

## UNEMPLOYMENT AND EDUCATION: ESTONIAN LABOUR MARKET ENTRY PATTERN COMPARED TO THE EU COUNTRIES

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**Abstract.** The paper will analyse the differences in the rate of unemployment between labour market entrants and experienced workers, the incidence of unemployment among labour market entrants in the light of individual educational achievement, and how the educational stratification of unemployment varies across the countries. The countries to be compared are Estonia and the EU countries. The starting point for the formulation of the hypotheses is the assumption that labour market institutions and educational systems have an impact on the labour market entry process. Comparing the educational systems as well as labour market institutions in Estonia and in the EU countries, will help us to formulate the hypotheses about labour market entry process in Estonia using the classification results from previous studies. The paper draws upon data from the Estonian Labour Force Survey 2002 as well as from the ELFS 1997 concerning the European Union countries published in Cedefop report. Labour force outcomes were measured as unemployment risks. Following the first description of the phenomenon in different countries we will explore the role of educational achievement. In addition, we will observe both exit from and vulnerability to unemployment.

**Keywords:** labour market entrants, unemployment, educational system, comparative analysis

### 1. Introduction

The rise of youth unemployment regarded as the failure of transition from school to work gave good grounds for examining this transition. Estonia is not an exception. In the early 1990s young people were considered as the most privileged age group, whereas in the late 1990s it became evident that a lot of problems were connected with the entry into adult life, more specifically, into the labour market. Although unemployment in general, as well as the youth unemployment, are relatively novel phenomena in Estonia, the gap between the unemployment rates

among the younger and the older age groups is continually widening (Helemäe and Vöörmann 2003).

Our intention is not to concentrate on the analysis of the young as a specific age group. Instead, we prefer to compare labour market entrants with experienced workers<sup>1</sup> because previous studies have demonstrated that the national organisation of the educational system as well as the labour market regulation influence the biographical timing of the transition (Couppié and Mansuy 2003). The category of new labour market entrants is useful because it combines the characteristics of the youth's position "...towards the education and training system with the experience accumulated on the labour market" (Couppié and Mansuy 2001a:24). Compared to the rest of the labour force, new entrants are defined by their lack of labour market experience. According to the insider-outsider theory, they are considered as outsiders.

There is a great number of empirical studies on school-to-work transitions carried out in the European Union countries (see for example Hannan et al. 1997, Shavit and Müller 1998, Kerckhoff 2000, Smyth et al. 2001, Kogan and Müller 2003, Müller and Gangl 2003) while the studies conducted in the Central and Eastern European countries are quite rare (see for example Cedefop 2001, Róbert and Bukodi 2002, Toomse 2003, Kogan and Unt 2004).

The present paper will analyse the differences in the unemployment rates between labour market entrants and experienced workers, the incidence of unemployment among labour market entrants from the perspective of individual educational achievement, and explore how the educational stratification of unemployment varies across different countries. Previous studies have shown that European countries differ markedly with respect to some core aspects of youth transition experiences (see Gangl et al. 2003). The countries to be compared are Estonia and the EU countries. The core of our interest concentrates on the aggregate effectiveness of youth labour market integration in Estonian institutional context. The study will be guided by the following main questions:

Are there any differences in unemployment risks between labour market entrants and experienced workers? If so, in what way does the institutional set-up in different countries shape these differences? Which role does education play with regard to labour market entrants' risk of unemployment? To what extent does the importance of education depend on the career stage on which individuals are at the risk of unemployment? Is there evidence to be found about distinct national linkages between education and unemployment risks?

As European educational systems and labour market institutions differ considerably in their structures, these structures have considerable theoretical potential for explaining cross-national differences in transition patterns (Shavit and Müller 1998, Müller and Gangl 2003). The starting point for the formulation of the

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<sup>1</sup> One can distinguish two kinds of surveys covering the school-to-work transition: age cohorts, which are based on the date of birth and event cohorts, grouping people who have experienced the labour market entry at the same time.

hypotheses is the assumption that labour market institutions and educational systems have an impact on the labour market entry process. Comparing the educational systems as well as labour market institutions in Estonia and in the EU countries, we could formulate the hypotheses about labour market entry process in Estonia using the classification results from previous studies.

The paper draws upon data from the Estonian Labour Force Survey 2002 and also data from the ELFS 1997 about European Union countries published in Cedefop report (2001). Section 2 will present the theoretical perspectives and the summary of the most relevant empirical results. Thereafter, the institutional context will be analysed and the hypotheses formulated. Section 5 will then discuss the database and the methodological approach to the analysis. Empirical results will be presented in Section 6 that holding the basic descriptive analysis about the labour market entry process in Estonia compared to the EU countries. The concluding section will summarise the results.

## **2. Labour market entry patterns**

The most recent research on the entry of the young into labour market has contrasted two polar types of systems on the European labour market: occupational labour market system operating in countries with strongly vocationally oriented training and internal labour market systems where labour market allocation predominantly relies on experience (Marsden 1986). Nevertheless, Gangl (2001) has found that important cross-national differences in labour market entry patterns exist within both groups of countries. Furthermore, the South-European pattern fits neither system; it combines elements from both systems. The effect of experience on unemployment is strong as in countries with internal labour markets, and the educational differentials in outcomes are marked as in countries with occupational labour markets.

The authors of the final report of the CATEWE project (Smyth et al. 2001) suggested that national transition systems could be represented as a single continuum. At the one end of this continuum are countries such as Germany with strong occupational labour markets, standardised and track-differentiated educational systems, and firm links between education and labour market. At the other end of the continuum are countries dominated by internal labour markets, with less standardised and less differentiated educational systems, weaker links between education and the labour market and little formal work-based training (Smyth et al. 2001:93). Examples of the latter type are the USA and Scotland and Ireland as its European counterparts.

Garonna and Ryan (1991) using the trio of internal market/occupational market/unorganised market, proposed three different ideal systems regulating the entry of youth into labour market: regulated inclusion, selective exclusion and competitive regulation.

Regulated inclusion is operating in the context of dominating occupational labour markets. Initial training is acquired through alternative training, usually in apprenticeship. Certification of training allows admission to the occupational market. Work experience has a limited impact on the recruitment decisions. Skills are transferable between firms but the insiders are partly protected from the outsiders' competition because the access is regulated by the completion of the correspondence qualification. This type of organisation of the labour market assumes that there is a co-operation among employers as well as between employees and employers (Estevez-Abe et al. 2001).

Selective exclusion operates in a context of dominating internal labour markets. The entrants begin their career at the bottom and progress upward through tenure and internal promotion. The qualification is obtained within the firm and is not transferable. Access to these markets is restricted because turnover costs are high and the insiders are protected against the outsiders. New entrants are likely to be recruited at the lowest levels. Ryan (2001) stressed that internal labour markets do not systematically produce selective exclusion: a strong position of the insiders is also a necessary condition.

In a competitive regulation setting, employers look for short-term profitability. This can occur in the case of high unemployment rate, weak employment protection and weak union power. Employers take maximum advantage of the competition between experienced workers and new entrants. Employers may recruit young workers on lower wages or use flexible forms of employment contracts instead of experienced workers (Cedefop 2001). Garonna and Ryan (1991) suggest a trend in this direction in the UK and the USA.

Proceeding from this typology, Couppié and Mansuy (2001b) classified the entry pattern in different European countries into four groups. The first group comprises countries where the model of integration of new entrants is close to that of regulated inclusion. Labour market entrants and experienced workers have a similar pattern of unemployment. Nevertheless, the entrants with lower qualifications have higher risk of unemployment than the experienced workers with the same level of education. The second group includes countries where the pattern is close to selective exclusion. Labour market entrants are disadvantaged compared to experienced workers. Their unemployment rate is higher and the jobs they occupy are less skilled. In the third type, the selective exclusion is tempered by competitive regulation for less qualified young people. The unemployment risk for the youth with diplomas is moderate. Couppié and Mansuy (2001b) characterise the fourth group as having composite pattern representing all three forms of regulation. Compared to the second group, diplomas have a lower effect on the entry of youth into labour market. The overview of results is presented in Table 1.

**Table 1. Labour market entry patterns**

	Model of labour market entry			
	Regulated inclusion	Selective exclusion	Selective exclusion+ Competitive regulation	Composite
Countries	Denmark, Germany, Austria	Greece, Italy	France, Sweden, Finland	Belgium, the Netherlands, Portugal, Spain, the UK, Ireland
Differences between new entrants and experienced workers in:				
- rate of unemployment	Low	High	Average	Average
- exit from unemployment	Average	Low	Average	Average
- vulnerability to unemployment	Average	Average	High	Average
The effect of education on youth's:				
- unemployment rate	High (lower educated entrants have disadvantages)	Low	High	Average
- exit from unemployment	High (lower educated entrants have disadvantages)	Average	High linear effect	High (higher educated entrants have advantages)
- vulnerability to unemployment	High	Low	High (lower educated have disadvantages)	Average

Source: Cedefop 2001, Couppié and Mansuy 2001a, Couppié and Mansuy 2001b.

### 3. Estonian institutional context

#### 3.1 Educational system

According to the theory, educational system should have an impact on success of the outsiders' labour market entry. When analysing educational systems, one has agreed that the largest differences are revealed on the secondary level. The differences are first of all connected with the extent to which educational system offers general and vocational education (Müller and Shavit 1998).

Green, Wolf and Leney (1999) highlight the key aspects of institutional differentiation of educational systems: divisions within compulsory schooling

along selective/comprehensive lines, structures at the upper secondary level and foundation training which are primarily school-based or alternatively work-based systems and the degree of decentralisation of governance and regulation of training (Green et al. 1999). They define apprenticeship models according to their status and participation: high status, high participation (Germany); moderate to high status, moderate participation (the Netherlands, the UK); low status, moderate participation (France); low status, very low participation (Ireland, Belgium, Portugal).

Allmendinger (1989) proposes a typology of educational systems based on two dimensions: the standardisation and the stratification. Standardisation is the degree to which the quality of education meets the same standards nation-wide. The criteria are the extent or degree of standards for education certificates, curricula, rules and requirements for taking the exams etc. on the state or regional level. In the majority of European countries, the general education system is rather standardised.

Another vital dimension is the differentiation of educational systems. Of relevance here is whether there are any distinctive tracks in educational levels, notably vocational and general education on the secondary education level (Müller and Shavit 1998). The age of the students, at which they are sorted into different tracks of a respective educational system, comprises another important dimension, which helps to find out how rigid the boundaries between these tracks are. Establishing the level of differentiation of educational systems, it is also important to examine whether and how the opportunities to continue tertiary education for graduates from different types of schools differ, and whether there are any educational dead ends. The differentiated educational system also contributes to an early stratification of the youth.

In the socialist period, Estonian educational system was a part of the Soviet educational system, which was constructed as an integral part of the party-state institutional structure and organised on the basis of the following main principles: centralisation, standardisation, utilitarian and egalitarian goals. The educational system was highly centralised and state controlled. The linkage between each level of education and the future job was clearly defined (Helemäe et al. 2000). Vocational schools trained skilled workers; secondary specialised schools trained semi-professionals. General secondary school was the traditional academic track to follow. Graduation from universities guaranteed access to high-level jobs (jobs of professionals and managers). Educational certificates played a major role accessing some specific jobs and careers. In this sense, schools and curricula were modelled on the German system with clear social divisions. Nevertheless, the pairing of certificates and job opportunities in Estonia was quite different from the German case because the status match often overweighed the skill match. Planning guaranteed the provision of status-adequate job placements even without the skill match. Such kind of occupational matching has been found in several former socialist countries (Róbert and Bukodi 2002, Solga and Konietzka 1999).

Today, Estonian educational system is characterised by a high level of standardisation and a medium level of stratification. While the high standardisa-

tion of the socialist period was reduced in the early 1990s, the second half of 1990s witnessed an increase of standardisation, most notably in the form of secondary school graduation exams, called state exams.

In Estonia the channelling of youth into different kinds of schools starts at very young ages (when children are six or seven years old). Two main types of schools offer basic education: one type has nine grades; the other offers both schooling in grades 1–9 and general secondary education. Basic schools with nine grades are very common in rural areas. The allocation of a child to one or the other type of school depends primarily on where the child lives. There are also a few elite general secondary schools offering a basic education. Usually children enter the elite educational path around age seven or eight. For most children the first crucial branch occurs after completion of basic education (at age 14–15). On the secondary level, young people have the opportunity to choose between the general and vocational track. Up to 1999, they could also opt for secondary specialised education. General secondary schools provide for a classical academic track, giving their graduates the best quality education for further studies at the university. Vocational schools, on the other hand, are practically considered as dead ends (Saar 1997). There is a rather negative selection to vocational track: those who are not admitted anywhere else usually go to vocational schools. Attending vocational schools is usually considered to be a sign of educational failure. In 1990s, the differentiating role of the secondary education track did not decrease substantially. Although the share of basic school graduates opting for a vocational track decreased, the internal differentiation of general secondary education increased. Regional differences between schools have increased as well, and there is a clear differentiation between the ordinary schools and elite schools that select their pupils according to their own criteria.

In the 1990s, there was an expansion of higher education in Estonia: the number of both higher education institutions as well students grew constantly (Heinlo 1998). Within 4 years (1966–1999), the enrolment into universities increased by 51% (Education 1999/2000). An assessment of the results of the Estonian labour market expansion will be available in two-three years, when these young people begin to graduate.

In Table 2, the countries are classified by the characteristics of their educational systems. There are two indicators characterising the vocational specificity of educational systems: participation in vocational secondary schools is measured by the percentage of upper secondary school students enrolled in vocational education. By a large share of general secondary education track, the Estonian educational system is similar to that of the Southern European countries and Ireland. In addition, a distinction is made between the countries having an apprenticeship system where training and working are combined (dual system) and countries where vocational training is mainly school-based. Estonia, similar to most European countries, belongs to the latter group.

**Table 2. Institutional context in different countries: educational systems**

Country	Participation in vocational secondary schools (%) <sup>a</sup>	Dual system <sup>b</sup>	Stratification of secondary education <sup>c</sup>	Upper secondary qualifications (%) <sup>d</sup>	Tertiary education share (%) <sup>f</sup>
Austria	71	1	2	86	16
Denmark	55	1	0	75	33
Germany	63	1	2	79	26
The Netherlands	68	1	2	73	27
Spain	34	0	1	69	29
Italy	25	0	1	71	12
Greece	32	0	1	81	26
Portugal	28	0	0	80	11
France	57	0	1	84	27
Belgium	67	0	1	83	35
Sweden	49	0	0	85	32
Finland	55	0	0	90	41
UK	67	0	0	84	28
Ireland	-	0	0	81	21
Estonia	33	0	1	84	29

Source: Kay data on Education 2002; Velden and Wolbers 2003.

- a Participation in vocational secondary schools is measured as the percentage of upper secondary school students enrolled in vocational education. Source: Kay data on Education 2002.
- b 1 – countries with an apprenticeship system in which learning and working are combined (dual system); 0 – absence of an extensive dual system. Source: Velden and Wolbers 2003.
- c 0 – prevalence of comprehensive schools that may or may not practice curricular and/or ability-based tracking; 1 – prevalence of between-school tracking such that those on the academic route usually attend separate schools from those on the lower or vocational route; 2 – an extreme form of stratification with very early differentiation among a plurality of programs. Source: Müller and Shavit, 2000.
- d Percentage of those aged 22 who have completed at least upper secondary education. Source: Kay data on Education 2002.
- f Percentage of people aged 30 to 34 with tertiary education qualifications. Source: Kay data on Education 2002.

Since the Estonian secondary education system is based on the German model, Estonia should be classified as a country with a stratified and differentiated educational system. However, by the actual extent of stratification Estonia should be placed far behind Germany because in Germany as well as in Austria and the Netherlands, the differentiation takes place much earlier than in Estonia. The absence of school-to-work linkages distinguishes Estonia from the German-speaking countries. In the former centrally planned system, there was a well-established link



between schools and enterprises. With the intention of reforms towards market economy this link was abolished. By the level of stratification (medium) Estonian educational system resembles the one of the Southern European countries, Belgium and France.

The percentage of people aged 30 to 34 having tertiary educational qualifications has been used to characterise the selectivity of the educational system. It is assumed that the educational systems are more selective in countries where this percentage is lower (Van der Velden and Wolbers 2003). Estonia together with the UK, France, Spain, Germany and the Netherlands belongs to the group of countries with medium proportions of people with tertiary education.

Low proportion of secondary school students attending the vocational track, medium level of stratification, and rapid expansion of the tertiary education make the Estonian educational system similar to that of the Southern European countries (especially in Spain and Greece).

### *3.2. Labour market institutions*

According to the evaluation of the World Bank, Estonian Employment Protection Legislation falls in the middle range in comparison to the group of the EU countries (Riboud et al. 2002:6). Employment protection in Estonia is considered to be stronger than in the UK and Ireland, but weaker compared to Southern Europe (see Table 3). However, the main problem of the labour market's legal regulation is the employers' unwillingness to follow the regulations. In the private sector and in small firms, violations of working time, work safety and holiday regulations are particularly common (Arro et al. 2001).

The main reason for the violation of regulation is the weakness of trade unions. During the 1990s, union membership declined in Estonia from almost 100% to about 12–13% (Arro et al. 2001:62), thus, union density here is quite similar to that of the US and Spain (Riboud et al. 2002:49).

Even in countries where the percentage of unionised workers is low, collective agreements can actually cover a large share of workers. This is the case for example in France and Spain. In Estonia, the coverage rate of collective bargaining (i.e. the proportion of workers that have their pay and working conditions set by collective agreement) is very low, even lower than in the UK.

While according to the evaluation of the World Bank the co-ordination between the employers and trade unions in Estonia is on the medium level (Riboud et al. 2002:49), in reality, the collective bargaining system in Estonia is poorly developed on enterprise, branch as well as state level (Arro et al. 2001). This allows for a relatively high wage flexibility.

In Estonia, similarly with other post-socialist countries, a lot of factors have contributed to the reduction of the power of trade unions and their appeal to workers. It has partly occurred due to the new developments, such as privatisation process, increasing importance of small and foreign firms, and employment shift from manufacturing to services, and partly because of the legacies of the past.

**Table 3. Institutional context in different countries: employment protection and wage formation system**

	Employment protection <sup>a</sup>	Trade union density <sup>b</sup>	Collective bargaining coverage <sup>c</sup>	Bargaining co-ordination <sup>d</sup>	Bargaining level <sup>e</sup>
Austria	2.4	30	92	2	Sectoral***, company*
Denmark	1.5	88	69	3	National**, sectoral**, company*
Germany	2.8	30	79	2.5	Sectoral***, company*
The Netherlands	2.4	27	82	2	Sectoral***, company*
Spain	3.2	15	83	1.5	Sectoral***, company*
Italy	3.3	35	70	2	Sectoral***, company*
Greece	3.5	33	...	2.5	National*, sectoral***, company*
Portugal	3.1	40	70	3	Sectoral**, company*
France	3.1	9	95	2	Sectoral*, company***
Belgium	2.1	69	96	2	National***, sectoral*, company*
Sweden	2.4	79	92	3	Sectoral***, company*
Finland	2.1	79	83	2.5	National***, sectoral*, company*
UK	0.5	29	39	2.5	Sectoral*, company***
Ireland	1.0	45	66	2	National***, sectoral*, company*
Estonia	2.3	15	29	1	Sectoral*, company***

<sup>a</sup> Employment protection is measured by the overall strictness of employment protection legislation in a country. Source: Riboud, Sánchez-Pármo, and Silva-Jáuregui, 2002.

<sup>b</sup> Source: Employment in Europe 2003.

<sup>c</sup> Source: Employment in Europe 2003.

<sup>d</sup> 3 – strong; 2 – medium; 1 – weak. Source: Employment in Europe 2003.

<sup>e</sup> \*\*\* indicates the dominant form; \*\* other important form; \* present but not very important forms of bargaining. Source: Employment in Europe 2003.

According to the opinion of the Estonian experts, the overall negative attitude towards trade unions and collective bargaining is the main problem in the development of industrial relations in Estonia (Arro et al 2001).

Estonian labour market regime has been characterised as a very flexible setting with only a few entry and exit barriers (Freitag 2002). By low trade union density and collective bargaining coverage it resembles the UK.

In Estonia, the expenditure on labour market policies is the lowest among the other transition countries comprising only 0.16 percent of the GDP (Eamets 2001).

Regulations for the recipients of unemployment benefits are very restrictive. Many unemployed persons do not qualify for receiving unemployment benefits, which could be a reason why only a half of them registers as unemployed. Estonia uses the flat rate unemployment benefit system. The replacement ratio of unemployment benefit is very low (below 10 percent of the national average wage). In relative terms, the active labour policy measures have declined in last years. Many unemployed people have no access to training because further training is offered to the registered unemployed only. Estonian unemployment policy is closer to the United Kingdom and Southern Europe than to the Central and Northern European countries (Table 4).

**Table 4. Institutional context in different countries: unemployment protection**

Country	Unemployment benefit replacement ratio <sup>a</sup>	Unemployment benefit duration index <sup>b</sup>	Spending on labour market policies <sup>c</sup>	Spending on active labour market policies <sup>c</sup>
Austria	0.25	0.68	0.46	0.14
Denmark	0.66	1.00	0.94	0.34
Germany	0.37	0.75	0.39	0.15
The Netherlands	0.70	0.60	1.30	0.55
Spain	0.63	0.29	0.14	0.05
Italy	0.42	0.00	0.16	0.10
Greece	...	...	0.09	0.04
Portugal	0.65	0.58	0.28	0.12
France	0.59	0.47	0.28	0.12
Belgium	0.46	0.78	0.40	0.14
Sweden	0.74	0.02	0.50	0.26
Finland	0.54	0.63	0.35	0.12
UK	0.17	0.96	0.17	0.05
Ireland	0.35	0.77	0.35	0.14
Estonia	0.10	0.00	0.02	0.01

<sup>a</sup> Initial benefit level divided by previous earned income. Source: Riboud, Sánchez-Pármo, and Silva-Jáuregui, 2002.

<sup>b</sup> Based on  $[0.06 \text{ (replacement ratio in 2}^{\text{nd}} \text{ and 3}^{\text{rd}} \text{ years of a spell)} + 0.04 \text{ (replacement ratio in 4}^{\text{th}} \text{ and 5}^{\text{th}} \text{ year of a spell)}] \div \text{(replacement ration in 1}^{\text{st}} \text{ year of a spell)}$ . Source: Nickell, 2003.

<sup>c</sup> Spending per unemployed individual as a percentage of GDP per labour force participant. Source: Riboud, Sánchez-Pármo, and Silva-Jáuregui, 2002.

#### 4. Hypotheses

While the Estonian educational system seems to be quite similar to the educational systems in Southern European countries, the employment as well as

unemployment protection is much lower than in these countries. We suppose that labour market institutions and educational systems should have an important effect on the labour market entry process of young people. Using the comparison of institutions presented in previous chapters, we hypothesise that the labour market entry process in Estonia should be more similar to the process in the UK and Ireland characterised as a composite pattern, and on the scale from selective exclusion to regulated inclusion should be placed on the medium position.

According to Table 1, we could formulate the following hypotheses concerning the labour market entry process in Estonia:

*Hypothesis 1.* New entrants have a higher unemployment rate than experienced workers but the differences between these groups are lower in Estonia than in the countries with selective exclusion, and higher than in the countries with regulated inclusion.

*Hypothesis 2.* Higher level of education protects the entrants from unemployment. The effect of education in Estonia is higher than in the countries with selective exclusion but lower than in the countries with regulated inclusion.

*Hypothesis 3.* Compared to experienced workers, new entrants have a greater risk of losing their jobs as well as a higher probability for leaving unemployment.

*Hypothesis 4.* The least qualified labour market entrants have the lowest probability to exit from unemployment and the highest risk of losing jobs. Thus, the effect of education in Estonia is higher than in the countries with selective exclusion.

## 5. Data and statistical methodology

The analysis draws upon data from the Estonian Labour Force Survey (ELFS) 2002 combined with the ELFS 2002 ad hoc module on school-to-work transition. ELFS carried out by the Statistical Office of Estonia is representative for the entire working-age population. In addition to standard labour market information, the respondents aged 15–35 were asked to provide information about their social background, the quits from educational system, and the first significant job. In total, the dataset used in this analysis includes 15 909 observations.

Our intention is to compare labour market entrants with experienced workers. An approach to the concept of ‘labour market entrants’ requires information on the individuals’ way to a stable job position. In constructing a ‘labour market entrants’ category we use information on the dates (month and year) of entry into the first permanent job<sup>2</sup>. The first permanent job was defined as non-marginal employ-

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<sup>2</sup> Couppié and Mansuy (2001a) have used a different method. The European Labour Force Survey did not include information on the dates of entry into the first permanent job. They used information on the highest level of general education and post-school training attained by individuals. By drawing on the national educational contexts they constructed the typical ages of leaving educational system. On the basis of this information and the age of respondents the theoretical period elapsing since the diploma was calculated.

ment, at least 20 hours per week, that has lasted at least six months and started after the employee's leaving continuous education. We have identified the following categories of respondents: labour market entrants comprising individuals aged over 15 and under 50 who entered the labour market less than five years ago. The first category has been divided into two sub-categories: entering the labour market from 0 to 2 years ago and from 3 to 5 years ago. The second category consists of experienced workers – respondents aged 16 to 50 entering the labour market more than 5 years ago.

The paper will first present descriptive evidence on the differences in labour market outcomes for labour market entrants and experienced workers in Estonia and in the EU countries. Labour force outcomes were measured as unemployment risks. Following the first description of the phenomenon in different countries we will explore the role of educational achievement. The level of education is measured using the following classification: low (having attained no more than lower secondary qualifications), medium (vocational secondary education or general secondary education), high (tertiary education).

In addition, we will observe both the exit from unemployment (persons being unemployed a year before) and vulnerability to unemployment (the mobility from employment to unemployment of persons employed a year before). Mobility from unemployment to a job indicates the relative ease of exiting unemployment. "Vulnerability to unemployment indicates a relative fragility on the labour market as it reveals the existence of latency periods between two jobs" (Couppié and Mansuy 2001b). We compare these respective transitions for both labour market entrants and experienced workers.

As a complement, we will also explore the role of education in more detail considering the circumstances under which the individuals face the risk of unemployment. We differentiate between two situations: the initial search period and the instability of the early career. The second stage presupposes a successful labour market entry, after which the person faces the risk of losing the job.

The data about the EU countries derives from the book "The transition from education to working life. Key data on vocational training in the European Union" published by Cedefop (2001) as well as from the working paper of Couppié and Mansuy (2001b).

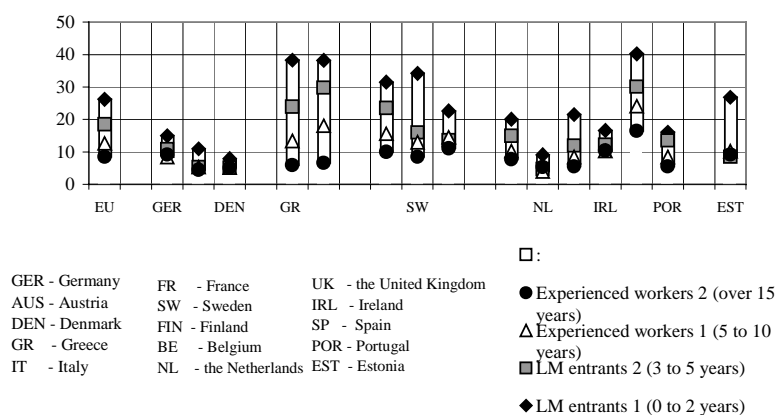
## **6. Findings**

### *6.1. Unemployment rate*

As the first step of the empirical analyses some descriptive evidence on the labour market outcomes for labour market entrants and experienced workers will be briefly presented. The risk of unemployment of labour market entrants is smallest in countries with regulated inclusion model and in the Netherlands. In contrast, unemployment rates were highest in most Southern European countries, in France and Sweden. Other countries (including Estonia) occupy an intermediate position.

In Estonia, as everywhere in Europe the rate of unemployment falls for those who have been longer on the labour market (Figure 1). Even two years of experience greatly reduces the risk of unemployment. Although entrants with less than two years' experience are at greater risk of unemployment than experienced workers the advantages connected to the longer labour market experience differs considerably from country to country (see also Gangl 2001). It is most evident in countries with the selective exclusion model (Greece and Italy) as well as in Spain, France and Sweden. On the other hand, it is low in countries representing the regulated inclusion model (Germany, Austria, and Denmark), in the Netherlands and Ireland. In Estonia, the differences are on the medium level, thus closer to those in the United Kingdom. What distinguishes Estonia is that for workers who entered the labour market more than two years before the survey was conducted, experience seemed to have no effect on the risk of unemployment. Only the labour market entrants, having less than two years of experience, seemed to face this disadvantage. Above that level the risk of unemployment was identical. The situation is similar to the unemployment pattern in countries with the regulated inclusion model. However, the unemployment rate among labour market entrants in Estonia is more than twice higher than in these countries. This result confirms the first hypothesis. The Estonian pattern resembles that of Sweden showing high unemployment rate for recent labour market entrants and small differences between experienced workers and labour market entrants having 3 to 5 years of working experiences.

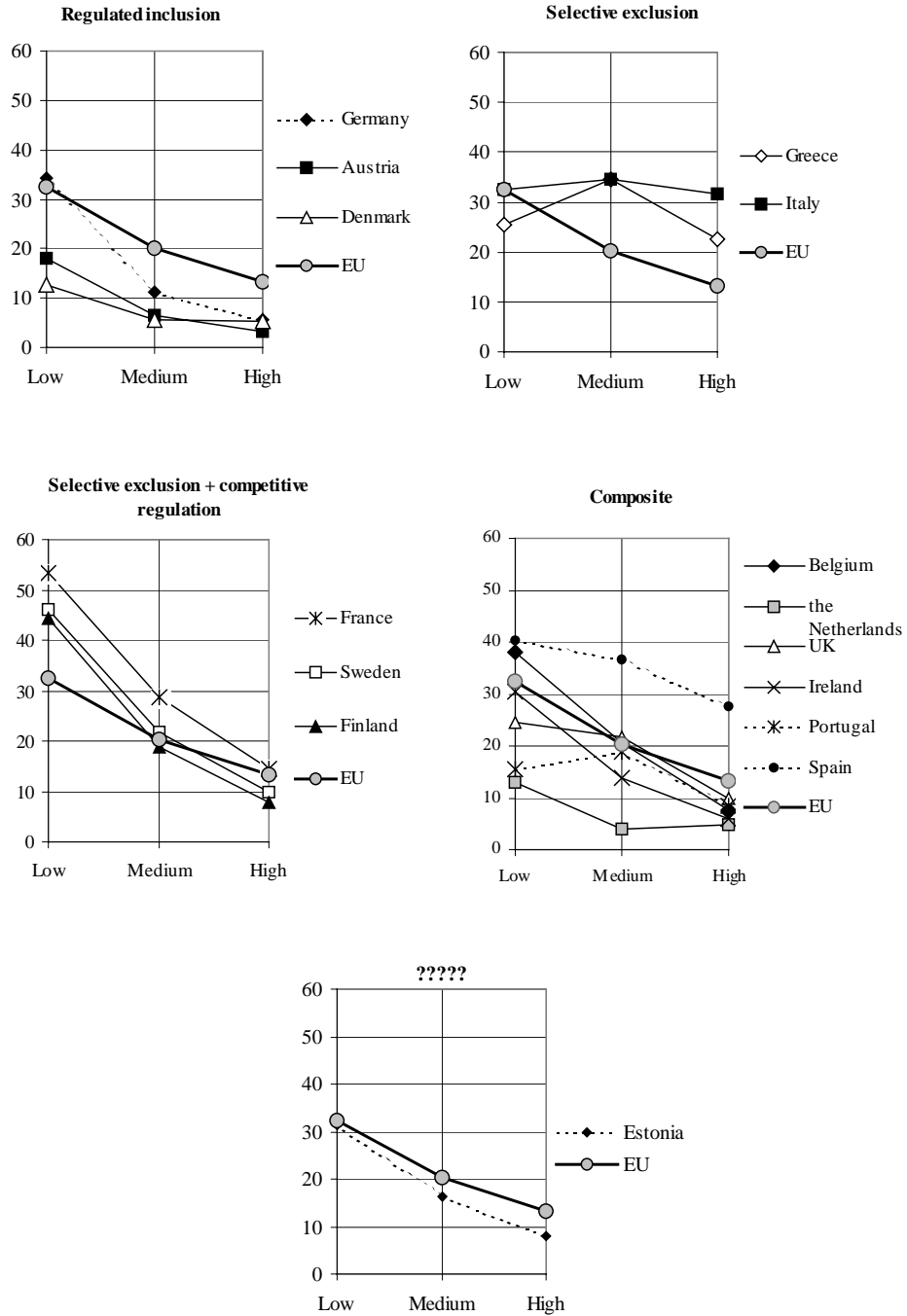
**Figure 1. Rate of unemployment of labour market entrants and experienced workers, %**



Source: Cedefop 2001; Estonian LFS 2002.

Figure 2 provides cross-tabulation between education and the rate of unemployment for labour market entrants (entering the labour market earlier than 5 years ago) in different countries. European countries have tentatively been classified into four groups expectedly having different labour market models. The

Figure 2. Rate of unemployment of labour market new entrants by level of education, %



results show substantial variation, both between the countries and the types of education. Generally, the unemployment rate is lowest in countries with the regulated inclusion model. In Estonia, the unemployment rate is on the average level. Higher level of education protects labour market entrants from unemployment; the only exceptions to the rule seem to be Italy and Greece. These countries are different in the sense that there are hardly any benefits attached to higher levels of education in terms of unemployment. Even young people having the highest level of education have difficulties entering the labour market. Bernardi et al (2000:225) have concluded that in Italy, the insider protection often gives rise to a collective form of exclusion, which is working against younger job seekers.

In Estonia, the unemployment rates on the upper secondary level are about half the figure for the lowest qualified, and reduced to about one-third for labour market entrants with tertiary education. Similar relations hold in Ireland and Belgium (the countries with composite model). Estonian unemployment pattern differs considerably from the one in the countries with regulated inclusion because the unemployment rate for all levels of education is higher in Estonia than in these countries (one exception is the labour market entrants with lowest qualification level in Germany). The countries in which the level of education is most likely to lessen the risk of unemployment are France, Sweden and Finland. In these countries as well as in Germany, the differences between the labour market entrants with the lowest qualification and with upper secondary education are the biggest. Countries belonging to the group of the composite model have the largest variation. In Portugal and Spain, the picture is quite close to the one of the other South-European countries. The Netherlands is more similar to the countries with the regulated inclusion model like Belgium, France, Sweden and Finland. Evident effects of the tertiary education diplomas can be found in the United Kingdom. In Estonia and Ireland, the effect of education on the unemployment risk seems to be linear and quite as expected, also higher than in the countries representing the selective exclusion model but lower than in the countries with regulated inclusion.

### *6.2. Vulnerability to unemployment*

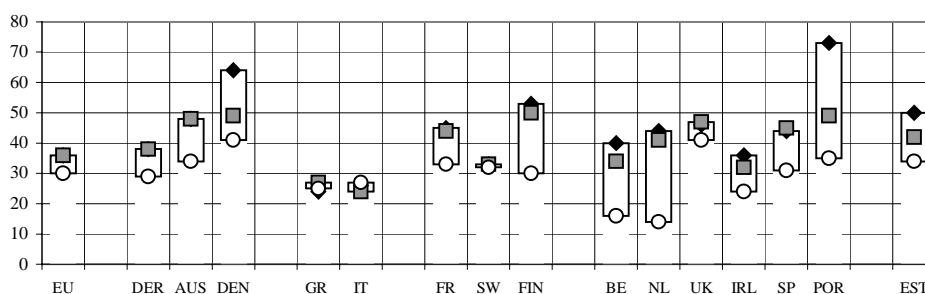
The mobility from job to unemployment indicates a relative fragility of the labour market as it reveals the existence of latency periods between two jobs. This kind of mobility is usually called as vulnerability to unemployment.

Seeking the first job is not the only high-risk factor of unemployment for labour market entrants. Compared to experienced workers, they also have a greater risk of losing their jobs in most European countries. Labour market entrants are already disadvantaged compared to experienced workers, but they are all the more at the risk of losing their jobs having only minimal work experience. In Spain, France and Finland, the difference in unemployment risks between labour market entrants and experienced workers is more marked than in the other countries (Figure 3). Estonian labour market entrants did not have higher risks of losing the job than experienced workers, which is quite unique for European countries.

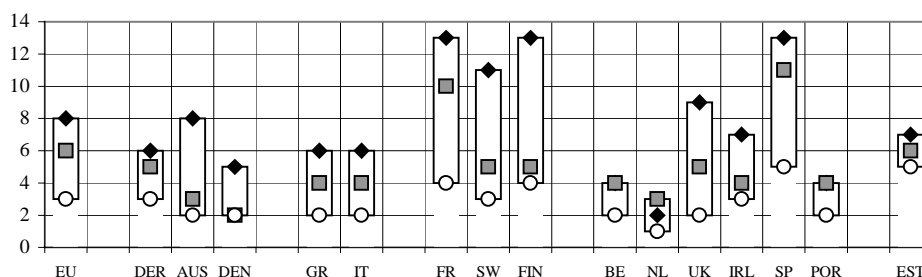


Figure 3. Exit from unemployment and entry into unemployment, %

Exit from unemployment



Entry into unemployment



◆ LM entrants 1 (0 to 2 years)    ■ LM entrants 2 (3 to 5 years)    ○ Experienced workers (over 5 years)

DER – Germany	FR – France	UK – the United Kingdom
AUS – Austria	SW – Sweden	IRL – Ireland
DEN – Denmark	FIN – Finland	SP – Spain
GR – Greece	BE – Belgium	POR – Portugal
IT – Italy	NL – the Netherlands	EST – Estonia

Source: Cedefop 2001; ELFS 2002.

Nevertheless, even the initial conversation with the applicants about the qualifications necessary for a certain position, revealed an evidence of the effect of education on unemployment risks at the beginning of labour market career (Table 5). The analyses reveal both cross-national similarities and dissimilarities. The commonalities between the observed countries refer to two different aspects of the educational stratification pattern: (1) having a low level of education is a handicap in most European countries, the risk of losing the job is greater; (2) the relative advantage provided by tertiary education. The effect of educational level is more influential in countries dominated by selective exclusion tempered by competitive regulation, as well as in Germany. The specificity of the German

pattern is the most disadvantageous position of labour market entrants with low level education compared to the other educational groups. The same pattern is also characteristic of the Estonian labour market entrants. 12% of young people with the basic level of education became unemployed during one year after entering the labour market. For the individuals with secondary education this figure is three times lower and for the tertiary education graduates it is six times lower.

**Table 5. Exit from unemployment and entry into unemployment by level of education, %**

Country	Exit from unemployment			Entry into unemployment		
	Low	Medium	High	Low	Medium	High
EU	1	36	52	10	7	4
<b>Regulated inclusion</b>						
Germany	29	41	55	15	5	2
Austria	...	...	...	9	5	3
Denmark	...	...	...	8	3	2
<b>Selective exclusion</b>						
Greece	27	23	33	4	6	3
Italy	22	27	32	5	5	2
<b>Selective exclusion+ competitive regulation</b>						
France	24	48	63	26	14	5
Finland	48	51	58	40	7	3
<b>Composite</b>						
Belgium	19	36	56	13	5	2
The Netherlands	30	42	68	6	2	2
UK	43	45	68	10	6	4
Ireland	22	43	59	11	5	2
Spain	41	43	50	16	14	8
Portugal	47	68	76	...	...	...
Estonia	26	56	92	12	4	2

... data not available

Source: Cedefop 2001; Estonian LFS 2002.

### 6.3. Exit from unemployment

Mobility from unemployment to a job indicates the relative ease of exiting unemployment. Although the labour market entrants are at greater risk of unemployment they are also more likely to exit from unemployment, except in Greece and Italy (see Figure 3). In Belgium, Denmark, the Netherlands and Finland, this advantage is more evident. In Estonia as well as in Ireland and Portugal, the effect of

labour market experience on the likelihood of returning to work seems to be linear. Longer working experience usually decreases this likelihood, but in Estonia this likelihood is lower than in Portugal and higher than in Ireland.

The mobility pattern between unemployment and jobs is quite different in various countries. Couppié and Mansuy (2001b:30) have found three configurations. The first characterises countries where the position of labour market entrants is weak: their risk of losing a job is higher and the chances to exit from unemployment are on the same level as for experienced workers. France, Sweden and the United Kingdom belong to this group. Greece and Italy belong to the second configuration where there are no considerable differences between labour market entrants and experienced workers. The third configuration is dominated by favourable prospects for labour market entrants. Compared to more experienced workers, they have greater chances to move from unemployment to a job without being affected by the risk of becoming unemployed. Estonia, Portugal and the Netherlands represent this profile. Finally, the fourth and most typical configuration characterises countries where young people have higher risks of losing the job as well as higher chances to return to employment.

Educational level seems to have an effect in the same countries as in those where the qualification affects the risk of unemployment. In Belgium, Germany, France, Ireland, Finland and Sweden, qualification determines the position of labour market entrants in the line for a job as well as their vulnerability to unemployment (see Table 5). In Austria, Portugal and the United Kingdom, qualification had a rather moderate effect on the risk of unemployment but it strongly affected the probability of returning to work within a year (Cedefop 2001:58). In Estonia, the effect of educational level on the unemployment risk as well as on the likelihood of finding a job is very strong. While most of the young unemployed with tertiary education return to employment within a year, the respective figure for the less qualified unemployed is more than three times lower. Only a quarter of them have returned to employment. The effect of education on the exit from unemployment is strongest in Estonia, compared to other European countries. This result confirms our hypothesis No. 4.

#### *6.4. Summary of findings*

The analysis presented in this paper reveals certain common factors as well as the degree of diversity in the forms of unemployment pattern among labour market entrants in Estonia and the European Union countries. The summary of results is presented in Table 6.

There is quite a strong competition for access to jobs among the labour market entrants with different educational backgrounds, as well as between labour market entrants and experienced workers. In such a competition, a diploma is certainly an asset: the level of education is a factor facilitating entry into the labour market. In Estonia, the effect of education is very strong placing the country into the same category with France and Sweden (countries where the selective exclusion is

**Table 6. Summary of results: commonalities with EU countries**

	Countries
<b>Rate of unemployment</b> Differences between labour market entrants and experienced workers	UK, Sweden
Differences between labour market entrants by level of education	Ireland, Belgium
<b>Exit from unemployment</b> Differences between labour market entrants and experienced workers	Ireland, Portugal, Belgium
Differences between labour market entrants by level of education	Ireland, Portugal, Belgium (in Estonia the effect is stronger)
<b>Entry into unemployment</b> Differences between labour market entrants and experienced workers	Portugal, the Netherlands
Differences between labour market entrants by level of education	UK, Ireland

tempered by competitive regulation). However, the labour market entrants in Estonia having an intermediate level of education, run less risk of unemployment than in France or Sweden.

As expected, the Estonian labour market entry pattern, according to the indicators of unemployment, seems to be similar with the composite one. There are many common features with the same process in Belgium, the UK, Portugal and Ireland. Based on this study, we could formulate a preliminary classification hypothesis about the location of Estonia in the typology of labour market entry patterns. Accordingly, we expect Estonia to belong to the same type with Ireland, Portugal, maybe with Belgium and the UK.

## 7. Conclusions and discussion

In this paper we have examined the differences between unemployment risks among the labour market entrants and experienced workers as well as the effect of education on these risks. The main objective was to explore how the risk of unemployment of labour market entrants is related to educational achievement and in what way this impact is shaped by the institutional embeddedness of educational and employment systems. For that purpose, a comparative analysis was applied on Estonia and the EU countries having different educational systems, labour market institutions and employment system, as well as various labour market entry patterns.

The analyses presented above confirm the value of the conceptual approach adopted in the paper. Previous studies have shown that national labour market institutions and educational systems have an impact on labour market entry process. Considering this conclusion and comparing the educational systems as well as labour market institutions in Estonia and in the EU countries, we have formulated the hypotheses about labour market entry process in Estonia using the classification results from previous studies. The typology of labour market entry patterns helps us to explain the specifics of the transition process and the labour market outcomes in Estonia. According to this typology, the Estonian transition model would be characterized as composite and quite close to the ones of Ireland, Portugal, the UK and Belgium.

In Estonia as well as in other countries having composite pattern:

- The unemployment rates of the labour market entrants, as well as the ratio of entrants compared to experienced workers' unemployment rates, tend to be on the medium level compared to other European countries;
- New entrants have a higher probability for leaving unemployment compared to experienced workers;
- The labour market entrants who have the best chances to enter the labour market also tend to have the best chances to profit from a fairly stable career in terms of lower risks of losing their jobs;
- The effect of educational level on the risk of unemployment and on the likelihood of finding a job is strong.

We also found some specific features concerning the labour market entry process in Estonia. Compared to more experienced workers, labour market entrants have greater chances to move from unemployment to a job without being affected by the risk of unemployment. Entry to the labour market seems to be the main problem for the young people in Estonia. If they succeed they will have the opportunity to compete with experienced workers on equal conditions.

Labour market entrants with basic education are far more likely to be unemployed. When unemployed, they have fewer opportunities to find another job quickly. In Estonia, the effect of educational level is very strong, even stronger than in the countries where selective exclusion model is tempered by forms of competitive regulation. Exclusion from entry into employment operates on a clear-cut qualifical base. Low-qualified young people turn out to be a specific problem group that deserves particular attention from politicians and the social sciences. The dropout rate from basic schools is currently quite high in Estonia: during the 2002/2003 school year nearly 1100 young persons interrupted their studies in basic school. Since this figure has remained stable at around 1100–1400 over the last five years, it is in fact having a cumulative impact, i.e. each year the number of young people without basic education increases by more than 1000. The 17–25 age group currently includes more than 10,000 young people without basic education. Young people with lower educational levels have increasing difficulties in breaking out of the vicious circle – the differences between those of

the same age are increasing, and this means that they will still have problems in entering the labour market or pursuing their education.

As Gangl et al. (2003) emphasize there are two possible ways of at least minimizing the problem of an excluded group of least qualified young workers. The first strategy aims at ensuring that all workers possess a minimum level of qualification that is marketable for a broad number of jobs. The unemployment risk will no longer be so strongly concentrated within a group of workers whose qualifications are below the standard requirement. The second strategy aims at decreasing this excluded group. In Estonia it is not possible without decreasing drop out from basic and secondary school.

Underachievement in the educational system is also penalised by allocation to a 'bad' job. Brauns et al (2003) explaining the educational stratification of unemployment on the French labour market mentioned that it would need to answer two questions: first, 'who gets a job, who does not?' second, 'who gets a good job, who a bad job?' the latter being attached to higher risk of unemployment afterwards. These questions should be answered in Estonia too.

This paper has been mainly based on cross-sectional data. The use of longitudinal information will add a dynamic aspect to the analysis. On the labour demand side, the stage of the business cycle has not been analysed.

For further research and verification, we have formulated a preliminary classification hypothesis about the location of Estonia in the typology of labour market entry patterns.

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