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TRANSITION FROM EDUCATION TO WORK IN EU NEIGHBOURING COUNTRIES

RESULTS OF AN ETF INNOVATION AND LEARNING PROJECT
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This publication summarises the main outcomes of an ETF Innovation and Learning Project entitled ‘Transition from Education to Work’, implemented in 2006 and 2007. The project aimed at studying the link between education and work in a dynamic and integrated way. The main innovative element of the project was the development of new conceptual approaches and new analytical instruments for the ETF and its partner countries.

The objective of the project was to develop two different tools for analysing the transition from education to work in partner countries in order to better understand the links between the education and training of young people and their labour market integration. The intended readership of this report is, first and foremost, researchers, who need better tools to be able to understand these links, and secondly, policymakers in Serbia and Ukraine, who can build on the results reported here as a sound basis for their policy recommendations. A specific aim has not been to produce policy recommendations as such. The survey in Ukraine, together with a complementary survey conducted by the World Bank, will nonetheless form the empirical basis for a more detailed policy analysis. In 2008, a specific policy note drawing on the lessons from these surveys will be jointly drawn up by the ETF, the European Commission and the World Bank.

A conceptual and analytical framework on the topic of education-to-work transition was first developed and used for national reports on this transition process in Ukraine, Serbia and Egypt. This project built on earlier work within the MEDA-Education and Training for Employment (MEDA-ETE) project implemented by the ETF, involving the preparation of a thematic study on education-to-work transition in Europe and discussing the relevance of European experiences with a network of MEDA experts and policymakers.

A methodology for a school-leaver survey was then developed and implemented in Serbia and Ukraine. This methodology, which took as its starting point an ad hoc module on school-to-work transition within the framework of the European Labour Force Survey in 2000, integrates specific key features of the countries outside the EU where the ETF operates.

This publication consists of four separate chapters. Chapter 1 presents the conceptual and analytical guidelines used for the national reports. Chapter 2 assesses the use and relevance of the conceptual framework for education–to-work transition in EU neighbouring countries, using the national reports produced in Ukraine, Serbia and Egypt as a departure point. Chapter 3 outlines the methodology developed and used for the implementation of school leaver surveys in Serbia and Ukraine. Finally, Chapter 4 describes and analyses the main results from the Serbian and Ukrainian school leaver surveys.

The publication was edited by Henrik Huitfeldt (ETF) and includes contributions from Anastasia Fetsi (ETF), Jens Johansen (ETF) (including editing in the final phase), Irena Kogan, and Walter van Trier. The country reports were prepared by Mona Amer (Egypt), Mihail Arandareno (Serbia) and Ella Libanova (Ukraine). Invaluable statistical support was provided by Doriana Monteleone. Three peer reviewers are warmly thanked for their suggestions and comments.
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The transition from education to work by young people is a complex process in which socioeconomic structures and institutional and policy settings in several areas interrelate. Policies to reduce youth employment and facilitate entry into the labour market are central to the European Youth Initiative in the revised Lisbon Agenda. Results from recent European research show that the outcomes of the transition process vary significantly between countries and national systems, according to the length and the nature of the transition process, the level and persistence of youth unemployment, and the types of jobs and contracts available to young people. A main conclusion from the existing literature is that the same policy intervention is unlikely to be equally effective in all national systems.

The ETF has developed a set of tools to better analyse education-to-work transition in its partner countries. A secondary objective has been to strengthen the analytical and policy-related links between the education system and the labour market. Although there are several approaches to addressing the education-to-work transition issue conceptually, it was decided to use the approach developed by the EU-financed CATEWE project as a starting point.

The CATEWE project had two major objectives. Firstly, it aimed to describe the pathways followed by young people when making the move from initial full-time education to the labour market. Secondly, it aimed to explain the extent to which differences in national institutional structures could account for differences in both transition patterns and outcomes for young people in the countries under consideration.

The CATEWE conceptual framework consists of five inter-related building blocks, each pointing to sets of variables that capture the main characteristics of the major factors affecting the transition from education to work, as follows: different aspects of the macro-context in which transition occurs; differences in education and training systems; the main characteristics and differences in labour market structures; the main characteristics and differences in the interfaces linking national education and training systems with the labour market; and finally, the characteristics of transition itself, which provides the indicators for assessing the success of the transition. One conclusion of the CATEWE project was that an additional building block covering the welfare system and the role of the family might be needed to explain education-to-work transition patterns found in a particular set of countries in southern Europe.

Given the poor quality of public welfare systems in some countries neighbouring the EU, this building block was accorded special significance in the conceptual framework developed by the ETF.

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1 CATEWE (Comparative Analysis of Transitions from Education to Work in Europe) was a cooperative team research venture that involved the Economic and Social Research Institute (Dublin), the Centre d’Etudes et de Recherches sur l’Education et les Qualifications (Marseille), the Mannheimer Zentrum für Europäische Sozialforschung (Mannheim), the Research Institute voor Onderwijs en Arbeidsmarkt (Maastricht) and the Centre for Educational Sociology (Edinburgh). A position paper was commissioned from leading members of the CATEWE team in the run-up to the OECD Thematic Review on the Transition from Education to Work (Hannan, Raffe & Smyth, 1996) and CATEWE was later involved in the review process itself.
Chapter 1 provides a description of the CATEWE conceptual framework and includes guidelines for writing country reports. Country reports should aim to answer three main questions in order to assess how well the school-to-work transition system works. How do young people move through the education system and what determines educational achievement and differences in educational achievement? How do young people move from the education system into the labour market and what determines their success at entering the labour market? Do processes, patterns and outcomes of early labour market entry influence the labour market outcomes and careers of young people at a later stage of life?

The main objective of Chapter 2 is to assess the use and relevance of the CATEWE conceptual framework for EU neighbouring countries within the framework of the ETF Transition from Education to Work project. Departing from the national reports for Egypt, Serbia and Ukraine, conclusions within three areas are highlighted. Firstly, some limitations of the national reports in their use of the conceptual framework were commented, referring, in particular, to a focus on desk research into existing material, a lack of information, and the cross-disciplinary nature of school-to-work transition, all of which made it difficult for a single national expert to apply the framework in depth in all the areas to which it applied. Secondly, a series of general remarks drew directly on the national reports. Even if the conceptual framework was not always used to structure the reports, most of the elements of the conceptual framework were included in some form in the reports. Unlike in most applications of this framework in EU countries, contextual information such as demographic changes in the economic structure due to the transition to a market economy and globalisation seem to affect the school-to-work transition. Another general remark relates to the fact that despite differences between the three countries covered, some interesting similarities emerged from the national reports. These referred mainly to a clear disconnection between the education structure and the labour market, and the implications of an expanded higher education system. Finally, the national reports led to a discussion on the extent to which the framework needs to be extended and further elaborated in order to cater for the specific features of EU neighbouring countries.

A major conclusion regarding education systems is that the uncertainty of job creation and difficulties in forecasting labour market needs would point to the benefits of becoming more flexible and proactive and of developing an education system that could accommodate a large degree of uncertainty.

The most striking fact about the situation of the youth labour market is the small role played by permanent formal jobs in the education-to-work transition. The main conclusion and policy recommendation would relate to the urgent need to develop an inclusive employment policy that would lead to more and better jobs. However, policy responses need to be multifaceted and should support labour market transition for all workers, including those with little opportunity to obtain work in the formal labour market.

Despite this main policy conclusion with regard to increasing the job creation rate, there is still a need to improve transition in terms of the interface between the education system and the labour market. Firstly, because the effects of a policy aimed at creating more and better jobs might be felt only in the medium term, action could and should be taken in the short term to prevent wasting the resources that young people bring to the labour market. Secondly, general policy measures may not have sufficient impact on young people. Given their specific characteristics and the fact that they are by definition ‘outsiders’ in the labour market, it seems evident that measures targeted at young people may have a role to play during the transition period.

Chapter 3 discusses and seeks to define possible formats for youth transition surveys. The ideal data required in order to be able to analyse transition processes as experienced by young people and the
criteria according to which data collection arrangements should be judged are also suggested. Conclusions are drawn in both respects, and specific recommendations for the implementation of youth transition surveys in EU neighbouring countries are made.

The methodological discussion is followed by a description of the major choices made in designing the sampling frame and the questionnaire for the ETF school leaver survey implemented in Serbia in 2006 and in Ukraine in 2007. The target group was individuals aged 15-34 who left education for the first time in the previous five years.

The questionnaire used during the survey was structured to cover the following issues:

- Situation before leaving continuous education for the first time;
- Monthly calendar of activities since leaving education;
- First job and first significant job after leaving education;
- Current labour market situation;
- Education and training since leaving education;
- Socio-demographic characteristics.

Finally, Chapter 4 discusses the main features of school-to-work transition in a dynamic way using two unique datasets collected in Serbia and Ukraine following the methodology described in Chapter 3. The survey data provides us with detailed information on the first five years of the transition from school to work for a large set of school leavers. Information is available for first jobs after leaving education, for first significant jobs (a minimum of 20 hours worked a week and employment duration of at least six months) and for employment at the time of the survey (up to five years after leaving education).

In Ukraine, the transition process unfolded relatively rapidly, whereas it was much more gradual in Serbia. Three fifths of Ukrainian school leavers compared to only one third of Serbian school leavers had a significant job six months after leaving education. However, significant differences were also observed between the two countries in terms of the quality of jobs and in the use of skills attained at school. In Serbia, young people remained unemployed longer or took up different kinds of informal employment. In Ukraine, on the other hand, many young people were employed in formal jobs, but often in jobs where wages were low and where a low qualification level was required (regardless of the educational attainment of the individual). In Ukraine, many women left the labour market soon after graduation.

Some differences between women and men were observed in the two countries. In general, men found work more quickly than women in both Serbia and Ukraine. The difference was smaller, however, for first significant jobs. In addition, men were more often informally employed or self-employed and worked more often in the private sector.

Education played a major role in terms of finding work rapidly after leaving the education system. Major findings are strikingly similar for the two countries. Post-secondary education graduates (including university graduates) did fairly well in both countries, followed by graduates from secondary vocational schools. Particularly noteworthy is the fact that graduates from secondary general education performed very poorly in comparison with other educational categories in both countries. These differences were also reflected in the quality of the job, with fewer graduates from post-secondary education working informally or in jobs where they did not use their qualifications.

Two methodological tools have been developed in this ETF Innovation and Learning Project on the Transition from Education to Work—a conceptual and analytical framework and a school leaver survey—that can be used to provide insights into the complex and dynamic process of labour market integration for young people. These tools have been piloted in a number of ETF partner countries and have been refined so as to better incorporate specific aspects of
school-to-work transition processes in EU neighbouring countries. Such ongoing minor refinements and adaptations of the tools are recommended, as they help ensure that they remain meaningful in any given national setting. As a result, the ETF is in the position to provide high-quality analytical and policy-related support in this field to its partner countries.
1.1 INTRODUCTION

In their contribution to the *International Handbook of Labour Market Policy and Evaluation* (1996), Ryan & Büchtemann note that discussions on school-to-work transition unavoidably bring up a multiplicity of related policy goals. A list of these commonly mentioned goals includes the following items:

- Widespread completion of upper secondary general education, along with appropriate achievement and certification, as well as access to continuing education thereafter.
- High-quality vocational preparation for all, including vocationally oriented education, work-related training and preparation for lifelong further training.
- Rapid transition to stable, career-oriented and well-paid employment.
- Low rates of youth unemployment, particularly long-term unemployment.
- Effective matching of young workers and jobs.
- Equal opportunities for young people, with options both for changes of career track and for second chances at particular tracks.

Although this list was drawn up nearly a decade ago, its relevance today is unquestionable, when questions concerning the performance of the education and training system seem to have become, if anything, even more prominent in policy debates. This is especially the case with respect to the relationship between the education and training system and labour market outcomes.

In the present policy context, considerations about school-to-work transition acquire their meaning and importance against the background of two kinds of demands that policy makers in this field have to confront. A first series of questions relates to problems originating...
from the domain of equality. They focus on whether the existing education and training system succeeds in providing all young people with equal opportunities to transit successfully from education to employment and access a respectable and decent position in society. Do pathways through the education and training system and/or the school-to-work transition system differ to such an extent that some pathways provide young people with more than average opportunities whereas other pathways lead young people to social exclusion?

A second series of questions relates to problems originating from the domain of efficiency. They focus on whether the skills supplied by the education system match the skills demanded by the labour market and look into whether the skills produced enable the national economy to compete successfully in international product markets. Does the existing skill formation system cater sufficiently to the demands of the globalising knowledge economy?

Moreover, in the present policy discourse both kinds of demands seem intimately connected. This is not only because a better performing education and training system promises more personal development as well as economic success, but also because failing to provide all young people with equal opportunities in the realm of education and training may deprive society of the talents of those who are left behind.

Looking in detail at the characteristics of education-to-work transition patterns and assessing whether and to what extent young people transit successfully is not, of course, the only possible way to get a better view of potential problems in regard to the interface between education and employment. Yet it is without doubt the most apt and informative way, if only because it enables us to consider the long-term implications of how new entrants integrate smoothly (or otherwise) into the labour market. Questions about the performance of the school-to-work transition system must undoubtedly occupy a privileged position on the research and policy agenda.

This chapter aims to develop a set of guidelines on how to structure and what to include in reports describing how young people transit from education to work and to assess whether, to what extent and why a national school-to-work transition system can be deemed successful. The chapter poses a list of questions, the answers to which will both enable a description of the main institutional characteristics of the education system and the labour market, and provide empirical evidence as to how young people actually move through the education and training system and how they transit to the labour market.

This will provide the basis for an assessment of education-to-work transition along both the dimensions—equality and efficiency—mentioned above.

Although other sources (for instance, OECD Thematic Reviews) have been consulted, the structure of the questionnaire closely mirrors the conceptual framework of the CATEWE research project set up in the late 1990s and funded in the framework of the European Targeted Socio-economic Research Programme. Its main aim is to make a comparative analysis of the transition systems of core European nations. As will become clear in the following pages, the CATEWE conceptual framework is undoubtedly a very convenient tool for understanding the many, interacting factors that affect how young people make the education-to-work transition and why they do it the way they do.

The rest of this chapter is structured in three sections. Section 2 describes the main building blocks of the CATEWE conceptual framework. Section 3 provides, for each building block, a detailed list of indicators that constitute the raw material from which to construct a picture of a national school-to-work transition system. It goes without saying that the list of questions and indicators proposed in this section is subject to further development. Section 4, therefore, indicates some of the more urgent directions that this further development could take.
1.2 THE CATEWE CONCEPTUAL FRAMEWORK AND BUILDING BLOCKS

The objective of the CATEWE project was twofold. First of all, it aimed at describing the pathways followed by young people when making the transition from initial full-time education to the labour market. Secondly, it aimed to explain to what extent differences in national institutional structures could account for differences in transition patterns and transition outcomes for young people in the countries under consideration.

Put simply, the main question the CATEWE team tried to answer was whether the differences in the success or performance of the different national school-to-work transition systems could be explained (at least partly) by the institutional set-up governing the circumstances in which young people choose how they navigate from education to work.

To accomplish this task the team needed two kinds of input, as follows:

- Longitudinal data relevant to the task at hand, which could be used both to describe in detail the pathways travelled by young people when making the transition from education to work and to empirically validate research questions and hypotheses.
- A conceptual framework, the main requirement for which was that it needed to be comparative in nature. In other words, it would not only be valid for describing national transition systems, but should allow a comparison of the different national systems along similar dimensions and form the basis for explaining why cross-national differences in education/training systems produce differences in transition patterns.

Neither of these instruments existed at the start of the project. Rather than enter into details of how the database was constructed—apart from mentioning that existing labour force and national school-leaver surveys were used—the chapter will be restricted to providing details of the conceptual framework.

The CATEWE conceptual framework consists of five inter-related building blocks, each pointing at sets of variables that capture the main characteristics of the major factors influencing the transition from education to work.

**Conceptual building block 1: the macro-context**

The first building block comprises variables reflecting different aspects of the macro-context in which national transitions occur. The main elements covered by this building block are the demographic situation and development; the industrial structure and the economic cycle; the employment and age structure; and the gender and ethnic composition of the labour force.

The rationale behind the inclusion of this building block is clear. National differences in any of these instances may effectively influence how young people enter—and how successful they are in entering—the labour market, with the differences noted not necessarily having anything to do with different institutional set-ups for the education and training system, the labour market or the school-to-work transition system itself. It is thus important to be able to control these factors when assessing the influence of institutions and policy measures.

Take, for instance, some of the data presented in the recent Global Employment Trends for Youth report by the ILO, particularly the estimates of youth labour force size for the period 2003-2015. Industrialised countries anticipate little growth (from 64.3 to 64.4 million) and transition economies expect to see a substantial drop (from 27.2 to 19.8 million). The South Asia region, however, anticipates a substantial rise (from 122.3 to 144.3 million), and the Middle East and North Africa regions also expect a rise (from 32.0 to 35.3 million), although to a smaller degree. In any case, it is clear that, all other things being equal, new cohorts of young people making the transition to employment in these different regions will do so under quite different circumstances.

In the CATEWE team's analysis, the variables associated with this first building block of the conceptual framework play the role of control variables. In other words, the effects of several factors are neutralised, as they might otherwise blur the picture.
and prevent the differences in education and labour market institutions from emerging clearly and distinctly.

**Conceptual building block 2: the education and training system**

The second building block, referring to differences in national education/training systems—which was of central importance to the CATEWE project—should take a prominent place in any description of a national school-to-work transition system. The approach finds its theoretical background in the sociological literature on social stratification and status achievement processes (Allmendinger 1989; Shavitt & Müller 1998).

The most apt metaphor for demonstrating the essence of how the literature conceptualises the role of the education and training system within the context of school-to-work transition is probably that of a ‘sorting machine’. The education and training system ‘sorts’ students in terms of differentiating and classifying them according to specific rules and procedures embedded in each national institutional set-up. The main elements in this building block aim to reflect the major mechanisms used by this sorting machine.

The first characteristic taken into account by the CATEWE framework is the extent of standardisation that exists within an education system. In this context, standardisation refers to the procedures used by public authorities (whether at the central state or regional level) in order to:

- Define or closely regulate the content of curricula in different subjects.
- Set an obligatory minimum set of subjects to be taken.
- Ensure through regulation or inspection that the curriculum is taught in schools.
- Set minimal end-points or standards to be achieved by the end of each course/period.
- Set, regulate and monitor examinations so that the same standards are used for all schools.

The extent to which such standardisation procedures are embedded in the institutional set-up and in actual practice in an education system will largely determine the homogeneous character of its output. Given that most European education systems are highly standardised, this characteristic does not really allow for differentiating between them. Hence, apart from distinguishing the European countries from the USA or Canada, this factor does not play an effective role in the typologies or analyses produced by CATEWE.

The second characteristic relates to the extent of differentiation within an education system. Three different dimensions can usefully be distinguished, as follows:

1. **Track differentiation.** This refers to the extent to which pupils or students are allocated to or divided up among separate curricular tracks and even into different school types. For instance, while the education and training system is comprehensive/general at lower secondary level in most European countries, both the Germanic dual-system countries and the Netherlands are very different in terms of curricula or school type at the same level. The degree of differentiation increases in most EU countries from the upper secondary level (or associated full-time vocational training).

2. **Outcome differentiation.** Countries differ with respect to how and to what extent they measure performance levels at the end of a particular period of study (usually upper and/or lower secondary level) and irrespective of curricular tracking. For instance, examination and certification systems vary in the extent to which pupil achievement levels are graded, with some using a simple pass/fail dichotomy, and others marking subjects on the basis of very precise grades (A1, A2, B1, B2, C1, C2, C3, D, E, F etc).

3. **Differentiation and its relationship to progression to the next stage in education.** This refers to the extent to which selection into tracks or school types is random or results from neighbourhood and community-based processes, and also the degree to which selection is based on academic performance, or even other social criteria, such as gender, social class or ethnic group. At one extreme are the
countries with relatively open systems, where students who complete lower secondary level are expected and even encouraged to go on to upper secondary level education, although with minimal selective curricular/course or examination/certification requirements (France and Ireland, for instance). At the other extreme are highly selective systems, where progress to upper secondary level courses is dependent on passing lower secondary level courses or examinations, or where progress to a differentiated course (such as, for instance, the Gymnasium/VWO in the Netherlands) is mainly dependent on having completed a relevant lower level course in the same school/curriculum type.

These characteristics marking differences between education and training systems—that is, standardisation and differentiation—are important in the way they classify school leavers and provide information to employers about the qualities and skills to be expected from potential workers.

**Conceptual building block 3: labour market structure**

The third building block is equally important. It contains elements aimed at capturing the major characteristics of and the main differences between national labour market structures. The theoretical background for this building block is the literature on industrial organisation and labour market segmentation (Doeringer & Piore 1971, Maurice, Sellier & Silvestre 1982, Marsden & Ryan 1990, Marsden, Eyraud & Silvestre 1990, Marsden & Germe 1991 amongst others). A standard feature of this literature is the distinction between three kinds of labour market structure within which firms can operate, namely, internal labour markets, occupational labour markets and external labour markets.

Firms relying on internal labour markets will fill their lower grade jobs from outside. After a period of mostly firm-specific training, employees will move on to higher positions. Put another way, one could say that these firms implicitly offer their workers a lifetime contract. In occupational labour markets jobs will be clearly defined in terms of content and will have a high level of consistency across firms or industries. In this case one expects that workers generally have skills that are transferable between employers. An example of a country traditionally dominated by internal labour markets is France, whereas Germany would be a typical example of a country dominated by occupational labour markets. Figure 1 illustrates the essential difference between internal and occupational labour markets.

**Figure 1. Internal and occupational labour market models**

<table>
<thead>
<tr>
<th>Internal Labour Market</th>
<th>Occupational Labour Market</th>
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<tbody>
<tr>
<td>Skilled labour</td>
<td></td>
</tr>
<tr>
<td>Semi-skilled labour</td>
<td></td>
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<tr>
<td>Unskilled labour</td>
<td></td>
</tr>
</tbody>
</table>

Main inflows ➡️ Main outflows
These labour market types are usually considered to stand in opposition to the supposedly unstructured external labour markets, where firms hire mostly low-skilled workers on the open market and where workers are exposed to competition from other workers. Mobility between firms is therefore commonplace but reflects job insecurity rather than upward mobility.

**Conceptual building block 4: education and labour market interface**

The fourth building block refers to variables capturing the characteristics and differences between the interfaces linking national education and training systems to the labour market.

An important feature of any skill formation system is the nature and strength of the institutionalised relationship between what is taught and learned at school and what type of education or training is required to obtain work. An important question to consider for a particular country, therefore, is if and to what extent explicit and vocationally relevant curricular differentiation exists in the school system and how this links to entry requirements and occupations specified in the labour market. Obvious examples of such institutional links are apprenticeships, licences to practice or specific forms of education and training required for entry to specific occupations.

We need to distinguish between two important ways in which such linkages can be forged. First of all, we need to consider the extent to which employers are involved and play a specific role in the organisation of the education and training system. The CATEWE team characterised the nature of this involvement in the following four terms:

1. Direct linkage systems, in which employers play a direct role in providing training themselves or cooperate with other training providers (for example, Germany)
2. Collinear linkage systems, in which employers have a say in specifying curricula and qualifications through institutional input into mainstream education and training systems (for example, the Netherlands)
3. Job placement systems, in which firms are involved in direct recruitment from schools or institutions (for example, Japan)
4. Decoupled systems, in which employers are not involved but are dependent on signals coming from the education and training system.

Secondly, the characteristics of the youth training system will also affect the nature and the strength of the link between, on the one hand, the standardisation and differentiation of skills (as signalled by the credentials awarded) and, on the other hand, specific occupational or job requirements. Important differences between countries stem from the level at which youth training is provided, whether youth training is formally differentiated from other forms of vocational education and training and from apprenticeships, and whether or not young people or first entrants have a right to training.

A particularly important phenomenon in this respect in many European countries is the development of so-called active labour market or welfare-to-work policies. In many respects, the measures taken within these frameworks border on—if they do not actually transgress into—domains that would traditionally be covered by youth training.

**Conceptual building block 5: transition outcomes**

The fifth building block relates to the characteristics of the transition itself and is meant to provide indicators that enable assessment of the degree of success of the transition. Two different sets of outcome variables need to be distinguished, namely, variables related to the transition outcomes and variables reflecting the characteristics of the transition process.

With respect to the transition outcomes, the proposed list referred to items such as principal economic activity, occupational status, industrial allocation, labour market segment location, wages, employment security, access to on-the-job training, access to on-the-job training sponsored by employers, job and career mobility, content...
congruence (the match between education type and job type), and level congruence (the match between education level and job level).

With respect to the variables reflecting the characteristics of the transition process, the CATEWE team proposed two indicators aimed at obtaining a better view of the most important transition period features, namely, the number of transitions and the length of transition period. However, since each of these indicators can be applied to any job in the sequence leading from initial contact with the labour market (after leaving the education system) to the acquisition of a stable job, they could also be envisaged to go beyond evaluating labour market outcomes on the basis of data corresponding to particular points in time. Indeed, given the right data it should be possible to construct synthetic indicators based on transition sequences or trajectories, adding evidence on career dynamics to the information according to which transition systems are assessed.

Having provided a brief description of the main building blocks of the CATEWE conceptual framework, and before concluding this first part of the paper with remarks on some of the limitations of the framework, an example of its usefulness when applied to distinguishing between different national institutional set-ups is provided—in the sense of both providing more insight than if the framework were not used and obtaining indications about where the framework itself needs further elaboration.

As a preliminary step towards analysing how young people actually make the education-to-work transition (using data from school leaver or labour force surveys), the CATEWE team produced reports for each of the countries included in their study. The main purpose of these country reports was to get a good overview of the specific characteristics of institutional set-ups and contexts. The detailed descriptions provided by the country reports also allowed the CATEWE team to locate the different countries within a typology contained in or based on the conceptual framework.

One example of the result of this exercise is depicted in Figure 2 (overleaf). It shows how it is possible to construct a typology that allows differentiation between countries using just three elements in the conceptual framework, namely, degree of standardisation, degree of differentiation, and nature of school-to-work linkage. This typology can be used in empirical research in order to assess whether differences between groups of countries account for differences in transition patterns or outcomes.

In other words, the typology enables empirical verification of whether the countries also differ with respect to, say, the length of the transition period, the ease with which young people find jobs, the extent to which their education and training matches their jobs and so on.

At the start of the project, the members of the CATEWE team worked on a double hypothesis. The first was that some of the possible combinations of the elements contained in the three sets of institutional formats (represented by three of the building blocks) would be more common than others. The second was that some combinations within the set of the more common combinations would be more effective than others in terms of successful education-to-work transition by young people. The underlying assumption was that two main school-to-work transition models would emerge from the national case studies.

It was anticipated that countries with a highly differentiated education and training system would combine this feature with an occupationally segmented labour market and with apprenticeships as a major link between both components in the model, while it was expected that countries with a less differentiated education and training system would combine this with a more open labour market and with substantial numbers of young people entering the labour market as so-called early leavers (that is, directly after initial education and without any further training).
One of the general but remarkable results of the empirical analyses (Müller & Gangl, 2003) is that the hypothesis as to two ideal transition models is not in fact confirmed. In fact, three specific patterns emerge from the data, which can be interpreted, broadly speaking, as being consistent with differences in education and training systems.

A first pattern pertains to the set of countries operating extensive vocational training systems at the upper secondary level, including Austria, Denmark, Germany, the Netherlands, Sweden, and Finland. The three typical characteristics of this pattern are as follows:

- The proportion of young people not progressing beyond compulsory education...
education levels is very low (typically below 15% of an age cohort).
- A significant proportion of young people obtain tertiary level qualifications (typically 25% of an age cohort, with the exception of Austria).
- Those who leave the education system from the upper secondary level obtain vocational qualifications either through dual-system arrangements (Austria, Germany, and to a lesser extent, Denmark) or school-based training (Netherlands, Sweden and Finland).

A second pattern, pertaining to the remaining northern and western European countries, is in many respects similar to the first, but with a slightly different education structure—although this difference is expressed more in qualitative terms than in terms of education level. Typical characteristics of this second pattern are as follows:
- A fairly large proportion of upper secondary level leavers enter the market with general rather than vocational qualifications (the UK, France, Belgium and Ireland).
- The progression rates beyond compulsory education are significantly lower compared to those of more vocationally oriented systems.

A third pattern applies to the southern European countries. Its most distinguishing characteristic is the significantly lower level of educational attainment, although rapid educational expansion in recent times may close the gap with other European countries very quickly. A main feature of this set of countries is the fact that vocational training systems are poorly developed, with a consequent limited provision of vocation-specific training. It seems likely that the specific characteristics of this third (and unanticipated) pattern are related to elements, such as family structure, the welfare system or the role of informal work, that are typical in at least some southern European countries. Since the CATEWE framework does not describe such elements in sufficient detail or as important in their own right, another building block—the welfare state system—may need to be included in the framework.

1.3 TOWARDS GUIDELINES FOR WRITING A COUNTRY REPORT

This section aims to convert the conceptual framework into a series of simple questions aimed at focusing the attention of local experts on potential indicators that could be included in their national reports. In this sense, the questions can be viewed as initial guidelines to be consulted when constructing a country report and that provide the background knowledge necessary to interpret—in a meaningful way—the data available on how young people make the transition from education to work.

In order to be able to assess the performance of the school-to-work transition system three key questions need to be answered:

Question 1. How do young people move through the education system and what determines differences in their educational achievement?

Question 2. How and through which channels do young people move from the education system into the labour market and what determines their success at labour market entry?

Question 3. Do processes, patterns and outcomes of early labour market entry influence the labour market outcomes and careers of young people at a later stage in life?

It should be clear that, to answer these questions properly, micro-level data is needed that enables the educational and early labour market careers of young people to be tracked and linked to the many different variables that influence careers. In other words, the best sources are school leaver or labour market entry surveys. These surveys collect data at the micro-level and use instruments that enable detailed reconstruction (at least partly and eventually retrospectively) of the pathways that lead young people from different social backgrounds along different educational tracks to different positions in the labour market.
However, in order to interpret the data in a meaningful way, a thorough knowledge is needed, both of the institutional framework governing and structuring the circumstances in which young people make their choices along the road from education to work, and of the context in which the education system and labour market structures operate. This is the information on which the national reports need to focus. The country report, therefore, needs to provide information as follows:

- A review of the available knowledge on the relationship between education and employment—and, more specifically, on the transition from education to work. The country report must provide the necessary material with which to draw a picture in which the additional information collected from micro-data (such as school-leaver surveys) can be placed.
- A detailed description of the education system, the labour market structure and the institutional framework governing the transition from education to work. This description should distinguish the key stages along the pathways taken by young people between education and the labour market and should mark the main crossroads that young people negotiate when choosing between different options. An important function of this description is to draw a distinction between the institutional structure and the uses made of it by young people (and changes over time in both structure and uses).
- A brief (but topical) review of social and political developments affecting changes in education and labour market institutions in recent decades, and a review of recent policy initiatives in these areas.

When trying to describe and assess a national school-to-work transition system, therefore, it will only be possible to address the three key questions referred to above if these areas are covered thoroughly.

A place should be found within this overall structure for the following topics and associated information—which should be described in as much detail as possible.

**Indicator set 1: available information sources**

- What information is available on the education-to-work transition? What databases can be used?
- Are data from labour force surveys available?
- What are the main studies on the link between education and employment?
- Do studies exist on the attitudes of young people towards work? Do studies exist on the attitudes of employers towards hiring young workers?
- Which economic, social and cultural factors are important to understanding the specific nature of the school-to-work transition system?

**Indicator set 2: general transition system context**

**A. Demographics**

- What are the broad population trends in terms of numbers and age structure?
- What is the overall size of the education system (number of students and participation rates, etc) and distribution between different parts of the education system?
- What are the relevant trends?

**B. The labour market**

- What is the situation of first-time labour market entrants or young people with respect to labour law and social security regulations? To what extent are these regulations implemented in reality?
- Does a minimum wage law exist? What segments of the labour market or sections of the working population does it cover? To what extent is the minimum wage legislation implemented in reality?
- Does a system of wage subsidies exist? If so, what segments of the labour market does it cover or what specific group of workers does it target?

**C. Policies**

- Which are the main education/training and youth labour market issues that have dominated or are prominent on the national policy agenda?
What major policy proposals or institutional reforms have been implemented in recent years?

Does government policy contain explicitly stated quantitative and/or qualitative targets for education? Do such targets exist in the domain of youth employment and unemployment?

Are education targets mostly set at the national, regional or local level?

**Indicator set 3:**
**education and training system structure**

**A. Overall structure**

- What is the main structure of the education and training system? What national agencies are involved in the formation of educational policy?
- What are the central goals and objectives of the different parts of the education system?
- What is the overall size of the different parts of the education system (number of students and participation rates, etc)?
- Which are the main education pathway stages?
- Where are the potential turning points in an educational career situated?
- What is the compulsory schooling age?

**B. Standardisation**

- To what extent are curricula, examinations and certification standardised?
- How are quality standards ensured? Are they ensured on a national or regional basis?
- Who defines or regulates the content/levels of curricula in different subjects?
- Is there an obligatory minimum set of subjects to be taken? Who defines this set?
- Are there minimal endpoints or standards for particular courses or study periods? Who sets these?

**C. Differentiation**

- Is there a difference between institutions or programmes at the same stage of the education system? In other words, are students allocated to or divided into separate curricular tracks or even into separate linked school types? To what extent are vocational options occupationally specific? Is there a difference between academic and vocational routes/tracks, even within the same establishment? Is there a difference between types of school, albeit not based on differences in curricula or programmes?
- Do any rules for pupil selection and progression exist? In other words, is student selection into tracks or school types a random, neighbourhood or community-based process? Or are pupils selected into a certain track or school on the basis of academic performance or other social criteria (social, ethnic or gender segregation, streaming on the basis of ability, schools as sorting machines, etc)?
- Is there formal differentiation at the end of each stage of the education system? In other words, is there outcome differentiation? If so, in what sense and to what extent does it exist? How does the education/training system rank or sort individuals at the end of each stage?
- Is there a relationship between differentiation and progression into the next stage? In other words, is there flexibility of progression? Is access to upper secondary level/higher education open or selective? On what basis is this process selective? Can students move easily between different routes or tracks?

**Indicator set 4:**
**labour market structure**

**A. Overall structure**

- What are the main characteristics of the industrial and occupational structure?
- What are the main trends for the mid-term?
- Is the labour market occupational, internal or external? How has this situation changed over time?
- Is the labour market heavily regulated? What are the main regulatory mechanisms (for example, for hiring and firing workers)?
B. The youth labour market

- What is the unemployment rate for young people? In what sectors or occupations do labour market entrants typically find jobs? What are the main characteristics of these entry-level jobs?
- What is the importance of the informal sector, both in general and for young people?
- How important is temporary work or part-time work, both in general and for young people?
- What is the pay structure? What are relative employment costs of hiring young people?
- Is it normal practice for young people to perform paid work while studying?

Indicator set 5: school-to-work transition process

- Which are the important ages in the typical lifecycle of young people?
- At what age do young people typically leave the education system?
- When can the transition process be said to start and end? (Internationally, the former is reckoned to be the point at which 25% of the cohort have left the education system and the latter is reckoned to be the point at which 75% have entered the labour market.)
- What guidance and information systems exist?
- Is there a system in place to detect young people at risk on leaving the education system? Is there a significant number of young people at risk?
- What is the main strategy for helping young people at risk?

Indicator set 6: education and labour market interface

A. Employer involvement

- What role do employers play in the education/training system?
- Do employers provide training to young people?
- Do employers have a say in specifying curriculum and qualifications? Do they have institutionalised input into provision within the mainstream education/training system?
- Are there any specific employee recruitment links between particular schools/institutions and particular firms?

B. Educational linkages with the labour market

- To what extent is there explicit and vocationally relevant curricular differentiation in the school system that is linked to occupational specification and entry requirements in the labour market?

C. Youth training

- What specific forms of youth training exist? What is its level of provision?
- Do young people have a right to participate?
- Is youth training subsidised in any way?
- Are there special provisions to encourage young people to obtain additional training while employed?

D. Guidance

- Do guidance systems exist within the education structure?
- Are there systems for assisting young people to look for work?

Indicator set 7: welfare and social support

- Does unemployment insurance cover all young people leaving the education system?
- Is there a social assistance system in place? Does it cover young people?
- How does the level of social protection for young people compare to that for adults?
- Does the level of social protection allow young people to live independently?
- Do young people have to rely on informal or family networks for social protection and/or to find jobs?
- Does the housing market play an important role?

As stated earlier, this list of questions is intended as a guideline for what to include in the national report. However, the list is neither exhaustive nor complete. It may well exclude items that
are particularly important for certain countries or include items that may be irrelevant. As such, it is a list in development which should be adapted to local circumstances as needed. The important point to stress is that the national reports should, insofar as is possible, give a faithful and complete overview of the mechanisms that structure the circumstances and options in which young people navigate from the realm of education and learning to the realm of work and employment—meaning that, in both realms, the picture should not, for example, only include formally recognised structures, regulations or institutions.

The importance of focusing on mechanisms, structuring circumstances and choice sets can be briefly and aptly illustrated by looking at the frequently discussed problem of skill or labour shortages. The CATEWE focus on labour supply leaves the role of labour demand largely out of the picture, and what this means is that an opportunity is missed for specifying the different labour demand mechanisms that could be involved. Indeed, the notion of a skill or labour shortage can be interpreted in at least six different ways—each hinting at a different kind of labour market problem—as follows:

1. Low skills equilibrium. Since employers pursue corporate strategies and product specifications which do not require high levels of worker skills, there is little demand for qualifications and little incentive for young people to obtain them.
2. Weak signalling. Employers lack confidence in existing qualifications as indicators that young people possess the skills required in the labour market.
3. Information failure. Young people are insufficiently aware of employer demand or of the existence of certain qualifications when making decisions about further study.
4. Poor quality training. Even if incentives potentially exist, young people are discouraged from participating in education and training by the poor quality of much of the existing provision.
5. Other disincentives. Young people are discouraged from participating in education and training by other factors, such as a need for an income to sustain a preferred lifestyle.
6. Non-rational behaviour. Young people do not act rationally when making decisions about education and training, so they would not respond to incentives even if these existed.

Distinguishing between these different mechanisms not only enhances the analytical and explanatory power of the conceptual framework, but also makes the framework more useful for policy makers.

1.4 FINAL REMARKS

Departing from the CATEWE conceptual framework and its building blocks, a set of questions and indicators aimed at guiding potential authors of a background report on education-to-work transition in a particular country have been developed that essentially consist of a list of topics and items that should not be excluded from any detailed country report of this nature.

It may seem surprising to take the CATEWE conceptual framework as a starting point, since it was originally developed in order to conduct a comparative analysis of core European nations. Is it feasible, one might ask, to describe and assess the case of a particular country using a set indicators constructed in order to compare a different set of countries? Does the notion of applying a common set of indicators not run the risk of overlooking precisely the more salient or crucial elements of a country that has its own unique history?

Although this point raises legitimate questions, it should not be a major concern in this case (and maybe not in any case). In fact, precisely because of its aims in terms of comparing and contrasting countries, the CATEWE conceptual framework looks carefully at the part of the institutional set-up or context that might cause two or more countries to differ in terms of school-to-work transition systems.
This framework, therefore, is a very useful heuristic instrument for describing the characteristic features and major mechanisms of the school-to-work transition in any country.

There are certain important factors to bear in mind when relying on the guidelines described above to write a national report. Although the focus is on the characteristics of the institutional set-up governing the circumstances in which young people make their choices when navigating from education to employment, the description should take care to distinguish between the institutional set-up as such and the use that is made of it by different social groups (and which may change over time even if the institutional set-up itself stays the same).

Given that the institutional framework of any country will be characterised by idiosyncratic features particular to a country and its history, the country report will need to point out if and how elements of pathway dependence and institutional interlock are involved.

Probably the most important factor is that the conceptual framework should not be used in a rigid and static way, nor should the indicators and questions be seen as exhaustive and fixed. The list is not exhaustive and the content of the building blocks may need further development in order to make sense if specific arrangements are typical for the country under consideration.

In fact, it may be necessary to elaborate and develop the CATEWE framework further by adding other building blocks (for example, a welfare system building block, as suggested earlier). In order to fit other institutional set-ups, moreover, it may even be necessary to reconstruct the content of each building block presented in the original CATEWE format.

A good example of such internal reconstruction is the building block representing the structure of the labour market. The reconstruction of this building block might be useful due to the fact that the CATEWE conceptual framework could be read as focusing primarily on labour supply mechanisms. Indeed, in this model the labour market building block functions in what could be called a receptive mode. The three different labour market structures represent possible destinations, each considered to be adapted to the kinds of education systems from which young people originate. In other words, in this picture the labour market is represented as quite a passive system.

This particular aspect of the CATEWE approach is to a great extent due to its origins in the so-called socio-economic achievement models. These models explain present statuses or destinations by looking at forces or origins influencing careers or pathways. Although this is a useful approach for educational careers, it may have unfortunate effects when applied rigorously to the transition from education to employment. This is because it pays little attention to the factors determining labour demand and the factors pulling young people into the labour market—even when it is clear that the latter undoubtedly plays an important role in school-to-work transition.

In writing national reports on the transition from education to work, therefore, the mechanisms structuring supply and demand in the youth labour market must not be overlooked.

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2 There are a number of other elements in the transition from education to work that can be taken into account, for example: the role of the media; labour exchanges; apprenticeship systems; job hunting methods; employment services; overemployment; labour market information systems; migration and regional mobility; and issues related to gender and population groups with special needs.
2. AN ASSESSMENT OF THE USE AND RELEVANCE OF THE EDUCATION-TO-WORK CONCEPTUAL FRAMEWORK FOR EU NEIGHBOURING COUNTRIES

Walter Van Trier, Anastasia Fetsi and Henrik Huitfeldt

2.1 INTRODUCTION

The main objective of this chapter is to assess the use and relevance of the conceptual framework for representing the transition from education to work in EU neighbouring countries. The conceptual framework was developed as a heuristic device to guide analyses of school-to-work transition systems and provide a common structure for the description of these systems. The chapter takes as a starting point national reports on education-to-work transition in Ukraine, Serbia and Egypt, produced within the framework of the ETF project on education-to-work transition.

The rest of this chapter is structured in four parts. Section 2 reviews the main objectives of the national reports and the principle features of the conceptual framework to give a benchmark against which to evaluate use of the conceptual framework. Section 3, which opens with some general comments, looks in more detail at how the main building blocks of the conceptual framework are handled in the three national reports, given that the framework was originally developed from a model for conducting comparative research in core western European nations. Section 4 considers some of the potential limitations of the framework when applied outside these boundaries and looks at whether the national reports provide clues in regard to potential extension to situations not covered by the original formulation. This section also includes a reflection on the policy implications of strengthening education-to-work transition systems in EU neighbouring countries within three main areas: the education system, the functioning of the labour market and the transition system itself. Finally, Section 5 closes the chapter with our concluding remarks.
2.2 WHY NATIONAL REPORTS AND WHAT CONCEPTUAL FRAMEWORK?

The basic objective of the national reports on school-to-work transition was to provide policymakers with data that would enable them to assess and evaluate the effectiveness and efficiency of the transition process. This assessment and evaluation can be made in terms of three dimensions, each potentially signalling a different kind of youth labour market problem.

The first dimension relates to problems of differential access to labour market positions and social status and is usually considered under the equality-of-opportunity label. The second dimension is primarily concerned with problems of social exclusion from the main domains of social life and goes under the label of social integration and social cohesion. Although these two dimensions may be related in practice, they are clearly not the same. One can imagine a state of affairs without social exclusion, but in which there is no real equality of opportunity. The third dimension signals skill formation problems and primarily points to potentially inefficient human resource use and welfare resource waste. This kind of problem may again be related to the other two dimensions; nonetheless, it is important to bear in mind that a situation in which there is social inclusion and equality of opportunity does not necessarily imply that skill production and utilisation is optimal.

It needs to be stressed that the prevailing view of many academics and policy advisers is that these three dimensions are intimately related. Better performing education and training systems promise greater personal development and economic success. Thus, the failure to provide all young people with equal and full opportunities in the realm of education and training deprives society of the talents of those left behind. Problems with school-to-work transition signal potential problems in both the youth labour market and in terms of future economic performance.

In order to arrive at a proper judgment in regard to school-to-work transition outcomes, the following three key questions (referred to in the previous chapter) need to be answered:

Question 1. How do young people move through the education system and what determines differences in their education achievement?

Question 2. How and through which channels do young people move from the education system into the labour market and what determines their success at labour market entry?

Question 3. Do processes, patterns and outcomes of early labour market entry influence the labour market outcomes and careers of young people at a later stage in life?

To answer these questions properly, one would ideally want to have available micro-level data on the pathways followed by young people going from school to work (as

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3 In fact, for Serbia and Ukraine the national reports were expected to be read alongside the data of school leaver surveys planned to be implemented in both countries. The country reports for Serbia and Egypt are available on the ETF web site.
revealed by micro-level data from school leaver surveys) are the result of choices made under particular circumstances, the national reports are expected to give a clear picture of the institutional setting giving rise—at each educational stage and during the initial transition to the labour market—to the set of options available to young people, and also the relevant incentives and potential barriers that apply to the different options.

It is important to note that this focus on the institutional structure should not be seen as a second or third-best option that is only useful because micro-data on transition pathways and results is not available. On the contrary, from a policy point-of-view, detailed knowledge of the features of the institutional set-up structuring the school-to-work pathway options available to young people—whether potential or realised—is an indispensable ingredient of any attempt at institutional reform, if only to the extent that a thorough analysis of the institutional set-up would allow policy makers to differentiate between the roles played by choice and circumstance in the realised pathways.

Finally, given the different recent histories of the EU neighbouring countries, a detailed comparison of different institutional set-ups might give important clues as to the extent of the role played by pathway dependence. Indeed, national differences in the original set-up and in the development of education or labour market institutions could very well account for some of the particularities of existing institutional configurations and result in different transition patterns or outcomes.

2.3 HOW WAS THE CONCEPTUAL FRAMEWORK USED?

The conceptual framework consists of five different building blocks, each containing one or more subsets of indicators reflecting the characteristics of each particular building block. As structured, the conceptual framework can best be viewed as a particular way of representing the socio-economic advancement process.

The first of the building blocks refers to the general context and consists of indicators for factors that potentially affect the transition from school to work in a specific country or region. Although not immediately connected to the education or employment systems, the indicators nevertheless reflect national (or regional) differences in transition processes and outcomes. In comparative analyses, they reflect the variables that control differences at the country level.

The education system and the employment system constitute the second and the third building block of the framework, respectively, and represent the origins and destinations of the pathways young people follow from school to work. It would make no sense to evaluate the transition process and its outcomes without taking into consideration differences in outcomes or skills produced by the education system, and the opportunities provided by or skills demanded in the employment system. The indicators for these building blocks should, in principle, allow distinctions to be drawn between different types of education and labour market structures.

The fourth building block concerns the transition system itself, that is, the set of actors, regulations and institutions that link the education system and the labour market. The indicators attempt to reflect the different channels through which young people can navigate from school to work and also the main differences in these channels.

The fifth building block contains a set of outcome indicators, reflecting the different dimensions—namely, equality of opportunity, social integration and efficient matching—along which the outcomes of school-to-work transition should be measured and evaluated.

Before considering how the three national reports made use of this conceptual framework we need to place the assessment in a proper perspective. The national reports that provide the results presented here used nothing but pre-existing material, such as official documents, research reports, labour
market statistics, and so on. No original data collection or additional research activity based on the conceptual framework was (or could be) undertaken in the context of preparing the national reports. It should not come as a surprise, therefore, that the authors had to use material that did not really fit very well within the conceptual framework they were asked to apply.

The school-to-work transition domain is a complex field, involving several disciplines. Experts on labour markets are not necessarily knowledgeable in the field of education and vice versa, and this fact may account for the profound differences in how some parts of the conceptual framework were applied.

With respect to research and information on school-to-work transition in the countries under consideration, the assessment of how the national reports made use of the conceptual framework reflects the state-of-the-art as much as—if not more than—a critical appraisal of the way the authors of the respective reports put the pieces of the puzzle together.

The following three general series of remarks about the use made of the conceptual framework in the national reports should, therefore, be read with these facts in mind.

A first general remark concerns the relationship between the structure of the reports and the structure of the conceptual framework. It should be noted that only in the Egyptian case was the conceptual framework used to structure the national report. This does not mean that the conceptual framework and its related guidelines did not inform the content of the other national reports; in the Serbian case and, to a slightly lesser extent, in the Ukrainian case, most of the elements present in the conceptual framework were included at some point in the report.

The most important and striking feature was a lack of information and data on both the outcomes and characteristics of the main building blocks.

There was a lack of information on regional differences.

Despite remarks about skill gaps, no real information was provided on either skills available or required.

Despite informal employment being substantial in the countries examined, no data were available as to the size or the functioning of the informal economy.

A second general remark concerns the fact that, unlike most applications of this framework in EU countries, contextual information does make a difference—and an important one at that. This is the case in the following areas:

The role and importance of demographic changes, particularly age structure in Egypt (the continuing growth in the number of young cohorts entering the labour market) and migration patterns in Ukraine (a shortage of people with higher education because of migration).

The significance of transitional changes, which can quickly outdate information on institutional structures and affect behavioural patterns because of modifications to incentives structures and the set of choices. It could even be asserted that there are three different dimensions of transitional change: towards a deregulated market economy, towards a knowledge-intensive economy, and towards becoming part of a global economy.

A third general remark is that, despite clear differences between the three countries concerned, several important similarities emerge:

A major feature common to the picture painted in all three of the national reports is the clear disconnection between the educational structure and the labour market. Although this does not mean that the quality of educational output as such is bad, it seems clear that the skills produced do not, to a large extent, match the skills demanded.

In several instances, references are made to problems of rational individual choices resulting in collectively negative situations. This occurs mostly in choice of study field (for example, too many Ukrainian pupils choosing to study law or...
economics and not enough choosing engineering) or choosing to stay in the informal sector even if formal sector jobs are available (as happens in Egypt).

Massification of higher education seems to lead to problems of higher educated young people not finding proper work, resulting in some cases in emigration. Higher education consequently is not a factor that necessarily lessens the risk of being unemployed.

2.4 DOES THE CONCEPTUAL FRAMEWORK NEED FURTHER DEVELOPMENT?

The guidelines for writing the national reports were based on the CATEWE conceptual framework constructed in the mid-1990s as part of a comparative research project that endeavoured to establish whether and why differences in national institutional configurations resulted in differences in the nature and success of school-to-work transition by young people.

Since it could be expected from the outset that this initial format might (and most probably would) need some adjustment when applied to countries with a very different history—particularly those which have experienced major changes in their recent past—a major message of the guidelines was that the conceptual framework should be used as a heuristic instrument. Consequently, a major issue on which the national reports should also be assessed is the extent to which they enable a pinpointing of the instances in which the conceptual framework needs further elaboration to better fit the reality of the countries under study.

The main conclusion in this respect is that all three reports clearly show that the framework needs to be further elaborated and extended. Below we discuss the main issues that need further discussion.

2.4.1 EDUCATION SYSTEM

The conceptual framework views the education and training system as a sorting machine and aims at capturing the major mechanisms used by the system to sort students, that is, to differentiate and classify them according to specified rules and procedures embedded in each particular national set-up. The extent of standardisation and diversification in education and training provision are the two characteristics of the system that are taken into consideration. This approach is relevant for the EU neighbouring countries, in particular when linked to equality of opportunities—in terms of progress and integration in the labour market—afforded to young people from different socio-economic backgrounds by the education system structure and sorting mechanisms. The approach proposed by the conceptual framework needs to be further explored by policy makers, in fact, given that issues of equity are not generally high (or, at least, are not given visibility) on the education reform agendas in any of the countries under consideration, nor are they examined in detail in the national reports for this project.

An example of how education and training systems can have a negative impact on equality of opportunities is the existence of vocational education and training programmes that transmit narrow occupation or job-specific knowledge and/or outdated skills and knowledge. Such programmes are dead-ends for young people who follow them from either an educational or labour market perspective (a lack of possibilities for progression within the education system or a lack of job opportunities). It is even worse when such programmes are used as a means of social protection for young people from poor socio-economic backgrounds (as is the case in a number of EU neighbouring countries), rather than as a vehicle for endowing young people with competences that enable them to compete in the labour market. This shows how education provision itself can lead to a disadvantaged labour market position for certain categories of young people.

However, as an alternative to approaching the education system as a sorting machine, it is also interesting to approach it as a system capable of adapting to socio-economic change. The capacity of
the education and training system to integrate or absorb and eventually adapt itself to socio-economic developments is particularly relevant for the EU neighbouring countries, especially for those who have been making the shift from centrally planned to market economies. The ongoing and frequently abrupt changes in the economic structures of the countries under consideration added to uncertainty about where jobs are created, the content of those jobs and the skills needed to exercise them (as expressed by levels of education, specialisation and/or types of knowledge and skills developed through education and training programmes) all go to create a need for a flexible education system.

The principle of education system flexibility entails different aspects, one of which is about keeping options and opportunities open for young people as long as possible by:

- Delaying track choice (to general education or vocational education at secondary level and to different specialisations within vocational education) and thus delaying the decision on future careers within the education system and the labour market.
- Keeping open the possibility for moving from one track to another (horizontal mobility).
- Ensuring different pathways for progression towards higher levels of education (vertical mobility).
- Diversifying post-secondary education.

The above options imply both a structural and curricular adaptation of the education system (for example, by introducing modular educational programmes) of the kind that rarely takes place (at least on a large scale) in the EU neighbouring countries. Education systems remain relatively inflexible and organised along rigid and largely impermeable tracks. Young people themselves, however, seem to use every available opportunity to keep their options open. Two trends are evident: (i) a greater demand for education programmes that provide access to higher education (mainly general education programmes), and (ii) an increasing percentage of people who progress towards higher education. The latter choice seems to be justified by the labour market, as evidence from the surveys in Serbia and Ukraine suggests that higher education graduates have better labour market outcomes. However, the other choice—that is, to participate in general education—seems to have poor outcomes if not successfully combined with progression to higher education; according to the surveys, general education graduates probably have the worst labour market outcomes. This observation would imply a need to diversify post-secondary education and open it up to young people—even if they are not early school leavers—at a risk of entering the labour market with no preparation.

A second aspect is about adapting the content of education programmes to the needs of the labour market. Mismatch between the skills with which young people enter the labour market and those required by employers has been mentioned in all three reports of this project as one of the major challenges to ensuring successful school-to-work transition. But what do these skill mismatches really imply? Is it about the level of education (as a proxy for the level of qualification)? Is it about specialisation in the secondary vocational education and training system? Or is it about the knowledge, competences and attitudes that young people are equipped with on leaving the education system? The answer is probably that the skills mismatch is a mix of all these aspects. Labour markets characterised by uncertainty and a large level of informality often send blurred messages to the education system. Despite possible improvements in the reception of these messages—for example, through improving the interface between education and the labour market by involving employers in the design and delivery of education and training programmes—a more or less perfect match cannot be expected and may not even be desirable, first of all because employers are often not capable of formulating their needs, and secondly, because employers may not even be sure of what their future needs might be. Also,
given more or less high levels of emigration among young people in some countries, responding to the needs of local employers does not necessarily resolve the problem of the relevance or adequacy of skills.

In this context, education and training systems need to be proactive (rather than responsive) in their efforts to adapt content, taking into account general economic development trends, both within the country itself and at the international level. The increasing share of services, declared policy objectives to expand and strengthen the small-and-medium business sector in most EU neighbouring countries, and participation in the knowledge economy are all indications that the development of key competences and soft and transversal skills are at least as important as the specific or technical skills corresponding to the traditional occupations. The recruitment of graduates from higher education to jobs requiring intermediate-level skills (as observed in the results of the surveys in Serbia and Ukraine) may be an indication that employers need the breadth of knowledge and the transversal skills developed in higher education rather than occupation-specific or technical skills.

To conclude, the uncertainty about job creation and the unclear messages coming from the labour market present a challenge for education and training systems in EU neighbouring countries. Although there is room for improvement in the interface between the education system and the labour market/economy, education and training systems need also to learn to live with and accommodate uncertainty while ensuring valid education opportunities for all young people without exception. This means that education and training systems need to develop more flexibility and proactivity through structural and curricular adaptations.

2.4.2 LABOUR MARKETS AND INFORMAL EMPLOYMENT

The CATEWE model was developed for EU countries, where competing labour market models coexist. The occupational labour market model focuses primarily on labour mobility across organisations based on occupational specialisation, whereas the internal labour market model focuses on upward labour mobility within organisations. In addition, the concept of the external labour market is used to describe more competitive and non-organised labour markets. The important issue for education-to-work transition is that the first two of these labour market models imply different types of careers (within professions versus within firms) and provide some job or employment (but not necessarily income) security. They also have different implications for skills development.

The functioning of the labour markets in EU neighbouring countries differs from these contexts, in particular because the role played by regular formal jobs in the labour market is less important than in the EU. Instead, different forms of informal employment and other income-generating activities are playing an increasingly important role in providing jobs to large groups of people in most EU neighbouring countries.

In neighbouring countries in eastern and south eastern Europe, jobs in the former industrialised economies have been destroyed at a slow but increasing rate, while job creation—especially in the form of regular jobs in the formal sector—has been sluggish. As a consequence, new labour market entrants are competing for a decreasing number of regular jobs and, in the absence of job options, are often forced to fall back on other kinds of labour market survival strategies, including short and long-term emigration and informal employment.

In the MEDA region and in other less developed neighbouring countries, the situation is different. A large part of the population could be said to still live and work in traditional labour markets where there is an emphasis on agriculture and small-scale trade and services. Furthermore, the formal regular labour market is small and labour market segmentation is pronounced. Many people have to struggle to make a living from a range of different, often insecure and low-productive jobs.
We can define the typical labour market structure in EU neighbouring countries as segmented or non-inclusive. To what extent, however, do these segmented or non-inclusive labour markets influence the analysis of education-to-work transition? In order to answer this question we need to better understand how jobs are created in the informal part of the labour market. Three major schools of thought have been prominent in discussions on the functioning of the informal labour market (ILO, 2004; Jutting, Parlevliet & Xenogiani, 2007).

The traditional view of informal employment is in the context of labour market segmentation where good regulated jobs are scarce. Workers outside the formal labour market queue for such jobs while working involuntarily in low-productive informal jobs. The reasons why jobs are not regulated could be several, ranging from intentional or non-intentional government policy, poor competition in labour or product markets leading to few jobs that can be regulated, or choices by entrepreneurs or workers. The second school of thought, which arises in relation to the work by Maloney (2004), is that many workers voluntarily choose informal jobs because they have a higher return than formal ones. Finally, the third school of thought sees the informal labour market as a two-tier labour market with an upper tier of voluntary informal employment and a lower tier of involuntary low-productive informal employment that often takes the form of self-employment (Fields, 2005). The debate on the functioning of the informal labour market has generated a great deal of interest in studying its heterogeneity and links with the formal labour market.

In the context of the EU neighbouring countries, the traditional informal labour market model may suit some of the least developed countries in the MEDA region and central Asia, while the two-tier informal labour market model may be more relevant for transitional countries in eastern and south eastern Europe. Emigration should also be included as another important phenomenon in EU neighbouring countries, which could be seen as having an upper tier of voluntary emigration providing higher returns than formal employment in the home country, and a lower tier of emigration providing higher returns than the lower tier informal employment in the home country.

We thus need to see education-to-work transition as a multifaceted transition that includes, at least, the transition from education to formal employment, the transition from education to voluntary informal employment, the transition from education to involuntary informal employment, the transition from education to work abroad, and the transition from involuntary informal employment to formal employment. This last transition could be seen as a prolonged transition period, given that it is observed in many EU countries where short-term employment is a common entry point to permanent employment.

This discussion poses two major challenges for policymakers in EU neighbouring countries in the context of the transition from education to work: firstly, how to make labour markets more inclusive so as to facilitate a larger share of transitions from education into regular formal jobs, and secondly, how to ensure more efficient transitions that lead to more productive jobs in the youth labour market.

Policy responses to the first challenge are likely to include measures that improve the overall functioning of the economy, the business environment and the work organisation of firms, but also steps to prevent individuals from being pushed into low-productive subsistence jobs—for example, measures that strengthen the employability of young people out of work, improve the social safety net and strengthen worker interest groups (trade unions and other labour institutions), and regulations to protect the disadvantaged in the labour market (via minimum wage, wage equality and redistribution measures). The second policy challenge will include measures to improve the productivity of all workers (including informal workers), stimulate upward mobility to better jobs, and prevent social exclusion during the education-to-work transition process. This last challenge is
essentially a question of broadening access to quality education and training with the aim of increasing the employability of all individuals.

2.4.3 TRANSITION INTERFACE OR TRANSITION SYSTEM?

The national reports assessed in this paper provide only very limited information on exactly how young people enter the labour market after leaving the education system. What channels are available to search for employment and which channels do young people actually use? What channels effectively provide them with jobs? What actors or institutions guide their choices? Do these actors merely provide information on vacancies or do they also give information on additional training? Do the actors mediate actively between applicants and firms? What role do schools play in this respect? How do existing institutions and regulations influence the motivations of both firms and young people? None of these questions are dealt with adequately in the national reports.

Of course, the national reports were intended to provide a picture at the macro-level and micro-data about the actual pathways followed is needed to respond to these questions adequately. Yet, one could read this omission as also signalling a problem with the conceptual framework itself. Indeed, insofar as the exact meaning and potential policy were not clearly specified it might have been difficult for users of the conceptual framework to adequately describe the actors, processes and institutions active in the no-man’s land between the education system and the labour market.

Two basic points are made here: first of all, a clearer conceptualisation of the transition system is provided, and secondly, a different and more active role than hitherto recognised is argued for the transition system.

In the CATEWE model, national differences in institutional linkages between the education system and the labour market refer to two mechanisms: the nature and extent of the involvement of employers in the organisation of the education and training system, and the characteristics of the youth training system. The intuition behind this assumption is that some institutional links provide better fits than others between, on the one hand, the education system and the labour market, and, on the other hand, young people’s educational resources (skills, knowledge and attitudes) on leaving education and the resources required to integrate rapidly and smoothly in the labour market.

As is usually understood, the CATEWE model focuses on institutional characteristics allowing for a productive synergy between the education and the employment systems. However, the CATEWE model stresses the nature of the linkages between education and employment as a variable that is important in adequately understanding national differences in the way young people make the education-to-work transition; consequently, it can also be understood as signalling the existence of a space between education and work. This space consists of a particular set of actors, processes and institutions that are defined by their being instrumental in equipping young people with resources (additional to or different from those provided by the education system) and in improving their potential for making the transition from the education system to the employment system. The composition of this set may differ over time or in different national contexts. But in all cases these actors, processes and institutions perform a specific societal function. The set includes employment services, retraining institutions, temporary work agencies, providers of career guidance, specific youth programmes, and targeted wage subsidies.

From the point of view of economic efficiency the answer to the question as to whether the transition system performs well (or well enough) depends on whether it helps allocate individuals to jobs in such a way as to attain an optimal match between skills supply and demand, with it obviously being necessary to distinguish between the
quantitative and qualitative dimensions of matching supply and demand.

Conceptualising the space between education and employment as a transition system—that is, as a cluster of actors and institutions that in some way work systematically together—clarifies how the existence and importance of a specific transition system and the function it performs could easily be overlooked. In a state of affairs where most young people move from education to work with no particular difficulties and in a very short period (as has been the case in many European countries until recently) this space was probably hardly noticed—or, indeed, may not even have been noticeable. When transition becomes more prolonged or more chaotic (as seems now to be the case in many industrial countries) its importance becomes vital—not just as a transient phase in the life-cycle of every individual, but as a permanent and distinct feature of society with potentially important consequences for the efficiency and effectiveness of transition.

To bring home the importance of the transition system let us focus on one of the common features of the three reports under review: the diagnosis that the skills presently produced by the education system do not match the skills required by the present or, even more so, the future employment structure.

That a skills mismatch exists in the countries under consideration hardly comes as a surprise. Given the characteristics of the present situation—with the labour market in transition in several senses of the word and with the educational structure proving to be very path-dependent and resistant to change—a growing discrepancy between the skills supplied and the skills in demand seems a natural outcome.

The question to focus on here, however, is whether and to what extent the transition system has a role to play with respect to the efficiency and the effectiveness of the move from education to work and independently of the functions performed by the education system (equipping young people with skills, knowledge and attitudes) and by the labour market (putting skills, knowledge and attitudes to optimal use).

One might expect this role of the transition system to be quite limited for at least two reasons. First of all, with respect to the skills supplied, the role of intermediaries between the education system and the labour market can only be remedial, and only long-term changes in the education system can be expected to develop the stock of skills available so that it matches the stock of skills required. Secondly, whether the skills supplied are actually used in the jobs available depends on the requirements of the labour market. If employers opt for a low wage/low skills strategy, however, very little can be done by other institutions.

Nevertheless, there seem to be at least two good reasons for conducting a more in-depth scrutiny of the standard view of the interface between education and employment. The first reason is that even if mismatches are dealt with by changes in the education system over the long run, it is highly unlikely that in the short run no action would or should be taken. Indeed, one would expect that, in the space between education and the labour market (and especially in the circumstances described in the three national reports), opportunities would arise for tackling some of these problems. Young people actually find jobs and it is important to know how and by what means they do so. Do most of these young people find their first job by directly contacting employers? Do the national employment service or temporary work agencies play a part? Does the informal sector act as an additional training period and, if so, what skills does it provide? These and similar questions could shed some light on how young people actually make the transition from education to work. The second—and probably more important reason—is related to the point that the transition system should not to be considered as a passive element that merely transmits information about supply or connects supply to demand, but as an element that plays an active part in matching supply and demand through brokering, training or retraining.
The existing literature commonly considers labour market intermediaries as only relevant to the extent that they shape supply and demand dynamics or affect power struggles between workers and employers. In most cases, therefore, they are not viewed as a third significant category of actors (or regulations) affecting the basic structure of labour markets. However, recent case studies on regional labour markets in the knowledge economy (Benner, 2003, and also Peck, 1996) suggest that the role of labour market intermediaries may well be more extensive. Indeed, when firms need to adapt effectively and rapidly to changing market conditions, identifying and capitalising on opportunities and successfully responding to new challenges are key factors in ensuring a competitive advantage. Rapid change and unpredictability lead to higher levels of displacement and job-hopping and weaken ties between employers and workers. Workers and employers thus place greater reliance on a wide range of different types of intermediaries to help them navigate through an increasingly complex and shifting labour market. The activities of these intermediaries also affect the structure and dynamics of regional labour markets which are not easily understood in the context of classic worker-employer dynamics.

“(…) Labour market intermediaries are essential for [Silicon Valley’s] regional development because they play a central role in shaping processes of labour adjustment. By fundamentally shaping the speed and the character of adjustments in regional labour markets, they have an important impact on the ability of the region as a whole to adjust to economic change.” (Benner, 2003)

Intermediaries perform three labour market functions for workers and employers. First of all, they reduce transaction costs, thereby increasing the ability of both workers and employers to adjust to changing labour market conditions. Secondly, they help build both social and business networks, which are essential for strengthening a region’s innovative capacity while diversifying opportunities and reducing worker vulnerability. Thirdly, they help workers and employers manage the increased risk associated with volatile economic change and so contribute to the development of a risk-taking entrepreneurial culture. In other words, although not directly involved in the production process, labour market intermediaries help the regional production complex rapidly take advantage of innovative opportunities. They thus contribute directly to a region’s development.

Labour market policy has traditionally focused on either the demand side or the supply side of the labour market. Demand-side policy is designed to affect firm behaviour, either by regulating the employment relationship or by providing incentives for investments in training, research and capital. Supply-side policy is designed to improve the skills of workers. Recognising the strategic importance of intermediaries in the labour market opens up a third broad focus for labour market policy that can contribute directly to regional development by implementing a more systematic approach to improving the functioning of the various social institutions, processes and actors within the transition system.

2.5 CONCLUDING REMARKS

The main aim of this chapter was to assess the use and relevance of the conceptual framework developed for EU neighbouring countries within the framework of the ETF project on education-to-work transition. Departing from national reports for Egypt, Serbia and Ukraine, conclusions in regard to three broad areas are highlighted.

Firstly, some limitations of the national reports in the use of the conceptual framework were observed. These relate in particular to a focus on desk research of existing material, a lack of information, and the cross-disciplinary aspect of the school-to-work transition, all of which made it difficult for a single national expert to apply the framework fully in all potential areas of coverage.
Secondly, a series of general remarks were made with regard to the national reports. Even if the conceptual framework was not always used to structure the reports, most of the elements in the conceptual framework were dealt with in some form in the reports. Unlike most previous applications of this framework in EU countries, contextual information such as demographic evolution and changes in the economic structure due to transitions to a market economy and globalisation seem to matter more as far as the school-to-work transition is concerned. Another general remark relates to the fact that despite the differences between the three countries, some interesting similarities emerged from the national reports—largely referring to a clear disconnection between educational structures and labour markets and the implications of further higher education expansion. Finally, we make some comments in regard to the extent to which an extension and further elaboration of the framework are both needed in order to cater for the specific features of EU neighbouring countries.

A major conclusion regarding the education system is that the uncertainty of job creation and the difficulty in forecasting labour market needs requires the development of an education system that would be capable of accommodating uncertainty and becoming more flexible and proactive.

The most striking fact about the situation of the youth labour market is the small role played by formal permanent jobs in the education-to-work transition. The main conclusion and policy recommendation would be the urgent need to develop an inclusive employment policy that would lead to more and better jobs. However, policy responses need to be multifaceted and support the transition to the labour market of all workers, including workers with few opportunities in the formal labour market.

Despite a main policy conclusion to increase the rate of job creation, an important requirement is to improve the interface between the education system and the labour market. First of all, the effects of a policy aiming to create more and better jobs might be felt only in the medium term, but in the short term, action could and should be taken to prevent wasting the resources that young people bring to the labour market at any given moment. Secondly, the effect of general policy measures may not have sufficient impact on young people. Given the specific characteristics of young people—of their being, by definition, outsiders in the labour market—it seems evident that measures targeted at young people during the transition period may play a key role.
3.1 INTRODUCTION

The transition from education to working life is a key topic in current social research and policy discussions as it touches upon the core issue of youth labour market integration. Studying the transition from school to work can go a long way towards determining how well younger generations become integrated in labour markets, and in turn, in social life in general. The transition is also important because an individual’s first labour market steps often crucially shape subsequent career opportunities.

While there is a considerable body of research on these issues for western industrialised countries, far less is known of eastern European countries. Different historical backgrounds and the rapid transformations witnessed by these countries in recent years would indicate a need for research on the specific conditions governing school-to-work transition and the outcomes of this process. From isolated research it is known that the transition to a market economy has increased inequalities between social groups, in terms of educational and occupational attainment and income distribution among young people of different social backgrounds. But many important questions remain to be addressed. What are the implications of the new social order for social stratification and living conditions in eastern Europe? Can young school leavers in eastern European countries be successfully integrated in the labour markets of their home countries, or will they add to those seeking their fortunes in neighbouring western and northern EU countries? To answer these and related questions a deeper understanding is required of the nature of stratification processes, and in particular, of education-job linkages in eastern European transition countries.

Despite its importance, however, conducting such research remains a daunting challenge, not least due to a lack of adequate, accessible and longitudinal (or retrospective) data for many of these
countries. Whereas considerable effort has been expended on collecting and analysing such data at the EU level for new EU Member States—thereby increasing the potential for learning more about these countries—knowledge on the situation of young school leavers in eastern European transition countries outside the EU-27 remains scarce and fragmentary.

This methodological note\(^4\) seeks to define possible formats for youth transition surveys, on the basis of which suggestions are made with regard to both the ideal data required for analyses of young people’s transitions and criteria are defined according to which any data collection arrangement should be judged. Conclusions are drawn in both respects, and specific recommendations for the implementation of youth transition surveys in eastern European countries are made.

### 3.2 SURVEY FORMATS FOR STUDYING YOUTH TRANSITION

The data used for studying school-to-work transition processes should include longitudinal or retrospective elements, since only this kind of data permits patterns of transition from education to the labour market to be investigated from a dynamic perspective; in other words, young people are studied over time until they obtain stable and secure employment. Cross-sectional data, on the other hand, would only offer a snapshot of the transition process and of its outcomes, and no exploration of its dynamics would be possible.

In a number of European countries, national surveys of school leavers have been the main source of information on the early labour market experiences of young people. These surveys have a number of advantages for the researcher exploring the transition from school to work. First of all, they usually collect detailed information on educational background and history and include aspects considered important in the given institutional context. Secondly, they allow researchers to directly relate young people’s educational backgrounds to their experiences in the labour market at the individual level. Thirdly, the fact that the surveys refer to school leavers means that they survey young people entering the labour market at the same point in time and thus encountering the same institutional and labour market conditions. Fourthly, these surveys typically provide rich data on a range of transition outcomes for young people, including labour market integration, type of job, participation in further education and training and, in some instances, household configuration. Finally, the surveys tend to be conducted on a regular basis, thus enabling an exploration of the impact of socio-economic and institutional context changes on early labour market integration.

There are, however, limitations to surveys of school leavers. Typically they refer to a single cohort followed up for about a year after leaving education (for example, leavers corresponding to the academic year 2003-2004 monitored until 2005). Consequently, although very detailed information on their educational history is obtained, very little can be said about their acclimatisation within the labour market, since very little time will have passed since leaving education, and young people can hardly be expected to attain stable employment in such a short period of time (particularly in transition countries marked by more volatile labour markets). Therefore, to obtain more information about the labour market trajectories of school leavers, repeated surveys need to be conducted for the same cohort of school leavers for a period of some five years after leaving education. A panel design for such a study would certainly be very effective, although it would also be quite expensive. Another limitation of the single-cohort surveys of school leavers is that they reflect only one specific school leaver cohort. Since this cohort cannot be compared to older cohorts, the question of whether the transition process and outcomes observed for a single cohort can

\(^4\) This note draws on the report *Recommendations on the replication of the module produced within the framework of the Eurostat-funded project Evaluation and Analyses of the LFS 2000 Ad Hoc Module Data on School-to-Work Transitions* (see Iannelli 2002).
be generalised to other school leavers (or whether they merely reflect the country’s general labour market situation at the moment of the survey) cannot be addressed.

The samples for most youth transition surveys are either age cohorts or event cohorts. A typical survey of school leavers would use an event cohort if the surveyed individuals—that is, all young people in a particular age group—experienced a particular event, such as leaving initial education, during a specified period of time prior to the survey. The main requirement for an event-cohort design is for the chosen event to correspond to a significant and relatively standard stage in the process, in such a way that the status and various events defined relative to this event represent comparable points in the causal and chronological sequence for all sample members.

The alternative to an event-cohort design is an age-at-survey design, in which the sample is drawn from all individuals whose ages lie within an appropriate age range at the time of the survey. Various events in the transition process could then be collected in calendar format (see discussion below) and recorded along with the point in time at which the event occurs. However, such a design would require a fairly broad observation window (ages 15-34 at least) in order to cover all potential educational careers plus the initial years in the labour market. This might prove impractical in the context of a transition survey with a limited budget, due to the larger volume of data that would be required and the poor reliability of information collected retrospectively over such a long period.

### 3.3 MAJOR YOUTH TRANSITION DATA REQUIREMENTS

#### Sample design

A transition survey should be based on a representative sample of all young people making the transition. A survey that was restricted, say, to young people leaving the education system at a given level could not compare the labour-market outcomes of leavers at different levels, nor could it explore issues of equality and social justice across the whole age cohort.

Considering the pros and cons of event- and age-cohort designs, it seems advisable for the transition surveys of the eastern European transition countries to draw on a sample school leaver cohort. Furthermore, based on the experience of the EU Labour Force Survey (EULFS) Ad Hoc Module on School-to-Work Transitions in six central eastern European countries (Slovenia, Hungary, Lithuania, Latvia, Romania and Slovakia) in 2000 and in Estonia in 2002, it would seem prudent to set the age range of the target group at 15-34 years and the follow-up period after leaving education at five years. Defining the target group for the transition survey as individuals aged 15-34 years would increase comparability with most aggregate statistical data (based on conventional age breaks, such as, for example, those used by OECD). Restricting the target group to those who left education and training within the previous five years would help to minimise the impact of recall bias on educational trajectory records (more pronounced if school leavers are tracked for up to ten years after leaving education) and initial labour market history. This time span should be sufficient to cover the most important stage of labour market entry, while the restricted data should still yield a significant historical database once the data is supplemented by regular replications of the module—for example every five years. Problems connected with

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5 Youth transition surveys are broader surveys that also include traditional surveys of school leavers.

6 It should be noted that the fieldwork in the EULFS 2000 Ad Hoc Module on School-to-Work Transitions was conducted in early spring. Taking into account that young people normally leave school in late spring or early summer the bulk of the most recent school leavers were thus interviewed about a year after leaving education. If the transition survey is conducted during the summer, it might make sense to restrict the target group to people who left continuous education from one to five/six years prior to the survey.
a survey capturing young people who have experienced very different labour market contexts could be partially compensated for by including time since leaving education as a control variable. However, for countries that have undergone dramatic transformation processes and in which young school leavers face extreme labour market difficulties, the inclusion of only those who left education in the previous five years might be insufficient as far as observing acclimatisation within the labour market is concerned. In such a case it might be desirable to extend the sample to those who have left education and training systems within the previous ten years.

An important issue for a transition survey with an event-cohort design is defining the moment of leaving education, for which the definition adopted by Eurostat for the EULFS 2000 Ad Hoc Module is recommended. Leaving continuous education (for the first time, and excluding interruptions for special reasons such as maternity leave, illness, national service, etc) was defined as either:

1. Successful completion of education (for example, graduation or acquisition of the final school-leaving diploma) or non-successful completion of education
2. The interruption of studies for more than one year.

Continuous education, meanwhile, is defined as full-time or part-time education or training of a vocational or general nature. Note that restricting continuous education to full-time learning might result in underestimating the age of those leaving the education system and erroneously include, within the group of continuous education leavers, young people on apprenticeships or combining education and employment. It is advisable to include a question that would allow researchers to distinguish between types of education and/or training at the time of leaving continuous education (that is, general or vocational, part-time or full-time, apprenticeship or equivalent programmes practiced in the surveyed countries). In addition, data in the transition survey should distinguish between young people who left education without completing a certain level or type of education and those who left after having successfully completed a course of study; in other words, a question should be included that distinguishes between school graduates and dropouts.

Another crucial issue for the transition module is sample size. Familiarity with the EULFS 2000 Ad Hoc Module suggests that fewer than 2000 cases considerably limits the descriptive potential, and above all, the analytical potential of the module. Experience in constructing indicators and using the module data for statistical analyses suggests that the target sample in each country should constitute at least 3,000 cases, with even larger samples certainly not constituting a drawback.

The survey should not only cover all categories of young people making the transition, but should also ensure that the sample obtained is representative. The best way to ensure the representativeness of a study is to draw a probability sample (as opposed to a non-probability, quota or snowball sample, which can never guarantee that the sample observed is representative of the whole population). The basic principle of probability sampling is that a sample will be representative of the population from which it is selected if all members of the population have a known (non-zero) chance of being selected for the sample. Moreover, it is possible to estimate the accuracy and representativeness of probability samples, something which cannot be done with other types of samples.

It is also important to ensure that the sampling frame (the list of people from which a probability sample is selected) does not exclude any particular category of young people, nor should it bias the

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7 This decision should be taken by local experts and based on analyses of existing panel or retrospective data.

8 This part of the definition should be checked with local experts and could possibly be extended to 18 months, since it is not unusual, for example, for young people to leave school in May, try to enter university or college the same year but fail, and retry the next year and succeed. Consequently, the waiting period after leaving secondary school and entering the university may extend to 15-16 months.
sample against full representation. For the transition survey of school leavers, there are two basic ways of drawing a sample. First of all, a population register can be used to obtain a representative sample of young people aged 15-34 years who could then be asked a screening question, namely, whether they had left an education or training system in the last five years. Individuals responding positively would then be issued with an extended questionnaire. An alternative approach would be to obtain lists of leavers from education and training institutions for the five years preceding the survey and use these to obtain a sample of all individuals aged 15-34 years. The decision as to the choice of sampling frame (either of those mentioned above or any other option) should be taken by local survey institutes and should be based on their experience and capacities. Surveyors should also endeavour to minimise non-response bias, since a survey sample will end up not being representative if non-response rates are high. Indeed, a low response rate is a danger signal because the non-respondents are also likely to differ from the respondents in ways other than their willingness to participate in the survey. Response rates vary depending on the data collection method.

Data collection

Survey questionnaires can be administered to a sample of respondents in four different ways: as self-administered questionnaires, normally in the form of a mail survey; as questionnaires administered by interviewers in face-to-face encounters; as questionnaires administered over the telephone; and as internet surveys. This last method will not be discussed in the overview below, given that it is not a feasible option for eastern European transition countries. It should be noted that there is no best survey method, as each approach has its strengths and weaknesses. The following considerations are intended to assist local survey organisers in choosing an appropriate data collection method.

The basic method for collecting data through the mail is to send a questionnaire accompanied by a letter of explanation and a self-addressed and stamped envelope for returning the questionnaire. The respondent is expected to complete the questionnaire, put it in the envelope and return it. An effective method for increasing return rates in mail surveys is promptly timed follow-up mailings. The advantages of the mail survey are that it only requires a small staff and is the least costly method of data collection. However, it also results in a higher number of incomplete questionnaires (it has the highest non-response rate of all survey types). In mail surveys, a response rate of around 50% is considered adequate for conducting analyses and reporting, with response rates of 60% and 70% considered to be good and very good, respectively. These numbers are only rough guides, however, and do not take into account the issue of response bias. A demonstrated lack of response bias is far more important than a high response rate alone. Survey researchers have developed many techniques that address the non-response problem (see Yammarino, Skinner & Childers, 1991, for an in-depth analysis of the response rates achieved in a number of studies using different techniques). Paying respondents or rewarding them with some kind of gift is one option. The problem with payment or gifts is the expense entailed by meaningful compensation for hundreds or thousands of respondents. However, it remains a possibility, particularly for surveys conducted in less wealthy countries.

The interview is an alternative method of collecting survey data. Interviewing is done either in a face-to-face encounter or over the telephone. A face-to-face interview—which typically lasts 30-60 minutes—is usually longer than a telephone interview. There are several advantages to having a questionnaire administered by an interviewer as opposed to it being completed alone by the respondent. Interview surveys typically attain higher response rates (up to 80-85%) than do mail surveys. The presence of an interviewer also generally

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9 The review of data collection methods is based on Babbie (2001) and Czaja and Blair (2005).
decreases the amount of missing data due to ‘don’t know’ or ‘no answer’ responses and so helps reduce the number of incomplete questionnaires. Interviewers can also help with confusing questionnaire items by clarifying matters, thereby ensuring relevant responses. Finally, leaving aside the responses to questions asked in the interview itself, the interviewer in a face-to-face encounter can also make important observations about the interview.

The chief advantages of telephone interviews over those conducted face-to-face centre primarily on time and money. Telephone interviews are much cheaper and can be organised and executed quickly. An additional advantage of telephone interviews when conducted using computer-assisted methods is the fact that the data is almost immediately ready for analysis. Another advantage of the telephone interview is interviewer safety when working in high-crime or dangerous areas. Moreover, the impact of the interviewer on responses is somewhat lessened when they cannot be seen by the respondents. Among the disadvantages of the telephone survey is, by definition, its limitation to people who have telephones. In countries that do not have a well-developed and relatively inexpensive telecommunications infrastructure, this method could produce a substantial social-class bias by excluding poor or remote populations. Furthermore, there is a growing proportion of households with only mobile telephones that are not included in many sampling frames. A related sampling problem involves numbers that are not listed in local telephone directories. Finally, in some countries the method could be hampered by the proliferation of bogus surveys that are actually sales campaigns disguised as research, which reduce respondent trust in telephone surveys. The ease with which people can hang up is another shortcoming of telephone surveys.

Another issue to be mentioned in this section is proxy interviewing, which is often used in transition surveys. Proxy interviews are those conducted with a third-person about an actual respondent. The method may reduce the accuracy of the information collected and produce a high percentage of missing information for certain items (particularly connected with the exact dates of events). Nonetheless, the use of proxy interviews may ensure an overall low level of non-response in a survey of this kind. There is a trade-off here, but the advantages of reducing gaps in the data by collecting the information even if proxy interviews are necessary should generally outweigh the disadvantages of the proxy method. The introduction of an identifier for proxy information is also recommended. This could also give researchers the opportunity to assess the quality of the data collected in proxy interviews.

Central concepts and key variables

The survey should collect data on key variables, including the items described below.

- Individual characteristics that might influence the transition, such as age, gender, family background and ethnicity.

The data collected in the transition survey should enable gender and ethnic inequalities with regard to educational and early labour market attainment to be examined. Information on family background should include the highest level of education obtained by parents and their labour market and occupational status, so as to enable an analysis of social reproduction processes. The transition from school to work is said to be strongly influenced by parents, directly by supporting children’s decisions in the labour market and indirectly by influencing their educational careers.

- Education, including level of studies and qualifications, field of study, completion and mode of study (full-time, apprenticeship, etc).

Education should be coded in detail using the national classification, but in such a way that it can be transformed into an internationally comparable classification (for example, ISCED97). A distinction

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For example, CATI (Computer-Assisted Telephone Interviewing). CAPI (Computer-Assisted Personal Interviewing) has the same advantage.
between different types of programme (general and vocational) at the secondary level is particularly important, since different tracks provide different opportunities with regard to access to tertiary education, not to mention to a range of labour market options.

Useful analyses could be conducted based on fields of study. Although national classifications of educational fields should ideally be slotted within the international classification, a national classification can be used when this is not possible. It is also advisable to include measures of education-job mismatches (both with regard to the level and field of education), since unsuitable employment is a problem faced by many young people on leaving education.

Furthermore, clear guidelines should be given for a central concept of the survey so as to prevent misinterpretations by respondents. This is the question about leaving education for the first time. Some guidelines are provided in the questionnaire, but they should be extended if necessary.

The survey should also contain questions on dual-status periods and on instances of return to education or training after a period of labour market activity. Finally, given that computer and foreign language proficiency have become ever more important in the globalised world, it might be relevant to ask school leavers questions on this topic.

- Key demographic transitions, such as marriage, parenthood or geographical mobility.

- Statuses outside education and the labour market, such as military service, long-term sickness and periods as a home worker should also be recorded. Labour market entry goes hand-in-hand with other transitions in youth and it is important to examine the processes interdependently.

- Labour market outcomes, such as employment or unemployment, occupation and earnings (ideally with details of the enterprise such as size and industrial sector).

The transition from education to work has no precise endpoint, and the time at which these outcomes should be recorded is a matter of debate. Ideally all labour-market statuses should be plotted over a number of years, but at a minimum there should be more than one observation. It has been suggested that the transition survey should include information on any significant employment that started before the end of continuous education (so-called benchmark jobs), namely, first ever job, first stable (significant) employment after the end of continuous education, as well as any other job held at the moment of survey (Figure 3). In addition, calendar information on monthly employment status after leaving continuous education should be collected, so that an analysis of transition and mobility within the labour market can be undertaken.

In defining significant employment one might well rely on the EULFS 2000 Ad Hoc Module on School-to-Work Transition, which defines this concept as employment

Figure 3. Benchmark jobs

![Figure 3. Benchmark jobs](image)

11 This would allow a comparison of educational attainment with regard to field of studies with school leavers in other countries.
for a minimum of 20 hours a week lasting at least six months\textsuperscript{12}, excluding any type of casual work, apprenticeships, training schemes, and compulsory military or national service.

It is important to collect a wide range of information on each of the benchmark jobs\textsuperscript{13}. Ideally, the transition survey should collect information about occupation, industry, earnings and wages, hours (including a distinction between full-time and part-time employment), and type of contract (fixed-term/ temporary or permanent) in order to obtain a more complete assessment of both first-job conditions and subsequent job mobility across different dimensions. It might also be interesting to include information such as whether the first-ever or first significant job was linked to on-the-job training, or information on motivational factors such as reasons for leaving a first job. Given problems of recall and the fact that the transition survey might remain as a one-shot cross-sectional survey, with no opportunity for providing additional cues to aid recall, there are obvious limits to further extensions along these lines.

The appendices to the questionnaire contain international classifications of occupations and industries. It is important to stress in this regard that, although relying on international classifications enables a more straightforward comparison of the results with those of other countries, it might be easier to apply national classifications used in academic surveys of a country.

To determine how young people search for employment it might be beneficial to include a number of variables related to the job search. Information on methods could enable the use of informal compared to formal means for obtaining jobs to be assessed. Furthermore, additional questions should be addressed to persons who have not been able to secure any employment during or after leaving continuous education and to those unemployed at the time of the survey.

Regarding income and earnings, it should be stressed that the readiness of respondents to answer such questions is often rather low. If experience shows that non-response with regard to income questions is rather high in a given country, the possibility of providing answer categories in meaningful groups should be considered. Respondents would thus not be obliged to give an exact sum but only to locate themselves within an income range.

- **Contextual variables**, for example, local labour market conditions.

The survey may not need to collect these data directly, as it may be possible to match them using, for example, geographical or institutional identifiers. As it is assumed that this will generally be the case, questions regarding contextual characteristics are not included in the questionnaire as it stands at present.

Other data requirements may be accorded a lower priority for a transition survey if the budget is limited. Ideally, however, a transition survey would collect data on subjective measures such as aspirations and job preferences, and on direct measures of basic and other skills\textsuperscript{14}, although this data is more difficult to collect and is not likely to be

\textsuperscript{12} The idea of 20 hours per week implies including part-time jobs as significant jobs. If, however, normal part-time employment is 18 or fewer hours per week in Serbia or Ukraine, this part of the definition of first significant employment may be modified.

\textsuperscript{13} A problem might arise with those respondents who have experienced many job changes and must therefore provide extensive responses. In such cases a pragmatic decision may be made to ask for detailed information about only one significant employment rather than all benchmark jobs. This could be decided after a pre-test of the questionnaire.

\textsuperscript{14} The following items can be considered under the rubric of knowledge, skills and competencies: broad general knowledge; cross-disciplinary thinking/knowledge; field-specific theoretical knowledge; foreign language proficiency; computer skills; first language; understanding complex social, organisational and technical systems; planning, coordinating and organising; applying rules and regulations; economic reasoning; documenting ideas and information; problem-solving ability; analytical competencies; learning abilities; reflective thinking, assessing one’s own work; creativity; working under pressure; accuracy, attention to detail; time management; negotiating; fitness for work; manual skills; working independently; teamwork; initiative; adaptability; assertiveness, decisiveness, persistence; power of concentration; getting personally involved; loyalty, integrity; critical thinking; oral communication skills; written communication skills; tolerance, appreciation of different points of view; leadership; taking decisions and accepting responsibility.
rated as high-priority information. To the extent that political interest in labour market programmes, innovative curricula, information and guidance or other state intervention is apparent, it would be desirable for a transition survey to collect information about them so that incidence and impact can be recorded.

**Longitudinal data**

The survey should collect longitudinal data—ideally in calendar form—that records the full sequence of educational and labour market statuses. It should record time-ordered data to support causal modelling—for example, of the effects of educational attainment or of training interventions on employment, unemployment or occupational level. The transition from initial education to work is usually understood as a sequence of transitions that start at the point when educational pathways first diverge and end at the point (not clearly defined) when a person’s position in the labour market becomes relatively stable. The survey should cover the whole of this period, with dates and details for each transition in the sequence. It should also record non-linear transitions, such as moves from the labour market to education and other transitions which do not follow the normal course, and also dual-status situations of work combined with education. This is probably best done once the data is collected in calendar form.

In order to construct reliable duration indicators—for example, the length of time before taking up the first stable employment or the duration of the first job—it is important to collect accurate information on the month as well as the year of the events. In the event of problems with recall, it is advisable to ask respondents for an approximation to the month of the event rather than leave a blank in the data. If the month of leaving education is left unanswered, it can be imputed from the typical graduation month or from the month marking the end of the academic year. It is more difficult, logically, to make deductions for job start and end dates.

**Data access and documentation**

The final stage is to make the data accessible to researchers or analysts. It should be accompanied by documentation not only on the formal definitions but also on the operational decisions made in implementing these definitions. As it is impossible to achieve absolutely representative data, the need arises for a specific weighting system that is capable of correcting for sample representativeness problems, especially when the non-response rate is high. Such weighting procedures must also be well documented.

**3.4 CONCLUSIONS**

Since transition from school to work is a complex issue and difficult to measure—and even more so in countries lacking a tradition of such surveys—intensive monitoring and piloting is needed at the questionnaire preparation stage. The major data requirements on school-to-work transition are apparent in the draft questionnaire. Due to its current length, when it comes to school leavers likely to have frequently changed employment, one should concentrate on a minimum set of questions concerning benchmark jobs and refrain from demanding more detailed information. Full information on all the characteristics of the job, the job search method and the training provided should only be collected for significant employment.

Careful and extensive pre-testing of the questionnaire is strongly advised, not least due to the fact that this should be adapted to national conditions. At the same time, the data collected in the survey should be potentially comparable to similar survey data collected in other countries so that cross-national comparisons can be made. Because of the differences in education and labour market systems, those operating the survey in the respective countries should be required to provide documentation showing how common variables have been operationalised and how classifications have been adopted in relation to particular national systems. The pre-test sample should be

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15 Questions that might be considered optional are marked with an asterisk in the questionnaire.
large enough to include people from diverse subgroups in the target population, to ensure that the questions and the answer categories are reasonably well tested. All in all, pre-testing should allow researchers to assess the impact of word selection, question sequencing and various formatting and layout issues.

Successful implementation of the pilot survey should be a primary concern. Another priority should be to conduct transition surveys as regularly as possible to allow consistent measurement over time, monitor social, educational and labour market change, and provide opportunities for assessing the impact of policy initiatives.

The transition survey will provide a invaluable database for research into statistical indicators reflecting the transition between education and work. This, in turn, should allow for marked improvement in reporting on social transition processes in eastern European countries. The experience of the post-communist countries is indeed unique, offering researchers an exceptional opportunity to gauge the effects of institutions in dynamic settings and thus to improve understanding of the intervening role of institutional factors in social stratification.

Addendum

For the youth transition surveys in Serbia and the Ukraine a decision was taken to apply an event cohort design of recent school leavers aged 15-34. In Serbia 1,504 school leavers who had left education in the previous five years were interviewed in autumn 2006, whereas in the Ukraine there were 2,015 individuals who left schooling up to six years prior to the survey which was conducted in spring 2007. The difference in the period that evolved since leaving education for the two countries is intentional and was aimed at capturing young people leaving education since 2001 in both countries. Figure 4 shows the algorithm of choosing respondents.

For both countries the random stratified samples have been drawn and the specifics of the sample selection could be found in field reports for each country. The data collection was conducted in form of face-to-face interviews, proxy interviewing was not practiced.

The questionnaires are almost identical for both countries; existing differences reflect peculiarities of each country. The main deviation in the questionnaires is in collecting information on income for each benchmark job in Ukraine but not in Serbia.

Figure 4. Algorithm for the selection of potential respondents from household (HH) members aged 15-34
4. AN ANALYSIS OF LABOUR MARKET ENTRY IN SERBIA AND UKRAINE
Henrik Huitfeldt, Jens Johansen and Irena Kogan

4.1 INTRODUCTION

Since the fall of communism and the commencement of the transition process in the early 1990s, the functioning of labour markets has changed dramatically in post-communist countries. Although there are major differences between the different transition countries (with the exception of some of the new EU Member States), labour market developments in general have been disappointing. Jobs in the old industrialised economies have been lost at a slow but increasing rate, while job creation, in particular in the form of regular jobs in the formal sector, has been sluggish.

The transition from school to work has become very difficult for the majority of young people. Open unemployment or other forms of joblessness tend to be high. Large groups of individuals cannot afford to be without an income due to the limited coverage of public social welfare systems. Consequently, different short and long-term labour market strategies are used by young people to manage their integration into the labour market. Emigration and different forms of informal employment have become the preferred or only choice for many. Unreformed education systems are likely to have led to skill gaps or mismatches between the skills acquired and those actually used in the labour market. In this setting, an understanding of the school-to-work transition process requires an assessment of both the quantity and the quality of the jobs taken up by young people. Here we analyse data on school-to-work transition for Serbia and Ukraine, two countries which, to a large extent, match the description given above.

Traditional labour market analysis is most often based on data from labour force surveys and analyses of employment and unemployment indicators at different points of time. However, these standard indicators do not capture several important

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16 In many countries in eastern and south eastern Europe, however, labour force surveys have not been conducted frequently, or they have not been consistent, either over time or between countries.
features of eastern and south eastern European economies, such as discouraged young people who do not search actively for work (and who are therefore not classified as unemployed in the labour force surveys) and the large number of young people that involuntarily work in low-quality jobs. A more complete analysis of the youth labour market would start by looking at all young people to try to find out what they are doing, whether in education, in the labour market or elsewhere. In this way, their labour market status can be identified.

In addition, many young people often move between different kinds of jobs or other labour market activities and/or carry out different activities at the same time. Labour force surveys fail to a large extent to reflect these dynamics—and particularly a process as dynamic as school-to-work transition. To better analyse labour market entry by young people, we would need longitudinal data that monitors how labour market integration takes place. In Serbia and Ukraine, some longitudinal datasets for recent school leavers exist\(^ {17}\), but the sample sizes are small, which make them less suitable for a detailed analysis of labour market entry.

We used datasets available for school leavers in Serbia and Ukraine, consisting of 1,504 Serbian and 2,015 Ukrainian young people who left the education system in the last five years. They were asked detailed questions on their school-to-work transition process. The main aim of the analysis was to assess the use of school leaver surveys in an ETF partner country context and to present preliminary findings and main challenges in regard to school-to-work transition in Serbia and Ukraine. Our aim was not to draw up a detailed policy recommendations for the two countries; in the case of Ukraine, a separate report will be prepared jointly with the World Bank as a background document for a policy note.

The rest of the chapter is laid out in six sections. Section 2 describes basic features of the datasets. Section 3 discusses the main features of school-to-work transition and the youth labour market. Section 4 analyses the characteristics of the first jobs taken up after leaving education, while Section 5 looks in more detail at skill mismatches in Serbia and Ukraine. Section 6 looks at early labour market careers and discusses the importance of labour market entry for future labour market outcomes. Finally, Section 7 discusses the main findings of the school leaver surveys in an ETF partner country context.

4.2 THE DATASETS

Surveys were carried out in Serbia (18-29 September 2006) and in Ukraine (24 March-20 May 2007), with samples in both countries covering both urban and rural areas. In the case of Serbia no interviews were conducted in Kosovo and in the case of Ukraine no interviews were conducted in the Chernobyl area. Strategic Marketing Research (SMMRI) was recruited to create the sample, train the interviewers, conduct the interviews, enter the data and perform a first verification of the dataset in Serbia. In Ukraine, these tasks were implemented by the Kiev International Institute of Sociology (KIIS).

The questionnaire used during the survey was structured to cover the following issues:

- Situation before leaving continuous education for the first time
- Monthly calendar of activities since leaving education
- First job and first significant job after leaving education
- Current labour market situation
- Education and training since leaving education
- Socio-demographic characteristics.

Although great care was taken to ensure comparability between the two surveys, the questionnaires were adapted to the national contexts. Furthermore, the fact that the survey was conducted in Serbia

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\(^ {17}\) In Serbia, a Living Standards Measurement Survey was carried out in 2002 and 2003 with some panel features. In addition, since 2004, a labour force survey uses a kind of rotating panel that has been made available for research. In Ukraine, a longitudinal survey was initiated in 2003 called the Ukrainian Longitudinal Monitoring Survey.
first led to clarifications to the survey implemented in Ukraine to make it more understandable for both interviewers and respondents. The Ukrainian survey served as the starting point for a World Bank survey conducted in late 2007.

The target group was made up of individuals aged 15-34 who had left education for the first time in the previous five years in Serbia or six years in Ukraine. A large majority of the individuals left education in the months of May, June or July. Thus, the shortest possible period since leaving education for most of the sample was about 12-14 months for Serbia and 9-11 months for Ukraine. A large majority of the individuals left education in the months of May, June or July. Thus, the shortest possible period since leaving education for most of the sample was about 12-14 months for Serbia and 9-11 months for Ukraine. The samples consisted of 1,504 respondents from 8,593 households contacted (17.5%) in Serbia and 2,015 respondents from 25,081 households contacted (8.0%) in Ukraine. Bearing in mind that not all households had a member falling within the target group, the actual response rates in both countries were very satisfying (especially for such a long questionnaire), with more than two thirds of possible respondents completing the questionnaire (67.5% in Serbia and 68.3% in Ukraine). It was much harder to find young people who had recently left education in Ukraine than in Serbia, despite the youth cohorts being of relatively similar sizes in the two countries. This could be due to more emigration occurring from Ukraine than from Serbia.

Figure 5. Monthly unemployment, employment and activity rates since leaving education for Serbia and Ukraine

Source: Authors

4.3 SCHOOL-TO-WORK TRANSITION AND THE YOUTH LABOUR MARKET

We collected monthly data on the labour status of individuals between leaving education and the time of the survey and conducted an analysis based on job types, with a distinction drawn between two major types of job taken up after leaving education: first job and first significant job. A significant job is defined as lasting a minimum of six months and having a minimum timetable of 20 hours a week. A large set of characteristics collected for these two major types of job are analysed below. All this information provided the opportunity for an examination of the dynamics of early labour market integration by young people and was used to identify typical patterns in early labour market careers.

Using the monthly data, we calculated the share of individuals participating in different labour market activities since leaving education, and also calculated main indicators such as employment, unemployment and activity rates (Figures 5 and 6). Large differences were observed between the two countries. The transition process seems to develop relatively rapidly in Ukraine, whereas in Serbia it was much more gradual. The unemployment rate in Serbia started out very high and gradually...
fell, stabilising at around 30%. In Ukraine the unemployment rate was fairly low 12 months after leaving education. The activity rate in Ukraine, however, decreased over time, stabilising at around 70% of the total population. This low activity rate was due to low labour force participation among Ukrainian women. No major differences exist in the unemployment rate between men and women. The recorded employment rate—significantly higher than in Serbia—was around 70% in Ukraine. However, the difference between the two countries might reflect differences in the quality of jobs. The social safety net is more developed in Serbia than in Ukraine and more people at any given time in Serbia might prefer to remain unemployed while waiting for a better job.

Using the information on time until first job and first significant job (Tables 1 and 2), we can calculate the length of the transition period, defined as the time between leaving education for the first time and starting a first job or a first significant job. In Serbia, 33% of all young people leaving the education system found a significant job within six months. In Ukraine, the transition process was shorter, with almost 60% of school leavers finding a significant job within six months after leaving education. However, for a large proportion of young people in both Serbia and Ukraine, the transition period was much longer. The share of individuals who had not found a first significant job two years after leaving education was 43% in Serbia and 26% in Ukraine.

A comparison between transition to a first job and transition to a first significant job provides some information on the dynamics of the youth labour market. In both Serbia and Ukraine, the share of non-significant first jobs is relatively low, with only 6% and 8%, respectively, having a non-significant first job six months after leaving education.

Men found a first job more quickly than women in both Serbia and Ukraine. However, women in Serbia had a slightly higher probability of finding a significant job within six months after leaving education. Comparing those who quickly got significant jobs to those who got any kind of job in the same period of time, Serbian men were more likely than Serbian women to accept any kind of job (that is, a job that was not a significant job, long-term job, or full-time job). No gender difference of this kind was observed for Ukraine.

Education played a major role in quickly finding a job—particularly a significant job—after leaving education (Tables 3 to 6). The major findings were strikingly similar in the two countries. Post-secondary education graduates (including university
graduates) did fairly well in both countries, followed by graduates from secondary vocational schools. Noteworthy is the fact that graduates from secondary general education performed very poorly in comparison with other educational categories in both countries.

In Serbia, 47% of university graduates but fewer than 30% of primary and secondary education graduates found a significant job within six months of graduating. In Ukraine, 74% of university graduates and 52% of secondary vocational school graduates found a significant job within six months of leaving education. Both college (that is post-secondary vocational education) and university graduates found a job in a relatively short period of time. Nonetheless, a significant share of these educational groups failed to find a job soon after graduation. In Serbia, 34% and 22% of graduates from colleges and universities, respectively, had not found a significant job within two years. In Ukraine, the corresponding figures were 18% and 14%. Clearly, a higher education qualification is not a guarantee of labour market success.

Differences between individuals with different educational attainments were smaller for non-significant jobs. For any kind of first job obtained within six months after leaving education, the difference between university and secondary vocational school graduates was only 16 percentage points in both Serbia and Ukraine. This compares to a difference of 19 percentage points in Serbia and 22 percentage points in Ukraine for first significant jobs. Thus, in addition to having a lower probability of finding a job, lower educated young people were relatively more likely to take a non-significant job. That is, both job quantity and job quality are important in terms of analysing labour market outcomes for different educational categories, with quality issues needing to be examined in more detail in terms of skill mismatches and more detailed job characteristics.

Table 1. Time to first ever job by gender in Serbia and Ukraine (%)

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<td>7-12 mths</td>
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Source: Authors

Table 2. Time to first significant job by gender in Serbia and Ukraine (%)

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Source: Authors
### Table 3. Time to first ever job by educational attainment in Serbia (%)

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Secondary Trade</th>
<th>Secondary Vocational</th>
<th>Secondary General</th>
<th>College</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>No search</td>
<td>7.0</td>
<td>5.7</td>
<td>4.7</td>
<td>9.6</td>
<td>7.7</td>
<td>11.7</td>
</tr>
<tr>
<td>1-3 mths</td>
<td>22.0</td>
<td>25.7</td>
<td>22.3</td>
<td>19.2</td>
<td>23.1</td>
<td>26.0</td>
</tr>
<tr>
<td>4-6 mths</td>
<td>8.4</td>
<td>7.5</td>
<td>7.2</td>
<td>6.7</td>
<td>9.1</td>
<td>12.8</td>
</tr>
<tr>
<td>7-12 mths</td>
<td>10.6</td>
<td>10.8</td>
<td>12.4</td>
<td>8.7</td>
<td>18.0</td>
<td>9.4</td>
</tr>
<tr>
<td>1-2 yrs</td>
<td>15.0</td>
<td>15.2</td>
<td>19.5</td>
<td>8.4</td>
<td>13.2</td>
<td>21.6</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>37.0</td>
<td>35.1</td>
<td>33.9</td>
<td>47.3</td>
<td>29.0</td>
<td>18.4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tr>
</tbody>
</table>

Source: Authors

### Table 4. Time to first significant job by educational attainment in Serbia (%)

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Secondary Trade</th>
<th>Secondary Vocational</th>
<th>Secondary General</th>
<th>College</th>
<th>University</th>
</tr>
</thead>
<tbody>
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<td>No search</td>
<td>9.8</td>
<td>5.1</td>
<td>4.3</td>
<td>9.6</td>
<td>7.0</td>
<td>10.9</td>
</tr>
<tr>
<td>1-3 mths</td>
<td>16.3</td>
<td>18.3</td>
<td>18.0</td>
<td>13.5</td>
<td>19.0</td>
<td>24.7</td>
</tr>
<tr>
<td>4-6 mths</td>
<td>2.3</td>
<td>5.9</td>
<td>6.1</td>
<td>5.8</td>
<td>11.7</td>
<td>12.1</td>
</tr>
<tr>
<td>7-12 mths</td>
<td>4.0</td>
<td>9.3</td>
<td>11.9</td>
<td>7.8</td>
<td>14.5</td>
<td>8.6</td>
</tr>
<tr>
<td>1-2 yrs</td>
<td>8.8</td>
<td>11.5</td>
<td>16.1</td>
<td>6.2</td>
<td>13.3</td>
<td>21.3</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>58.7</td>
<td>49.8</td>
<td>43.6</td>
<td>57.1</td>
<td>34.4</td>
<td>22.4</td>
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<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors

### Table 5. Time to first ever job by educational attainment in Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Less than Secondary</th>
<th>Secondary Vocational</th>
<th>Secondary General</th>
<th>Junior Specialist</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>No search</td>
<td>0.9</td>
<td>7.3</td>
<td>4.8</td>
<td>9.0</td>
<td>26.6</td>
</tr>
<tr>
<td>1-3 mths</td>
<td>32.7</td>
<td>49.5</td>
<td>31.4</td>
<td>58.2</td>
<td>44.4</td>
</tr>
<tr>
<td>4-6 mths</td>
<td>6.7</td>
<td>7.6</td>
<td>10.5</td>
<td>7.4</td>
<td>8.4</td>
</tr>
<tr>
<td>7-12 mths</td>
<td>7.5</td>
<td>6.9</td>
<td>9.6</td>
<td>6.1</td>
<td>5.2</td>
</tr>
<tr>
<td>1-2 yrs</td>
<td>5.2</td>
<td>11.8</td>
<td>9.1</td>
<td>4.5</td>
<td>5.4</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>47.0</td>
<td>16.9</td>
<td>34.7</td>
<td>14.7</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors

### Table 6. Time to first significant job by educational attainment in Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Less than Secondary</th>
<th>Secondary Vocational</th>
<th>Secondary General</th>
<th>Junior Specialists</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>No search</td>
<td>0.0</td>
<td>6.4</td>
<td>3.7</td>
<td>9.1</td>
<td>25.6</td>
</tr>
<tr>
<td>1-3 mths</td>
<td>26.0</td>
<td>38.2</td>
<td>24.6</td>
<td>52.8</td>
<td>39.6</td>
</tr>
<tr>
<td>4-6 mths</td>
<td>5.9</td>
<td>7.1</td>
<td>9.4</td>
<td>7.6</td>
<td>8.3</td>
</tr>
<tr>
<td>7-12 mths</td>
<td>1.3</td>
<td>6.4</td>
<td>8.3</td>
<td>7.1</td>
<td>5.9</td>
</tr>
<tr>
<td>1-2 yrs</td>
<td>4.9</td>
<td>12.1</td>
<td>9.3</td>
<td>5.3</td>
<td>6.3</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>61.9</td>
<td>29.8</td>
<td>44.7</td>
<td>18.0</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors
Large differences exist between urban and rural areas (Tables 7 and 8). In Serbia, 36% of young school leavers in urban areas found a significant job within six months of leaving education compared to only 28% in rural areas. This difference—at more than 20 percentage points—is more aggravated in Ukraine (66% and 45% for urban and rural areas, respectively). It is interesting to note, however, that even in rural areas of Ukraine young people found jobs faster than in urban areas of Serbia. In particular, the share of young people in rural areas who had not found a significant job after two years was very high in both Serbia and Ukraine. Since no major differences were observed between any kind of first job and a first significant job, short-term jobs within agriculture do not seem to explain these differences between urban and rural areas.

4.4 RECENT SCHOOL LEAVERS: FIRST JOBS

In view of the existence of a large informal labour market in central and eastern European countries, one of the aims of the survey was to detect informal employment and explore the determinants of youth labour market precariousness. Table 9 clearly shows that, if successful in obtaining employment, a large proportion of young Ukrainians found work in the formal labour market (whether a first ever job or a first significant job). Informal employment seemed to be more common among young people in Serbia. The proportion of young people in self-employment appeared to be quite similar when it came to first ever jobs, but was somewhat smaller for first significant employment in Ukraine. Young people helping to run family businesses were common in Serbia, whereas this group in Ukraine was very small. Overall, it is noticeable that the quality of the first significant job appears to be higher than the quality of the first ever job in both countries. Clearly more young people were employed officially rather than in informal jobs.

Self-employed workers in their first ever employment in Serbia were largely shopkeepers, followed by employees of their own company, farmers and self-employed

Table 7. Time to first ever job by urban/rural area in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th></th>
<th>Ukraine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>No search</td>
<td>8.0</td>
<td>5.9</td>
<td>17.5</td>
<td>8.1</td>
</tr>
<tr>
<td>1-3 mths</td>
<td>25.5</td>
<td>21.0</td>
<td>48.4</td>
<td>35.1</td>
</tr>
<tr>
<td>4-6 mths</td>
<td>8.6</td>
<td>8.0</td>
<td>7.8</td>
<td>10.0</td>
</tr>
<tr>
<td>7-12 mths</td>
<td>11.0</td>
<td>12.0</td>
<td>6.1</td>
<td>8.1</td>
</tr>
<tr>
<td>1-2 yrs</td>
<td>19.6</td>
<td>13.7</td>
<td>5.4</td>
<td>12.2</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>27.3</td>
<td>39.4</td>
<td>14.8</td>
<td>26.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors

Table 8. Time to first significant job by urban/rural area in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th></th>
<th>Ukraine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>No search</td>
<td>7.5</td>
<td>5.5</td>
<td>16.6</td>
<td>7.3</td>
</tr>
<tr>
<td>1-3 mths</td>
<td>21.1</td>
<td>16.0</td>
<td>41.8</td>
<td>27.7</td>
</tr>
<tr>
<td>4-6 mths</td>
<td>7.7</td>
<td>6.7</td>
<td>7.3</td>
<td>9.9</td>
</tr>
<tr>
<td>7-12 mths</td>
<td>10.3</td>
<td>9.7</td>
<td>6.6</td>
<td>5.9</td>
</tr>
<tr>
<td>1-2 yrs</td>
<td>17.4</td>
<td>10.1</td>
<td>6.5</td>
<td>12.0</td>
</tr>
<tr>
<td>&gt; 2 yrs</td>
<td>36.0</td>
<td>52.0</td>
<td>21.2</td>
<td>37.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors
craftsmen and street-sellers (in that order). In Ukraine, on the other hand, the vast majority of self-employed were qualified or unqualified workers, followed by professionals, street-sellers and shop/café/restaurant owners (in that order). As for first significant jobs, the distribution in Serbia was similar to that for first ever jobs; that is, the majority of young self-employed were shopkeepers, followed this time by self-employed craftsmen, farmers and employees of their own company. In Ukraine, about 30% of significantly self-employed workers were qualified workers, followed by shop/café/restaurant owners, farmers, self-employed unqualified workers, street-sellers and professionals. Most self-employed workers in the two countries had no employees. Other cross-national differences were evident, however. In Serbia 69% of the self-employed in a first ever job and 62% in a first significant job had no employees, whereas in Ukraine, these figures were around 77% and 70%, respectively. In both countries, nonetheless, once employees are taken on, self-employed workers are rather classified as small businesses.

The employment status of young school leavers and the degree of precariousness of the first ever or first significant employment were both affected by young people’s educational attainment (Tables 10 and 11). In both countries primary school leavers were at a high risk of informal employment and had the lowest probability of obtaining a registered job. In both countries these people were also most likely to be self-employed in their first ever job; in Serbia this was also true for first significant employment. In addition, Serbian low-skilled young people largely found employment as family helpers—both for first ever employment and—even more so—for first significant employment.

In both countries, young people who finished school with a secondary general diploma were also at a higher risk of informal employment. In Serbia graduates from secondary general education were highly represented among family helpers. Young people who acquired secondary vocational training, on the other hand, had better chances of obtaining formal employment than those with secondary general education only or those with short-course vocational training. This finding is consistent across the two countries and holds for both first ever and first significant employment. Finally, college and—to a greater degree—university graduates had the best chances of finding registered employment and avoiding informal work. In Ukraine, highly qualified specialists were also somewhat more highly represented among the self-employed; this was also reflected in the distribution of professions among the self-employed. Overall, a significant job improves the chances for secure employment based on a comparison of the first ever and the first significant job of various school leavers in the two countries.

Access to formal and informal employment was also stratified by gender (Table 12), with women more often found among the registered employed in their first ever jobs in both countries. For the first significant

Table 9. Status of first ever and first significant employment in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th></th>
<th>Ukraine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First ever job</td>
<td>First significant job</td>
<td>First ever job</td>
<td>First significant job</td>
</tr>
<tr>
<td>Registered job / official employee</td>
<td>49.1</td>
<td>58.2</td>
<td>65.0</td>
<td>70.8</td>
</tr>
<tr>
<td>Unregistered job / unofficial employee</td>
<td>39.0</td>
<td>29.4</td>
<td>29.3</td>
<td>24.7</td>
</tr>
<tr>
<td>Self-employed</td>
<td>4.6</td>
<td>4.9</td>
<td>4.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Family business helper</td>
<td>5.4</td>
<td>5.7</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Other</td>
<td>1.9</td>
<td>1.7</td>
<td>0.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Authors
employment the same held true in the case of Ukraine, whereas differences between men and women in Serbia were small. Men were more often self-employed in both countries. In Serbia, men were also over-represented among family helpers, whereas there were hardly any gender differences in this respect in Ukraine.

**Occupational status by educational attainment**

Despite the higher level of registered employment, in Ukraine compared to Serbia young school leavers were less likely to enter professional jobs for both first ever and first significant employment. Instead, they were more likely to occupy jobs in services and in shop and market sales. In addition, in Ukraine compared to Serbia, more young people worked as skilled agricultural and craft workers and significantly more as machine operators and assemblers. Young school leavers doing clerical work were more likely in Serbia than in Ukraine. Some degree of stability in occupational distribution between first ever and first significant jobs was also noticeable (Table 13).

**Table 10. Status of first ever (left column) and first significant (right column) employment in Serbia by education level (%)**

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Vocational</th>
<th>Secondary</th>
<th>College</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered job</td>
<td>16.1</td>
<td>25.0</td>
<td>37.9</td>
<td>44.3</td>
<td>34.9</td>
</tr>
<tr>
<td>Unregistered job</td>
<td>50.0</td>
<td>31.8</td>
<td>52.5</td>
<td>44.3</td>
<td>44.4</td>
</tr>
<tr>
<td>Self-employed</td>
<td>12.9</td>
<td>15.9</td>
<td>1.8</td>
<td>5.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Family business helper</td>
<td>21.0</td>
<td>27.3</td>
<td>6.7</td>
<td>9.5</td>
<td>11.1</td>
</tr>
</tbody>
</table>

**Table 11. Status of first ever (left column) and first significant (right column) employment in Ukraine by education level (%)**

<table>
<thead>
<tr>
<th></th>
<th>Primary</th>
<th>Elementary</th>
<th>Secondary</th>
<th>College</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official employee</td>
<td>33.9</td>
<td>40.4</td>
<td>53.6</td>
<td>61.4</td>
<td>46.1</td>
</tr>
<tr>
<td>Unofficial employee</td>
<td>52.7</td>
<td>48.9</td>
<td>35.7</td>
<td>34.9</td>
<td>43.1</td>
</tr>
<tr>
<td>Self-employed</td>
<td>9.8</td>
<td>6.4</td>
<td>7.1</td>
<td>2.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Family business helper</td>
<td>3.6</td>
<td>4.3</td>
<td>3.6</td>
<td>0.0</td>
<td>2.6</td>
</tr>
</tbody>
</table>

**Table 12. Status of first ever and first significant employment by gender in Serbia and Ukraine (%)**

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First ever job</td>
<td>First significant job</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Registered job / official employee</td>
<td>46.7</td>
<td>51.7</td>
</tr>
<tr>
<td>Unregistered job / unofficial employee</td>
<td>38.4</td>
<td>39.6</td>
</tr>
<tr>
<td>Self-employed</td>
<td>6.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Family business helper</td>
<td>7.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Other</td>
<td>1.2</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**Source: Authors**
There were also important cross-national differences with regard to the economic sectors in which young school leavers were employed. Employment in agriculture was much more pronounced in Ukraine, but also employment in mining and quarrying, construction, electricity, gas and water supply, construction, transport, storage and communication, public administration and defence, compulsory social security, and finally education. In Serbia, on the other hand, young school leavers were more likely to be found in hotel and restaurant businesses and in other community, social and personal service activities (Table 14).

Overall, youth employment was more pronounced in traditional industries in Ukraine, whereas in Serbia young people tended to take up employment in services. Whether this distribution by industries is specific to the youth labour market or is a general characteristic of the Serbian or Ukrainian labour markets could not be determined in the survey (but can possibly be determined by a comparison with the situation for older individuals).

### Table 13. Occupational status of first ever and first significant employment in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th>Ukraine</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First ever job</td>
<td>First significant job</td>
<td>First ever job</td>
<td>First significant job</td>
</tr>
<tr>
<td>Legislators, senior officials and managers</td>
<td>2.5</td>
<td>3.1</td>
<td>3.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Professionals</td>
<td>21.2</td>
<td>24.7</td>
<td>16.6</td>
<td>18.4</td>
</tr>
<tr>
<td>Technicians and associated professionals</td>
<td>11.5</td>
<td>11.5</td>
<td>10.6</td>
<td>12.0</td>
</tr>
<tr>
<td>Clerks</td>
<td>8.9</td>
<td>9.5</td>
<td>5.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Service workers and shop and market sales workers</td>
<td>19.3</td>
<td>18.6</td>
<td>22.3</td>
<td>21.2</td>
</tr>
<tr>
<td>Skilled agricultural and fishery workers and craft and related trade workers</td>
<td>16.3</td>
<td>16.4</td>
<td>17.3</td>
<td>18.2</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>3.6</td>
<td>4.0</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>16.6</td>
<td>11.9</td>
<td>15.9</td>
<td>12.4</td>
</tr>
<tr>
<td>Armed forces</td>
<td>0.2</td>
<td>0.3</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: Authors

Job characteristics

Table 15 describes and compares the characteristics of first jobs\(^{18}\) held by Serbian and Ukrainian school leavers. Serbian compared to Ukrainian young people were much more likely to be employed in the private sector. Furthermore, first ever jobs, compared to first significant jobs, were more likely to be in the private sector, and this difference was greater in Serbia. In addition, we observed slightly fewer women employed in the private sector in either first ever or first significant job in Serbia (gender data not shown in table), whereas in Ukraine there were hardly any gender differences with regard to employment in the private or public sectors.

Ukrainian school leavers were more likely to be employed in middle-sized or larger firms. About 50% of Serbian school leavers were employed in firms employing up to 10 people, while 70% were employed in enterprises with up to 50 people. The equivalent figures for the Ukraine were 22% and 50%, respectively.

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\(^{18}\) Here we refer to both first ever employment and first significant employment, irrespective of whether the job was acquired before or after leaving education.
With regard to the average number of hours worked per week, Serbians tended to work about one hour more than Ukrainians. Young people with significant employment tended to work somewhat more hours than young people in their first ever jobs. There were very minimal differences in the number of hours worked by men and women in both first ever and first significant employment in Serbia. This difference was more pronounced in Ukraine, however, where women worked 3-4 hours less on average (results are not shown in the table). The average number of hours worked per week tended to decrease in line with higher educational levels in both countries.

Part-time employment appeared to be more pronounced in Ukraine than in Serbia. While about 9.4% of Serbs were employed part-time in their first jobs only 5.3% were employed part-time in significant employment. In Ukraine, the trend was quite similar, but the rates were somewhat higher, at 12% and 9.5%, respectively. Unlike in western industrialised countries, young female school leavers in Serbia were actually less likely to be employed part-time, and this held true for both first ever and first significant employment. In Ukraine, on the other hand, women were more likely to be employed part-time in their first jobs. The gap between men and women was even

Table 14. Industrial structure of first ever and first significant employment in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia First ever job</th>
<th>First significant job</th>
<th>Ukraine First ever job</th>
<th>First significant job</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, hunting and forestry</td>
<td>5.5</td>
<td>4.8</td>
<td>8.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Fishing</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>0.5</td>
<td>0.5</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15.5</td>
<td>14.1</td>
<td>14.3</td>
<td>14.9</td>
</tr>
<tr>
<td>Electricity, gas and water supply</td>
<td>1.0</td>
<td>1.3</td>
<td>2.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Construction</td>
<td>6.6</td>
<td>5.5</td>
<td>9.5</td>
<td>9.8</td>
</tr>
<tr>
<td>Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods</td>
<td>24.4</td>
<td>26.0</td>
<td>22.5</td>
<td>22.2</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>11.0</td>
<td>10.1</td>
<td>5.0</td>
<td>5.1</td>
</tr>
<tr>
<td>Transport, storage and communication</td>
<td>3.4</td>
<td>3.8</td>
<td>5.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>2.2</td>
<td>2.4</td>
<td>2.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Real estate, renting and business activities</td>
<td>1.4</td>
<td>1.7</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Public administration and defence, compulsory social security</td>
<td>3.1</td>
<td>3.7</td>
<td>4.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Education</td>
<td>6.8</td>
<td>7.3</td>
<td>8.7</td>
<td>8.0</td>
</tr>
<tr>
<td>Health and social work</td>
<td>6.8</td>
<td>7.6</td>
<td>6.8</td>
<td>7.6</td>
</tr>
<tr>
<td>Other community, social and personal service activities</td>
<td>11.5</td>
<td>10.9</td>
<td>5.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Private households with employed persons</td>
<td>0.2</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Extra-territorial organisations and bodies</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors
higher with regard to first significant employment. The main reason for taking up part-time employment in both countries was an inability of young people to find full-time work, with more Serbs compared to Ukrainians stating this as the main reason for part-time employment; the second most important reason for young Ukrainians in their first ever job was to be able to combine studies and work. Finally, family reasons were also frequently mentioned as reasons for working part-time.

Permanent employment appeared to be more of a reality for young school leavers in Ukraine, where 59% were employed permanently in their first job and about 65% in their first significant job. In Serbia the corresponding figures were much lower: 42% and 52%, respectively. Some cross-national differences were noticeable. The main reason for non-permanent employment was the inability to find a permanent job for Serbs. More Ukrainians, on the other hand, reported their willingness to do temporary or seasonal work or to work without a contract.

Mobility comparisons

In referring to employment mobility between the first and current job among young school leavers in the two countries,
we need to examine the effects of gender and education. Overall, Ukrainians seem to be somewhat less mobile than Serbs, whereas Serbs seem to run a higher risk of permanent unemployment than Ukrainians. Women were less mobile than men in Serbia. In Ukraine, gender differences were less pronounced. Women, however, tended to have higher rates of permanent unemployment in both countries. Interestingly enough, in Serbia, more mobility was observed among both highly educated and the least educated people. It seems that in Serbia having third-level education provided protection from unemployment; however, although highly educated individuals had a lower unemployment risk, this was not much lower than—as an example—the risk for the least educated. In Ukraine, young people with a university education were the least mobile, and they also had the lowest rates of permanent unemployment, closely followed by college graduates. The most mobile young people in Ukraine were secondary vocational school leavers, primary education leavers and college graduates (Table 16).

In their first years in the labour market, a substantial proportion of young people had already changed jobs. Whether this job mobility was a positive or negative experience depended on the outcome, that is, whether and to what extent mobility tended to improve a young person’s occupational status. A substantial fraction of job changes were associated with improved occupational status or upward occupational mobility. In both countries upward occupational mobility was more frequent than downward mobility, which is consistent with findings across Europe (see Müller et al. 2002). Evident also were comparatively high levels of lateral mobility in the two countries—but exceptionally high in Ukraine. With respect to gender differences, only marginal differences between men and women were found in Ukraine; however, differences were somewhat more pronounced in Serbia. Overall, women were more inclined to make lateral occupational changes and were less likely to be found among the upwardly mobile individuals (Table 17).

As for income-related mobility of young school leavers between first and current employment, more upward income-related mobility was observed in comparison to occupational mobility, especially among females.

Table 16. Mobility between first ever and current employment in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th></th>
<th></th>
<th>Ukraine</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-mobile</td>
<td>Mobile</td>
<td>Unemployed</td>
<td>Non-mobile</td>
<td>Mobile</td>
<td>Unemployed</td>
</tr>
<tr>
<td>Total</td>
<td>32.4</td>
<td>43.4</td>
<td>24.2</td>
<td>43.3</td>
<td>41.2</td>
<td>15.6</td>
</tr>
<tr>
<td>Men</td>
<td>30.5</td>
<td>48.6</td>
<td>20.8</td>
<td>47.6</td>
<td>41.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Women</td>
<td>38.4</td>
<td>38.4</td>
<td>27.4</td>
<td>39.5</td>
<td>41.2</td>
<td>19.3</td>
</tr>
<tr>
<td>Primary</td>
<td>36.2</td>
<td>42.6</td>
<td>21.3</td>
<td>20.9</td>
<td>45.9</td>
<td>33.1</td>
</tr>
<tr>
<td>Elementary Vocational</td>
<td>37.8</td>
<td>36.1</td>
<td>26.0</td>
<td>37.8</td>
<td>37.8</td>
<td>24.3</td>
</tr>
<tr>
<td>Secondary Vocational</td>
<td>31.9</td>
<td>38.7</td>
<td>29.4</td>
<td>36.4</td>
<td>49.9</td>
<td>13.7</td>
</tr>
<tr>
<td>Secondary General</td>
<td>33.3</td>
<td>29.2</td>
<td>37.5</td>
<td>30.1</td>
<td>41.4</td>
<td>28.6</td>
</tr>
<tr>
<td>College</td>
<td>29.7</td>
<td>50.0</td>
<td>20.3</td>
<td>46.6</td>
<td>43.5</td>
<td>9.9</td>
</tr>
<tr>
<td>University</td>
<td>28.1</td>
<td>54.2</td>
<td>17.6</td>
<td>55.5</td>
<td>35.8</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Source: Authors

19 Occupational status mobility is derived from a comparison of the International Socio-economic Index (ISEI) scores for first and current occupations among individuals who changed jobs. The ISEI score represents an internationally comparable measure of occupational status that reflects level of earnings and educational requirements.
Thus, few people experienced an income loss by moving between jobs.

Regarding young school leaver mobility between different occupations, large differences between the two countries were observed. Almost half of the young Ukrainians were employed in occupations with the same occupational titles as in their first jobs. In Serbia, on the other hand, the vast majority of school leavers (about 80%) were employed in different occupations (Table 19).

### Second jobs

Results show that having a second job parallel to the main activity was more pronounced among school leavers in Serbia than in Ukraine. While in Serbia about 21% of self-employed young people (with employees) had a second job (the highest proportion among all young people), in the Ukraine the highest rate for a second activity was observed among paid family helpers (16.7%). In both countries unregistered employees had somewhat higher probabilities of being employed in a second job (Table 20).

Individuals with secondary general and university education were more likely to have a second job, both in Serbia and Ukraine. Men were more likely to hold second jobs in Serbia, while there were hardly any gender differences in this regard in Ukraine.

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20 This question could only be answered for Ukrainian school leavers, as income information for first jobs was only collected in the Ukrainian survey.
Incomes

Analyses of current school leaver incomes (in 2006 for Serbia and in 2007 for Ukraine) indicated lower wages among those with unregistered employment. Unofficial workers compared to official workers in Serbia and Ukraine earned less—around 69.9% and 61%, respectively. Results also indicated that women tended to earn more than men in Serbia, whereas the situation was the other way around in Ukraine (the female income level was about 58% of that of men). Furthermore, results show that the ultimate winners in terms of income in Serbia were university graduates, with wage levels far higher than those of the rest of school leavers. In Ukraine the picture was more equitable; university graduates certainly earned more than the rest but income differences were much narrower. Thus, as a percentage of university graduate incomes, primary education leavers earned about 74%, elementary vocational school leavers about 81%, secondary vocational school leavers about 82%, and college graduates about 84%. Secondary general school leavers, however, only earned about 59% of what university graduates earned (Table 21).

Table 20. Second job holders by employment status in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>All employment</td>
<td>6.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Registered employment</td>
<td>6.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Unregistered employment</td>
<td>8.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Self-employed without employees</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Self-employed with employees</td>
<td>21.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Paid family helper</td>
<td>3.9</td>
<td>16.7</td>
</tr>
</tbody>
</table>

Source: Authors

Table 21. Average job-related income for school leavers in Serbia and Ukraine (national currencies\(^{21}\) rounded up)

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income 2006</td>
<td>Income 2007</td>
</tr>
<tr>
<td>Average</td>
<td>21,769</td>
<td>831</td>
</tr>
<tr>
<td>In registered employment</td>
<td>24,768</td>
<td>1,176</td>
</tr>
<tr>
<td>In unregistered employment</td>
<td>17,304</td>
<td>724</td>
</tr>
<tr>
<td>Men</td>
<td>19,952</td>
<td>1,045</td>
</tr>
<tr>
<td>Women</td>
<td>23,722</td>
<td>601</td>
</tr>
<tr>
<td>Primary</td>
<td>10,241</td>
<td>695</td>
</tr>
<tr>
<td>Elementary vocational</td>
<td>15,565</td>
<td>762</td>
</tr>
<tr>
<td>Secondary vocational</td>
<td>18,806</td>
<td>771</td>
</tr>
<tr>
<td>Secondary general</td>
<td>21,261</td>
<td>558</td>
</tr>
<tr>
<td>College</td>
<td>18,503</td>
<td>797</td>
</tr>
<tr>
<td>University</td>
<td>37,362</td>
<td>945</td>
</tr>
</tbody>
</table>

Source: Authors

\(^{21}\) Incomes have been left in the national currencies for a number of reasons. One is the inherent difficulty in determining an appropriate exchange rate for a whole year, and another reason is that the data refers to two different years. Converting both to euro, for example, would implicitly invite the reader to make a direct comparison between the two countries, and this would present an incorrect picture of the reality. Lastly, converted currencies would have diverted attention away from the main research interest, namely how income is distributed within each country.
Information on income from the first ever employment was also collected in Ukraine, and so it was possible to compare growth in earnings for different categories of school leavers. It was evident that income differences between individuals employed—for the first time since leaving education—in both registered and unregistered jobs were much smaller than for employment later in occupational careers. People taking up unofficial employment earn only slightly less than those in registered jobs. Similarly, the differences between men and women as well as between graduates from different educational levels were also much smaller.

4.5 EDUCATION AND LABOUR MARKETS: SKILL MISMATCHES

As previously mentioned, educational attainment plays an important role in explaining labour market outcomes in both Serbia and Ukraine. We will now discuss the impact of training after leaving continuous education on future labour market outcomes and analyse the extent of skill mismatches.

Education and training after leaving continuous education

In Serbia, around 15% of young people participated in regular education after leaving continuous education for the first time (defined as being out of education for at least 12 months). The number of people returning to regular education after leaving continuous education was higher in Ukraine than in Serbia, with around a fifth of school leavers returning to education in Ukraine. However, in both countries just under half of these people were still in education at the time of the survey (Table 22).

There was a higher propensity to return to education in Ukraine. The data is based on current labour market status at the time of the survey. On comparing the unemployed in both countries with either employed or inactive workers, a higher proportion had returned to education and left it again.

Returning to education without finishing it is clearly not conducive to labour market success. The unemployed did not appear to be particularly attracted to the idea of returning to education to upgrade their skills, as indicated by the relatively low numbers in education at the time of the survey. Inactive workers were far more likely to still be in education, which of course, is partly due to the fact that students are considered inactive by definition. All in all, Ukrainians in the labour force were about twice as likely to return to education as Serbs.

Although large numbers of people returned to education in Serbia, this made no change to the educational attainment of the group as a whole in this period. In fact, only one person reported having obtained a higher qualification since going back to education (thereby adding a vocational qualification to a trade diploma). In Ukraine the picture was more complex, with 148 people stating that they currently had a higher level of education than on first leaving education. However, as this was less than 10% of the Ukrainian sample, we will not distinguish between education attained before leaving education for the first time and the highest level of education attained, but simply focus on the highest level of education obtained.

Training

As discussed above, very few people attended regular education after leaving education for the first time, and the same applied to other kind of courses or seminars. Although young Ukrainians of both genders were more likely to return to regular or formal education than young Serbs, female Serbs were more likely to have attended courses or seminars outside of formal education. Compared to Serbian men, women in Serbia were also more...

22 The educational structures in Serbia and Ukraine are not similar enough to justify using the same categories, so when discussing the transition from education to work national terms are used. In both countries vocational education is important in secondary education. Traditionally vocational education has been seen as providing straightforward links to the labour market, with students being prepared for very specific occupations. These links are being severely tested in recent years, however, and vocational education is the subject of much attention with a view to reform. General education at the secondary level was and is seen as preparation for higher education.
likely to report having trained for reasons related to their present or future job. In Ukraine men and women were equally likely—and for the same reasons—to have taken up education or training. Training in both countries was taken predominantly for reasons related to present or future employment. However, Serbs compared to Ukrainians more often reported having undertaken training for personal or social reasons (around 39% and 28%, respectively). It must be noted though that about one in three Serbs refused to state the purpose of their training activity (Table 23).23

More than half of the employed Serb respondents who were willing to provide details had to do their training outside of paid working hours; this would indicate a lack of importance attached to training in Serbia by employers—also reflected in the higher percentage of Serbs who undertook training while unemployed. Training was more likely to be seen as a private responsibility in Serbia than in Ukraine, where training was more likely to take place during work hours. Employed Serb women in particular trained outside paid work hours. Although women were also more likely than men to undertake training activities outside work hours in Ukraine, they were far more likely than Serbian women to do so during paid work hours. Ukrainian men were twice as likely to be trained during work hours as outside work hours.

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23 These respondents were not included in the distribution of Serbs according to training purposes.
Training took place outside working hours for unemployed and inactive workers in Serbia, indicating that the unemployed took training to upgrade their skills. In Ukraine a sizeable number of unemployed and inactive workers did have a job when they were last trained, although the training clearly did not help them retain their employment. The most interesting feature of how occupational status influenced training in both countries was uncovered on examining the differences between employees having a formal status and those employed unofficially. The latter category was characterised by a large minority who had received training before becoming employed (42%-46%); moreover, when they received training whilst employed this largely took place outside working hours (Tables 24 to 26).

Only 15%-20% of all unofficially employed workers received training primarily during working hours. Almost half of official employees in Ukraine undertook training mostly during paid working hours. However; only a quarter of officially employed workers in Serbia were able to attend training during paid working hours.

Training activities mostly took place in training centres, but more so in Serbia than in Ukraine. Far more training took place in the workplace and in a school or formal setting in Ukraine, especially for official employees. Distance learning was rarely used in Serbia (2%-6%, depending on occupational status) but seems to have gained a foothold in Ukraine, where almost one in ten used this approach for their last training course (7%-10%).

The result of training activities was primarily that employed participants were given more responsibilities. Increases in salaries were less common, although increased responsibilities in the long term may lead to salary increases.

**Skill mismatches**

The issue of whether students found jobs that fitted with their educational background was assessed based on a subjective question. Respondents were asked what minimum educational level their employer would require of a person occupying their job. This level was then compared to the educational level of the respondent. The risk with such a subjective question is that respondents may not coincide with their employer in their assessment of the necessary educational level. It is also quite possible that a respondent might consider the minimum education required by their employer as insufficient to conduct the job correctly and that the respondent does not consider their own level of education as a mismatch. Nonetheless, we will be using a narrow definition of the term ‘over-qualification’. A person characterised here as overqualified may function well in their job, with the employer taking full advantage of all their skills. The term here only means that the respondents have indicated that their employer might be satisfied with a less educated person in their job. It is quite possible that employers use the additional skills of their employees for other tasks.

Fields of study will also be examined to determine if a more precise mismatch of skills and needs can be determined. Thus, the fields of study of the respondents will be compared to the fields of education demanded by the employer. Note that, once again, there is an element of subjectivity present. Each country will be examined in turn, first Serbia and then Ukraine.

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24 Please note that the training could have taken place during working hours if the respondent had worked prior to being unemployed or inactive.

25 Another method classifies occupations in groups that are then matched with fields of study. This method aims at being more objective in its assessment. A job mismatch is defined as a discrepancy between the current occupation and the original field of education. The danger with this method lies in how occupations are grouped and in how groups are matched with fields of study. The present report only examines perceived mismatches based on the subjective question. The second method for determining mismatches may be dealt with in a future ETF study.

### Table 24. Training during working hours by gender in Serbia and Ukraine (%)

<table>
<thead>
<tr>
<th>Did you have a job during your most recent training activity?</th>
<th>Serbia</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>No</td>
<td>51.1</td>
<td>43.9</td>
</tr>
<tr>
<td>Yes. Training took place only during paid work hours</td>
<td>12.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Yes. Training took place mostly during paid work hours</td>
<td>5.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Yes. Training took place mostly outside paid work hours</td>
<td>9.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Yes. Training took place only outside paid work hours</td>
<td>21.7</td>
<td>34.2</td>
</tr>
</tbody>
</table>

**Source:** Authors

### Table 25. Training during working hours by occupational status in Serbia (%)

<table>
<thead>
<tr>
<th>Did you have a job during your most recent training activity?</th>
<th>Serbia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Registered Employee</td>
</tr>
<tr>
<td>No</td>
<td>17.3</td>
</tr>
<tr>
<td>Yes. Training took place only during paid work hours</td>
<td>15.0</td>
</tr>
<tr>
<td>Yes. Training took place mostly during paid work hours</td>
<td>9.4</td>
</tr>
<tr>
<td>Yes. Training took place mostly outside paid work hours</td>
<td>15.0</td>
</tr>
<tr>
<td>Yes. Training took place only outside paid work hours</td>
<td>43.3</td>
</tr>
</tbody>
</table>

**Source:** Authors

### Table 26. Training during working hours by occupational status in Ukraine (%)

<table>
<thead>
<tr>
<th>Did you have a job during your most recent training activity?</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Official Employee</td>
</tr>
<tr>
<td>No</td>
<td>20.1</td>
</tr>
<tr>
<td>Yes. Training took place only during paid work hours</td>
<td>30.5</td>
</tr>
<tr>
<td>Yes. Training took place mostly during paid work hours</td>
<td>16.1</td>
</tr>
<tr>
<td>Yes. Training took place mostly outside paid work hours</td>
<td>14.4</td>
</tr>
<tr>
<td>Yes. Training took place only outside paid work hours</td>
<td>19.0</td>
</tr>
</tbody>
</table>

**Source:** Authors
Most respondents felt that they were in a job that required a lower level of education than they actually had, which is to say, most respondents in Serbia feel overqualified for their present job. Note that we rated secondary vocational education as representing a higher level of education than secondary trade education. However, even allowing for the possibility that the two levels of education are similar, it is clear that there were a lot of jobs in Serbia held by people who considered themselves to be overqualified for the post.

Table 29 below (and similarly presented tables) should be read diagonally. For each column 1-6 the percentage of people holding the precise level of education needed for the job is highlighted in bold. Percentages to the left indicate overqualified respondents, and percentages to the right indicate underqualified respondents. Referring by way of an example, to secondary vocational education leavers (3 in the table), of the 354 people employed with this level of education, 53.7% worked in a job for which they felt that their employer was satisfied with their exact level of education. Only 1.7% believed that their employer was looking for a higher level of education—a university or doctoral degree (0.6%) or general secondary education (1.1%). The rest (44.6%) believed their employer would have been satisfied with a lower level of education. Thus, this proportion of workers can be considered to be overqualified in the narrow sense defined above.

Looking first at the group of people with a first (non-significant) job after leaving education, almost irrespective of

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### Table 27. Training activities by occupational status in Serbia (%)

<table>
<thead>
<tr>
<th>In which framework did the education / training take place?</th>
<th>Serbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Employee</td>
<td>Unregistered Employee</td>
</tr>
<tr>
<td>School / formal education (full-time or part-time)</td>
<td>14.6</td>
</tr>
<tr>
<td>At the workplace (with no additional training in a school)</td>
<td>8.5</td>
</tr>
<tr>
<td>Combined system: workplace + additional training (alternate)</td>
<td>13.8</td>
</tr>
<tr>
<td>Training centre (private or public but not school)</td>
<td>59.2</td>
</tr>
<tr>
<td>Distance learning (corresp. course)</td>
<td>3.8</td>
</tr>
</tbody>
</table>

*Source: Authors*

### Table 28. Training activities by occupational status in Ukraine (%)

<table>
<thead>
<tr>
<th>In which framework did the education / training take place?</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Employee</td>
<td>Unofficial Employee</td>
</tr>
<tr>
<td>School / formal education (full-time or part-time)</td>
<td>26.0</td>
</tr>
<tr>
<td>At the workplace (with no additional training in a school)</td>
<td>26.6</td>
</tr>
<tr>
<td>Combined system: workplace + additional training (alternate)</td>
<td>9.8</td>
</tr>
<tr>
<td>Training centre (private or public but not school)</td>
<td>30.1</td>
</tr>
<tr>
<td>Distance learning (corresp. course)</td>
<td>7.5</td>
</tr>
</tbody>
</table>

*Source: Authors*
educational background the respondents worked in positions for which they were overqualified. Very few people were in jobs for which they believed their employer would demand a level of education at least as high as the level they held themselves. University graduates were better matched, with almost four out of five holding jobs where at least a university degree was expected, and likewise for people with primary education or less (although the latter, by definition, cannot be overqualified as there is no lower level of education).

Two thirds of secondary trade graduates were in positions requiring that level of education, and more than half of secondary vocational education graduates were in jobs matching their background.

The group that really stood out consisted of people who had finished general secondary, as only around one in four was in a job matching their educational background and almost 69% were in jobs for which the employer would have been satisfied with a lower level of education. This is the same group that had the greatest difficulties getting into the labour market in general. Only 60.6% of graduates from secondary general education held jobs on being surveyed, compared to 67.4%-78.9% for the other groups. This is a relatively small group of people and probably consists of people who had intended to continue in higher education, but who, for some reason, had not finished a higher level of education. This would explain the poor results for this group. This theory is further supported by the finding that very few people having higher levels of education than general secondary worked in jobs demanding that level, whereas substantial numbers of college or university graduates worked in jobs intended for secondary vocational or lower level graduates.

Post-secondary or college graduates were also more likely to work in jobs requiring a lower level of education, with just 40% appearing to be well matched.

The picture changes on examining the group with a first significant job after leaving education. Apart from the groups of people with primary education or less and with general secondary education, there was, in general, a better fit between job-holder levels of education and the education required by employers. In particular, secondary trade graduates improved their match by more than seven percentage points. Nonetheless, the number of people who obtained a significant job immediately after leaving

### Table 29. First job after leaving education in Serbia: minimum level of education required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Share with job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary or less</td>
<td>67.4</td>
<td>92.7</td>
<td>7.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>55</td>
</tr>
<tr>
<td>2. Secondary trade</td>
<td>72.2</td>
<td>28.7</td>
<td>67.6</td>
<td>3.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>275</td>
</tr>
<tr>
<td>3. Secondary vocational</td>
<td>70.8</td>
<td>16.9</td>
<td>27.7</td>
<td>53.7</td>
<td>1.1</td>
<td>0.0</td>
<td>0.6</td>
<td>100</td>
<td>354</td>
</tr>
<tr>
<td>4. General secondary</td>
<td>60.6</td>
<td>18.0</td>
<td>29.5</td>
<td>21.3</td>
<td>26.2</td>
<td>0.0</td>
<td>4.9</td>
<td>100</td>
<td>61</td>
</tr>
<tr>
<td>5. Post-secondary / college</td>
<td>73.4</td>
<td>5.7</td>
<td>17.1</td>
<td>34.3</td>
<td>1.9</td>
<td>40.0</td>
<td>1.0</td>
<td>100</td>
<td>105</td>
</tr>
<tr>
<td>6. University / doctorate</td>
<td>78.9</td>
<td>1.0</td>
<td>1.9</td>
<td>10.1</td>
<td>1.9</td>
<td>6.3</td>
<td>78.8</td>
<td>100</td>
<td>208</td>
</tr>
<tr>
<td>Total</td>
<td>19.8</td>
<td>31.0</td>
<td>25.5</td>
<td>2.5</td>
<td>5.2</td>
<td>16.1</td>
<td>100</td>
<td>1058</td>
<td></td>
</tr>
</tbody>
</table>

The numbered headings correspond to the groupings listed in the column on the extreme left.

Source: Authors
education was substantially lower for all levels of education (Table 30).

Having a university education made it easier to get a significant job. Almost the same proportion of university graduates held a significant job as held any kind of job after leaving education. For all other levels of education the proportion that held a significant job was substantially lower than the proportion that held any kind of job. In other words, it was easiest for university graduates to acquire significant jobs.

College graduates were also likely to obtain significant jobs, but they were unable to get jobs at their level of education. A third of all college graduates with a significant job were employed in jobs for which the employer demanded no more than vocational secondary education, and a further 17% were in jobs for which only secondary trade education was required.

People with no more than a primary education were less likely to have a significant job. They are effectively being squeezed out of the labour market by overqualified graduates who are willing to work in jobs for which a lower level of education is sufficient.

Due to the small sample size, trends for respondents who had a first significant job before leaving education could not be characterised as significant. Overall however, it appears that the skills mismatch was even greater for this group. Such a result indicates that employers recruit on the basis of employee qualifications at the time of recruitment and not on the basis of their potential. This is hardly surprising as many jobs require certificates. Taking a significant job before leaving education could therefore lead to a situation in Serbia in which a person would be overqualified (Table 31).

Education level is not, however, the only manner in which a possible mismatch can be assessed. It is also possible to assess to what extent the educational level of the respondents had any bearing on whether or not the employer was satisfied that the employees had studied the right field of education (Table 32).

Respondents were questioned as to what field of education their employer demanded. The responses indicated that the higher the level of education the better the match between the studied field of education and the field demanded by the employer. Strictly speaking, it is pointless to talk of fields of study for education below college level.

Table 30. First significant job after leaving education in Serbia: minimum level of education required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Share with job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary or less</td>
<td>47.8</td>
<td>89.5</td>
<td>10.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>38</td>
</tr>
<tr>
<td>2. Secondary trade</td>
<td>53.5</td>
<td>22.1</td>
<td>75.0</td>
<td>2.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>204</td>
</tr>
<tr>
<td>3. Secondary vocational</td>
<td>57.7</td>
<td>10.0</td>
<td>28.6</td>
<td>59.7</td>
<td>1.0</td>
<td>0.0</td>
<td>0.7</td>
<td>100</td>
<td>290</td>
</tr>
<tr>
<td>4. General secondary</td>
<td>49.0</td>
<td>16.0</td>
<td>24.0</td>
<td>32.0</td>
<td>22.0</td>
<td>0.0</td>
<td>6.0</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>5. Post secondary / college</td>
<td>62.2</td>
<td>4.5</td>
<td>16.9</td>
<td>32.6</td>
<td>2.2</td>
<td>43.8</td>
<td>0.0</td>
<td>100</td>
<td>89</td>
</tr>
<tr>
<td>6. University / doctorate</td>
<td>70.6</td>
<td>1.1</td>
<td>1.6</td>
<td>9.6</td>
<td>2.1</td>
<td>5.3</td>
<td>80.3</td>
<td>100</td>
<td>188</td>
</tr>
<tr>
<td>Total</td>
<td>14.2</td>
<td>31.4</td>
<td>28.2</td>
<td>2.3</td>
<td>5.7</td>
<td>18.2</td>
<td>100</td>
<td>859</td>
<td></td>
</tr>
</tbody>
</table>

The numbered headings correspond to the groupings listed in the column on the extreme left

Source: Authors
Nonetheless, the answers indicated that the respondents were aware that their employers were less critical with regard to specialisations. For jobs demanding higher levels of skills employers were more explicit in their demands. Although almost two thirds of university graduates were employed in jobs corresponding to their exact field of study, this was the case for only little more than a third of college graduates. College graduates were less able to find jobs matching their qualifications.

The sample of respondents having a significant job before leaving education was too small for meaningful analysis, although the tendency appeared to be the same as for respondents getting jobs after leaving education.

Ukraine

Since the educational structure of Ukraine is not the same as that of Serbia, the results for the two countries will not be directly comparable. We do, however, expect to see similar results in terms of higher levels of education leading to a better match with the job held, and in terms of a better fit between fields of education demanded by the employer and university graduates.

Table 31. First significant job before leaving education in Serbia: minimum level of education required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Share with job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary or less</td>
<td>6.5</td>
<td>50.0</td>
<td>50.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>4</td>
</tr>
<tr>
<td>2. Secondary trade</td>
<td>5.1</td>
<td>42.1</td>
<td>57.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>19</td>
</tr>
<tr>
<td>3. Secondary vocational</td>
<td>5.1</td>
<td>19.2</td>
<td>19.2</td>
<td>61.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>26</td>
</tr>
<tr>
<td>4. General secondary</td>
<td>7.7</td>
<td>12.5</td>
<td>12.5</td>
<td>25.0</td>
<td>37.5</td>
<td>0.0</td>
<td>12.5</td>
<td>100</td>
<td>8</td>
</tr>
<tr>
<td>5. Post secondary / college</td>
<td>16.1</td>
<td>21.7</td>
<td>17.4</td>
<td>52.2</td>
<td>8.7</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>23</td>
</tr>
<tr>
<td>6. University / doctorate</td>
<td>16.2</td>
<td>4.7</td>
<td>9.3</td>
<td>27.9</td>
<td>4.7</td>
<td>9.3</td>
<td>44.2</td>
<td>100</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>18.7</td>
<td>22.0</td>
<td>34.1</td>
<td>5.7</td>
<td>3.3</td>
<td>16.3</td>
<td>100</td>
<td>123</td>
<td></td>
</tr>
</tbody>
</table>

The numbered headings correspond to the groupings listed in the column on the extreme left

Source: Authors

Table 32. First job after leaving education in Serbia: field of study required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Own educ. field</th>
<th>Own or related educ. field</th>
<th>Different educ. field</th>
<th>No specific educ. field</th>
<th>Refusal to respond</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post secondary / college</td>
<td>36.2</td>
<td>28.6</td>
<td>12.4</td>
<td>22.9</td>
<td>0.0</td>
<td>105</td>
<td>100</td>
</tr>
<tr>
<td>University / doctorate</td>
<td>63.2</td>
<td>22.2</td>
<td>5.2</td>
<td>8.5</td>
<td>0.9</td>
<td>212</td>
<td>100</td>
</tr>
<tr>
<td>Total, n</td>
<td>326</td>
<td>205</td>
<td>120</td>
<td>426</td>
<td>9</td>
<td>1086</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors

Table 33 (and similarly presented tables) should be read diagonally (see explanation for Table 29). In Ukraine compared to
Serbia, college graduates had a better fit with their jobs, whereas university graduates were more likely to be overqualified (41% compared to 49%). General secondary education graduates also had a better fit than anticipated. Overall, however, the impression is that of a society where around half the employees holding significant jobs were overqualified for their jobs.

There were relatively few poorly educated respondents so we cannot with certainty conclude anything with regard to lesser educated people being less likely to have a significant job. The shares of school leavers holding a significant job were higher than those for Serbia; thus, it was easier to get a significant job in Ukraine, although at the price of being overqualified. The better educated appeared to push the less educated into more precarious jobs by being willing themselves to accept jobs for which they were theoretically overqualified. The high percentage of mismatches for significant jobs would imply that employers were keen to exploit the possibility of getting better qualified staff for less demanding positions (Tables 33 and 34).

The vast majority of people in Ukraine who obtained a significant job before leaving education continued their education and ended up having a university degree. This is markedly different from what was observed in Serbia. In fact, there were so few representatives in any other category that it was only possible to draw conclusions about university graduates. Just a third of these graduates were in positions commensurate with their final educational level, which would imply that they were hired on the basis of their existing qualifications; for many individuals the post did not change once they had finished university education. This could imply that the labour market in Ukraine is more static than the labour market in Serbia (Table 35).

Gender did not appear to have much effect on the relevance of the field of study, although some effect was noted in Serbia, where women more often held educational levels relevant to their jobs. In both countries, however, rural/urban status and registered/unregistered status had a

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Table 33. First significant job after leaving education in Ukraine: minimum level of education required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Share with job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary or less</td>
<td>43.9</td>
<td>97.8</td>
<td>0.0</td>
<td>0.0</td>
<td>2.2</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>45</td>
</tr>
<tr>
<td>2. Elementary vocational</td>
<td>60.0</td>
<td>52.9</td>
<td>29.4</td>
<td>11.8</td>
<td>5.9</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>17</td>
</tr>
<tr>
<td>3. Secondary vocational</td>
<td>74.0</td>
<td>35.9</td>
<td>3.7</td>
<td>51.9</td>
<td>7.8</td>
<td>0.4</td>
<td>0.4</td>
<td>100</td>
<td>270</td>
</tr>
<tr>
<td>4. General secondary</td>
<td>59.7</td>
<td>55.2</td>
<td>1.0</td>
<td>1.0</td>
<td>41.2</td>
<td>1.0</td>
<td>0.5</td>
<td>100</td>
<td>194</td>
</tr>
<tr>
<td>5. Technical college</td>
<td>84.3</td>
<td>22.5</td>
<td>0.8</td>
<td>8.1</td>
<td>8.9</td>
<td>58.9</td>
<td>0.8</td>
<td>100</td>
<td>236</td>
</tr>
<tr>
<td>6. University</td>
<td>86.2</td>
<td>18.1</td>
<td>1.9</td>
<td>5.9</td>
<td>7.8</td>
<td>15.4</td>
<td>51.0</td>
<td>100</td>
<td>592</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30.8</strong></td>
<td><strong>2.2</strong></td>
<td><strong>14.6</strong></td>
<td><strong>12.6</strong></td>
<td><strong>17.2</strong></td>
<td><strong>22.6</strong></td>
<td><strong>100</strong></td>
<td><strong>1354</strong></td>
<td></td>
</tr>
</tbody>
</table>

The numbered headings correspond to the groupings listed in the column on the extreme left

*Source: Authors*
significant impact on the relevance of a field of study. Or rather, rural/urban status had an impact on how possible it was to match field of study and a job, given that there was a smaller choice of jobs in rural areas. The apparent link between registered/unregistered status and the relevance of the field of study was most likely a product of employers being more willing to overlook field of study if an employee was not registered (unregistered workers were more likely to have studied a field of education deemed irrelevant by their employer). If an employee fails to deliver it is relatively easy to replace the person with someone else. Employers have greater difficulties firing registered employees, however, which is probably why they make a greater effort to ensure compatibility before taking on a new employee. One aspect of compatibility is the field of study, and, all other things being equal, having studied the required field of study should be a greater guarantee of compatibility with a job’s requirements.

Table 34. First job after leaving education in Ukraine: minimum level of education required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Share with job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary or less</td>
<td>57.0</td>
<td>96.7</td>
<td>1.7</td>
<td>0.0</td>
<td>1.7</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>2. Elementary vocational</td>
<td>76.7</td>
<td>54.5</td>
<td>36.4</td>
<td>4.5</td>
<td>4.5</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>22</td>
</tr>
<tr>
<td>3. Secondary vocational</td>
<td>85.8</td>
<td>39.6</td>
<td>3.8</td>
<td>49.1</td>
<td>7.3</td>
<td>0.0</td>
<td>0.3</td>
<td>100</td>
<td>316</td>
</tr>
<tr>
<td>4. General secondary</td>
<td>71.8</td>
<td>58.6</td>
<td>0.8</td>
<td>0.8</td>
<td>38.4</td>
<td>0.8</td>
<td>0.4</td>
<td>100</td>
<td>237</td>
</tr>
<tr>
<td>5. Technical college</td>
<td>89.9</td>
<td>23.7</td>
<td>0.8</td>
<td>8.3</td>
<td>9.5</td>
<td>56.9</td>
<td>0.8</td>
<td>100</td>
<td>253</td>
</tr>
<tr>
<td>6. University</td>
<td>90.9</td>
<td>20.6</td>
<td>1.6</td>
<td>5.9</td>
<td>8.1</td>
<td>15.3</td>
<td>48.6</td>
<td>100</td>
<td>632</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34.5</strong></td>
<td><strong>2.3</strong></td>
<td><strong>14.2</strong></td>
<td><strong>12.6</strong></td>
<td><strong>16.0</strong></td>
<td><strong>20.5</strong></td>
<td><strong>100</strong></td>
<td><strong>1520</strong></td>
<td></td>
</tr>
</tbody>
</table>

The numbered headings correspond to the groupings listed in the column on the extreme left

Source: Authors

Table 35. Significant job before leaving education in Ukraine: minimum level of education required by employer (%)

<table>
<thead>
<tr>
<th>Highest diploma obtained</th>
<th>Share with job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary or less</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>2. Elementary vocational</td>
<td>3.3</td>
<td>0.0</td>
<td>100</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>3. Secondary vocational</td>
<td>6.3</td>
<td>58.3</td>
<td>8.3</td>
<td>16.7</td>
<td>16.7</td>
<td>0.0</td>
<td>0.0</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>4. General secondary</td>
<td>4.2</td>
<td>55.6</td>
<td>0.0</td>
<td>0.0</td>
<td>22.2</td>
<td>0.0</td>
<td>22.2</td>
<td>100</td>
<td>9</td>
</tr>
<tr>
<td>5. Technical college</td>
<td>10.4</td>
<td>20.0</td>
<td>0.0</td>
<td>10.0</td>
<td>35.0</td>
<td>30.0</td>
<td>5.0</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>6. University</td>
<td>30.6</td>
<td>10.8</td>
<td>2.3</td>
<td>8.9</td>
<td>16.4</td>
<td>27.7</td>
<td>33.8</td>
<td>100</td>
<td>213</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15.3</strong></td>
<td><strong>2.7</strong></td>
<td><strong>9.0</strong></td>
<td><strong>18.0</strong></td>
<td><strong>25.5</strong></td>
<td><strong>29.4</strong></td>
<td><strong>100</strong></td>
<td><strong>255</strong></td>
<td></td>
</tr>
</tbody>
</table>

The numbered headings correspond to the groupings listed in the column on the extreme left

Source: Authors
4.6 ANALYSIS OF CURRENT LABOUR MARKETS

Comparison of career patterns was not an easy task due to the various periods of time elapsed since individuals left education. A clearer pattern emerges if the studied group included only those school leavers who were longer out of education. We decided to focus, therefore, on school leavers who had left education at least 51 months before the survey. Given the different survey dates in Ukraine, a more meaningful cut-off point appeared to be 58 months. Although we were left with a smaller sample of school leavers, a comparison of people with longer experience in the labour market was certainly more meaningful.

The sequence analyses were conducted separately for both countries, but due to similarities in the cluster solutions it was possible to compare some statuses across countries (Tables 36 to 38).

Figures 6 and 7 plot labour market career sequences according to cluster membership for young school leavers in Serbia and Ukraine, respectively. The employment careers for different individuals in the sample are plotted as lines and the different colours refer to different statuses. The career since leaving school is measured in months along the X-axis (minimum 51 months) and the Y-axis depict the number of relevant respondents in both cases.

Looking at the overall career entry patterns in the two countries, the predominance of unemployment was evident in Serbia, whose graph was dominated by orange (unemployment), although blue (registered employment) also featured prominently. About 29% of school leavers in Serbia were unemployed, compared to only 4.69% in Ukraine. The Serbian labour market was also characterised by a cluster of unemployment and transition to unregistered employment (5.45%), which was not the case for Ukraine.

In Ukraine, meanwhile, the cluster of youth out of the labour markets (home workers, individuals on maternity/paternity leave, and those doing military or national service or unable to work due to disability) was quite pronounced (14.24%); the

<table>
<thead>
<tr>
<th>Table 36. Summarised cluster solutions for career sequences (minimum 51 months duration) in Serbia and Ukraine (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ukraine</strong></td>
</tr>
<tr>
<td>Registered employment predominantly</td>
</tr>
<tr>
<td>Unemployment, unregistered employment, other statuses ➔ registered employment</td>
</tr>
<tr>
<td>Registered employment ➔ other statuses (mostly employment exit)</td>
</tr>
<tr>
<td>Registered employment ➔ other statuses (mostly unemployment)</td>
</tr>
<tr>
<td>Self-employment</td>
</tr>
<tr>
<td>Unemployment</td>
</tr>
<tr>
<td>Unemployment ➔ unregistered employment</td>
</tr>
<tr>
<td>Unregistered employment</td>
</tr>
<tr>
<td>Return to education</td>
</tr>
<tr>
<td>Out of labour market</td>
</tr>
<tr>
<td>Out of labour market ➔ registered employment</td>
</tr>
</tbody>
</table>

A nine-cluster solution has been selected for both Serbia and Ukraine

*Source: Authors*

27 Sequence analyses were conducted using Stata Version 9.2. The matrix resulting from a pairwise comparison of all sequences was subjected to a cluster analysis and then plotted in the index plots presented here.
In Ukraine, furthermore, young people tended to exit the labour market from other statuses more often than in Serbia. Indeed, in Serbia there was no cluster for people exiting the labour market after some employment experience, unlike in Ukraine (9.05%).

Furthermore, it seems that self-employment and working in the family business were more pronounced in Serbia than Ukraine (5.45% compared to 3.02%, respectively). Periods of unemployment before entry to regular employment seemed to be shorter in Ukraine, where more people overall found themselves in regular employment than was the case in Serbia. More people in Serbia experienced job instability (whether unemployment or unregistered employment) before taking up registered

### Table 37. Cluster membership by basic socio-demographic characteristics in Serbia (%)

<table>
<thead>
<tr>
<th>N</th>
<th>Cluster Description</th>
<th>Gender</th>
<th>Locality</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Urban</td>
</tr>
<tr>
<td>1</td>
<td>Registered employment predominantly</td>
<td>28.3</td>
<td>22.4</td>
<td>29.6</td>
</tr>
<tr>
<td>2</td>
<td>Registered employment/other statuses (mostly unemployment)</td>
<td>4.4</td>
<td>7.5</td>
<td>8.1</td>
</tr>
<tr>
<td>3</td>
<td>Return to education</td>
<td>3.1</td>
<td>3.7</td>
<td>3.2</td>
</tr>
<tr>
<td>4</td>
<td>Various statuses/registered employment</td>
<td>9.3</td>
<td>8.4</td>
<td>9.3</td>
</tr>
<tr>
<td>5</td>
<td>Out of labour market</td>
<td>0.9</td>
<td>4.7</td>
<td>1.2</td>
</tr>
<tr>
<td>6</td>
<td>Self-employment</td>
<td>7.5</td>
<td>3.3</td>
<td>4.9</td>
</tr>
<tr>
<td>7</td>
<td>Unemployment</td>
<td>28.8</td>
<td>29.0</td>
<td>25.1</td>
</tr>
<tr>
<td>8</td>
<td>Unemployment/registered employment</td>
<td>6.6</td>
<td>4.2</td>
<td>4.5</td>
</tr>
<tr>
<td>9</td>
<td>Unregistered employment</td>
<td>11.1</td>
<td>16.8</td>
<td>14.2</td>
</tr>
</tbody>
</table>

Source: Authors

### Table 38. Cluster membership by basic socio-demographic characteristics in Ukraine (%)

<table>
<thead>
<tr>
<th>N</th>
<th>Cluster Description</th>
<th>Gender</th>
<th>Locality</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Urban</td>
</tr>
<tr>
<td>1</td>
<td>Registered employment predominantly</td>
<td>40.78</td>
<td>25.73</td>
<td>36.63</td>
</tr>
<tr>
<td>2</td>
<td>Various statuses/registered employment</td>
<td>16.08</td>
<td>9.06</td>
<td>11.69</td>
</tr>
<tr>
<td>3</td>
<td>Registered employment/other statuses (mostly employment exit)</td>
<td>3.92</td>
<td>12.87</td>
<td>8.54</td>
</tr>
<tr>
<td>4</td>
<td>Self-employment</td>
<td>5.88</td>
<td>0.88</td>
<td>3.82</td>
</tr>
<tr>
<td>5</td>
<td>Unemployment</td>
<td>5.49</td>
<td>4.09</td>
<td>2.47</td>
</tr>
<tr>
<td>6</td>
<td>Unregistered employment</td>
<td>9.80</td>
<td>7.02</td>
<td>7.19</td>
</tr>
<tr>
<td>7</td>
<td>Return to education</td>
<td>10.59</td>
<td>6.14</td>
<td>9.44</td>
</tr>
<tr>
<td>8</td>
<td>Out of labour market</td>
<td>1.96</td>
<td>23.39</td>
<td>12.58</td>
</tr>
<tr>
<td>9</td>
<td>Out of labour market/registered employment</td>
<td>5.49</td>
<td>10.82</td>
<td>7.64</td>
</tr>
</tbody>
</table>

Source: Authors

comparable cluster in Serbia was much smaller (2.73%). In Ukraine, furthermore, young people tended to exit the labour market from other statuses more often than in Serbia. Indeed, in Serbia there was no cluster for people exiting the labour market after some employment experience, unlike in Ukraine (9.05%).

Furthermore, it seems that self-employment and working in the family business were more pronounced in Serbia than Ukraine (5.45% compared to 3.02%, respectively). Periods of unemployment before entry to regular employment seemed to be shorter in Ukraine, where more people overall found themselves in regular employment than was the case in Serbia. More people in Serbia experienced job instability (whether unemployment or unregistered employment) before taking up registered
Furthermore, the proportion of Serbs who were predominantly employed in unregistered jobs was much higher than for Ukrainians (13.86% compared to 8.04%, respectively).

There was a pronounced difference in the proportion of young people returning to education or training in the two countries, with more people in Ukraine (8.04%) tending to continue education after a short period in the labour market, compared to 3.41% doing so in Serbia.

4.7 CONCLUSIONS

Using unique datasets for school leavers in Serbia and Ukraine, we discussed the main features of school-to-work transition in a dynamic way. The survey data provided us with detailed information on the first five years of school-to-work transition for two large sets of school leavers. Information was available for first ever jobs after leaving education, for first significant jobs (lasting at least six months and for a
minimum of 20 hours a week), and for current employment at the time of the survey (up to five years after leaving education).

The transition process occurred relatively quickly in Ukraine and was much more gradual in Serbia. Three fifths of Ukrainian school leavers had a significant job six months after leaving education, compared to only one third of Serbian school leavers. However, significant differences were also observed between the two countries in terms of the quality of jobs and the use of skills acquired at school. In Serbia, young people remained unemployed longer or took up different kinds of informal jobs. In Ukraine, on the other hand, many young people were employed in the formal sector, but often in jobs with low wages and a low qualification level (regardless of the educational attainment of the individual).

In Ukraine, many women left the labour market soon after graduation. Other differences between women and men were observed in both countries. Men found any kind of job more quickly than women in both Serbia and Ukraine, although this difference was smaller for first significant jobs. Men were also more likely to be informally employed or self-employed and worked more often in the private sector.

Education played a major role in obtaining a job sooner after leaving education. The major findings were strikingly similar in the two countries. Post-secondary education graduates (including university graduates) did fairly well in both countries, followed by graduates from secondary vocational schools. Particularly noteworthy was the fact that graduates from secondary general education performed very poorly in comparison with other educational categories in both countries. These differences also related to the quality of the job, with less graduates from post-secondary education working informally and in jobs where they were not using their qualifications.


Bradley, H. and van Hoof, J. (eds), *Young People in Europe. Labour markets and citizenship*, Policy Press, Bristol, 2005


TRANSITION FROM EDUCATION TO WORK IN EU NEIGHBOURING COUNTRIES


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