



POLICY NOTE FOR WORKING PAPER 5.20

Skill Mismatch, Education Systems, and Labour Markets in EU Neighbourhood Policy Countries

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OBJECTIVE

Skill mismatches and skill shortages have become a priority concern for policy makers in many countries, especially since the onset of the global economic crisis and its intensification through the crisis in the eurozone. Endogenous growth models emphasise that human capital is a key resources for growth (Romer, 1994). The efficiency with which human resources are developed in the education system and used on the labour market must therefore be a priority for policy makers. The process of matching skilled workers to the demands of employers is central to this concern. Yet, currently there is much evidence to suggest that mismatch in the European Neighbourhood Policy (ENP) countries is too high. This issue has two dimensions: the education and training system and the institutions of the labour market. Skill mismatch has an adverse effect on the efficiency of labour markets raising unemployment above the levels that could potentially be achieved given the level of aggregate demand. Efficient matching would reduce frictional and structural unemployment and ensure that vacancies are matched to workers with appropriate qualifications and skills (Petrolongo and Pissarides, 2001).

Most transition countries experienced volatile labour markets for many years. Although unemployment rates were on a falling trend up to 2008, long-term unemployment was persistently high in many countries leading to a corresponding obsolescence of skills among a large section of the workforce. After almost a decade of sustained economic growth, the global economic crisis brought about an abrupt reversal of fortunes and unemployment began to increase in most countries of the region (ETF, 2011). Long-term unemployment is a serious problem in transition economies, especially affecting older workers with obsolete skills. Youth unemployment is generally high (Kolev & Saget, 2005) especially in countries with a rapidly growing population. On the demand side of the labour market, many old large scale industries declined or closed down, while most new jobs emerged in the service industries among which a range of new skills are needed (Bartlett, 2007). Regional mismatch also emerged as a specific problem due to the collapse of industries in

peripheral areas and mono-industrial towns (Bornhorst & Commander, 2006; Newell & Pastore, 2006).

The paper explores the nature of skills mismatch in transition and developing countries of the ENP region. It identifies some of the features of transition and development that might lead to differences in the nature of skills mismatches compared to the developed economies. It argues that policy reforms are needed in the education systems and the labour market in ENP countries in order to improve matching effectiveness by making better use of the skills that are available. It also argues for the provision of improved information about the direction of skills needs in the future for individual job seekers, employees, employers, careers guidance professionals and public and private employment agencies.

SCIENTIFIC/ RESEARCH METHODS

Previous studies that have estimated the extent of labour market mismatch in developed countries have focused on the labour market flows and the relationship between vacancies and job offers (the so-called “Beveridge curve”) (Blanchard and Diamond, 1989; Rogerson et al., 2005). However, in the ENP countries and Turkey there is far less information available on labour market flows. This paper therefore focuses on the relationship between labour market stocks of unemployed and employed workers to investigate the matching process. In this section, mismatch is measured by comparing the share of unemployed people with a given education level to the share of employed people with the same level of education. If, for a given education level, the share of the unemployed with that level of education is higher than the share of the employed with that level of education, then the mismatch ratio will be greater than 1. This indicates a ‘positive’ mismatch, in the sense that there is an excess supply of labour with that education level. In other words, the education system is supplying ‘too many’ workers at that qualification level to the economy relative to demand. Conversely, if the share of unemployed people with a given education level is less than the share in employment the mismatch ratio will be less than 1 and we can say that there is a ‘negative’ mismatch (in a sense, too few graduates with the given education have been ‘produced’ by the education system). Only when the shares of an education group in both unemployment and employment are identical will there be a situation of perfect matching for that group. For example, an interpretation of a negative mismatch for the university educated is that there is an excess demand for university graduates. In this example we could infer that there is a ‘skill gap’ for university graduates.

The measure assumes that there is no substitutability between workers with different education levels. This is a strong assumption. In practice, employers are likely to choose workers with higher education levels to those with lower levels of education, even for jobs that do not require the higher level of education. This is the phenomenon of ‘bumping down’ (McGuinness, 2006). Given rational profit-maximising behaviour by employers, we would therefore not expect to see perfect matching. Nevertheless, private rationality is not the same as social efficiency. The phenomenon has a social cost in that it implies that too much investment is being allocated to producing an excess of highly educated people for which appropriate jobs are not available. It also implies that people with lower education levels are suffering disproportionately from unemployment, and that the investment in their human capital is also going to waste.

Overall, there are significant social costs involved where there is a high degree of mismatch. A negative mismatch for the university educated implies the phenomenon of overeducation.

POLICY VALUE - ADDED

The major finding of the study is that there is a different pattern of skill matching across education qualifications between transition economies and emerging economies in the ENP region. In most countries there is a clear divide between mid-level educated workers with secondary education, who suffer high levels of positive mismatch, and more highly educated workers with university education who have a better experience in the labour market (as do workers with a very low level of education). This pattern is found in the transition economies such as Croatia and Moldova. It is similar in Ukraine although tertiary educated workers also suffer high levels of positive mismatch and only the post-graduate qualification ensures easy access to a job. The picture is rather similar in Turkey, with the exception that there is a huge gender bias with women facing far greater degree of mismatch than men at almost all levels of education qualifications. However, Egypt shows a completely different pattern, with high levels of mismatch among all education groups. Among workers with primary education or less, the level of negative mismatch is high, while among the more educated with secondary and tertiary levels of education the level of positive mismatch is high.

Policies are needed that address the high level of mismatch in the middle level of education achievement. This means reforming secondary vocational schools to replace out-dated curricula and improve the efficiency of school systems. Policy makers need to make the necessary adjustments to education and training systems. To this end, vocational education systems need to adapt or be reformed. Appropriate changes need to be made in the curricula, in the reallocation of teachers between subjects, in teacher retraining and in school restructuring.

Higher education systems also need attention since there is a growing demand for highly skilled workers, evidenced by the high level of mismatch of university graduates. Even though enrolment in universities has increased, there appears to be much scope for further growth at the tertiary level. However, any further expansion of tertiary education also needs to be well regulated to ensure that the quality of the education experience does not decline.

At the same time, the capacity of the public administration to carry out labour market forecasts or skills forecasts is limited by budget cuts, caps on further public sector employment, and a lack of statisticians and labour market experts to carry out the analyses. Contracting out of services may to some extent overcome such limitations, but will not completely solve it. The first priority therefore is to carry out capacity building within the public administration to enable the appropriate staff carry out and use skill mismatch analyses and macroeconomic and sectoral skill forecasts.

Yet, even if the macro- or sector-level skill forecasts are carried out, and the education and training systems are adapted, reformed and restructured, such a top-down approach may still fail to address skill mismatches if the future demand for skills does

not match the projections due to unexpected technological and structural change. For this reason, ENP countries should also consider using subsidies to ensure a greater degree of skill matching especially for adult training and retraining purposes, and to supplement skills forecasts and skills anticipation activities which are likely to remain especially useful for guiding long-term investments in the provision of initial education.

Finally, the research has shown the substantial and significant common problems of mismatch in the labour markets of both the EU Enlargement and EU Neighbourhood countries. Some specific policy measures could help to lessen mismatch including (i) incentives to older less skilled workers to retrain and to firms to carry out more and better in-house training for workers of all skill levels; (ii) reform of the secondary and vocational education systems especially in transition countries; (iii) measures to improve the labour market matching for women workers such as provision of publicly provided nursery and kindergarten education for young children especially in the emerging market countries; (iv) encouragement to employers to take on younger skilled workers through job subsidies and internships; and (v) provision of improved skill forecasts to professionals in career and education guidance for adults as well as school leavers.

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