPTIVE ANALYSIS

2.1. Differential Effects of the Crisis on EU Labour Markets

After a strong increase in the EU-27 GDP annual growth during 2006 and the first half of 2007, the EU economy started to lose momentum. As a result of the global slump, GDP annual growth slowed down in 2008 and a worse performance is expected for 2009. Even under this common adverse scenario there are significant differences among GDP growth of the member states, ranging from 7% in Slovakia, 4.4% in Slovenia and Czech Republic to -1.6% in Ireland and -1.3% in Estonia.

Table 1: GDP annual growth across EU members and selected countries, 1999-2010 (Source: Eurostat & EC DG-ECFIN)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Belgium	3.4	3.7	0.8	1.5	1	3	1.8	3	2.8	1.4	0.1	0.9
Bulgaria	2.3	5.4	4.1	4.5	5	6.6	6.2	6.3	6.2	6.5	4.5	4.7
Czech Republic	1.3	3.6	2.5	1.9	3.6	4.5	6.3	6.8	6	4.4	3.6	3.9
Denmark	2.6	3.5	0.7	0.5	0.4	2.3	2.4	3.3	1.6	0.7	0.1	0.9
Germany	2	3.2	1.2	0	-0.2	1.2	0.8	3	2.5	1.7	0	1
Estonia	-0.1	9.6	7.7	7.8	7.1	7.5	9.2	10.4	6.3	-1.3	-1.2	2
Ireland	10.7	9.2	5.8	6.4	4.5	4.7	6.4	5.7	6	-1.6	-0.9	2.4
Greece	3.4	4.5	4.2	3.4	5.6	4.9	2.9	4.5	4	3.1	2.5	2.6
Spain	4.7	5	3.6	2.7	3.1	3.3	3.6	3.9	3.7	1.3	-0.2	0.5
France	3.3	3.9	1.9	1	1.1	2.5	1.9	2.2	2.2	0.9	0	0.8
Italy	1.5	3.7	1.8	0.5	0	1.5	0.6	1.8	1.5	0	0	0.6
Cyprus	4.8	5	4	2.1	1.9	4.2	3.9	4.1	4.4	3.7	2.9	3.2
Latvia	3.3	6.9	8	6.5	7.2	8.7	10.6	11.9	10.2	-0.8	-2.7	1
Lithuania	-1.5	4.2	6.7	6.9	10.2	7.4	7.8	7.8	8.9	3.8	0	-1.1
Luxembourg	8.4	8.4	2.5	4.1	1.5	4.5	5.2	6.4	5.2	2.5	1.2	2.3
Hungary	4.2	5.2	4.1	4.1	4.2	4.8	4	4.1	1.1	1.7	0.7	1.8
Malta			-1.6	2.6	-0.3	1.2	3.5	3.2	3.9	2.4	2	2.2
Netherlands	4.7	3.9	1.9	0.1	0.3	2.2	2	3.4	3.5	2.3	0.4	0.9
Austria	3.3	3.7	0.5	1.6	0.8	2.5	2.9	3.4	3.1	1.9	0.6	1.3
Poland	4.5	4.3	1.2	1.4	3.9	5.3	3.6	6.2	6.6	5.4	3.8	4.2
Portugal	3.8	3.9	2	0.8	-0.8	1.5	0.9	1.4	2	0.5	0.1	0.7
Romania	-1.2	2.1	5.7	5.1	5.2	8.5	4.2	7.9	6.2	8.5	4.7	5
Slovenia	5.4	4.4	2.8	4	2.8	4.3	4.3	5.9	6.8	4.4	2.9	3.7
Slovakia	0	1.4	3.4	4.8	4.7	5.2	6.5	8.5	10.4	7	4.9	5.5
Finland	3.9	5	2.6	1.6	1.8	3.7	2.8	4.9	4.5	2.4	1.3	2
Sweden	4.6	4.4	1.1	2.4	1.9	4.1	3.3	4.2	2.5	1	-0.2	1.6
United Kingdom	3.5	3.9	2.5	2.1	2.8	2.8	2.1	2.8	3	0.9	-1	0.4
Iceland	4.1	4.3	3.9	0.1	2.4	7.7	7.5	4.4	3.8	-3.4	-8.3	2
Norway	2	3.3	2	1.5	1	3.9	2.7	2.3	3.1	1.9	1.3	2.1
United States	4.4	3.7	0.8	1.6	2.5	3.6	2.9	2.8	2	1.5	-0.5	1

Following a similar pattern, employment across EU-27 countries experienced a noticeable increase in both 2006 (1.6%) and 2007 (1.8%), followed by a strong deceleration in the next two years (see European Commission Autumn Forecast 2008).

Unemployment rates prospects also record worsening expectations of the labour market, with a noticeable rise both in 2009 and 2010. This increase is expected to place the unemployment rate over its natural trend (as measured as the non-acceleration wage rate of unemployment; source: AMECO-EC) during these years.

Figure 2: GDP and Employment Growth in EU-27



Across EU-27 members, according to the EC Forecasts, the Spanish labour market is expected to be the most affected by the business cycle (Table 2). In fact, Spanish unemployment rate could increase its unemployment rate by 2.5 points in 2008, reaching 13.8% in 2009, and 15.5% in 2010. Although to a lesser extent, other countries could follow the same mood, such as Ireland, Greece or Eastern Europe countries (e. g. Latvia, Lithuania or Estonia).

By contrast, the current downturn seems to have a negligible effect on the labour market of other countries. For example, Bulgaria, Cyprus or Slovakia are expected to improve employment conditions during both 2008 and 2009.

2.2. Migration in the EU

During 1999-2007, net migration has increased substantially (almost a 95%), accelerating especially in Southern Europe countries (Spain, Italy, etc.) The consequences of this phenomenon have been recently analysed by the EC (European Commission 2008), concluding that immigration could foster economic growth and increase labour- market flexibility. The latter would be improved not only by having an increase in labour input but also through the characteristics of the incoming labour supply. This is so since immigrant workers exhibit a higher degree of dynamism compare to native EU workers. In addition, incoming migration flows have helped to ease shortages of low-skill jobs in several industries. Overall, migrant employment seems to complement rather than substitute EU workers.

According to the EC's report, the potential contribution of immigrants is not yet fully realized since there persist problems regarding to their integration in the labour market (higher unemployment rates and tend to be more exposed to jobs of lower quality) Hence, migrants find more difficult to make effective use of their human capital, resulting in underutilisation of their skills and mismatches between their actual job and their qualifications.

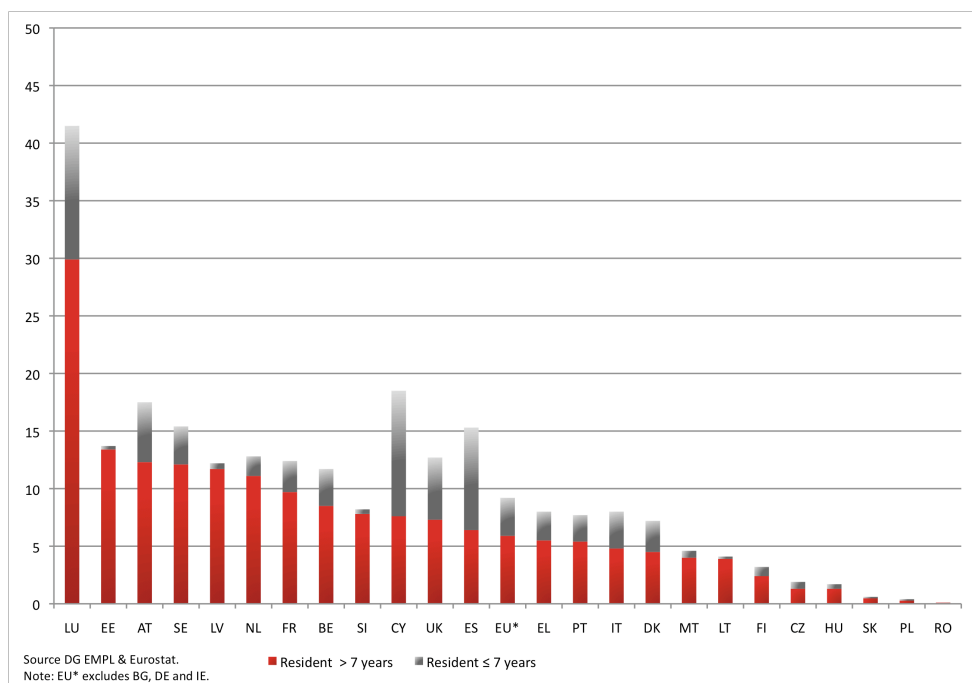
Table 2: Unemployment Rate across EU countries (Source: Eurostat and EC DG-ECFIN).

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
EU-27	Total	9.2	8.6	8.9	9.0	9.2	8.9	8.2	7.1	7.0	7.8	8.1
	Nationals	7.8	7.0	7.3	7.7	9.0	8.6	7.8	6.8			
	Foreigners	13.6	12.4	12.8	14.1	14.3	14.1	13.2	12.1			
EU-15	Total	8.4	7.3	7.7	8.0	8.2	8.1	7.7	7.0			
	Nationals	7.7	6.6	7.1	7.4	7.9	7.7	7.3	6.5			
	Foreigners	13.5	12.3	12.9	14.1	14.4	14.2	13.3	12.2			
Belgium	Total	6.6	6.2	6.9	7.7	7.4	8.4	8.2	7.5	7.1	8.0	8.1
	Nationals	5.8	5.4	6.0	6.8	6.6	7.7	7.4	6.7			
	Foreigners	15.5	14.3	16.7	18.2	15.9	16.8	17.3	15.4			
Bulgaria	Total	16.2	19.9	18.1	13.7	12.0	10.1	9.0	6.9	6.0	5.8	5.7
	Nationals		19.9	18.1	13.7	12.1	10.1	8.9	6.9			
	Foreigners											
Czech Republic	Total	8.8	8.0	7.0	7.5	8.2	7.9	7.1	5.3	5.0	5.0	5.2
	Nationals	8.8	8.0	7.0	7.5	8.2	7.9	7.2	5.3			
	Foreigners	7.2	11.6	10.2	10.1	5.6	6.8	6.2	5.5			
Denmark	Total	4.5	4.2	4.3	5.4	5.2	4.8	3.9	3.8	3.1	3.5	4.3
	Nationals	4.3	4.0	4.1	5.1	4.9	4.6	3.7	3.5			
	Foreigners	9.8	10.3	10.3	15.3	15.5	10.8	8.2	9.6			
Germany	Total	7.9	7.8	8.5	9.8	10.7	11.1	10.2	8.6	7.3	7.5	7.4
	Nationals	7.4	7.3	8.0	9.1	10.0	10.2	9.3	7.8			
	Foreigners	12.8	12.6	13.5	16.6	17.9	20.2	18.8	16.1			
Estonia	Total	13.1	12.4	9.4	10.7	10.0	7.9	5.9	4.7	5.0	6.7	7.7
	Nationals	11.3	10.8	7.5	8.8	7.6	6.2	4.9	3.9			
	Foreigners	16.3	18.7	17.2	18.2	19.2	15.2	10.7	8.3			
Ireland	Total	4.3	3.7	4.2	4.5	4.5	4.3	4.4	4.6	6.1	7.6	7.4
	Nationals	4.2	3.6	4.2	4.3	4.4		4.1	4.3			
	Foreigners	6.4	4.7	5.1	6.5	6.2						
Greece	Total	11.2	10.4	9.9	9.3	10.2	9.8	8.9	8.3	9.0	9.2	9.3
	Nationals	11.2	10.4	9.9	9.4	10.3	10.0	9.0	8.3			
	Foreigners	11.6	11.4	9.8	8.9	9.3	8.2	7.9	7.5			
Spain	Total	13.8	10.3	11.2	11.3	11.1	9.2	8.5	8.3	10.8	13.8	15.5
	Nationals	13.8	10.2	11.0	11.0	10.8	8.9	8.0	7.6			
	Foreigners	14.3	12.8	14.1	14.9	13.5	11.4	11.8	12.2			
France	Total	10.2	8.6	8.7	8.5	9.2	8.8	8.8	7.9	8.0	9.0	9.3
	Nationals	9.5	8.0	8.1	8.0	8.7	8.4	8.4	7.5			
	Foreigners	20.8	18.4	18.1	18.0	17.6	17.4	16.6	16.3			
Italy	Total	10.8	9.6	9.2	8.9	7.9	7.7	6.8	6.1	6.8	7.1	7.3
	Nationals						7.6	6.7	5.9			
	Foreigners						10.2	8.6	8.3			
Cyprus	Total	5.0	4.0	3.3	4.1	4.3	5.3	4.5	3.9	3.9	3.8	3.7
	Nationals	5.0	4.1	3.4	4.0	4.4	5.1	4.3	3.6			
	Foreigners	4.2	2.6	2.8	5.3	4.0	6.6	5.8	5.6			
Latvia	Total	14.2	13.1	13.2	10.6	9.9	8.9	6.8	6.0	6.5	9.2	9.6
	Nationals					9.9	8.8	6.8	6.0			
	Foreigners											
Lithuania	Total	15.9	16.8	13.0	12.9	11.3	8.3	5.6	4.3	4.9	7.1	8.4
	Nationals	16.0	16.8	13.0	12.8	11.3	8.3	5.7	4.3			
	Foreigners											
Luxembourg	Total	2.3	1.8	2.6	3.7	5.1	4.5	4.7	4.1	4.0	4.3	4.7
	Nationals	1.6	1.1	1.8	2.4	3.1	3.3	3.0	3.3			
	Foreigners	3.4	2.6	3.6	5.2	7.6	6.0	6.7	4.9			
Hungary	Total	6.6	5.7	5.6	5.8	5.8	7.2	7.5	7.4	8.1	8.6	8.5
	Nationals		5.7	5.6	5.8	5.9	7.2	7.5	7.4			
	Foreigners											
Malta	Total	6.3	7.1	6.9	7.5	7.3	7.3	6.9	6.5	5.9	6.2	6.4
	Nationals						7.3	6.9	6.3			
	Foreigners											
Netherlands	Total	2.7	2.1	2.6	3.6	4.6	4.7	3.9	3.2	3.0	3.4	3.7
	Nationals	2.6	2.0	2.4	3.4	4.4	4.4	3.7	3.0			
	Foreigners	7.1	4.2	5.1	9.4	9.9	11.7	8.8	6.5			
Austria	Total	4.7	4.0	4.8	4.8	5.3	5.2	4.7	4.4	3.9	4.2	4.5
	Nationals	4.2	3.6	4.4	4.4	4.4	4.4	4.1	3.8			
	Foreigners	8.7	8.0	9.4	8.1	11.5	11.6	10.6	9.5			
Poland	Total	16.3	18.4	19.9	19.4	19.1	17.7	13.8	9.6	7.3	7.3	7.8
	Nationals					19.1	17.8	13.9	9.6			
	Foreigners											
Portugal	Total	3.8	3.8	4.5	6.1	6.3	7.6	7.7	8.0	7.7	7.9	7.9
	Nationals	3.7	3.7	4.4	6.0	6.2	7.5	7.5	7.8			
	Foreigners	8.6	8.1	7.1	11.2	13.3	12.1	11.1	12.0			
Romania	Total	7.0	6.6	8.1	6.9	7.7	7.2	7.3	6.4	6.1	6.4	6.1
	Nationals					7.7	7.2	7.3	6.4			
	Foreigners											
Slovenia	Total	6.9	5.7	5.9	6.5	6.0	6.5	6.0	4.8	4.5	4.8	4.7
	Nationals			5.9	6.5	5.9	6.5	5.9	4.8			
	Foreigners											
Slovakia	Total	19.1	19.4	18.7	17.1	18.6	16.3	13.4	11.1	9.9	9.8	9.6
	Nationals				17.1	18.6	16.3	13.4	11.1			
	Foreigners											
Finland	Total	11.1	10.3	10.4	10.5	10.4	8.4	7.7	6.9	6.3	6.5	6.4
	Nationals	10.9	10.1	10.3	10.3	10.1	8.2	7.5	6.7			
	Foreigners	28.8	23.7	17.9	18.2	25.5	20.6	18.4	16.6			
Sweden	Total	5.5	4.7	5.0	5.6	6.7	7.8	7.1	6.2	6.0	6.8	7.3
	Nationals	5.0	4.5	4.7	5.2	6.2	7.4	6.8	5.9			
	Foreigners	14.5	10.1	11.5	13.1	16.1	15.3	13.6	12.9			
United Kingdom	Total	5.6	4.7	5.0	4.8	4.6	4.8	5.4	5.3	5.7	7.1	6.9
	Nationals	5.4	4.5	4.9	4.6	4.4	4.6	5.2	5.1			
	Foreigners	9.9	8.0	8.1	7.9	7.4	7.8	8.3	7.7			

The concentration of immigrants varies strongly across the EU. Figure 3 shows the relative size of foreign-born working-age population in the host country labour market. There are some countries in which foreign active population plays an important role, like Luxembourg, Austria, Sweden, Cyprus and Spain (with a share of foreign working-age population above 10%).

Another divergent feature of immigration across EU members is the period elapsed since immigrants' arrival. Hence, there are countries with an old tradition on migration hosting, such as Luxembourg, France, Estonia or Latvia, while there are others where this phenomenon has started only recently (e.g. Spain or Cyprus). Immigrants who have been residing for a long in the same country are more likely to be entitled to receive unemployment benefits, which made the host country Social Security Funds more vulnerable to a shock that lowers immigrant employment. Moreover, the longer they have stayed in the host country, the higher their average contribution to Social Security systems will be, increasing therefore their expected unemployment benefits. Conversely, the lower they have stayed in the host country, the lesser is the social and labour attachment of immigrants. Consequently, these immigrants are more likely to return to their countries of origin, shortening the potential unemployment benefit burden in the host country.

Figure 3: Foreign-born as a share of working-age population by years of residence, 2007.



Traditional destination countries are currently the ones exhibiting a higher share of older foreign workers (above 45) in the total foreign active population (Table 3). On the opposite side, countries that are experiencing the migration phenomenon in the recent

years (Mediterranean countries, among others) show a lower proportion of older active foreigners. This is an important fact when considering that old workers are more prone to suffer from unemployment. Assuming that these workers have been employed for a long time, an unemployment shock affecting this group would cause a large impact on public finances since these workers have access to higher unemployment benefits.

Table 3: Proportion of foreign active population older than 45 in total foreign actives, 2007 (Source: authors' calculations from Eurostat data).

Spain	16.2	Austria	26.4
Portugal	16.5	Finland	28.3
United Kingdom	19.1	Switzerland	28.4
Italy	21.3	Luxembourg	28.7
Cyprus	21.4	Norway	28.9
Czech Republic	22.1	Belgium	30.3
Poland	22.2	Germany	31.1
Greece	22.5	Slovenia	31.4
Netherlands	24.2	Latvia	34.0
Denmark	24.6	Sweden	35.0
EU-27	25.0	France	37.2
Hungary	25.3	Estonia	51.1

An important issue worth noticing is that the immigration inflow up to 2007 took place while the EU economy was in a cyclical upturn, with growing working-age population. However, with the arrival of the crisis, migration trends remain uncertain.

2.3. Differences in the unemployment benefits systems.

The impact of immigration unemployment on public finances of EU members depends on: (i) the sensitiveness of the economy to the business cycle, (ii) the share that migrants represent over total labour force, and (iii) the structure of their unemployment benefits programs.

Table 4 shows the contribution sources to unemployment-benefit programs and the contribution weighted by the share of foreigners in the active population. Columns 1-3 contain the contributions made by workers and employers to the unemployment fund. In column 5, we compute a proxy of the contribution made by immigrant workers per each €10,000 of revenue collected, through weighting the total contribution revenues by the share of foreign working-age population (e.g. for each €10,000 collected in Austria, €64.6 come from immigrants, according to their share in the active population). Since immigrants' contributed earnings are, on average, lower than nationals', this measure is an upper bound of the Social Security total revenues dependence from immigrants' contributions.

The countries where immigrants' imputed contributions are higher are Cyprus, Spain and Ireland. By contrast, Eastern European countries, such as Romania, Slovenia or Bulgaria, exhibit much lower imputed contributions, mainly due to their low share of foreign workforce.

Table 4 Contributions to the UB system, and share of foreign employment in EU countries (Source: authors' calculations from Eurostat and International Social Security Association data).

	Contributions to the Unemployment Program			Share of foreign active population (B)	Imputed Contributions (€) due to foreigners (A)x(B)*10000
	Insured person	Employer	Total (A)		
Austria	3.0%	3.0%	6.0%	10.8%	64.64€
Belgium	0.9%	1.5%	2.3%	8.6%	20.04€
Bulgaria	0.4%	0.6%	1.0%	0.1%	0.15€
Czech Republic	0.4%	1.2%	1.6%	1.1%	1.70€
Denmark	8.0%	0.0%	8.0%	4.4%	34.81€
Estonia	0.6%	0.3%	0.9%	17.3%	15.53€
Finland	2.7%	1.8%	4.5%	1.8%	8.07€
France	2.4%	4.0%	6.4%	5.3%	34.16€
Germany	1.7%	1.7%	3.3%	9.1%	30.05€
Greece	1.3%	2.7%	4.0%	7.0%	28.08€
Hungary	1.5%	3.0%	4.5%	0.7%	3.27€
Iceland	0.0%	5.3%	5.3%	3.2%	17.24€
Ireland	2.5%	9.8%	12.3%	5.5%	67.31€
Italy	0.3%	1.6%	1.9%	6.6%	12.65€
Latvia	1.2%	1.8%	2.9%	1.3%	3.83€
Lithuania	0.0%	1.2%	1.2%	0.8%	0.94€
Netherlands	3.5%	4.8%	8.3%	3.5%	29.18€
Poland	0.0%	2.5%	2.5%	0.2%	0.44€
Portugal	1.8%	1.8%	3.6%	3.9%	14.32€
Romania	0.5%	1.0%	1.5%	0.2%	0.28€
Slovak Republic	1.0%	1.0%	2.0%	0.1%	0.28€
Slovenia	0.1%	0.1%	0.2%	0.8%	0.17€
Spain	1.6%	6.7%	8.3%	14.3%	117.91€
Switzerland	1.0%	1.0%	2.0%	22.0%	44.07€
United Kingdom	0.5%	1.9%	2.4%	7.5%	17.97€

The degree of generosity of unemployment benefits schemes can be analyzed from different perspectives. Some authors (see Burda, 1993 and OECD, 1994) describe generosity of unemployment benefits systems by means of cross-country comparisons of the benefits entitlements that a hypothetical worker would claim if becoming unemployed. An alternative way is to consider the degree of coverage of those workers registered as unemployed. Both methods are unsatisfactory since they overlook key factors such as tax treatments of unemployment benefits, unemployment benefit duration and eligibility conditions for claiming unemployment benefits.

To overcome these shortcomings, we rely on Allard's (2005) index of generosity that takes into account all the above-mentioned features for 21 OECD countries. According to this index, Denmark, Germany, Finland, France and Ireland are found to have the more generous systems. In view of the existing differences in unemployment benefits schemes and immigration rates, one can argue that Austria, Germany and Spain seem to be the EU countries whose unemployment benefit burden could be more strongly affected (in absolute terms) by immigrants' unemployment. This is so since they have high

immigration rates and their benefit schemes are classified among the most generous (Germany is in the first position in Allard’s ranking of EU countries).

Table 5: Unemployment Benefit Indicator Index (Source: Allard, 2005)

	2003	1993	1983	1973
Austria	10.3	12.9	12.4	1.6
Belgium	10.2	10.6	30.1	20.7
Denmark	40.1	34.7	18.4	9.9
Finland	19.2	18.8	5.4	5.9
France	19.2	19.6	14.8	7.1
Germany	23.2	20.9	25.4	23.2
Greece	10.7	12.7	1.6	1.5
Ireland	17.5	22.5	11.2	5
Italy	6.4	5.3	0.2	0.3
Netherlands	15.8	23.7	11.4	8.1
Norway	16.9	5.2	3.9	0.7
Portugal	13.1	10.4	0.7	0
Spain	14.7	15.3	9.4	2.7
Sweden	14.4	16	19.2	4.5
Switzerland	14.8	13.1	1.2	0
United Kingdom	3.8	10.8	17.3	19.6

Note: high score in the indicator suggests a high degree of generosity in the country.

Yet, due to the complexity of the different schemes, indexes like Allard’s, which dates back to 2003, omit recent important reforms affecting the total unemployment benefit burden. Therefore, an updating is required whenever country specific legislation changes modifying eligibility conditions have taken place since 2003. For this reason, Table 6 summarizes the design and main characteristics of the unemployment benefit programs, as of to date, based on the information provided by Social Security Administration Office of Retirement and Disability Policy.

To sum up, Table 7 shows cross-country comparisons of the relevant characteristics to explain the unemployment benefit expenditure attributable to immigration. Considering this information we can classify European countries attending to their exposure to a potential shock in immigrant unemployment.

Table 6: Social Security Programs in EU countries (Source: Social Security Administration).

Country	Coverage	Requirements	Contribution (employee)	Unemployment benefit
AUSTRIA	Employed persons earning €349.01 or more a month and apprentices.	28 weeks of contributions in the last 12 months or 52 weeks in the last 24 months.	3% of covered earnings.	55% of net earnings paid up to 20 weeks (it may be extended up to 52 weeks).
BELGIUM	Employed persons. It may be extended to first-time jobseekers and other collectives.	312 days of covered employment in 18 months (if younger than 36). 468 days in 27 months (if aged 36-50). 624 days in 36 months (if older than 50).	0.87 % of reference earnings.	60% of earnings for the entire period of unemployment (with spouse or dependents). Benefits vary for other situations.
CYPRUS	Employed persons aged 16 to 65.	26 weeks of paid contributions in the last year.	6.3% of covered earnings.	60% of insured's average basic covered earnings in the last year (plus a supplement) for at least 156 days.
CZECH REPUBLIC	Citizens of the Czech Republic, EU and non-EU residing permanently.	Employed for at least 12 months in the last 3 years.	0.4% of monthly covered earnings.	50% of insured's average net earnings in the last quarter for the first 3 months; thereafter, 45%.
DENMARK	Employees aged 18 to 63, self-employed persons and other specific collectives.	12 months of membership in the unemployment fund and 52 weeks of insured employment in the last 3 years.	8% of gross salary.	90% of average earnings in the previous 12 weeks, up to 3.200 kroner a week. Paid for up to 4 years.
ESTONIA	All persons residing permanently in Estonia aged 16 up to the retirement age.	12 months of work in the 36 months before registering as unemployed.	0.6% of gross earnings.	50% of reference earnings for the first 100 days, thereafter, 40%.
FRANCE	Unemployment insurance: Employed persons in France or in the principality of Monaco.	6 months of work in the last 22 months.	2.4% of covered earnings.	57.4% to 75% of the average daily wage during the last 12 months, paid for 7 up to 12 months depending on the duration of the contributions.
GERMANY	Employed persons, including domestic workers, apprentices, and trainees.	12 months of covered employment in the last 2 years.	1.65% of covered earnings.	67% of the insured's net earnings for unemployed persons with children (60% otherwise). The benefit is paid for 6 to 18 months.
GREECE	Employees in industry, commerce, and related occupations and persons aged 20 to 29 who have never worked.	125 days of contributions in the last 14 months.	1.33% of covered or gross earnings.	40% of daily wages (blue-collar workers) or 50% of monthly salary (white-collar workers), paid for 5 months up to 12 months.
SPAIN	Employees in industry, commerce and services.	360 days of contributions during the last 6 years.	1.55% of covered earnings. 1.60% if employed under a fixed-term contract.	70% of the insured's average earnings in the last 6 months paid for 180 days; thereafter, 60% of the insured's average earnings.
FINLAND	All gainfully employed workers aged 17 to 68; and self-employed persons and entrepreneurs aged 17 to 64.	The insured must have worked at least 43 weeks in the last 28 months.	None for the basic unemployment benefit. Voluntary contribution of 0.34% for the unemployment fund.	Basic benefit: €24.51 a day. Unemployment fund: €24.51 plus 45% of daily wage, if monthly earnings are less than €2,205; €59.65 plus 20% if higher.
HUNGARY	Employed and self-employed persons.	The insured must have at least 365 days of coverage in the last 4 years.	1.5% of gross monthly earnings.	60% of gross average earnings of the previous year for the first 91 days; thereafter, 22,500 forints. Benefit is paid up to 270 days.
IRELAND	Employees younger than 66.	Unemployed for at least 3 days in 6 consecutive days, and with 39 weeks of paid contributions including 39 weeks paid or credited in the last tax year.	If weekly earnings are €352 or less, none; otherwise, none for the first €127, with 4% paid on the remaining.	The maximum benefit is €197.8 a week, paid for up to 15 months.

Table 6 (cont.): Social Security Programs in EU countries (Source: Social Security Administration).

Country	Coverage	Requirements	Contribution (employee)	Unemployment benefit
ICELAND	Employed & self-employed persons.	The insured must have at least 10 weeks of insured employment in the previous 12 months.	None.	The full daily benefit is paid for 10 days; thereafter, daily benefits are based on 70% of average earnings.
ITALY	Private-sector employees.	The insured must have at least 2 years of coverage with 52 weeks of contributions in the last two years, for the total unemployment benefits.	None, except for insured persons in companies with more than 50 employees who contribute 0.3% of gross earnings.	Daily benefits are equal to 60% of the insured's gross average daily wage for the first 6 months and 50% for the 7th and 8th month, paid up to 12 months.
LITHUANIA	Private- and public-sector employees.	The insured must have paid at least 18 months of contributions in the last 36 months.	None.	The monthly benefit is equal to the state-supported income of 235 litas plus a variable amount (based on insured's income).
LUXEMBOURG	Employed persons, self-employed persons under certain conditions, recent graduates, and persons aged 16 to 28 who have completed voc. training.	The insured must have worked 26 weeks in the last 12 months.	The insured person contributes an amount under a special solidary tax.	80% of the insured's average earnings, up to a maximum of 2.5 times the social minimum wage., paid for up to 365 days in a 24-month period.
LATVIA	Employed persons.	The insured must have at least 1 year of contributions, including 12 months in the last 18 months before unemployment.	9% of covered earnings.	50% of the insured's average earnings in the last 6 months with 1 to 9 years of coverage, increasing up to 65% with 30 years or more.
NETHERLANDS	Employed persons.	There must be a minimum loss of 5 working hours a week, and have worked for at least 26 of the last 36 weeks.	Average contribution is 3.5% of covered earnings.	75% of the last salary, up to the daily maximum earnings of €177.04, paid for 3 months.
NORWAY	Employed persons, including public sector employees and seamen.	Annual earnings in the last year before unemployment equal to at least 1.5 times the base amount at the time of making a claim to the benefit.	None.	0.24% of annual income a day, up to six times the base amount, paid for up to 52 or 104 weeks if annual income is less or higher than 133,624 kr.
POLAND	Employed persons.	The insured's earnings must have been at least equal to the minimum wage during at least 365 days in the 18-month previous period.	None.	Flat-rate base amount (538.30 zlotys) for those with between 5-20 years of employment; 80% with less than 5 years; 120% with more than 20 years. Paid for up to 6-18 months.
PORTUGAL	Employed persons, cooperative workers and previously disabled persons reassessed as work-capable.	450 days of contributions in the last 24 months before unemployment.	5.22% of the 34.75% of gross earnings contributed under Old Age, Disability and Survivors.	65% of the insured's average earnings, based on the insured's earnings in the 12 months before the 2 months before unemployment began.
SWEDEN	Employed and self-employed persons younger than age 65 (for the voluntary program).	The worker must have been employed for a minimum of 6 months.	The insured pays a membership fee.	Flat-rate benefit of 320 kronor a day provided that the insured was working 40 hours a week before unemployment, paid for up to 300 days.
SLOVENIA	Employed persons, including public-sector employees and seasonal workers.	The insured must have been employed full-time during 12 months in the last 18 months before unemployment.	0.14% of gross earnings.	The monthly benefit for the first 3 months is equal to 70% of the insured's average monthly earnings in the last 12 months; thereafter, 60%.
SLOVAKIA	Unemployed job seekers.	3 years of contributions in the last 4 years.	1% of covered earnings, voluntarily insured persons contribute 2%.	50% of the daily assessment basis, based on earnings in the 3 years before unemployment.
UNITED KINGDOM	All unemployed jobseekers meeting the qualifying conditions.	Contributions must have been paid on earnings equal to at least 25 times the weekly lower earnings limit, plus other conditions.	11% of weekly earnings between 105-770 pounds (reductions apply to married women and widows).	Flat-rate paid at £60.50 a week if aged 25 or older, £47.95 if aged 18 to 24, or £47.95 if younger than age 18. The benefit is paid up to 26 weeks.

Table 7: Cross-country comparisons of immigration and generosity of UB systems (Source: Authors' calculation from Eurostat and Allard, 2005).

	Share of foreign-national population (Eurostat-LFS)		Duration of residence* (Eurostat-LFS)		Difference from the mean EU unem. Rate (Eurostat-LFS)		Generosity of the Social Security System (Allard, 2005)	
EU-27	6.4		75.7		7.1		16.3	**
Belgium	8.6	+	72.6	-	7.5	+	10.2	-
Bulgaria	0.1	-			6.9	-		
Czech Republic	1.1	-	68.4	-	5.3	-		
Denmark	4.4	-	47.4	-	3.8	-	40.1	+
Germany	9.1	+			8.4	+	23.2	+
Estonia	17.3	+	97.1	+	4.7	-		
Ireland	5.5	-			4.6	-	17.5	+
Greece	7.0	+	67.9	-	8.3	+	10.7	-
Spain	14.3	+	41.8	-	8.3	+	14.7	-
France	5.3	-	78.9	+	8.3	+	19.2	+
Italy	6.6	+	59.3	-	6.1	-		
Cyprus	14.5	+	41.1	-	4.0	-		
Latvia	1.3	-	95.9	+	6.0	-		
Lithuania	0.8	-	95.1	+	4.3	-		
Luxembourg	47.8	+	71.5	-	4.1	-		
Hungary	0.7	-	81.3	+	7.4	+		
Malta	2.8	-	88.9	+	6.4	-		
Netherlands	3.5	-	86.7	+	3.2	-	15.8	-
Austria	10.8	+	70.3	-	4.4	-	10.3	-
Poland	0.2	-	75.0	-	9.6	+		
Portugal	3.9	-	70.1	-	8.1	+	13.1	-
Romania	0.2	-	100.0	+	6.4	-		
Slovenia	0.8	-	96.3	+	4.9	-		
Slovakia	0.1	-	100.0	+	11.1	+		
Finland	1.8	-	75.0	-	6.9	-	19.2	+
Sweden	4.3	-	79.1	+	6.1	-	14.4	-
United Kingdom	7.5	+	57.0	-	5.3	-	3.8	-

Legend: + above EU-27 average, - below average. Missing values in columns 2, 3 and 4 are not available from the original source.

* Measured as the percentage of foreign-born immigrant with more than 7 years of residence over the total foreign-boirn population.

**European mean only considers countries reported in Allard (2005).

It seems that Eastern Europe countries (Czech Republic and Bulgaria) are the least jeopardized to experience a dramatic increase in the public burden as a consequence of the current economic downturn. However, other Eastern Europe countries in a similar situation (Estonia) are more vulnerable to an unemployment shock (due its higher share of immigrants).

Economies with a high share of foreign population and with a labour market more sensitive to the business cycle face a riskier situation. This is the case of Spain, Greece and Belgium, though in the first two immigration has been a relatively recent phenomenon, a fact that moderate the negative outlook (as a consequence of less benefit-entitled immigrants). Countries with a more generous UB benefits schemes (e.g, Germany, France) are also highly exposed.

3. ECONOMETRIC ESTIMATION

3.1. Data

The data is obtained from the EU-SILC (Community Statistics on Income and Living Conditions) elaborated by Eurostat. This survey analyzes the welfare and living conditions of private household across 25 EU-members (plus Norway and Iceland) during 2004-06. The choice of this data source is driven by the fact that EU-SILC pays attention to both the economic and social roots of unemployment, enriching therefore the analysis. However, a drawback is that, due to the sampling design, the survey underestimates the number of immigrants receiving unemployment benefits. To overcome this drawback, a factor correction has been used to re-scale the predictions. Relevant socioeconomic variables concerning household characteristics and personal situation have been selected.

3.2. Modelling strategy

Unemployment benefit coverage can vary over time and across countries due to: (i) changes in the composition of workers that claim unemployment benefits, (ii) changes in the rules determining eligibility or, (iii) by a combination of both. If we have had sufficient detailed data to simulate benefit entitlement, the ideal approach would have been to build an unemployment-benefit prediction model that would take into account the differences in unemployment benefits rules that determine eligibility. However, EU-SILC does not contain sufficient detailed information to carry out this simulation. Hence we adopt a different approach, attempting to decompose changes in coverage using standard multivariate regression analysis.

In particular, to estimate the evolution of the unemployment benefit burden among the different EU states, we proceed in three steps.

First, we compute the probability of receiving unemployment by means of a *probit* model for each country. Controls are the demographic and socio-economic factors (gender, age, marital status, education, citizenship and an index of the degree of household economic difficulties in making ends meet), in addition to labour-market characteristics (experience, economic sector, type of contract, etc.) of those workers receiving benefits during the period under analysis, plus aggregate time variables (national GDP annual growth) to capture cyclical effects. Individuals' working histories are not available in the data but they could be considered to be a function of all the above-mentioned controls.

To compute the probability of receiving unemployment benefits in 2009- 2010, we use predicted probabilities obtained from the previous estimations, evaluated at the means of the observed individual controls in 2004-2006 and the EUROSTAT GDP growth forecasts in each country⁷.

Secondly, we need to compute the unemployment benefits that each individual would claim in case of becoming unemployed. Given data shortages on individuals' complete working histories, we are not able to compute individuals' unemployment benefit claims according the current rules in the country of residence. To overcome this hindrance, we use employed and unemployed workers' characteristics in the sample in order to impute potential unemployment benefit for those who will lose their jobs in the future. The matched characteristics are gender, cohort of birth, civil status, migrant status, education, years since first job, country of residence, household economic difficulties in making ends meet and other characteristics related to the location of the family's house (noise and crime in the area, and degree of urbanization measured by population density).

Thirdly, we pose alternative scenarios about the characteristics of the immigrants becoming unemployed. Given that complete working histories are not available in the data, we cannot identify precisely which of them are eligible. Hence, different alternatives about the proportion of eligible prospective unemployed migrants are considered. Then, through randomization, migrants affected by the crisis are chosen among the total stock of migrants in each country according to each scenario.

Formally, the total unemployment benefits burden (TUB) in the country i during the year t is computed as

$$TUB = \sum_{x=1}^n p_{x_{it}} U_{x_{it}}$$

that is, TUB is the sum of the expected unemployment benefits of all migrants likely to become unemployed in country i during the year t .

3.3. Results

Five alternative scenarios are considered. In each of them the negative effect of the crisis is increased by raising the number of workers susceptible of becoming unemployed.

⁷ It relies on the assumption that workers' characteristics remain unchanged at their average values in 2004-2006 during the outlook horizon period.

Scenario 1 considers an unemployment shock that affects the 33% of the immigrant population younger than 30 years, who represent the most likely group to suffer from the termination of temporary job contracts under weak labour-market conditions. Scenario 2 accounts for a harder impact on immigrant unemployment, where 66% of the young immigrant population loses their jobs. In Scenario 3, not only 66% of young immigrant workers get unemployed but also 66% of those aged above 45. Scenario 4 entails an increase up to 100% in the unemployment rate for unskilled immigrant workers in Scenario 3. Finally, in Scenario 5, we set an upper bound to the estimated effects by considering an unemployment shock that affects all the immigrant workers.

As Table 8 shows, immigrants' unemployment impact on TUB is rather limited under Scenario 1. Due to heterogeneity in immigrants' characteristics, these figures vary considerable between countries with Luxembourg (where the foreign-nationals over population reach 39% in 2006) suffering the largest impact by far, i.e., an increase of 22% in TUB during 2006-2008.⁸ Allowing for a larger tougher job-destruction shock (66% of young immigrant population) in Scenario 2 implies that TUB could double in most of the countries.

Widening the migrant population affected by the shock to the 66% of migrants older than 45 under Scenario 3 gives rise to wider differences across countries. In this way, countries such as Latvia, Estonia or France record a large increase (about 200%) in TUB due to their high share of workers above 45 years of age in foreign employment (recall Table 3), while the effect is milder in countries with less older foreign workers, like Spain (8%).

Scenario 4 extends the shock to low skilled immigrants (without a university degree). The effect under this scenario is more homogeneous, though United Kingdom and Italy seem to be the most sensitive to the shock.

As mentioned above, Scenario 5 is not meant to be realistic but it is just used to set up an upper bound on the sensitivity of a country' s TUB to immigrant unemployment. EU members such as Luxembourg, Latvia, Estonia and France are the most prone to suffer a larger burden. Other economies as Austria, Finland, Germany, Ireland Spain, or Italy would register an increase of around 20-25% in TUB under this scenario.

TUB is expected to peak in 2009, after increasing in 2008, and to slow down slightly in 2010. Results should to be read with caution because are mainly driven by current

⁸ Of course, given that a large share of the foreign population in Luxembourg are permanent employees of international institutions located there, the results for this country are not likely to be meaningful.

prospects about GDP growth dynamics during the following two years, which have turned to be exceptionally uncertain.

Table 8: Estimated increase in unemployment benefits burden from 2006 (Source: authors' calculations).

Expected increase between 2006-2008					
	33% immigrants younger than 30	66% immigrants younger than 30	66% immigrants younger than 30 and older than 45	66% immigrants younger than 30 and older than 45 & all no educated immigrants	All migrants
Austria	2.12%	4.26%	10.54%	18.98%	24.24%
Belgium	2.13%	5.22%	22.17%	49.80%	60.41%
Cyprus	1.74%	3.15%	5.58%	10.39%	16.62%
Czech Republic	0.15%	0.15%	1.01%	2.56%	3.13%
Denmark	0.63%	1.90%	11.14%	29.49%	49.66%
Estonia	6.95%	16.55%	187.57%	303.95%	346.13%
Finland	1.25%	2.83%	5.90%	16.40%	22.26%
France	3.30%	4.82%	27.71%	52.44%	70.91%
Germany	0.95%	1.77%	8.07%	13.48%	18.86%
Greece	5.53%	11.28%	18.22%	34.31%	41.25%
Ireland	1.49%	2.68%	7.83%	12.31%	22.98%
Italy	1.85%	4.25%	3.76%	16.48%	19.99%
Latvia	1.63%	4.49%	206.03%	312.84%	358.63%
Luxembourg	22.15%	44.76%	175.73%	299.52%	381.98%
Netherlands	0.06%	0.29%	0.45%	1.69%	2.73%
Norway	0.66%	1.60%	1.77%	6.37%	8.25%
Portugal	0.31%	0.53%	0.95%	1.44%	1.75%
Spain	2.09%	4.19%	7.76%	17.62%	25.29%
Sweden	0.17%	1.42%	10.30%	31.00%	39.85%
United Kingdom	3.64%	6.88%	8.26%	134.18%	16.43%
Expected increase between 2006-2009					
	33% immigrants younger than 30	66% immigrants younger than 30	66% immigrants younger than 30 and older than 45	66% immigrants younger than 30 and older than 45 & all no educated	All migrants
Austria	0.52%	1.04%	2.61%	4.56%	5.75%
Belgium	2.21%	5.41%	22.94%	51.58%	62.62%
Cyprus	1.57%	2.85%	5.04%	9.37%	14.98%
Czech Republic	0.20%	0.20%	1.33%	3.40%	4.18%
Denmark	0.70%	2.09%	12.33%	32.56%	54.92%
Estonia	6.89%	16.40%	185.82%	301.09%	342.83%
Finland	1.28%	2.90%	6.06%	16.85%	22.88%
France	3.76%	5.49%	31.57%	59.81%	80.92%
Germany	0.91%	1.70%	7.76%	12.93%	18.10%
Greece	5.64%	11.50%	18.59%	35.00%	42.10%
Ireland	1.46%	2.62%	7.65%	12.03%	22.45%
Italy	1.85%	4.25%	3.76%	16.48%	19.99%
Latvia	2.06%	5.67%	259.87%	398.22%	457.90%
Luxembourg	20.73%	41.90%	164.40%	279.97%	356.76%
Netherlands	0.05%	0.25%	0.38%	1.45%	2.33%
Norway	0.27%	0.67%	0.72%	2.54%	3.26%
Portugal	0.30%	0.51%	0.92%	1.39%	1.69%
Spain	2.57%	5.16%	9.52%	21.72%	31.20%
Sweden	0.27%	2.32%	17.13%	51.47%	66.67%
United Kingdom	7.20%	13.63%	16.51%	273.49%	33.12%
Expected increase between 2006-2010					
	33% immigrants younger than 30	66% immigrants younger than 30	66% immigrants younger than 30 and older than 45	66% immigrants younger than 30 and older than 45 & all no educated immigrants	All migrants
Austria	1.16%	2.33%	5.78%	10.27%	13.05%
Belgium	2.16%	5.30%	22.46%	50.48%	61.25%
Cyprus	1.63%	2.96%	5.24%	9.75%	15.58%
Czech Republic	0.18%	0.18%	1.20%	3.07%	3.76%
Denmark	0.61%	1.83%	10.76%	28.51%	47.97%
Estonia	5.06%	12.04%	135.77%	219.51%	249.13%
Finland	1.26%	2.86%	5.96%	16.56%	22.48%
France	3.35%	4.89%	28.13%	53.23%	71.99%
Germany	0.93%	1.74%	7.94%	13.25%	18.55%
Greece	5.62%	11.46%	18.52%	34.89%	41.96%
Ireland	1.31%	2.35%	6.87%	10.79%	20.11%
Italy	1.86%	4.27%	3.78%	16.55%	20.09%
Latvia	1.27%	3.49%	160.22%	241.15%	275.62%
Luxembourg	21.93%	44.31%	173.94%	296.44%	378.01%
Netherlands	0.05%	0.26%	0.40%	1.51%	2.43%
Norway	0.86%	2.10%	2.32%	8.44%	10.98%
Portugal	0.31%	0.54%	0.96%	1.46%	1.78%
Spain	2.34%	4.69%	8.66%	19.72%	28.32%
Sweden	0.14%	1.20%	8.70%	26.21%	33.61%
United Kingdom	4.42%	8.37%	10.07%	164.43%	20.08%

4. CONCLUSIONS

The current, severe economic downturn is having an uneven impact across EU economies, in particular with regard to their GDP and employment growth responses. Unemployment benefit burden is expected to peak in 2009 after an increase in 2008, and to slow down slightly in 2010. The study identifies three main factors revealing, with a certain degree of accuracy, whether a given EU country is set to face a low or a high financial burden as a result of the increase in migrant unemployment: (1) the sensitivity of the economy to the business cycle; (2) the share of migrants in the country's total labour force; and (3) the nature and structure of unemployment benefits. Moreover, the age structure of working migrants and their employment history can have an impact both on the level of unemployment benefits to be paid by the host country and on the propensity of migrants to return to their respective countries of origin.

It can also be added that the welfare system of those countries that have a high percentage of foreign labour and that depend heavily on social security contributions to fund unemployment benefit programmes are the ones that will be more vulnerable to sharp increases in unemployment. On the one hand, countries where payroll taxes finance unemployment benefit systems will be more exposed to a reduction in tax collection as a result of a drop in the number of affiliations to Social Security programmes. On the other hand, a high immigration rate would place a serious strain on the public finances of host countries, as migrant workers are usually more likely than native workers to lose their jobs during economic downturns. It follows that countries that have high immigration rates and generous unemployment benefit schemes will be the ones that are hit the most by a sharp rise in migrant unemployment,

In conclusion, it can be said that EU Member States that have had a large number of migrants working on their territory for a long time, who are thus likely to be entitled to claim unemployment benefits, are set to face a gradually growing financial burden as a result of the increase in migrant unemployment. For EU countries where migration is a relatively new phenomenon, the financial burden will tend to be lower as a limited number of migrant workers will be eligible for unemployment benefits. This holds true unless Europe's economic recession deepens. Our projection is that the impact of the rise in migrant unemployment on the unemployment benefit burden is likely to be sizeable over the next few years. If 66% of young migrant workers become unemployed, along with 66% of migrants over the age of 45, which is probable the more realistic scenario, the estimated average rise would amount to 37% in 2008 and 40% in 2009. We have also

prepared a more pessimistic scenario, which takes account of a more profound economic slump and more layoffs of migrant workers. Under this projection, the unemployment benefit burden will almost double, rising, on average, to 70% in 2008 and 80% in 2009.

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