



ANALYTICAL HIGHLIGHT

PROSPECTS FOR
Denmark

- Denmark's employment rate was 75.6% in 2013 – lower than the national 2020 target of 80% but in line with the EU-28 2020 target of 75%.
- A shortage of higher and vocationally educated persons is expected for 2020.
- 20% of employed persons think that they need more education and training to perform better in their current job.

The employment rate in Denmark is decreasing

According to Eurostat, Denmark's employment rate for the labour force was 75.6% in 2013, below the national target of 80% but high compared to the EU28 average of 68.4%. An important reason for the high employment rate in Denmark is that women are more frequently taking part in the labour force than in many other European countries. In 2012, the activity rate was 76.7% for men and 72.7% for women.

The employment rate has decreased significantly over the last decade (from 78.3% in 2001) as a result of the global financial crisis and a loss of jobs particularly in the manufacturing sector. However, the ageing workforce has also been a factor. In 2013, about 25% of working age persons (16-64 years) were outside the labour force. A great number of these were persons receiving early retirement pensions or other pensions (24%) and early retirement pay (12%).¹ A third explanation for the decreasing employment rate relates to the underemployment of non-western immigrants since the financial crisis. National statistics have reported differences in employment between non-western immigrant men and Danish men and Danish women and non-western immigrant women of as much as 23 percentage points and 29 percentage points respectively.²

Unemployment has decreased during the last decades

Historically, the unemployment rate has decreased in Denmark during the last few decades from an all-time high of 12.9% in March 1994. In 1994-1995, the Danish government introduced labour market reforms via active labour market policies that reduced the benefit period for the unemployed from seven years to four years. These reforms boosted the supply of labour. Since then unemployment has steadily decreased, reaching the lowest level in 2008 (1.7%) before the financial crisis. Following the financial crisis, unemployment rose again significantly, but in the last year has begun to decrease – as of August 2014 the unemployment rate was 3.9%.

Denmark has one of the lowest levels of youth unemployment in Europe, yet, more than 50,000 persons (aged below 30) received cash benefits (*køntanthjælp*) in 2013. Approximately 90% of this group did not have an education. With the Cash Benefit Reform from January 2014 young people (aged under 30) have been required to either find a job or start an education which can give them access to the labour market. An analysis of the Cash Benefit Reform in 2014 showed that the number of young cash beneficiaries has been reduced from 54,000 to 48,000; and the number of young people (aged 25-29) enrolled in education has increased from 8% to 15%. Over time the reform could hence contribute to raising education outcomes for youth at risk.³ Furthermore, according

¹ Denmark's Statistics (2013), Denmark in Figures
<http://www.dst.dk/pukora/epub/upload/1.7953/dkinfigures.pdf>

² Denmark's Statistics (2014), Immigrants in Denmark

³ Pre National Reform Programme assessment report Denmark, Hanne Shapiro 2014- for DG EAC

to the Youth Guarantee, the municipalities are obliged by law to offer additional preparatory education for those that are not ready.⁴

The Danish labour market is often described with the term “flexicurity” which is a compound of flexibility, security and active labour market policy.⁵ Overall, the flexicurity of the Danish labour market is regarded as an important driver of low unemployment levels because labour supply is flexibly adapted to demand. Consequently, Denmark has a high level of job mobility – around 20% of Danish employees have been in their present job less than a year; and in 2012, new job openings accounted for 27% of all employed.⁶

Employment has decreased in the private sector

Looking across all sectors, during 2009-2012 employment decreased, particularly in the private sector. In the private sector, Denmark experienced negative employment growth in the key sectors of: agriculture (-2.5%); industry (-8%); construction (-5.9%); and market services (-2.4%). Compared to the EU-27, Denmark’s industry has been hit harder by the crisis than many other countries. In general, this has been largely due to low productivity in Danish manufacturing. During 2009-2013 the number of those employed in the private sector has decreased significantly (-8%).

In the public sector, the number of those employed during the period 2009-2013 has also decreased, in particular in public companies and organisations (-14.6%) and to some extent in local government – the municipalities (-2.8%). There has been an increase in employment in central government (+5%).

The short-term employment outlook of key occupations varies considerably

Twice a year the four labour market regions of Denmark publish results of the Labour Market Balance, which is based on surveys of employer demand for various occupations. The Labour Market Balance only presents a short-term diagnosis of the employment situation of occupations. However, in Denmark there are no general forecasts available on occupations.

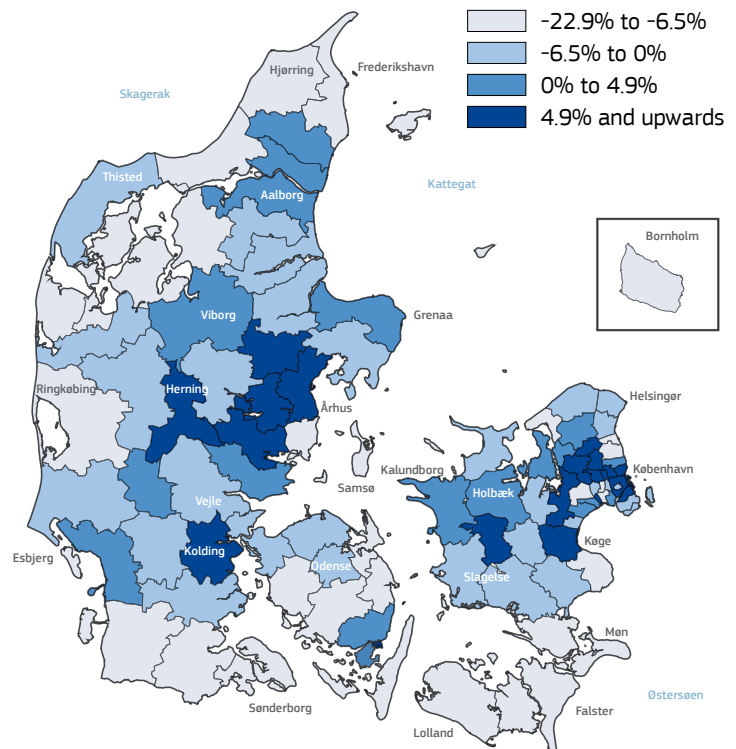
Looking across recent reports from 2014, the overall trend is that the Danish labour market has an increasing and unfulfilled demand for academics and vocationally educated in engineering and technical occupations in many industries. In manufacturing there is a growing concern particularly of lack of skilled labour set in a context of an aging skilled workforce and difficulties in attracting youth to choose

manufacturing VET programme. In contrast, there is excess supply in occupations related to administration, office work, financial service, healthcare, media and public administration.

Forecasts envisage that the Danish labour market until 2020 will have a significant unfilled demand for vocationally educated and higher educated. Nevertheless, the unemployment rate of tertiary graduates one year after graduation is at present at 30% and mainly in the field of humanities. The government has proposed a cut in the number of study places in programmes that have had a high unemployment over time with approximately 4,000 places. It will gradually be phased in from 2015-2016.⁷ Too few young people today choose vocational education as an increasing share of young people chooses general upper secondary education. The recent VET reform was also introduced with the aim of raising the attractiveness and quality of VET programmes.⁸ In 2014, about 70% of the youth cohort chose upper secondary, while only 20% chose vocational education. In 2007, about 30% chose vocational education, which indicates a significant decrease. However, one of the explanations is that, on average, people starting a vocational education are older (24 years) than young people starting general upper secondary education (90% under 20 years).

Geographically, employment growth remains uneven. The general trend is that the number of jobs is increasing in areas around the biggest cities,

▼ Figure 1 – Growth in jobs 2001-2011



Source: The Economic Council of the Labour Movement

4 Ministry of Employment (2014), Implementation of the Youth Guarantee in Denmark
 5 The component *flexibility* is the flexible rules for hiring and firing, which make it easy for the employers to dismiss employees during downturns and hire new staff when things improve. The second component *security* is unemployment security in the form of a guarantee for a legally specified unemployment benefit at a relatively high level – up to 90% for the lowest paid workers. The third component is *the active labour market policy*. An effective system is in place to offer guidance, a job or education to all unemployed. Denmark spends approx. 1.5% of its GDP on active labour market policy.
 6 Confederation of Danish Employers (2013), Labour Market Report 2013 http://www.da.dk/bilag/Arbejdsmarkedsrapport%202013_Kapitel_4.pdf

7 <http://nyheder.ku.dk/dimensionering/konsekvenser-paa-koebenhavns-universitet-af-ministerens-model/>
 8 Ministry of Education (2014), Two reforms two quick overviews refer to <http://eng.uvm.dk/~UVM-EN/Content/News/Eng/2014/140708-two-reforms-two-quick-overviews>

in particular Copenhagen and Aarhus, while the outer areas are losing jobs. Figure 1 shows this pattern. In 17 municipalities (kommuner) near the big cities, the number of jobs increased by more than 4.9%, while in 33 municipalities the number of jobs have decreased by over 22.9%.

The educational level of the Danish labour force is increasing. The general pattern is that most people in Denmark have completed their education by their mid-thirties. Since 2006, the share of people aged 35 years having a formal qualification from an education and training programme has increased from 74% to 81% in 2014. The increase is higher among women (76-84%) than among men (71-77%).

Table 1 shows the highest completed level of education among people aged 16-69 years. The share of people who have completed more than primary/lower secondary school has increased and educational attainment is increasing in Denmark. However, the yearly increase has levelled off during the last few decades.

▼ **Table 1 – Highest completed level of education among people aged 16-69**

Education level	2006	2014
Primary and lower secondary school	32.1%	27.9%
General upper secondary education	5.9%	6.6%
Vocational upper secondary education	2.3%	2.3%
Vocational education	33.5%	31.2%
Higher education – short cycle	4.1%	4.4%
Higher education – medium cycle	12.2%	13.0%
Higher education – bachelor	1.4%	2.0%
Higher education – long cycle	5.5%	7.3%
Research education/Ph.D	0.3%	0.5%

Source: Denmark Statistics (2014)

Compared to other countries, the Danish labour force has a high share of unskilled workers. In 2014, 27% of the Danish labour force has no formal qualification while the similar share in Germany is only 14%. Recently, the social partners have agreed with the government that one billion Danish Kroner (134 million EUR) have been set aside to ensure that more unskilled workers become skilled workers through an accelerated pathway to qualification, and to ensure more skilled workers are further educated to the level of technician. More modular-based vocationally oriented continuing education programmes will be implemented particularly in technical fields. The main explanation is that in Germany a higher share of young people does complete an upper secondary education than young people in Denmark. Despite the increasing importance of being educated, around 20% of each annual cohort of young people in Denmark had not completed upper secondary education 10 years after finishing lower secondary school. This state of affairs is far from the political objective that 95% of young people should have completed an upper secondary education.

The share of young people without upper secondary education has been relatively stable during the last 10 years.⁹ Generally, most young people (around 97%) begin an upper secondary (youth education) after compulsory education, but significantly high proportions drop out of vocational education and training programmes (VET).¹⁰ Geographically, the share of young people without upper secondary education is higher in eastern parts of Denmark than in Jutland.

A shortage of higher educated and vocationally educated persons expected for 2020

According to Cedefop forecasts for 2013-2025¹¹, employment in Denmark will increase by 8.6% – above the forecasted percentage change at EU-28 level (3.3%). Denmark's share of total EU-28 employment in 2025 will be 1.3%. Similarly, Denmark's share of total EU-28 job opportunities until 2025 will be 1.7%.

Forecasts indicate that the Danish labour market in 2020 will encounter a shortage of skilled workers at most educational levels. By contrast, according to the forecast by The Economic Council of the Labour Movement, there is a trend toward an over-supply of un-skilled people with no formal qualification and of people with general upper secondary education, which is not a qualifying education for occupations requiring specific skills.

Table 2 shows the supply and demand of labour by educational levels.

▼ **Table 2 – Denmark medium-term labour force supply forecast 2013 to 2020 by educational levels**

Educational level	Labour force 2020	Lack (-) Over-supply (+)
Un-skilled	605,000	80,000
General upper secondary education	340,000	62,000
Vocational education	996,000	-32,000
Higher education – short cycle	153,000	-50,000
Higher education – medium cycle	549,000	-36,000
Higher education – long cycle	335,000	-23,000

Source: The Economic Council of the Labour Movement (2013).¹²

The forecast of employment and skills demand at sector level, presented in Table 3, indicates that the demand for un-skilled labour will decrease in all sectors.

⁹ The Economic Council of the Labour Movement (2011), Economic Tendencies 2011 http://www.ae.dk/files/dokumenter/publikation/ae_ot-publikation.pdf

¹⁰ Ibid.

¹¹ Cedefop forecasts, 2014.

¹² The Economic Council of the Labour Movement (2013), Economic Tendencies 2013 http://www.ae.dk/sites/www.ae.dk/files/dokumenter/publikation/ae_ot13.pdf

▼ Table 3 – Change in employment demand in 2020 (1000s persons)

Educational level	Agriculture	Construction	Manufacturing	Private service	Public sector	Total
Un-skilled	-11	1	-50	-57	-54	-171
General upper secondary education	0	1	2	30	-4	28
Vocational education	1	11	-2	8	8	27
Higher education – short cycle	1	1	11	38	4	55
Higher education – medium cycle	1	1	10	57	40	110
Higher education – long cycle	0	0	12	58	25	95
Total	-8	17	-17	134	18	144

Source: The Economic Council of the Labour Movement 2013.

Until 2020 there will be a significant decrease in the demand for unskilled workers (-171,000). The demand for vocationally educated people will increase in construction (+11,000) and in the public sector (+8,000). In agriculture, the vocationally educated will represent an increasing share of the employed. However, as employment in agriculture is decreasing due to mechanisation and automation, the demand for agricultural workers will decrease (-8,000 persons).

The same patterns apply in manufacturing, where the share of vocationally educated is forecasted to be stable. However, due to automation and increased labour productivity, the demand for employees is forecasted to decrease (-2,000 persons). While overall employment will decrease in manufacturing, automation is expected to lead to an increasing demand of higher educated workers whose skills complement technology – in the short, medium and long term.

Significant employment growth will take place in the private services sector where employment is expected to increase by 134,000 persons, most of whom will be higher educated.

In total, there will be an increase in the demand for the vocationally educated (+27,000 persons). The future lack of vocationally educated is mainly caused by the insufficient supply, which is expected to decline by 22,000 persons. The demand for higher educated short-cycle, medium cycle and long-term cycle, will increase in most sectors.

Political responses to the future lack of vocationally educated

Politically, the future lack of vocationally educated is regarded a serious problem, which can impede Danish companies to outsource production to other countries. Therefore, several political initiatives are being launched by the Danish government:

- Improving the image, attractiveness and visibility of vocational education. Campaigns and guidance reforms are being launched to inform and motivate young people to choose vocational education.
- Reducing the number of young people dropping out of vocational education because they cannot find an apprenticeship place. Guarantee of school-based apprenticeship is provided as an alternative in order to help VET students to complete their education.
- Improvement of assessment and recognition of prior learning in order to enhance adult education and training among the existing vocationally educated.
- The internationalisation strategy for HE was launched in 2013 – a central aim is to encourage and improve that more foreign graduate and PhD students remain in Denmark after having finished their studies.
- Use of a green card to facilitate legal immigration of highly-skilled citizens of non-EU countries.

In addition to responding to the challenges to increase vocational and higher education the PIAAC survey has identified a number of skills challenges for Denmark, including:

- 16.1% of Danes aged 16-65 years have low basic skills in reading and writing, which is below the OECD average.
- Similarly 14.6% of Danes aged 16-65 have low basic skills in mathematics/numeracy.
- 28.4% of the Danes have poor basic ICT-competences e.g. using a computer for solving everyday problems.
- About 20% of people in employment think that they need more education and training to perform better in their current job.

In particular, the latter indicates that there is potential for improving performance and productivity of the Danish workforce by increasing participation in education and training. ■



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