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Abstract

The aim of this paper is to explore the potential of an EMU unemployment insurance scheme (EMU-UI) to improve the income protection available to individuals and their families in case of unemployment. Our analysis uses an illustrative EMU-UI scheme, which has a common design across member states and can therefore be considered as a benchmark with respect to which gaps in national unemployment insurance schemes are assessed. We make use of EUROMOD, the EU-wide tax-benefit microsimulation model, to simulate entitlement to the national and EMU-UI and calculate their effect on household disposable income for all individuals currently in work and those with the highest unemployment risk, in case they would become unemployed. Our results show that the EMU-UI has the potential to reduce current gaps in coverage where these are sizeable due to stringent eligibility conditions, to increase generosity where current unemployment benefits are low relative to earnings and to extend duration where this is shorter than twelve months. The illustrative EMU-UI would reduce the risk of poverty for the potentially new unemployed and would have a positive effect on household income stabilization. The extent of these effects varies in size across EMU member states for two main reasons: differences in the design of national unemployment insurance schemes and differences in labor force characteristics across member states.

JEL Classification: C81, H55, I3

Keywords: Unemployment insurance, European Monetary Union, Household income, Microsimulation.

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1. Introduction

It has become increasingly recognized that deeper fiscal integration is needed at the European Monetary Union level to provide better shock absorption against economic shocks (European Commission 2012, 2014; Andor 2014). The potential of a common unemployment insurance benefit at the European Monetary Union level (EMU-UI hereafter) to smooth fluctuations in income across member states has attracted particular attention. In addition to its benefits in terms of stabilization, a common EMU-UI could be designed in such a way that a minimum level of income protection is ensured for individuals in case of unemployment, hence strengthening the social dimension of the EMU.

Unemployment insurance schemes characterized by mechanisms of co-insurance or reinsurance are already present in some countries, where different levels of government co-exist (e.g. federal government, regional government, municipal government). The US system of unemployment insurance represents one of these cases. The Unemployment Compensation program in the US is a joint federal-state scheme financed by both federal and state payroll taxes. Additionally, the federal government provides extensions to the duration of unemployment compensation via the Extended Benefit program, which is a permanent program co-financed by the states; and the Emergency Unemployment Compensation program, which is temporary and fully financed by the federal level.[1] Extended Benefits and Emergency Benefits are contingent schemes meaning that the transfers are activated only in times of economic hardship (subject to a trigger). Unemployment insurance schemes such as that of the US could serve as example for the design of an EMU-UI.

Recent empirical studies have focused on the design of an EMU-UI and the effect it would have had on income stabilization had it been implemented before the economic recession. Dullien (2013) shows, for instance, that the impact of the scheme would have varied significantly across countries but for sizeable shocks the additional stabilization from the EMU-UI would have been large. In the same line, Dolls et al. (2014) find that a common EMU-UI scheme would have absorbed a significant part of the unemployment shock in the recent recession and discuss different design options for an EMU-UI. Lelouch and Sode (2014) find that countries such as Belgium, Germany, Netherlands, Austria, and Luxembourg would have benefited from a common EMU-UI in the early 2000s, while Greece, Spain and Portugal would have benefited after 2009. As such, these backward-looking analyses are partially informative as they consider only shocks observed in the past and they do not provide an assessment of the potential of an EMU-UI in case different population groups would be hit by unemployment.

In this paper we explore the potential of an unemployment insurance benefit at EMU level to improve the income protection available to the individuals and their families in case of unemployment. Our analysis uses an illustrative EMU-UI scheme with a common design across countries, which can be considered as a benchmark to assess gaps in current national unemployment insurance. In particular, the EMU-UI would be intended to reduce

[1] Whittaker and Isaacs (2013) and Whittaker and Isaacs (2015) provide an overview of the characteristics of the Unemployment Compensation program, the Extended Benefit program and the Emergency Unemployment Compensation program.

the extent of current gaps in coverage where these are sizeable due to stringent eligibility conditions, to increase generosity where current unemployment benefits are low relative to earnings and to extend duration where this is shorter than 12 months. Our analysis compares the extent of the effect of these improvements across all countries from the Monetary Union using EUROMOD, the EU-wide tax-benefit microsimulation model, to simulate entitlement to the national and EMU-UI and to calculate the effect on household disposable income. Contrary to previous studies, which have analyzed the effects of an EMU-UI based on information about individuals currently unemployed in the data (i.e. past shocks), we simulate transitions to unemployment (Avram et al., 2011; Figari et al., 2011; Fernandez Salgado et al., 2013) and calculate the effect of an EMU-UI for all individuals currently in work, for those with the highest risk of unemployment and for different population sub-groups (e.g. by gender, education, age), in case they would become unemployed. Our approach allows us to provide a generalizable assessment of the effects of existing unemployment benefit systems and what an EMU-UI benefit could add, rather than one referring only to a particular set of labor market conditions.

This paper contributes to the recent literature on the impact of a common EMU-UI in several ways. First, we extend the work of previous studies by assessing the effect of an EMU-UI for all those currently in work in case they would become unemployed. Second, we compare the average effects of the EMU-UI for the whole population to those of specific population sub-groups, in particular those with the highest risk of unemployment, in order to provide some insights on the extent to which the characteristics of the new unemployed affect the impact of the common scheme. Finally, in addition to the usual focus on extended coverage, budgetary cost and additional income stabilization, we provide an assessment of the potential of an EMU-UI to reduce risk of poverty in case of unemployment.

The remainder of this paper is structured as follows. Section 2 describes the main dimensions characterizing national unemployment benefits in EMU member states. Section 3 specifies the design of the illustrative EMU-UI scheme considered in this paper. Section 4 introduces the methods used to evaluate the effect of an EMU-UI using EUROMOD. The results are discussed in Section 5 in terms of five main outcomes of interest: coverage, beneficiaries, income stabilization, risk of poverty and budgetary costs. Finally, Section 6 summarizes the main findings, highlights some caveats of the analysis and suggests ideas for future research.

2. National unemployment insurance schemes in EMU member states

Existing unemployment benefit systems vary widely in many dimensions, making comparisons and assessments quite complex as well as posing challenges for any attempt to suggest pathways to greater harmonization. Different dimensions are likely to have an important effect on the amount of benefit received by any particular person in unemployment. Table 2 in the Appendix summarizes the key characteristics of the schemes in 2014 in the EMU member states.

Eligibility in terms of meeting the minimum required amount of work or contributions to be entitled to the benefit is one of the key dimensions of unemployment insurance schemes. Table 2 shows that the minimum contribution period varies widely across member states, from 4 months in France to 12 in Germany, Estonia, Spain, Italy and

Portugal, and to 18 months in Lithuania. In addition the period over which these contributions are required to be made also varies across countries. The implicit proportion of time working or contributing to qualify for the benefit can be as low as 14% in France (4 months out of the previous 28) or 20% in Spain (12 months out of the previous 60) or as high as 75% in Latvia (9 months out of the previous 12).[2] Other conditions for eligibility exist and vary across countries. There are lower age limits in some countries and certain sorts of labor contracts are excluded in others. In general the self-employed are not covered by unemployment insurance (and do not pay contributions) but could be eligible for particular types of unemployment assistance benefits in some countries.[3]

A second key dimension of unemployment insurance schemes is the *level of payment*. The payment may be flat rate or proportional to previous earnings, either net or gross of income tax and/or social insurance contributions, or to another reference income base. Proportional schemes may in some cases include floors and/or ceilings to the benefit amount. The level of payment may also depend on the length of the period of contribution or vary over the period of eligibility. This period may be the same as the contribution period or it can be shorter, sometimes that of the last earnings payment. Table 2 shows that the benefit payment is flat rate in Greece, Malta and Ireland, and is calculated as a percentage of previous earnings in a reference period in the remaining countries. In Finland, Germany and Austria the earnings base is calculated net of income tax and social insurance contributions. The percentage that is applied ranges from as high as 85% in Luxembourg to as low as 40% in Estonia and Italy following a reduction of the rates after the first months of unemployment. In Germany and Luxembourg the percentage depends on the presence of children (67% in Germany and 85% in Luxembourg) or not (60% in Germany and 80% in Luxembourg). In many countries there are minimum and/or maximum payments. The latter can substantially reduce the replacement rate for higher earners. The level of payment in many countries reduces through time and within the 12 months considered in this paper, for instance in Estonia, Italy, Latvia and Portugal.

Another key dimension is the *duration* of entitlement, which depends on several criteria in some countries. Table 2 shows the maximum duration for "standard cases" but in many countries special cases (based on age or length of contribution for example) apply, extending duration up to or beyond the 12 months considered in this paper. In Cyprus, Ireland, Latvia, Lithuania, Malta and Slovakia maximum duration is shorter than 12 months in all cases.

Finally another important dimension to consider is how unemployment insurance schemes interact with the rest of the tax-benefit system. The existence of an *unemployment assistance* scheme (and the conditions attached to it) relates to this interaction. In most but not all EMU countries unemployed people seeking work are eligible for *social assistance* if their family incomes are low enough and they meet other relevant conditions. Moreover, unemployment insurance benefits are treated differently across countries in relation to

[2] See European Commission (2013) Table 8.

[3] Lagenbucher (2015) compiles a composite indicator of strictness of *eligibility criteria* for unemployment benefits in 40 OECD countries. Three dimensions are used to construct the indicator: availability of requirements and suitable work criteria, job-search requirements and monitoring, and sanctions. Note that in her study, Lagenbucher (2015) refers to requirements in terms of contribution conditions or exclusions of certain groups from receiving unemployment benefits as *entitlement criteria*.

being subject to taxes or social insurance contributions, or whether they are used as part of the income base for assessment of other benefits.[4]

3. A common EMU unemployment insurance scheme

The substantial diversity in design of existing national unemployment insurance schemes, presented in the previous section, highlights the challenges for defining the features characterizing a potential EMU-UI scheme. Most studies assessing the effects of an EMU-UI have considered a scheme, which would have a common design across countries.[5] Mainly two different types of common EMU-UI schemes have been discussed in the recent literature. The first alternative is a so called *genuine* scheme, in the sense that its provision is not conditioned to the size of unemployment (or the economic conditions) of member states. The *genuine* scheme aims to provide a basic level of insurance by replacing part of the national schemes. The common basic level of provision could then be topped-up by national unemployment insurance systems (Andor 2014, Dullien 2013). Alternatively, the *genuine* EMU-UI could be designed in such a way that national insurance schemes represent the basic UI provision, with EMU-UI top-ups in case the latter is more generous (Jara and Sutherland 2014). The second alternative, referred to as *contingent* or *equivalent* unemployment scheme, is meant to be triggered only in case of large economic shocks. A member state would receive a transfer if, for instance, unemployment exceeds a certain threshold, with national unemployment systems acting as normal (Beblavý and Maselli 2014; Dolls et al. 2014; Gros 2014). Beblavý et al. (2015) provide a useful literature review of recent work related to a European unemployment insurance benefit and discuss the different features of the scheme proposed in previous studies.

In our analysis we consider an illustrative *genuine* EMU-UI scheme, which has a common design across member states and can therefore be considered as a benchmark with respect to which gaps in national unemployment insurance benefits are assessed. The main features of the common EMU-UI analyzed here are based on the assessment of key design issues set out in a paper prepared by a DG-EMPL working group "On Automatic Stabilisers", with some minor refinements based on previous work by Jara and Sutherland (2014) and Jara et al. (2015), among others.

The illustrative EMU-UI presented here would be considered as the first tranche of the unemployment insurance provision in each country, with the national provision topping up to the existing level, if this exceeds the EMU-UI provision.[6] Individuals eligible to our illustrative EMU-UI would be those who have made contributions on earnings during at least three months in the previous 12 months. In terms of age, the EMU-UI scheme would be available to all currently in work up to age 64, excluding the self-employed. The benefit amount would be set at 50% of previous (most recent) own gross monthly earnings, with a

[4] The regulation of activation policies of unemployed individuals is another important dimension related to the design of unemployment insurance benefits. Vandenbroucke et al. (2016) analyse eight country case studies and highlight potential problems of institutional moral hazard, when the regulation of unemployment benefits (as well as social assistance) and activation is characterised by a multi-tiered setting.

[5] Note that a supranational scheme which provides a basic common level of insurance across Member States is not indispensable to achieve income stabilisation (Brandolini, 2015). Income stabilisation from a scheme with specific country characteristics (for instance similar to the existing national systems) could be achieved by centralising the financing of the systems at the EMU level (Brandolini, 2015).

[6] Note that this particular dimension of the EMU-UI design is important mainly for assessing the overall budgetary cost of the common scheme and the financing of the provision.

floor at 20% of average earnings in each country, except for part-timers (no floor), and a ceiling equal to 150% of average earnings in each country. The benefit duration is set at 12 months, starting from the first month of unemployment. Finally, the benefit would be treated in the same way as the existing national unemployment insurance in the rest of the tax benefit system (i.e. whether it is taxable or included in the income base for the assessment of other benefits). As previously found in Jara and Sutherland (2014) and Jara et al. (2015), the specific characteristics of the common EMU-UI relative to the characteristics of the existing national systems will influence the potential effect of the EMU-UI to provide income protection and income stabilization in case of unemployment.

Potential problems related to the introduction of an EMU-UI, such as risk of moral hazard or permanent transfers between countries should also be considered for the design of a common scheme. For instance, limiting the duration of the EMU-UI scheme to the first year of unemployment allows reducing potential problems of permanent cross-country transfers, as long-term unemployment is not targeted. However, potential risks of permanent transfers and moral hazard are more related to the way the financing of the scheme is designed in an intertemporal setting. Previous studies have suggested contingent schemes, as well as mechanisms such as experience rating or claw-back as alternatives to mitigate risks of moral hazard and permanent transfers (see Beblavý et al. (2015) for a review).[7] In this paper, such mechanisms are not considered given that our analysis is restricted to the additional gains from a common EMU-UI scheme in a particular policy year (not over time).

4. Methods and data

4.1. The European tax-benefit model EUROMOD

Our analysis makes use of EUROMOD, the EU tax-benefit microsimulation model based on information from EU-SILC to calculate entitlement to unemployment insurance and household disposable income. EUROMOD simulates cash benefit entitlements and direct personal tax and social insurance contribution liabilities on the basis of the tax-benefit rules in place and information available in the underlying datasets. Policies are those in place on June 30th in the year in question. Market incomes are taken from the data, along with information on other personal/household characteristics (e.g. age and marital status).[8] In this analysis we use micro-data from the 2012 SILC, which includes income information from 2011.

Our analysis aims at assessing the current gaps in national unemployment schemes using the EMU-UI as a benchmark and the effects of the EMU-UI on income stabilization and risk of poverty. All EMU 19 member states are included in our analysis.[9] For this, we limit our analysis to year 2014 (i.e. using the 2014 tax-benefit system, including 2014 national unemployment insurance schemes as the starting point for our analysis). As such, we do

[7] In the context of an EMU-UI, where Member States would contribute to a common unemployment insurance scheme, experience rating would imply defining a relationship between the contribution rates and the usage of the scheme (e.g. contribution rates increase for countries with frequent use of the scheme). Claw-back, on the other hand, would imply modifying contribution rates when the net position of a Member State with respect to the common fund deteriorates beyond a certain point (i.e. increasing contribution rates when a Member State has been net beneficiary for several years).

[8] See Sutherland and Figari (2013) for more information about EUROMOD.

[9] Lithuania is included in our analysis for completeness, although the country adopted the euro in 2015.

not consider intertemporal cross-country transfers and redistribution. In our analysis labor market and other behavior is assumed to be the same before and after the introduction of the EMU-UI, as is the behavior of other household members when a person becomes unemployed.

4.2. Simulating the transition from work into unemployment

The strategy used in this paper in order to evaluate the potential effect of an EMU-UI consists in moving people from work (employment or self-employment) into unemployment and re-calculating their new disposable income both with and without introducing the EMU-UI by means of the microsimulation model EUROMOD, hence capturing the implications of tax and benefit systems under their new labor market status. The effects of a transition to unemployment are simulated for all those currently in work (employed and self-employed) in the data, aged between 18 and 64, as well as for those with the highest risk of unemployment. This section focuses on the assumptions to simulate transitions into unemployment, while the next section describes the selection of people with the highest risk of unemployment.

The effects of transitions to unemployment in our analysis are simulated in the following way. First, disposable income is calculated before transition to unemployment takes place. Then, for each earner in the household, individual earnings are set to zero and all benefits they would become eligible for (including EMU-UI) are simulated with EUROMOD, as well as their corresponding household disposable income under unemployment.[10] This is done separately for each earner in the household, making the assumption that the earnings of other household members are not affected by the individual's change in labor market status and income. Table 3 shows the characteristics of the samples in each country, highlighting the extent to which the in-work labor force differs across member states.

Simulating transitions to unemployment is particularly practical in order to simulate the policy rules determining entitlement to unemployment benefits given that essential information needed to simulate unemployment benefits for those currently unemployed in data is unavailable. For instance, most national unemployment insurance systems are based on previous earnings, which are not reported in the data for those currently unemployed. However, for those currently in work, previous earnings can simply be recorded as the earnings before simulating their transition to unemployment. Moreover, information needed to simulate eligibility to unemployment benefits is unavailable for the current unemployed. In particular, contribution history prior unemployment is not reported in the data; neither is previous labor market status (employment or self-employment). For the new unemployed in our analysis (people currently in work who would become unemployed), the number of months worked in the qualifying period can be assessed using the number of months in work before transition to unemployment, which is recorded over the last 12 months in the data. For instance, in Greece, it is required to have worked (and have made contributions) for 5 out of 12 months to be eligible to unemployment insurance, while in Germany it is required to have worked 12 out of 24 months. In our simulations we would consider a person in Greece eligible if she has worked 5 out of 12 months (according to the data) before transition to unemployment; and 12 out of 12 months in

[10] Other relevant labour market variables entering the simulations are adjusted to reflect the corresponding change in their labour market situation e.g. labour market status set to unemployment, hours of work set to zero, etc.

Germany (given that month by month employment information is available for the previous year only).[11] For those countries where the qualifying period goes beyond 12 months, for instance Lithuania where it is required to have contributed 18 out of 36 months, we use information about working history since entering the labor market as an additional control.

An important assumption needed for the calculation of unemployment benefits for the new unemployed involves determining the duration of their unemployment spell. Here, we use a simplifying assumption in order to introduce some variation in the duration of unemployment spells of the hypothetical unemployed. We assume that unemployment duration is equal to months in work during the year before the simulated transition. This assumption is made in order to compare disposable income in and out of work over a similar time period.[12] Note, however, that our assumption that both, unemployment duration and months of contribution history, are equal to months in work in the previous year, means that we cannot capture coverage of the EMU-UI for people in short-term unemployment (1 to 2 months) because the eligibility requirement of the EMU-UI is based on contributions of 3 or more months in the previous year.

4.3. Selection of people with the highest risk of unemployment

As mentioned in the previous section, transitions into unemployment are simulated for all individuals currently in work. This approach has the advantage of allowing us to choose different population sub-groups to analyze the effect of the EMU-UI for individuals with particular characteristics. In addition, here we propose to simulate the effect of the EMU-UI for those individuals with the highest probability of becoming unemployed. More precisely, the 2% of the working population with the highest probability of becoming unemployed in each country.[13] For this, we first estimate the probability of experiencing unemployment for a sample of people in work in the EU-SILC data. The calculation is based on a probit model of unemployment experience in the past year as a function of a set of individual, household and job characteristics known to explain unemployment:

$$y_i^* = \mathbf{x}_i \boldsymbol{\beta} + \varepsilon_i$$

$$y_i = 1[y_i^* > 0]$$

where y_i is equal to one if individual i experienced unemployment and zero otherwise, 1[.] is the indicator function (with y_i^* being the latent propensity to be unemployed), and ε_i is distributed as standard normal. The vector of explanatory variables $\mathbf{x}_i$ contains dummy variables for gender, age categories, marital status, number of children in the household, number of earners in the household, home ownership status, years of work experience,

[11] Note that this approach is different from that of Jara and Sutherland (2014), where each country's specific qualifying period was translated into a proportion of 12 months. Under that approach, the contribution condition of working 12 out of 24 months in Germany would have been considered fulfilled if a person was observed working 6 out of the 12 months in the previous year.

[12] As a sensitivity check, we analyzed the case where duration would be set to 12 months for all those entering unemployment, and this did not affect the results significantly.

[13] The choice of 2% of the working population is based on the average changes in national employment levels in recessions over the recent decades in Europe.

part-time employment, educational qualifications, earnings quintile groups, and one-digit occupation and industry.

The estimates of the coefficients $\boldsymbol{\beta}$ are listed in Table 4. The pseudo-R^2 figures (indicating amount of variation explained) are typically in the range 0.2-0.4, which is quite high for probit models, suggesting good model fit. Some general patterns can be observed across countries. In general women are less likely to be unemployed than men. The profile of unemployment with age differs across countries, although the risk of unemployment usually falls with work experience (which is related to age). Earnings are by far the strongest and most consistent predictor across all countries: the higher the earnings the lower the risk of unemployment. Holding earnings constant, the relationship between education and unemployment risk is relatively weak and, where present, suggests that lower qualifications are associated with lower unemployment risk (holding earnings constant, a low level of qualifications may be picking up high levels of motivation or other unobserved skills). Household characteristics affect unemployment to some extent: in countries where being married has an effect it is generally to reduce unemployment risk. Having fewer children and more earners in the household may be associated with lower unemployment risk. Job characteristics also have some effect. Part-time workers are generally less exposed to unemployment. For brevity we do not report the coefficients on the industry and occupation dummy variables. The industry variables identify sectors at high risk of unemployment: thus construction usually carries a positive. Occupation also has some effect, although (as for education) we are already allowing for earnings.

From the probit coefficients (Table 4) we predict the risk for each individual of experiencing future unemployment. These predictions are based on each person's characteristics (multiplied by the coefficients) plus a random component (the probit error term) that accounts for unobserved factors that may tip people into unemployment. Specifically the risk is given by:

$$\hat{p}_i = \Phi(x_i\hat{\beta} + \nu_i)$$

where $\hat{\beta}$ are the estimated coefficients, ν_i is the random (standard normal) component and $\Phi(.)$ is the standard cumulative normal distribution. The addition of the random factor means that we do not completely exclude the lowest risk groups (e.g. high earners) from unemployment (Li and O'Donoghue 2014).

In each country, we sort individuals according to their predicted unemployment risk and the 2% with the highest risk is selected for the analysis. In the process, we constrain the selection of those with the highest risk such that the coverage rate of the national UI matches the short-term rates of unemployment benefit recipients observed in 2014 in the EU Labor Force Survey (EU-LFS) data (see Table 5). The constraint on coverage of national UIs is imposed with the aim of providing an assessment of the effects of the EMU-UI for a population which would be in a similar situation to that of the short-term unemployed in 2014. More precisely, first, we sort individuals on the basis of their unemployment risk and on their eligibility status for national UI. Eligibility for national UI is based on EUROMOD simulations performed for all the individuals employed in the underlying input data. Then, we first select those with the highest unemployment risk among those eligible for national UI. This step allows us to match coverage rates among those with the highest unemployment risk to the rates of short-term unemployment benefit

recipients observed in 2014 in EU-LFS. Finally, we select the remaining number of individuals, to complete our sample of 2% of the working population, on the basis of their predicted unemployment risk independently of the eligibility status to the national UI scheme. In order to ensure the matching of short-term coverage rates of national UI, eligible individuals selected in the final step are assumed to be non-eligible to national UI, meaning that their simulated amount of national UI is set equal to zero and their disposable income is recalculated under such assumption. Table 5 in the appendix presents the characteristics of the 2% with the highest risk of unemployment.

5. Assessing the effects of the EMU-UI

This section presents an empirical assessment of the potential effect of the EMU-UI on different outcomes of interest. Using our illustrative EMU-UI scheme as a benchmark, we first analyze the potential of the EMU-UI to reduce the extent of current gaps in coverage of national UI schemes. Then, we consider the proportion of new unemployed who would benefit from the EMU-UI, due to increased generosity of payments, extended coverage or extended payment duration. Third, the effect of the EMU-UI on household income stabilization and poverty risk is analyzed. Finally, the additional budgetary cost of the introduction of the EMU-UI is discussed. The results presented in the main text show the average effect of the EMU-UI over the whole population in work and those for individuals with the highest risk of unemployment, while the effects over particular population groups (e.g. males and females, age and education groups, and earning quintile groups) are discussed, with results presented in the appendix. Focusing on particular population groups contributes to providing an idea of how the impact of entering unemployment and the potential effect of the EMU-UI vary with respect to the characteristics of the individuals considered.

5.1. Potential coverage

The extent to which eligibility conditions of national unemployment insurance schemes differ from those of a common EMU-UI would determine the potential of the common scheme to extend coverage in each member state. Different ways of measuring UI coverage exist and the levels, and to some extent country rankings, depend on the data, methods and definitions used (European Commission, 2013). In our analysis, we use the concept of "potential coverage" to refer to the proportion of the new unemployed who would be entitled to any UI (based on their previous work history) in the first 12 months of unemployment. Our measure of potential coverage differs from statistics on effective unemployment benefit recipients for several reasons. First, standard statistics on unemployment benefit recipients, calculated using information on the existing unemployed in surveys and administrative sources, can include the long-term unemployed who may have exhausted their eligibility and therefore figures would be lower than our measures of "potential coverage". Second, even if only the short-term unemployed are considered in the calculation of unemployment benefit recipients using surveys, there is a conceptual difference between the two measures. Our measure of "potential coverage" does not refer to actual unemployment benefit receipt (as those provided by Eurostat, for instance) but whether individuals currently in work fulfil the national eligibility conditions based on their previous work history. There could be issues of under-reporting of unemployment

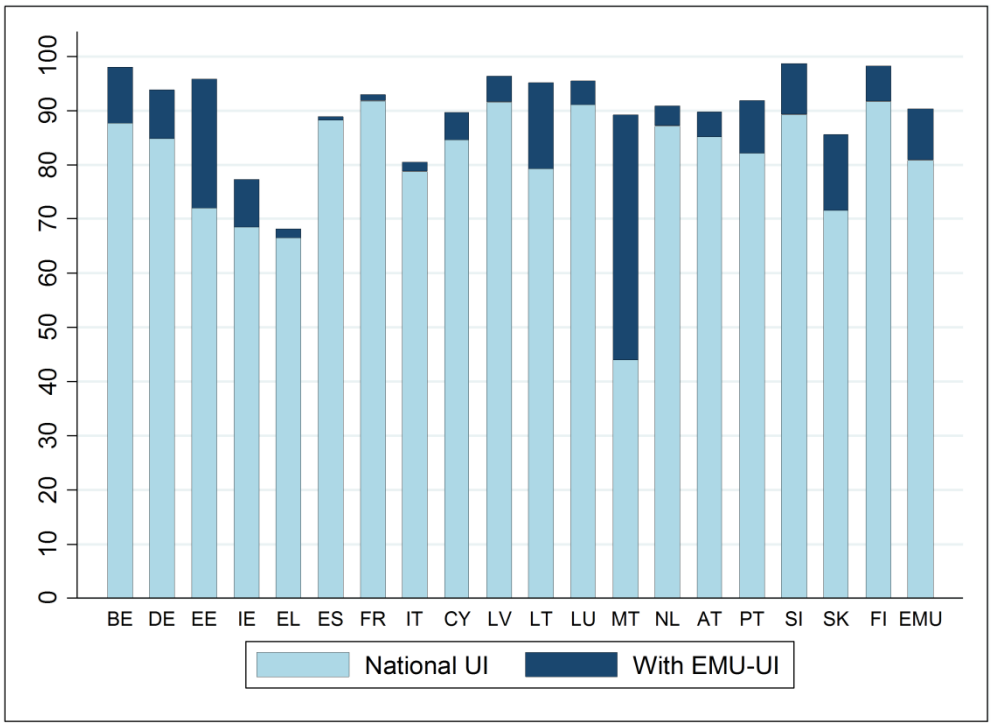
benefits receipt or cases where individuals might be eligible for unemployment benefits (from their work history) but not registered or not receiving unemployment benefit in the survey. Third, our calculations of "potential coverage" will be necessarily affected by the fact that not all the information needed to simulate eligibility is available in the data and therefore cannot be modelled in EUROMOD. For instance, administrative procedures required to register as unemployed in order to receive the benefit cannot be simulated in the model. In this sense, we expect our measures of "potential coverage" to be higher than measures of effective unemployment benefit receipt. Fourth, the characteristics of our sample of new unemployed (e.g. their number of months in work before entering into unemployment) determine whether they would be entitled to any UI or not, and could be significantly different from contribution history of those unemployed in the data. In fact, the majority of individuals currently in work in our data are observed working full-year and would therefore be considered eligible to national and EMU-UI, which is not likely to be the case for those currently unemployed in the data. For this reason, in addition to average results over the whole population, we present results for those with the highest risk of unemployment, where potential coverage of national UI has been constrained to be equal to the share of short-term unemployed receiving unemployment benefits in 2014 according to EU-LFS data. Additionally, in the appendix, estimates of potential coverage of national and the EMU-UI for specific population groups are presented in order to provide some insights on the extent to which the characteristics of the new unemployed affect their eligibility to unemployment benefits.[14]

Figure 1 shows the percentage of all people in work in each country who would be entitled to receive national UI at some point in the year after becoming unemployed.[15] It also shows the additional potential coverage resulting from the introduction of the EMU-UI, for those who do not qualifying for national benefit during the year. According to our results, average potential coverage rates of the existing national UI benefits for all those currently in work range from 44% in Malta to 92% in France, Latvia, Luxembourg and Finland. Among the countries with low potential coverage rates we also have Greece and Ireland (around 67%), while among the higher ranked we observe Belgium, Spain and Slovenia. Our results indicate that our illustrative EMU-UI would increase potential coverage in all countries but to very different extents. Potential coverage would substantially increase in Malta (around 45 percentage points), Estonia (around 20 percentage points) and Lithuania (around 15 percentage points). The increase in potential coverage is mainly due to less stringent contribution conditions of the EMU-UI compared to the national schemes. The smallest extensions in potential coverage are observed in Greece, Spain and France, the reason being that eligibility requirements for national benefits in terms of contribution conditions are similar to those of the common scheme.

[14] It should be noted that despite the caveats of our methodology, simulating transitions to unemployment and using information on previous employment to assess entitlement to unemployment benefits is the only method that allows simulating the effect that changes on eligibility conditions would have on "potential coverage". Any other method to assess effective coverage would require imposing additional assumptions about the shares of people that would be effectively covered.

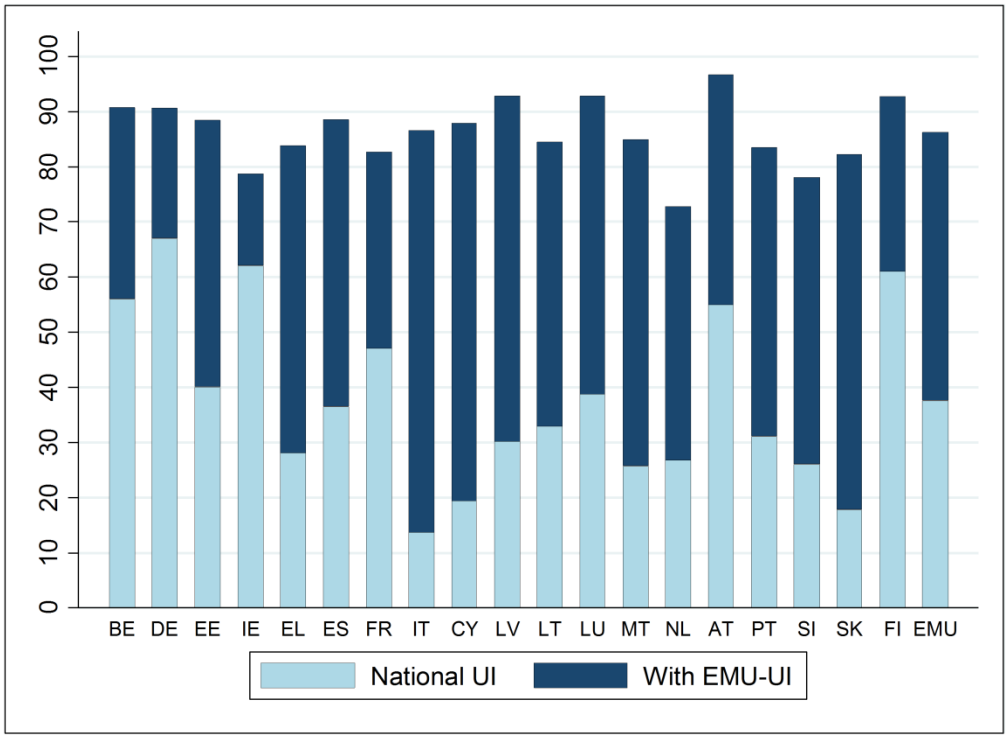
[15] Country codes are specified in Table 2 in the Appendix.

Figure 1. Potential coverage: whole sample in work



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

Figure 2. Potential coverage: 2% with highest risk of unemployment



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74 and EU-LFS data for coverage of national UIs.

Figure 2 provides information on potential coverage, but now, for those with the highest risk of unemployment. Potential coverage rates of national UIs are, by construction, equal to shares of short-term unemployed receiving unemployment benefits in 2014 according to EU-LFS. As expected (for the reasons discussed above), shares of short-term unemployment benefit recipients are considerably lower than shares of potential coverage for all those in work. Our results further show that the EMU-UI would have a significant effect on coverage for those with the highest risk of unemployment. Additional potential coverage for those with the highest unemployment risk would be on average 48 percentage points at the EMU level, ranging between 17 percentage points in Ireland and around 73 percentage points in Italy. Countries such as Germany, Belgium and Finland are among those with the smallest extensions in coverage due to the EMU-UI. These are countries where coverage of national unemployment insurance schemes (as measured by the share of short-term unemployed receiving unemployment benefits according to EU-LFS) is already relatively high.

Table 6 in the appendix shows how the additional coverage due to the EMU-UI, measured in percentage points varies with the characteristics of the potentially new unemployed. In most countries, the additional coverage provided by the EMU-UI would be larger for women, younger age groups (younger than 30), the low-skilled and people with low earnings (bottom earnings quintiles). The results highlight the potential of the EMUI-UI to extend coverage of unemployment insurance for vulnerable population groups.

5.2. Beneficiaries

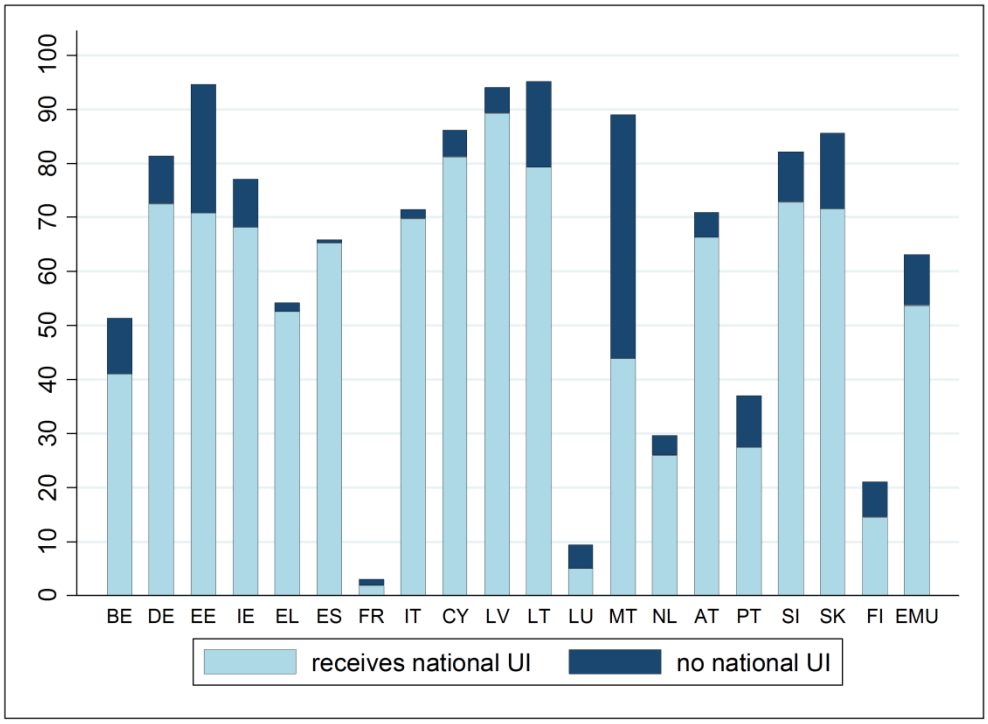
Our second outcome of interest refers to the proportion of new unemployed who would benefit from the EMU-UI, i.e. would have a higher benefit provision as a result of the introduction of the common scheme. The proportion of beneficiaries from the EMU-UI in each member state can be the result of extensions of coverage, increased generosity of benefit payments and/or increased benefit duration.

Figures 3 and 4 present the results on gainers from the EMU-UI for all those currently in work and those with the highest unemployment risk, respectively. The figures show the proportion of the sample who would receive an additional payment from the EMU scheme at some point in the 12 months following their transition to unemployment. For completeness, the figures distinguish between those who would receive higher payments from the EMU-UI, while receiving the national provision and those who would not qualify to the national benefit, but would be entitled to the EMU-UI. For the whole population in work (Figure 3), the share of new unemployed who would benefit from the illustrative EMU-UI varies widely across countries, from around 95% in Estonia and Lithuania down to less than 5% in France. On average, at the EMU level, 63% of people currently in work would benefit from an EMU-UI in case of unemployment. The rate is particularly high in Estonia because the national provision decreases with duration. In Cyprus, Latvia, Lithuania, Malta and Slovakia the percentage of beneficiaries is high because the national provision is shorter than 12 months. Figure 4 shows a similar cross-country pattern for those with the highest risk of unemployment. France, Belgium and Finland are amongst the countries with the lowest proportion of beneficiaries, while Latvia, Estonia, Cyprus and Lithuania would benefit the most for the introduction of the EMU-UI. At the EMU level, around 70% of those at high risk of unemployment would benefit from an EMU-UI.

The results for the whole population in work (Figure 3) show that in most countries the largest proportion of beneficiaries is composed of individuals who would receive some extra benefit at some point in the year from the EMU-UI while also receiving the national benefit at some point. This is the case because, for all those in work, potential coverage of national UIs is high so that the largest proportion of beneficiaries is explained by increased generosity or extended duration of the EMU-UI payments compared to national UI schemes. For those with the highest risk of unemployment (Figure 4), the opposite picture is observed, in general. In most member states the largest proportion of beneficiaries is made up of individuals who would not qualify to the national benefit but would be entitled to the EMU-UI, reflecting extension in coverage by the common scheme.

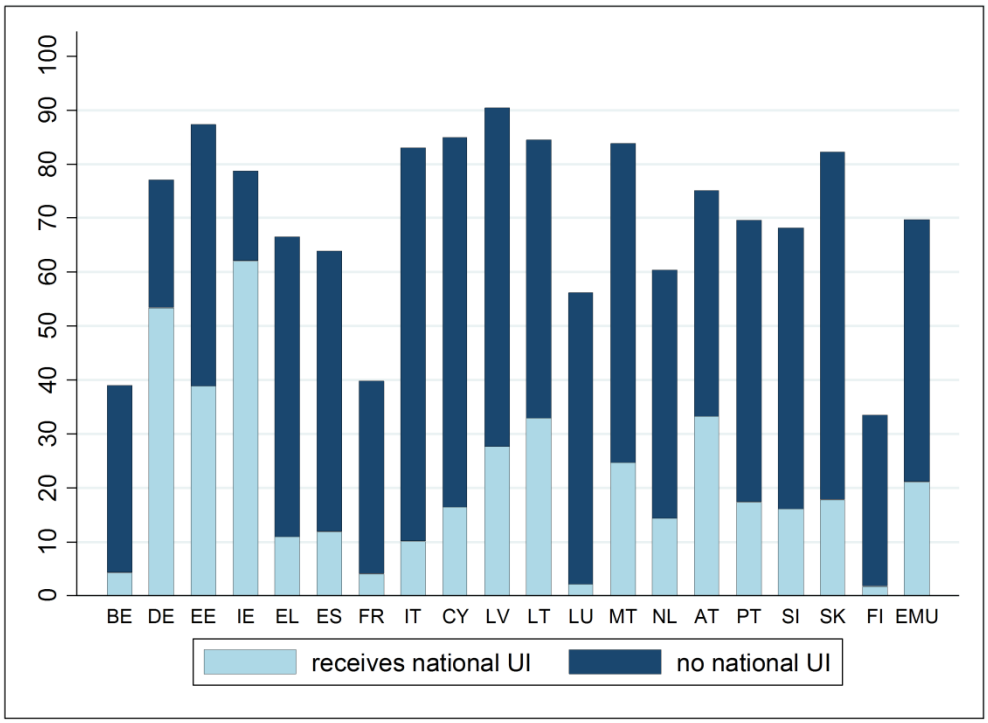
Table 7 shows the proportions of different population sub-groups who would benefit from the EMU-UI, distinguishing between those receiving the EMU-UI in addition to the national insurance benefit, and those receiving the EMU-UI without eligibility for the national benefit. In most countries, the high-skilled and those in the top earning quintile would benefit the most from the EMU-UI, while already receiving the national provision. The result could be explained by the fact that the illustrative EMU-UI is proportional, in which case high earners would benefit the most from the supranational provision, in particular when the ceiling of the EMUI-UI is higher than the national ceilings. On the other hand, the proportion of beneficiaries not entitled to national UI is larger for women, younger age groups (younger than 30), the low-skilled and people with low earnings (bottom earnings quintiles) in most member states. The latter results reflect the impact of the EMU-UI on extending coverage (see Table 6)

Figure 3. Beneficiaries: whole sample in work



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

Figure 4. Beneficiaries: 2% with highest risk of unemployment



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

Table 7 can be also used to provide some intuition about the relative scale of beneficiaries that would result from an increase in unemployment among particular types of workers. For example, if new unemployment were concentrated among the low-skilled then the EMU-UI would have a particularly large share of beneficiaries among those already entitled to national benefit in Ireland, Cyprus and Latvia. However, there would be a particularly low share of such beneficiaries in France, Luxembourg and Finland. In terms of the newly entitled to unemployment insurance benefit (EMU-UI), Malta, Estonia and Lithuania would have the highest proportion of low-skilled beneficiaries.

5.3. Household income stabilization

The potential of the EMU-UI to act as an automatic stabilizer in case of economic shocks is of particular interest in our analysis. Here, we provide a picture of national automatic stabilizers for the EMU member states, and the extent to which the EMU-UI would add to the income stabilization that occurs as a result of the operation of national tax-benefit systems. We use the "income stabilization coefficient" as defined in Bargain et al. (2013; equation 12):

$$\tau = 1 - \frac{\sum_i (Y_{ih}^B - Y_{ih}^S)}{\sum_i (X_{ih}^B - X_{ih}^S)} \ ,$$

where Y_{ih}^B represents the baseline household disposable income, i.e. the disposable income before transitions into unemployment are simulated; Y_{ih}^S $(S = N, EU)$ represents the disposable income of household h when worker i enters unemployment and only the national unemployment benefit scheme is in place (Y_{ih}^N) or when also the EMU-UI is in

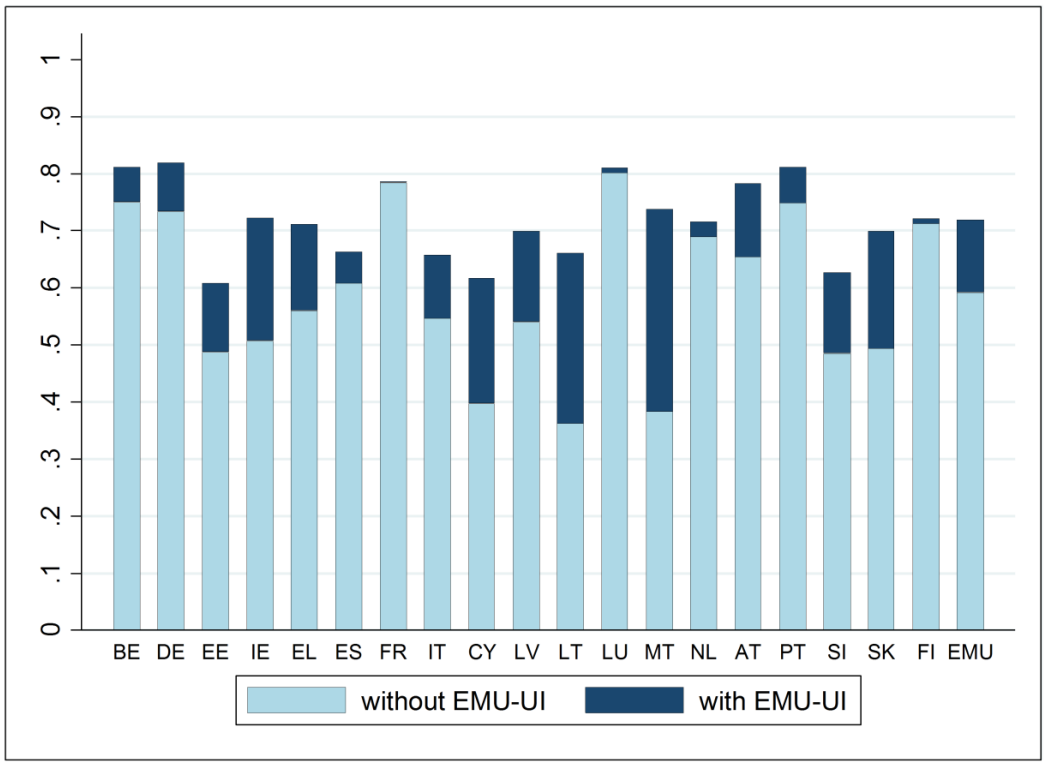
place (Y_{ih}^{EU}); X_{ih}^{B} and X_{ih}^{S} stand for household h's market income before and after transition to unemployment, respectively. As such, the income stabilization coefficient represents the proportion of gross income from work lost on becoming unemployed that is retained in the form of reduced taxes and increased benefits (i.e. unemployment insurance). The coefficient of income stabilization due to the tax benefit system as a whole is plotted in Figure 5 for the whole population in work and in Figure 6 for those with the highest risk of unemployment. The additional effect of the EMU-UI is also shown.

Income stabilization due to national tax-benefit systems varies widely across member states and is in general lower for those with the highest risk of unemployment, except in Belgium, Ireland, Greece, Lithuania, Malta, Slovakia and Finland. For the whole population in work the coefficient of income stabilization is the lowest (highest) in Lithuania (Luxembourg), while it is the lowest (highest) in Italy (Belgium) for those with the highest unemployment risk.[16] The EMU-UI has a positive effect on the degree of income stabilization with a diverse pattern across countries. For both, the whole population in work and those with the highest risk of unemployment, the largest additional stabilization is observed in Malta and Lithuania, while among those where the additional stabilization is the lowest we find Belgium, France, Finland and Luxembourg. For those with the highest risk of unemployment, Spain and Italy also present high additional stabilization, while the effect of the EMU-UI is smaller when the whole population in work is considered. At the EMU level, income stabilization would increase on average by around 13 percentage points when the whole population is considered and 20 percentage points for those at high risk of unemployment.

Table 8 shows how the additional income stabilization due to the EMU-UI, measured in percentage points varies with the characteristics of the potentially unemployed person. In most countries, the additional income stabilization from the EMU-UI tends to be larger for the high-skilled compared to other groups. No sizeable differences are observed between men and women, except in Belgium, Estonia and Austria, where the additional income stabilization would be larger for men; and in Ireland, Malta, the Netherlands and Slovakia where the EMU-UI would have a larger effect for women. There are no common patterns by educational attainment. As it was the case for beneficiaries, Table 8 can be used to indicate the scale of stabilization if unemployment is concentrated among groups with particular characteristics. For example, the increase in stabilization from the EMU-UI would be particularly high in Slovakia, Lithuania and Malta if new unemployment were concentrated among the younger age group; while it would be high in Cyprus, as well, if the new unemployment were concentrated among the older age group.

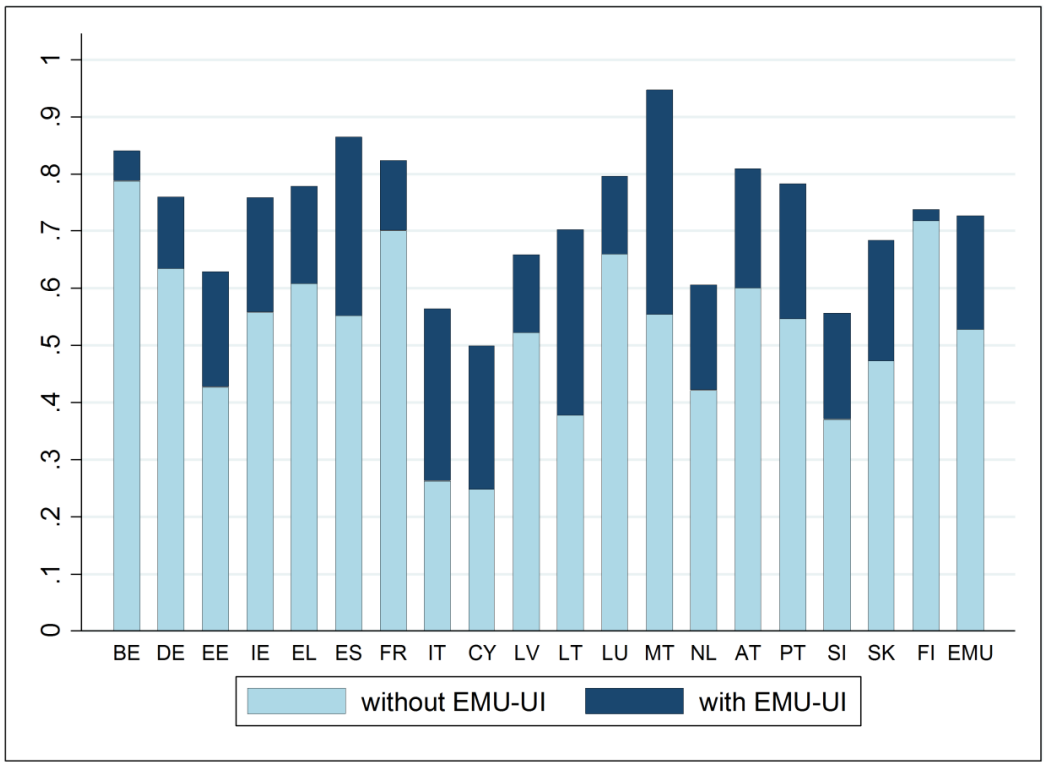
[16] These estimates of income stabilisation are higher than those presented in other studies such as Dolls et al. (2013). This is because our analysis focuses on the effect of unemployment on incomes in the first year of unemployment when entitlements to UI benefits are at their highest.

Figure 5. Income stabilization coefficient: whole sample in work



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

Figure 6. Income stabilization coefficient: 2% with highest risk of unemployment



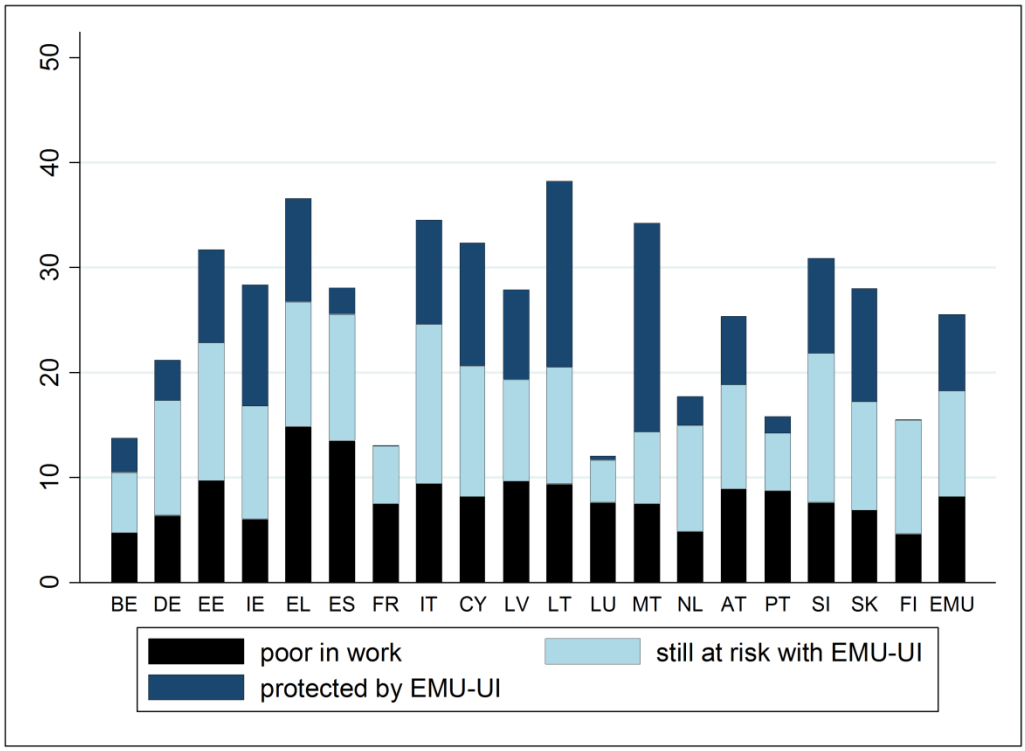
Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

5.4. Risk of poverty

Becoming unemployed increases the risk of household incomes falling below the poverty threshold, here measured as 60% of median equivalized disposable income in the baseline before unemployment. Figures 7 and 8 present the proportion of people who would fall into poverty as a result of their transition into unemployment, as well as the difference made by the EMU-UI in protecting incomes from falling below the poverty threshold (dark blue part of the bars). They also show the proportion of the sample who have incomes below the poverty threshold while still in work (black part of the bars), and those who would fall into poverty even if the EMU-UI was in place (pale blue part of the bars).

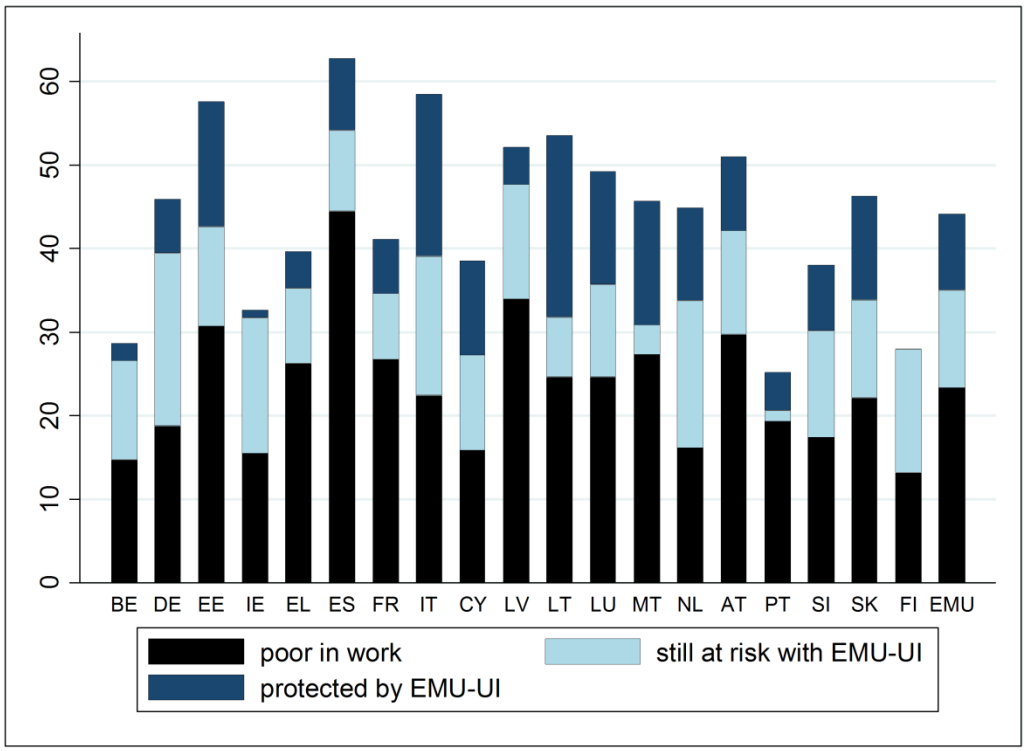
For the whole sample in work, figure 7 shows that the proportion of those poor while in work varies widely across EMU member states, ranging between 4.6% in Finland, and 14.8% in Greece. The additional protective effect of the EMU-UI is evident in all member states but is very small in France, Finland and Luxembourg, which presented the lowest proportion of beneficiaries from the common scheme. The effect on poverty prevention is the largest (more than 10 percentage points) in Ireland, Greece, Italy, Cyprus, Lithuania, Malta and Slovakia. At the EMU level, around 7% of those becoming unemployed would be protected from poverty by the EMU-UI, when the whole sample is considered.

Figure 7. At risk of poverty: whole sample in work



Notes: The poverty threshold is 60% median equivalized household disposable income in the baseline before unemployment. Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

Figure 8. At risk of poverty: 2% with highest risk of unemployment



Notes: The poverty threshold is 60% median equivalized household disposable income in the baseline before unemployment. Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

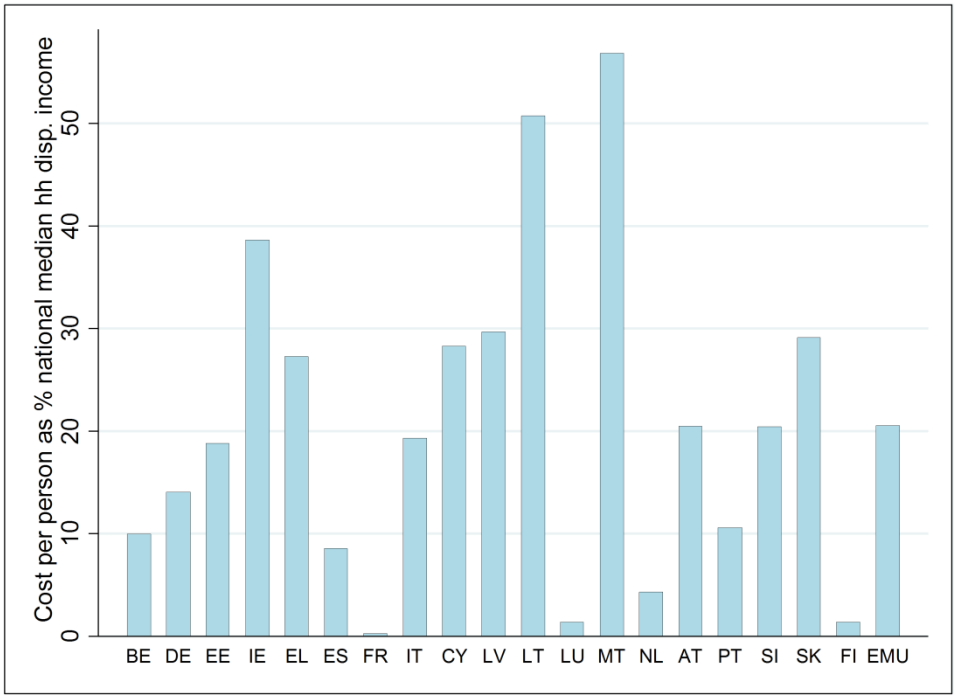
Figure 8 shows that for those with the highest risk of unemployment, the proportion of individuals who are poor while in work is very high (above 13%), and particularly so in Estonia, Latvia and Spain (above 30%). This is mainly explained by the fact that those with the high risk of unemployment belong to the lowest quintiles of the earnings distribution, as shown in Table 5 in the appendix. The EMU-UI would have a positive effect on poverty prevention in all countries but the effect is small in Finland, Belgium and Ireland. The reason behind this result is that in these countries, those with the highest risk of unemployment have very low earnings so that the additional EMU-UI payment does not compensate them enough to cross the poverty line in case of unemployment. The largest effect on poverty reduction is observed in Estonia, Lithuania and Italy. On average, the EMU-UI would protect from poverty around 9% of those at high risk of unemployment, at the EMU level.

5.5. Budgetary cost

The first round net budgetary cost of the additional effect of the illustrative EMU-UI scheme is compared in terms of the average cost across all potentially unemployed in each country. This is shown in Figure 9 for the whole population in work and Figure 10 for those with the highest risk of unemployment. The additional cost is measured as a proportion of median household disposable income in each country, to factor out cross-country differences in income levels.

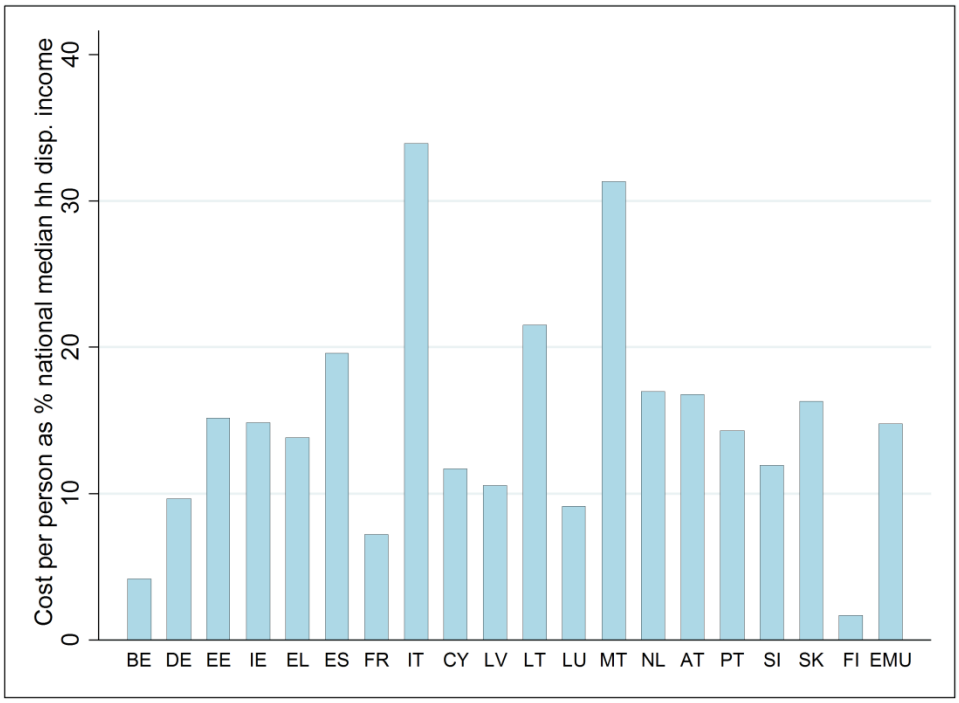
The pattern of the additional budgetary costs follows closely the pattern of beneficiaries from the EMU-UI. For the whole population in work (Figure 9), the cost is the lowest (below 5%) in France, Luxembourg and Finland, while the scheme is particularly costly (above 30%) in Ireland, Lithuania and Malta. In the latter member state, the relative additional budgetary cost is substantial, amounting to more than 50%. The high additional cost for Malta might be explained by three main factors. First, Malta is one of the countries for which additional potential coverage of the EMU-UI is the highest. Second, the national UI scheme in Malta is flat rate meaning that individuals with relatively high earnings would benefit significantly from the proportional EMU-UI scheme. Finally, additional payments from the EMU-UI are expected as a result of extended duration, as the national benefit covers only the first six months of unemployment. For those with the highest risk of unemployment (Figure 10), the cost would be the lowest in Finland, France and Luxembourg, as it was the case for all those in work, and in Belgium. The highest additional cost is observed in Italy, followed by Malta, Lithuania, and Spain.

Figure 9. Average additional budgetary cost of EMU-UI per unemployed person as percentage of median household disposable income: whole sample in work



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

Figure 10. Average additional budgetary cost of EMU-UI per unemployed person as percentage of median household disposable income: 2% with highest risk of unemployment



Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

For those with the highest risk of unemployment it is also possible to calculate the contribution rate needed to finance the common scheme if the scheme was to be financed through social insurance contributions. The first column of Table 1 presents the country-specific contribution rates needed in case each country had to finance the harmonization of their national UI schemes to the EMU-UI benchmark. Contribution rates would range from 0.3 percent in Portugal to 0.7 percent in Italy, However, the idea behind an EMU-UI is to allow risk sharing across members of the scheme. In this sense, the common scheme could be financed based on a uniform contribution rate across EMU countries. The uniform contribution rate necessary to finance the introduction of an EMU-UI for the 2% with the highest unemployment risk would be equal to 0.455 percent of employment income. The second and third columns of Table 1 present, in addition, the total cost of the EMU-UI as a percentage of GDP in each country. The second column shows the cost of the EMU-UI in case each country had to finance on their own the harmonization of their national UI schemes to the EMU-UI benchmark, while the third column presents the cost of the EMU-UI if a uniform contribution rate across EMU member states was applied. In both cases, the cost of the EMU-UI for the 2% with the highest unemployment risk is very low, ranging between 0.008 to 0.016 percent of GDP across EMU member states and 0.012 percent of GDP at the EMU level.

Table 1. Contribution rates and cost of an EMU-UI: 2% with highest risk of unemployment

	Contribution rates (%)	Total cost (% of GDP)	
		specific	uniform
BE	0.406	0.012	0.013
DE	0.458	0.015	0.015
EE	0.411	0.011	0.013
IE	0.367	0.008	0.009
EL	0.493	0.009	0.008
ES	0.350	0.008	0.011
FR	0.353	0.009	0.012
IT	0.680	0.015	0.010
CY	0.310	0.011	0.016
LV	0.314	0.008	0.012
LT	0.382	0.008	0.009
LU	0.451	0.008	0.008
MT	0.498	0.014	0.013
NL	0.491	0.015	0.014
AT	0.562	0.016	0.013
PT	0.307	0.008	0.012
SI	0.328	0.010	0.014
SK	0.479	0.010	0.010
FI	0.466	0.014	0.014
EMU	0.455	0.012	0.012

Notes: Countries ordered according to the official EU protocol order.
Source: own calculations using EUROMOD version G2.74

6. Conclusion

This paper presents an assessment of the potential of an EMU-UI to provide additional income support and to increase within country income stabilization. The illustrative EMU-UI scheme presented in this paper has a common design across member states, which allows identifying gaps in national unemployment insurance schemes using the EMU-UI as a benchmark. The effect of the EMU-UI is simulated for all individuals currently in work in the data as well as for the 2% with the highest unemployment risk, in case they would become unemployed. As such, our approach allows us to provide a generalizable assessment of the effects of existing unemployment benefit systems and what an EMU benefit could add, rather than one referring only to a particular set of labor market conditions.

Our results show that the common EMU-UI has the potential to extend coverage and increase generosity in the level of payment compared to national schemes. The illustrative EMU-UI would also reduce the risk of poverty for the potentially new unemployed and would have a positive effect on household income stabilization. The degree of additional income protection and stabilization varies, however, considerably across EMU member states. The main factor explaining differences in the effect of the EMU-UI across countries

is that the existing national UI schemes vary considerably in design in different dimensions. In France, Finland and Luxembourg the common EMU-UI has a very small effect on income stabilization and poverty risk. This is because, the existing national schemes are more generous than the EMU-UI in most dimensions. At the other extreme, the EMU-UI would have a significant effect in Cyprus, Ireland, Lithuania, Malta and Slovakia because the EMU-UI performs better in some dimensions compared to the national schemes. In Malta the flat rate national scheme offers low income replacement to high earners. This is to some extent the case in Ireland, as well, where the national scheme is flat rate depending on previous earnings. In Cyprus, Lithuania, Malta and Slovakia the standard duration of the national benefit is only six months, and in Ireland only nine months. Ceilings and floors that operate in the national systems as well as the definition of the earnings base and rate for the benefit payment also influence the results.

Another factor, which would affect the impact of on EMU-UI are the characteristics of individuals who would enter unemployment. Our analysis for those with the highest risk of unemployment highlights the potential of an EMU-UI to extend coverage substantially, under the assumption that national UI coverage for this group would be the same as that observed for the current unemployed in EU-LFS data. The specific demographic and labor market characteristics of those at high unemployment risk would, however, determine the degree of impact of the EMU-UI on income stabilization and risk of poverty. In some countries, the additional stabilization and reduction of poverty risk provided by the EMU-UI for those with the highest unemployment risk is lower than that of the whole population because individuals with very low earnings are part of the population with the high risk of unemployment. The results for different population sub-groups provide additional information about the potential effect of the EMU-UI according to individual characteristics. In particular, population groups often considered as vulnerable, such as, women, the young, the low-skilled and those with low earnings would benefit the most from an extension in coverage due to the EMU-UI. Moreover, our analysis by population subgroups provides some insights about the potential effect of an EMU-UI that would result from an increase in unemployment among particular types of workers. Consider for instance that unemployment were concentrated among the self-employed. In that case, the EMUI-UI would have very little effect on income protection or stabilization because the self-employed would not be eligible to the illustrative EMU-UI.

Our analysis highlights two relevant points in the debate about the potential of an EMU-UI. First, if the idea would be to cross-finance elements of the UIs that are common across countries, so that the risks are somehow mutual, our analysis shows that without reform, the common element of existing national UIs would be very small as it would need to conform to the "lowest" common denominator in every relevant dimension. For example it would need to last until only the sixth month of unemployment (as in Cyprus and Slovakia) and have more stringent eligibility conditions such as in Slovakia (9 months out of 12). The existence of flat rate benefits in some countries (as Greece) implies that this would need to be reflected in the design of the underwritten benefit. Second, if the idea would be alternatively, to allow for a larger stabilization function, some national UIs would need to be reformed to allow for a larger common scheme. Our analysis explores the implications of such a scheme showing that little enlargement would be needed in some countries (as France, Finland or Luxembourg) but in other cases more important extensions might be needed in some of the dimensions of the national schemes (e.g. duration in the case of Latvia, Cyprus and Slovakia, eligibility conditions in Slovakia).

The aim of this analysis was to provide an empirical assessment of the current gaps in national unemployment schemes using an illustrative EMU-UI as a benchmark and to assess the effects of the supranational scheme on income stabilization and risk of poverty. As such, assessments of the legal and political feasibility of introducing such a supranational scheme go beyond the scope of this paper. Our analysis does not consider the potential of an EMU-UI to smooth income fluctuations over time across EMU member states, either. Our approach offers, however, the possibility of analyzing the effect of an EMU-UI in case of hypothetical unemployment shocks, by selecting different groups of individuals who would enter (and exit) unemployment over time. Such hypothetical exercises would serve as additional assessments of the added value of an EMU unemployment benefit scheme and should be the focus of future research.

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Appendix: Tables

Table 2. Key characteristics of unemployment benefit systems in 2014

Country (code)	Contribution period [a] (in months)	Payment	Duration (months)	Assistance	Taxes and SICs
Belgium (BE)	12/21 (age<36), 18/33 (age>=36 & age<50), 24/42 (age>=50)	65% falling to 60% of gross; min, max	12 (no limit)	None	Tax
Germany (DE)	12/24	67-60% of net; max	12(24)	Means-tested UA	Indirectly (tax applied on taxable income increases if UB received)
Estonia (EE)	12/36	50% falling to 40% of gross; min, max	12	Flat UA	Tax and reduced SICs
Ireland (IE)	9/12	Flat rate based on previous earnings; min, max	9	Means-tested UA	Tax (except child dependent element)
Greece (EL)	5/12	Flat rate	10(12)	Flat UA (means-tested)	Tax (if taxable income > 30,000 euro/year)
Spain (ES)	12/72 (employees) 12/24 (self-employed)	70% falling to 50% of previous contributory base	24	Means-tested UA	Tax and SICs
France (FR)	4/28	40.4% of gross + fixed allocation	24(36)	Means-tested UA	Tax and reduced SICs
Italy (IT)	12/24	60% falling to 40% of gross; min, max	8(12)	None	Tax
Cyprus (CY)	-	60% of basic insurable earnings + increases for dependent spouse and children; min	6	Social assistance	neither
Latvia (LV)	9/12	50-65% of gross; reduces with length of unemployment	9	Social assistance	Neither
Lithuania (LT)	18/36	Flat rate + 40% of gross falling to 20%; max	6(11)	None	Neither
Luxembourg (LU)	6/12	80-85% of gross; max	12	Social assistance	Tax and SICs
Malta (MT)	5/24	Flat rate	6	Means-tested UA	Neither
Netherlands (NL)	6/8	75% falling to 70% of gross; max	3(38)	None	Tax and SICs
Austria (AT)	12/24	55% of net earnings; min, max	9(12)	Means-tested UA	Neither
Portugal (PT)	12/24	65% falling to 55% of gross; min, max	11(12)	Means-tested UA	Neither

Slovenia (SI)	9/24	80% falling to 50% of gross; min, max	3(12)	None	SICs
Slovakia (SK)	24/36	50% of previous contributory base	6	None	neither
Finland (FI)	6/28 (employees) 18/48 (self-employed)	basic component + 45% of difference between net daily wage and basic allowance + 20% difference between daily wage and daily limit; min, max	16	Means-tested UA	Tax and Health insurance contribution for medical care

Notes: a. Months of contributions/period in which contributions can be made. In Cyprus eligibility is defined in terms of the amount paid in contributions 26 weeks before unemployment. b. "Standard" maximum duration (typical maximum duration taking account of age and other criteria, where this is longer). UA – Unemployment assistance; SICs – Social Insurance contribution. *Sources*: MISSOC (May 2015) with additional information from EUROMOD Country Reports (https://www.iser.essex.ac.uk/euromod/resources-for-euromod-users/country-reports).

Table 3. Sample characteristics of the population in work

Country	BE	DE	EE	IE	EL	ES	FR	IT	CY	LV
Sample observations	5,454	12,149	5,867	3,800	4,273	12,070	11,802	16,508	5,760	5,748
Population in work (000)	4,434	36,428	604	1,637	3,735	18,151	26,208	21,256	402	842
% female	46.3	49.1	50.7	48.8	41.1	45.0	48.6	41.6	48.1	52.0
% age 18-29	18.9	17.0	22.3	18.5	13.8	15.5	20.8	13.3	23.2	21.6
% age 30-50	58.4	56.4	52.7	57.7	65.0	64.4	57.3	63.9	55.4	53.2
% age 50+	22.7	26.7	25.0	23.8	21.2	20.0	21.9	22.9	21.4	25.3
% low-skilled	17.3	6.9	9.7	18.5	23.6	36.6	14.2	33.1	21.0	11.2
% medium-skilled	37.3	53.0	52.0	30.9	42.2	25.1	49.5	47.6	41.7	55.8
% high-skilled	45.4	40.1	38.3	50.5	34.1	38.4	36.2	19.2	37.3	33.0
% self-employed	8.3	5.6	2.1	11.6	31.0	10.4	5.5	18.6	9.3	3.4

Country	LT	LU	MT	NL	AT	PT	SI	SK	FI
Sample observations	4,979	6,451	4,338	11,598	5,928	5,803	12,082	7,017	11,480
Population in work (000)	1,227	229	162	7,307	3,678	4,241	853	2,408	2,325
% female	50.3	44.5	36.0	46.3	44.5	48.4	45.5	46.6	49.2
% age 18-29	18.6	20.1	29.1	17.8	21.7	18.7	15.7	19.6	18.8
% age 30-50	56.2	63.1	51.9	56.8	57.6	60.6	66.1	57.3	51.6
% age 50+	25.2	16.8	19.0	25.4	20.7	20.8	18.2	23.1	29.6
% low-skilled	6.1	31.1	43.5	20.6	12.4	58.0	12.6	3.2	11.5
% medium-skilled	54.5	39.1	33.9	40.6	66.1	22.5	58.9	71.7	45.3
% high-skilled	39.4	29.9	22.6	38.8	21.5	19.5	28.6	25.2	43.3
% self-employed	3.4	3.5	10.1	8.3	9.0	7.3	9.7	13.6	5.4

Notes: In this table "self-employed" are defined as those with self-employment income and no employment incomes. *Source*: own calculations using EUROMOD version G2.74

Table 4. Prediction of unemployment risk - probit coefficients

	BE	DE	EE	IE	EL	ES	FR	IT	CY	LV
Female	-0.322***	-0.212***	-0.445***	-0.456***	-0.252**	-0.020	-0.312***	-0.052	-0.499***	-0.149*
	(-2.93)	(-2.66)	(-5.26)	(-4.60)	(-2.46)	(-0.32)	(-4.71)	(-1.48)	(-6.15)	(-1.77)
Age 15-24	-0.317	-0.118	0.276	0.819***	0.768**	0.189	0.318*	0.819***	0.171	-0.532**
	(-0.97)	(-0.52)	(1.09)	(2.81)	(2.55)	(1.07)	(1.68)	(7.05)	(0.77)	(-2.01)
Age 25-34	-0.382	0.189	0.036	0.535**	0.447*	0.391***	0.221	0.609***	0.003	-0.357
	(-1.44)	(1.09)	(0.17)	(2.37)	(1.85)	(2.80)	(1.37)	(6.84)	(0.02)	(-1.64)
Age 35-44	-0.287	-0.016	0.016	0.310	0.358*	0.091	0.140	0.505***	0.067	-0.302*
	(-1.30)	(-0.11)	(0.10)	(1.64)	(1.79)	(0.74)	(0.99)	(6.88)	(0.44)	(-1.77)
Age 45-54	-0.353*	0.161	0.222*	0.339**	0.228	0.206*	0.161	0.411***	0.103	-0.014
	(-1.90)	(1.51)	(1.82)	(2.23)	(1.35)	(1.92)	(1.31)	(6.75)	(0.83)	(-0.11)
Lower secondary or less	0.012	-0.278*	-0.283**	-0.194	0.023	0.004	-0.020	0.092	-0.084	-0.160
	(0.08)	(-1.84)	(-2.29)	(-1.62)	(0.14)	(0.05)	(-0.21)	(1.58)	(-0.81)	(-1.20)
Upper secondary non tertiary	-0.228*	0.006	-0.248***	-0.155	0.063	-0.008	0.014	-0.005	-0.263***	-0.184*
	(-1.80)	(0.07)	(-2.90)	(-1.58)	(0.44)	(-0.10)	(0.18)	(-0.11)	(-3.00)	(-1.77)
2nd earnings quintle	-1.132***	-0.798***	-0.943***	-0.866***	-0.720***	-0.867***	-0.954***	-0.246***	-1.042***	-1.219***
	(-10.08)	(-9.37)	(-10.87)	(-7.86)	(-6.78)	(-13.37)	(-13.56)	(-5.24)	(-11.67)	(-13.68)
3rd earnings quintle	-1.812***	-1.598***	-1.449***	-1.478***	-1.698***	-1.752***	-1.756***	-0.540***	-1.867***	-1.696***
	(-11.79)	(-14.14)	(-14.30)	(-11.34)	(-11.73)	(-20.97)	(-17.73)	(-10.68)	(-16.92)	(-15.48)
4th earnings quintle	-2.223***	-2.049***	-1.779***	-1.942***	-2.089***	-2.012***	-1.931***	-0.767***	-2.414***	-1.755***
	(-9.98)	(-13.77)	(-14.70)	(-12.31)	(-10.71)	(-20.30)	(-16.65)	(-14.18)	(-17.88)	(-14.95)
5th earnings quintle	-2.277***	-2.231***	-1.844***	-2.323***	-2.010***	-2.270***	-2.290***	-1.017***	-3.060***	-2.187***
	(-8.80)	(-13.11)	(-14.61)	(-12.38)	(-9.94)	(-17.88)	(-14.46)	(-16.69)	(-16.03)	(-13.73)
Work experience	-0.026***	-0.005	-0.021***	0.003	0.001	-0.010**	-0.022***	0.000	-0.001	-0.035***
	(-3.31)	(-1.04)	(-3.31)	(0.47)	(0.21)	(-2.52)	(-4.76)	(0.05)	(-0.25)	(-5.12)
Part time worker	-0.277**	-0.719***	-0.176	-0.260**	-0.372***	-0.427***	-0.158**	-0.224***	-0.243**	-0.570***
	(-2.27)	(-7.37)	(-1.26)	(-2.54)	(-3.15)	(-6.04)	(-2.01)	(-4.18)	(-2.42)	(-4.76)
Married	-0.080	-0.141*	-0.012	0.095	0.122	-0.112*	-0.137**	-0.016	-0.046	-0.117
	(-0.78)	(-1.77)	(-0.16)	(0.96)	(1.06)	(-1.83)	(-2.02)	(-0.45)	(-0.58)	(-1.59)
0 to 4 children	-0.038	-0.086	-0.125	-0.040	-0.210*	0.154***	-0.114*	0.027	0.090	0.065
	(-0.49)	(-0.86)	(-1.50)	(-0.54)	(-1.90)	(2.86)	(-1.85)	(0.74)	(1.28)	(0.90)
5 to 9 children	0.059	-0.084	0.245***	0.034	0.081	0.004	0.019	-0.027	0.066	-0.025
	(0.64)	(-0.95)	(3.55)	(0.48)	(0.84)	(0.08)	(0.33)	(-0.75)	(0.93)	(-0.36)
10 to 14 children	-0.035	0.032	-0.061	-0.004	-0.021	0.078	-0.061	-0.007	0.045	0.112
	(-0.36)	(0.45)	(-0.84)	(-0.06)	(-0.23)	(1.40)	(-1.06)	(-0.19)	(0.68)	(1.58)
Number of earner in HH	-0.031	-0.076	-0.036	-0.086	0.007	0.080**	-0.071*	-0.044**	0.019	0.036
	(-0.43)	(-1.56)	(-0.89)	(-1.43)	(0.12)	(2.56)	(-1.72)	(-2.06)	(0.56)	(0.97)
Home owner	-0.183*	-0.148**	-0.057	0.149	-0.030	-0.195***	-0.222***	-0.077**	0.046	-0.007
	(-1.81)	(-2.10)	(-0.60)	(1.56)	(-0.30)	(-3.62)	(-3.71)	(-2.25)	(0.63)	(-0.08)
_cons	0.677*	-0.243	0.607**	-0.079	-0.460	-0.318	0.244	-0.208	-0.093	0.984***
	(1.79)	(-0.95)	(2.00)	(-0.23)	(-1.29)	(-1.52)	(1.11)	(-1.61)	(-0.34)	(3.21)
N	4498	10817	4812	3150	3834	9806	9702	12426	4961	4885
pseudo R^2	0.324	0.252	0.246	0.230	0.343	0.310	0.318	0.123	0.332	0.314

Notes: Industries and occupation dummies included in the estimation, except in Malta. *t* statistics in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4. Prediction of unemployment risk - probit coefficients (continuation)

	LT	LU	MT	NL	AT	PT	SI	SK	FI
Female	-0.357***	-0.112	-0.413***	-0.410***	-0.380***	-0.276***	-0.006	-0.246***	-0.232***
	(-3.83)	(-0.93)	(-2.66)	(-5.42)	(-4.33)	(-2.82)	(-0.08)	(-3.09)	(-3.55)
Age 15-24	-0.158	0.345	0.100	-0.266	0.724**	-0.107	-0.765***	-0.183	0.481***
	(-0.55)	(1.03)	(0.21)	(-1.20)	(2.56)	(-0.31)	(-3.37)	(-0.60)	(3.98)
Age 25-34	-0.595**	0.347	-0.483	0.157	0.763***	0.185	-0.957***	-0.498*	0.432***
	(-2.51)	(1.25)	(-1.16)	(1.00)	(3.23)	(0.64)	(-4.71)	(-1.87)	(4.54)
Age 35-44	-0.468**	0.441*	-0.319	0.268**	0.599***	0.134	-0.671***	-0.235	0.253***
	(-2.52)	(1.81)	(-0.90)	(2.16)	(3.19)	(0.57)	(-3.61)	(-1.20)	(2.82)
Age 45-54	-0.204	0.328	-0.110	0.098	0.252	0.245	-0.508***	-0.208	0.192**
	(-1.54)	(1.46)	(-0.38)	(0.99)	(1.61)	(1.27)	(-2.97)	(-1.42)	(2.49)
Lower secondary or less	-0.163	-0.460***	-0.514***	-0.249***	0.176	-0.168	-0.408***	-0.216	0.154*
	(-0.94)	(-2.66)	(-3.51)	(-2.63)	(1.23)	(-0.87)	(-3.23)	(-1.13)	(1.65)
Upper secondary non tertiary	-0.044	-0.514***	0.000	-0.187**	0.016	-0.019	-0.245***	-0.333***	0.098
	(-0.39)	(-3.23)	(.)	(-2.44)	(0.14)	(-0.10)	(-2.66)	(-2.80)	(1.31)
2nd earnings quintle	-1.014***	-1.458***	-1.133***	-0.593***	-0.568***	-1.372***	-0.863***	-1.047***	-0.500***
	(-9.91)	(-11.22)	(-6.97)	(-7.75)	(-5.73)	(-12.78)	(-11.90)	(-11.82)	(-6.35)
3rd earnings quintle	-1.338***	-1.713***	-1.605***	-1.248***	-1.249***	-1.701***	-1.393***	-1.576***	-1.253***
	(-11.54)	(-11.50)	(-6.67)	(-12.76)	(-10.85)	(-13.63)	(-14.89)	(-13.32)	(-13.91)
4th earnings quintle	-1.694***	-2.101***	-	-1.547***	-1.838***	-1.922***	-1.840***	-1.671***	-1.729***
	(-11.29)	(-10.86)		(-14.33)	(-13.44)	(-12.90)	(-13.69)	(-12.93)	(-16.48)
5th earnings quintle	-1.681***	-2.632***	-1.343***	-1.744***	-2.058***	-2.336***	-2.001***	-1.746***	-2.053***
	(-9.74)	(-9.28)	(-4.43)	(-14.64)	(-12.65)	(-9.75)	(-12.68)	(-12.47)	(-16.77)
Work experience	-0.037***	0.001	-0.016	0.001	0.015**	-0.023***	-0.070***	-0.025***	-
	(-5.11)	(0.13)	(-1.30)	(0.27)	(2.22)	(-3.03)	(-12.20)	(-3.11)	
Part time worker	-0.551***	-0.593***	-0.963***	-0.277***	-0.416***	-0.457***	-0.148	0.108	-0.253***
	(-3.56)	(-4.20)	(-3.40)	(-3.46)	(-3.88)	(-3.02)	(-1.20)	(0.68)	(-2.59)
Married	0.011	-0.110	0.173	-0.186***	-0.089	0.078	-0.102	-0.294***	-0.027
	(0.11)	(-1.08)	(0.89)	(-2.66)	(-1.07)	(0.77)	(-1.42)	(-3.30)	(-0.44)
0 to 4 children	-0.085	-0.107	-0.045	-0.019	-0.015	-0.033	-0.096	-0.136	-0.139**
	(-0.73)	(-1.23)	(-0.23)	(-0.33)	(-0.18)	(-0.32)	(-1.57)	(-1.15)	(-2.09)
5 to 9 children	0.169*	0.024	0.178	-0.058	-0.088	-0.010	-0.010	0.019	0.024
	(1.70)	(0.28)	(1.01)	(-1.03)	(-1.14)	(-0.10)	(-0.15)	(0.23)	(0.42)
10 to 14 children	-0.068	-0.470***	-0.075	-0.024	0.076	-0.135	0.034	0.135*	-0.011
	(-0.66)	(-3.80)	(-0.53)	(-0.45)	(1.12)	(-1.43)	(0.48)	(1.70)	(-0.23)
Number of earner in HH	-0.065	0.037	-0.057	-0.038	-0.066	0.018	0.023	0.021	-0.031
	(-1.37)	(0.55)	(-0.81)	(-0.93)	(-1.53)	(0.34)	(0.76)	(0.59)	(-0.85)
Home owner	0.174	-0.098	-0.332**	-0.016	-0.019	-0.217**	-0.010	0.226*	-0.205***
	(0.99)	(-1.01)	(-2.11)	(-0.22)	(-0.25)	(-2.45)	(-0.13)	(1.81)	(-3.05)
_cons	0.664*	-0.474	0.138	-0.222	-0.966***	0.370	0.750***	0.354	0.016
	(1.83)	(-1.11)	(0.24)	(-0.87)	(-2.84)	(0.88)	(2.75)	(0.98)	(0.09)
N	4458	5648	1965	10150	5086	4921	10102	6371	8892
pseudo R^2	0.314	0.296	0.260	0.163	0.244	0.315	0.349	0.287	0.244

Notes: Industries and occupation dummies included in the estimation, except in Malta. *t* statistics in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5. Sample characteristics of the 2% with highest risk of unemployment

Country	BE	DE	EE	IE	EL	ES	FR	IT	CY	LV
Sample observations	109	211	101	74	78	190	199	285	100	107
Population in work (000)	84.50	701.53	11.47	32.08	67.99	319.26	495.04	420.43	7.23	15.65
% female	47.2	52.4	36.5	34.8	44.0	53.8	36.6	36.4	38.3	47.3
% age 18-29	44.3	33.6	39.8	33.5	31.1	33.1	50.0	25.9	47.1	30.9
% age 30-50	44.1	45.9	50.0	61.9	48.5	59.2	43.5	62.1	38.7	55.1
% age 50+	11.6	20.5	10.3	4.7	20.4	7.7	6.5	12.0	14.2	14.1
% low-skilled	25.3	9.9	15.0	12.5	41.4	50.1	17.0	50.8	38.4	16.3
% medium-skilled	38.0	63.3	52.5	47.0	41.9	30.9	54.0	40.0	33.8	65.7
% high-skilled	36.6	26.9	32.5	40.5	16.7	19.0	29.0	9.2	27.8	18.0
% low earnings (Q1 and Q2)	88.2	77.7	71.9	75.2	86.6	92.6	85.0	64.2	94.7	88.9
% self-employed	16.8	9.1	9.3	12.8	16.0	11.1	13.4	13.4	10.1	5.8
% national UI coverage*	56	67	40	62	28	36	47	14	20	30

Country	LT	LU	MT	NL	AT	PT	SI	SK	FI
Sample observations	93	130	82	158	107	103	230	131	193
Population in work (000)	23.74	4.38	3.18	139.24	72.20	80.10	15.73	46.54	43.85
% female	29.7	49.3	22.6	33.7	26.5	48.0	47.6	38.4	41.4
% age 18-29	39.2	25.9	43.6	20.7	40.9	36.4	38.5	35.6	32.6
% age 30-50	46.7	56.1	47.9	63.6	52.0	55.9	56.2	50.8	41.9
% age 50+	14.1	18.0	8.5	15.7	7.0	7.7	5.4	13.6	25.5
% low-skilled	21.2	48.9	54.2	30.0	18.0	61.5	9.5	10.4	27.6
% medium-skilled	64.3	38.9	45.8	32.5	68.6	24.2	58.4	74.4	50.3
% high-skilled	14.5	12.2	0.0	37.5	13.4	14.2	32.1	15.3	22.1
% low earnings (Q1 and Q2)	84.6	88.7	84.4	57.6	59.6	94.5	74.4	87.5	61.5
% self-employed	8.4	5.7	12.1	24.1	1.2	12.0	29.3	15.5	8.8
% national UI coverage*	33	39	26	27	55	32	26	18	61

Notes: In this table "self-employed" are defined as those with self-employment income and no employment incomes. *Source*: own calculations using EUROMOD version G2.74. * National UI coverage rates come from 2014 EU-LFS.

Table 6. Coverage: additional effect of EMU-UI by characteristics of the potentially unemployed (ppts)

Country	BE	DE	EE	IE	EL	ES	FR	IT	CY	LV
All	10.4	8.9	23.8	8.8	1.7	0.6	1.2	1.8	5.0	4.8
Male	9.2	7.6	24.9	9.8	1.2	0.3	1.1	1.6	4.1	4.7
Female	11.7	10.3	22.6	7.9	2.3	1.0	1.2	2.1	6.0	4.9
Age 18-29	19.6	21.0	33.2	13.1	4.6	3.4	3.2	10.8	11.2	9.1
Age 30-50	9.2	7.2	18.5	8.5	1.3	0.1	0.5	0.5	2.3	0.2
Age 50+	5.7	4.8	26.5	6.3	0.7	0.0	0.9	0.3	5.2	10.9
Low-skilled	14.0	16.4	34.9	8.5	2.1	0.2	1.2	0.9	7.4	6.2
Medium-skilled	11.8	8.8	23.6	9.2	1.7	0.5	1.3	2.3	4.5	4.9
High-skilled	7.8	7.8	21.1	8.8	1.3	1.1	0.9	2.1	4.3	4.4
Earnings Q1	37.9	28.3	53.6	17.1	7.5	1.3	6.6	5.7	21.7	8.3
Earnings Q3	3.8	5.3	16.7	7.6	0.0	0.6	0.1	0.9	2.8	4.9
Earnings Q5	2.0	1.7	14.0	6.1	0.0	0.1	0.2	0.2	1.0	3.3

Country	LT	LU	MT	NL	AT	PT	SI	SK	FI
All	15.8	4.4	45.2	3.8	4.6	9.6	9.5	14.0	6.6
Male	17.3	4.1	50.5	3.4	4.2	9.5	9.3	11.8	4.9
Female	14.4	4.8	35.9	4.1	5.2	9.7	9.6	16.6	8.3
Age 18-29	29.4	13.7	64.7	9.8	7.1	17.1	31.9	34.7	15.3
Age 30-50	10.9	2.2	35.6	2.6	3.8	8.5	4.7	8.0	4.8
Age 50+	16.8	1.4	41.7	2.2	4.4	6.2	7.2	11.4	4.1
Low-skilled	29.3	6.0	49.3	5.1	6.5	9.8	12.1	16.4	9.2
Medium-skilled	18.0	3.7	44.7	4.2	4.3	10.7	9.9	12.8	7.5
High-skilled	10.8	3.6	38.1	2.6	4.8	7.7	7.3	17.2	5.0
Earnings Q1	50.8	17.6	42.6	20.3	21.5	35.2	19.8	43.1	43.5
Earnings Q3	11.0	1.7	47.7	2.1	2.0	5.8	8.0	9.0	1.0
Earnings Q5	5.2	0.6	38.4	0.3	2.3	1.8	1.1	7.8	0.1

Source: own calculations using EUROMOD version G2.74

Table 7. Beneficiaries: percentage benefiting from the EMU-UI by characteristics of the potentially unemployed

Country	BE		DE		EE		IE		EL		ES		FR		IT		CY		LV	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
All	41.0	10.4	72.4	8.9	70.9	23.8	68.2	8.8	52.5	1.7	65.3	0.6	1.8	1.2	69.7	1.8	81.2	5.0	89.2	4.8
Male	50.3	9.2	77.3	7.6	70.0	24.9	61.5	9.8	53.2	1.2	66.4	0.3	1.2	1.1	68.1	1.6	79.3	4.1	88.7	4.7
Female	30.1	11.7	67.4	10.3	71.6	22.6	75.2	7.9	51.5	2.3	63.9	1.0	2.4	1.2	71.9	2.1	83.2	6.0	89.7	4.9
Age 18-29	20.6	19.6	66.7	21.0	61.5	33.2	57.8	13.1	46.9	4.6	55.5	3.4	2.5	3.2	63.9	10.8	75.7	11.2	84.5	9.1
Age 30-50	44.4	9.2	72.2	7.2	76.2	18.5	72.3	8.5	57.3	1.3	66.7	0.1	1.6	0.5	74.9	0.5	85.4	2.3	94.4	0.2
Age 50+	49.0	5.7	76.6	4.8	67.9	26.5	66.3	6.3	41.6	0.7	68.2	0.0	1.6	0.9	58.5	0.3	76.2	5.2	82.4	10.9
Low-skilled	25.2	14.0	62.3	16.4	58.4	34.9	65.5	8.5	30.4	2.1	54.0	0.2	1.9	1.2	63.3	0.9	69.8	7.4	85.1	6.2
Medium-skilled	30.2	11.8	72.4	8.8	70.3	23.6	65.8	9.2	54.8	1.7	64.6	0.5	2.0	1.3	72.7	2.3	83.0	4.5	88.4	4.9
High-skilled	55.8	7.8	74.2	7.8	74.8	21.1	70.6	8.8	65.0	1.3	76.4	1.1	1.5	0.9	73.1	2.1	85.5	4.3	92.0	4.4
Earnings Q1	0.0	37.9	21.5	28.3	12.9	53.6	34.0	17.1	2.3	7.5	14.3	1.3	12.8	6.6	35.7	5.7	44.7	21.7	63.6	8.3
Earnings Q3	14.2	3.8	78.1	5.3	82.7	16.7	75.6	7.6	73.4	0.0	85.1	0.6	0.2	0.1	80.6	0.9	85.6	2.8	92.0	4.9
Earnings Q5	92.4	2.0	88.1	1.7	85.3	14.0	80.0	6.1	69.7	0.0	87.6	0.1	0.5	0.2	80.3	0.2	93.4	1.0	95.1	3.3

Country	LT		LU		MT		NL		AT		PT		SI		SK		FI	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
All	79.3	15.8	5.0	4.4	43.8	45.2	25.9	3.8	66.3	4.6	27.4	9.6	72.8	9.5	71.6	14.0	14.5	6.6
Male	77.5	17.3	6.8	4.1	35.6	50.4	23.9	3.4	74.8	4.2	28.5	9.5	69.7	9.3	69.1	11.8	19.8	4.9
Female	81.0	14.4	2.8	4.8	58.5	35.9	28.3	4.1	55.7	5.2	26.2	9.7	76.5	9.6	74.4	16.6	9.0	8.3
Age 18-29	66.1	29.4	3.2	13.7	28.2	64.7	82.5	9.8	63.1	7.1	77.6	17.1	60.7	31.9	54.6	34.7	3.7	15.3
Age 30-50	84.5	10.9	4.3	2.2	52.9	35.5	18.8	2.6	66.4	3.8	13.8	8.5	79.4	4.7	76.2	8.0	16.5	4.8
Age 50+	77.2	16.8	9.6	1.4	43.0	41.7	2.0	2.2	69.3	4.4	22.1	6.2	59.1	7.2	74.4	11.4	17.8	4.1
Low-skilled	61.4	29.3	2.1	6.0	34.3	49.2	22.3	5.1	49.8	6.5	14.6	9.8	61.9	12.1	64.6	16.4	5.7	9.2
Medium-skilled	75.7	18.0	2.5	3.7	47.2	44.7	24.6	4.2	67.9	4.3	34.7	10.7	69.6	9.9	71.9	12.8	5.8	7.5
High-skilled	86.9	10.8	11.3	3.6	57.1	38.1	29.2	2.6	70.8	4.8	57.0	7.7	84.0	7.3	71.6	17.2	25.9	5.0
Earnings Q1	30.1	50.8	5.5	17.6	36.4	42.4	18.6	20.3	16.9	21.5	13.1	35.2	16.8	19.8	25.1	43.1	0.0	43.5
Earnings Q3	85.1	11.0	0.1	1.7	40.3	47.7	34.4	2.1	78.9	2.0	18.8	5.8	75.9	8.0	81.7	9.0	0.0	1.0
Earnings Q5	92.9	5.2	19.3	0.6	54.4	38.4	11.2	0.3	88.2	2.3	66.7	1.8	95.4	1.1	79.5	7.8	57.3	0.1

Notes: (a) – All benefiting from EMU-UI; (b) of which, those not receiving national UI. *Source*: own calculations using EUROMOD version G2.74.

Table 8. Coefficient of income stabilisation: additional effect of EMU-UI by characteristics of the potentially unemployed (ppts)

Country	BE	DE	EE	IE	EL	ES	FR	IT	CY	LV
All	6.1	8.5	12.1	21.6	15.2	5.6	0.2	11.1	22.0	15.9
Male	6.9	8.3	12.5	20.7	15.2	5.8	0.1	11.2	20.8	15.3
Female	4.9	8.9	11.5	23.0	15.4	5.2	0.2	10.9	23.9	16.7
Age 18-29	3.6	11.0	18.2	22.0	10.3	5.1	0.3	12.8	20.6	18.5
Age 30-50	6.5	7.8	10.0	22.9	16.0	5.2	0.1	12.8	22.1	14.6
Age 50+	6.6	9.1	12.0	18.0	14.9	6.8	0.3	6.4	22.5	17.3
Low-skilled	4.0	8.6	15.2	17.0	9.0	3.0	0.3	9.7	15.3	17.1
Medium-skilled	4.4	8.0	11.5	19.9	14.8	4.1	0.2	11.5	20.8	17.0
High-skilled	7.5	8.9	12.1	23.1	17.5	7.6	0.1	11.6	24.9	14.7

Country	LT	LU	MT	NL	AT	PT	SI	SK	FI
All	29.8	0.9	35.5	2.6	12.8	6.3	14.2	20.5	0.9
Male	29.7	1.0	34.0	2.2	13.8	6.2	14.0	19.8	1.2
Female	30.0	0.9	39.1	3.4	10.7	6.4	14.4	21.7	0.5
Age 18-29	30.0	2.8	37.1	13.9	10.0	8.4	23.3	23.6	0.0
Age 30-50	30.4	0.6	36.1	1.5	12.8	5.3	14.5	19.3	1.0
Age 50+	28.5	0.9	32.1	0.3	14.3	7.8	8.2	21.4	1.2
Low-skilled	22.2	0.8	31.1	2.4	7.4	3.6	11.1	16.2	0.1
Medium-skilled	26.3	0.6	37.7	2.6	12.1	6.3	13.2	19.6	0.2
High-skilled	33.2	1.3	37.8	2.7	15.4	9.5	16.0	22.8	1.5

Source: own calculations using EUROMOD version G2.74