Mastering the Supply and Demand of Tomorrow’s Labour Market:  
A case study from Denmark  

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The recent wave of Euroscepticism that has been spreading across the European continent is influencing national legislation in many policy areas. Protectionist migration and employment policies are reactions to uncertain outlooks for European national economies. Disconcertingly, policies that incorporate Euroscepticism and limit European cooperation – not to mention the UK’s decision to reject the latter altogether – run counter to the collective action necessary to tackle the shared structural challenges of sluggish productivity increases and economic growth that gave rise to Euroscepticism in the first place.

This Commentary examines challenges arising in the Danish labour market with a view to raising three key labour market questions that arguably should be at the top of national as well as European policy agendas. Firstly, it addresses the change in the skills set required by European labour markets. Secondly, it asks whether we are educating students in a way that will allow them to accommodate these changes in the long term. Finally, it considers the potential of recruiting from abroad to supplement the current and projected low domestic supply of highly skilled workers.

Closing the Knowledge and Skills Gap

Production jobs are shifting away from Western European countries, thus reducing their demand for unskilled labour. At the same time, analyses show an influx to Western European countries of Eastern European unskilled workers that began following the 2004 enlargement of the European Union. Last year, The Think Tank

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1 It should be noted that there are outliers from the EU28 averages. Per OECD data, the 2014 EU28 GDP growth rate was 1.6% (OECD, 2017, GDP annual growth rates in percent) while the productivity increase was 0.6% (OECD, 2017, GDP per hours worked).

DEA found\(^3\) that Denmark received a net 42,000 foreign workers between 2001 and 2011. One in three emigrated from Eastern Europe and seven of ten were unskilled. A recent projection\(^4\) suggests that by 2020 the Danish economy will have a surplus of approximately 100,000 unskilled workers and a significant undersupply of skilled workers. In many European countries, projections of job opportunities\(^5\) by 2025 forecast that at least half of all jobs will require high-skill qualifications. By the same projections, qualifications at every educational level will need to be upgraded. The changing demand will in part be solved by the retirement of unskilled workers and entrance into the workforce of a more highly skilled younger generation. Nonetheless, for the foreseeable future, unskilled workers will continue to make up a significant part of our future labour force, which makes it important to continuously upgrade their qualifications.

In a recent analysis,\(^6\) The Think Tank DEA investigates the potential of vocational education and training programmes (VET) and adult education and continuing training (CVT) in upgrading workforce qualifications. The analysis highlights the beneficial effects of Danish vocational and adult educational programmes and concludes that six out of ten unskilled workers in Denmark carry out work that normally requires skilled labour qualifications. The analysis also concludes that one in ten skilled workers perform jobs that normally require higher education qualifications.

The results are positive insofar as they put a damper on the current national political debate over the harmful employment effects of immigration. Because many unskilled workers perform jobs that normally require higher skills, the results reveal a reduced risk of Danish unskilled jobs being outsourced to low-wage economies. However, the results also disclose labour market rigidities, as too few of the individuals who upgrade their skillset through workplace experience, VET and CVT have their improved qualifications evaluated and certified. Without certification, opportunities for job mobility are limited and, as a result, individual job insecurity increases, if, as predicted, the demand for unskilled labour decreases further.

**From Blind to Bold Education**

The surging demand for higher-skilled labour has already penetrated several European economies and governments have expanded their higher education systems to meet this demand. Three of four European university graduates find employment within three years\(^7\) of graduation. In a recent data analysis,\(^8\) The Think Tank DEA goes one step further to survey whether Danish university graduates end up in jobs that match their qualifications. While most university graduates do find employment that matches their qualifications, the analysis finds significant differences between subject areas. Within one year of graduation, nine out of ten health science and social science graduates are employed in jobs that match their qualifications. Only seven out of ten arts and humanities graduates are employed in jobs that match their qualifications. In 2015, almost one in four Danish university graduates were educated in the arts and humanities,\(^9\) which demonstrates just how many individuals are overqualified for their positions. The same study shows that over time many arts and humanities graduates find jobs that match their qualifications: eight in ten are thus employed five years after graduation.

Mastering the balance between the demand and supply of highly skilled workers is at the intersection of labour market and education policy and has implications for both individuals and society. In Denmark, we find our-

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\(^3\) Brain Drain eller Brain Gain? Arbejdskraftvandringer til og fra Danmark (DEA, 2016).

\(^4\) Uddannelse kan redde fremtidens arbejdsstyrke (Economic Council of the Labour Movement, 2011).

\(^5\) Europe’s uneven return to job growth (CEDEFOP, 2015).

\(^6\) Super uafgældte og super faglærte - Kompetenceløft gennem efteruddannelse (DEA, 2015).

\(^7\) Employment rates of recent graduates (European Commission, 2016).

\(^8\) Universitetsuddannedes vej ud på arbejdsmarkedet.(DEA, 2017).

\(^9\) Tal om de danske universiteter 2016 (Universities Denmark, 2016).
selves at a crossroads of boosting educational attainment in general and promoting select subject areas specifically. Arts and humanities graduates have experienced unemployment disproportionately in recent years while demand for graduates holding degrees in other fields, such as STEM,\(^\text{10}\) has risen.

Over-education and misguided education choices are detrimental and unfulfilling to the working lives of individuals, just as oversupply of highly skilled workers is a waste of public resources and ultimately results in lower productivity and slow growth. Mastering the balance between supply and demand of different kinds of highly skilled workers should be the focal point of both national and European policy agendas. It is paramount to raise the question of whether we educate correctly and whether we educate too little or too much. Without a more targeted approach to education, long-term discrepancies between the supply and demand of not just high-skill labour but labour of all skill levels are likely to expand.

**Patching the Holes with International Talent**

In the future, owing to ageing European populations, people who leave the European labour markets will outnumber those who enter them.\(^\text{11}\) It is already more difficult for both public and private employers to recruit the workers they need to continuously generate growth and new jobs. As pointed out earlier, a growing proportion of the European workforce is completing university-level education, a development that will, it is hoped, meet the increasing long-term demand for high-skill labour. However, the short-term demand for high-skill labour in several fields is surging at a faster rate than the increasing domestic supply. In Denmark, a frequently discussed potential solution is to expand the recruitment of highly educated workers from abroad. Arguments for recruiting abroad include increased tax revenue from such high-wage employees, while arguments against include the increased public expense of covering the healthcare and education of their spouses and children.

In a recent series of four analyses, The Think Tank DEA sheds light on the muddled political debate by providing economic insight on actual costs and benefits of highly skilled international workers in the Danish labour force. From a strictly economic perspective, highly skilled immigrants and their families – whether from Western or non-Western countries – contribute significantly to Danish public finances. This is the result of high tax payments and the limited need for public transfers and services. Both tax and public service levels are relatively high in Denmark, as the former is crucial to financing the latter. Outside Scandinavia, tax levels are lower, thus so too are public service levels. Hence, the analyses support the idea that international recruitment could help solve the unsatisfied demand for highly skilled workers in Western European countries. The analyses also justify the urgency of redirecting Western European education systems to address the expanding discrepancies between the supply and demand of labour at all skill levels on the European labour market.

**The Way Forward**

The Danish national debate on European collaboration is influenced by Euroscepticism, as is the case regarding similar debates in several European economies, where scepticism also has resulted in protectionist migration and employment policies. Unfortunately, national legislation fails to address the shared structural challenges of slow productivity increases and sluggish economic growth that face the European continent as a whole.

The extent to which current employment challenges are caused by the immigration of unskilled workers is certainly inflated in several European economies, but the changing skills needs in European labour markets is not. The steady influx of Eastern European workers to Western European countries after the eastern enlargement of the European Union is merely a consequence of increasing competition for low-skill jobs in the West. The resulting twofold challenge is to address the incompatibility of an increasing oversupply of unskilled

\(^{10}\) STEM: Science, Technology, Engineering and Mathematics.

workers in a European labour market where medium and high-skilled workers are needed to do the jobs of tomorrow. Hence, the focus of all European policy-makers should be on increasing labour market flexibility and redirecting national education systems to address future needs, as this twofold challenge is both short- and long-term.

The twofold challenge calls for bold action that continuously strengthens and coordinates national vocational education and training programmes and adult education and continuing training. While the current workforce should generally upgrade their qualifications, it is increasingly important to educate new generations in a more targeted way in order to avoid excess unemployment and overeducation. However, redirecting national education systems to address changing skill needs is a long-term solution. This underscores the importance of recruiting highly skilled international candidates to satisfy surging short-term demand for high-skill labour.

From our national perspective, an obvious first step is to exchange views on how to address national challenges that result from the intracontinental structural challenges of slow productivity increases and stagnating economic growth. Rather than isolating and wrapping ourselves in parallel protectionist policy measures, we welcome international collaboration to strengthen the European knowledge base and develop a framework in which to address these structural challenges collectively.