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# EMPLOYMENT AND PRODUCTION IN BLUE DENMARK 2019



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## Main conclusions of the analysis

- > In 2018, Blue Denmark accounts for the direct employment of 60,271 persons. In total, Blue Denmark employs 96,164 persons, including the indirect contribution from the demand for goods and services in other Danish sectors. This corresponds to 2.1 per cent and 3.4 per cent, respectively, of the total employment in Denmark. These figures are comparable to last year.
- > The total employment contribution of Blue Denmark has decreased during the period from 2007 to 2018. Direct employment decreased by 15,037 persons, while indirect employment increased by 2,746 persons.
- > In 2018, the production in Blue Denmark amounts to DKK 350 billion and gross value added (GVA) amounts to DKK 83.6 billion. This corresponds to 8.9 per cent of total production and 4.4 of GVA, respectively, of the overall economy. If the indirect contribution is included, the total contributions amount to 10.5 and 5.9 per cent, respectively.
- > Blue Denmark generates more than twice as much GVA per employee as the average of the Danish Economy.
- > Exports from firms in Blue Denmark amounted to almost DKK 258 billion in 2017. This is a little more than previous year and corresponds to 25.7 per cent of total exports. If indirect exports are included, the proportion corresponds to 28.9 per cent. This is a little more than the previous year.
- > In 2015, exports are 82.8 per cent of the production value of Blue Denmark - 73.6 per cent directly and 9.2 indirectly. This is a little less than in 2014.
- > During the period from 2005-2015, Blue Denmark has experienced a productivity growth of 0.2 per cent annually, driven by decreasing production in oil and gas. It has not been possible to assess the development from 2015 to 2016 due to changes in Statistics Denmark's industry definition of the oil and gas industry. The subsector shipping has experienced a productivity growth of 3.7 per cent annually compared to 0.9 per cent in the overall Danish economy. The subsector equipment has witnessed a high average productivity growth of 4.5 per cent annually.



# 1 Summary

## 1.1 The employment in Blue Denmark

As of 2018 the total number of persons directly employed in Blue Denmark is 60.271, equivalent to 2.1 per cent of the total number of employed in Denmark. The employment is largest within the maritime services and equipment subsectors. Since the start of the recession in 2008 the employment has decreased by 15.037 persons. The largest relative decline has happened within the equipment and shipbuilding subsectors, whereas the employment within maritime services has fallen moderately.

The indirect contribution to the total employment from sectors outside Blue Denmark through subcontracting to Blue Denmark is 35.893 persons as of 2018 whereas the contribution was 33.147 people in 2007. Thus, total contribution to employment is 96.164 people, equivalent to 3.4 per cent of the total employment in Denmark. The share has been declining since 2007. The contribution in 2007 was 3.9 per cent.

Since 2007 there has been a gradually increase in the level of education among the employed within Blue Denmark. Vocational educated represents 38.4 per cent of the total number of employed, however the number of persons employed with a vocational education has declined by 30 per cent since 2007. The employment of unskilled people has decreased by 54 per cent. Unskilled people are still the second largest employment group within Blue Denmark with 14.6 per cent of the employment. Medium-term further education is the third largest group of employed people in Blue Denmark and accounts for 11.9 per cent. The number of employed persons with a long further education have increased by 62 per cent since 2007.

The Region of Southern Denmark, which includes Southern Jutland and Funen, is the largest residential region among people employed in Blue Denmark. 31.2 per cent of all employed in Blue Denmark lives there. The second largest residential region among people employed in Blue Denmark is the Capital Region of Denmark, which also includes Bornholm, and accounts for 25.9 per cent. Since 2006 there has been a tendency of increasing employment share in the Capital Region

of Denmark leaving the Region of Southern Denmark and the Central Denmark Region with a lower employment share. The residential area of people employed in the subsectors equipment and shipbuilding is primary Funen and Jutland, however people employed in shipping are predominantly resident in the Capital Region of Denmark. The residential areas of people employed within the oil and gas subsectors are predominantly the Region of Southern Denmark and the Capital Region of Denmark.

25.3 per cent of those employed in Blue Denmark are in the age group of 40-49 years old. Since 2007 there has been a gradual aging of the employment in Blue Denmark. As of 2007 the age groups of 30-39 years old and 40-49 years old were equally big. However, today the age group of 30-39 years old only accounts for 20.3 per cent.

The average annual income for persons employed in Blue Denmark is 489.000 DKK, which is 156.000 DKK more than the average Danish annual income. The income is highest among people employed in the oil and gas subsectors. The second highest average income is earned among persons employed in the shipping subsector. The oil and gas subsector is also the subsector with the highest growth in income since 2007.

## 1.2 Production and export in Blue Denmark.

The production in Blue Denmark had a total value of 350 billion DKK as of 2018. This is equivalent to 8.9 per cent of the total value of the Danish production. When the indirect contribution through supply-chain linkages is included, Blue Denmark contributes with 10.5 per cent of the total value of Danish production. The gross value added within Blue Denmark is 83.6 billion DKK as of 2018. Another 28.7 billion DKK is added if the indirect contribution is included. Blue Denmark contributes with 4.4 per cent of the total gross value added directly and 5.9 per cent when the indirect contribution is included.

The largest contribution to the value-added stems from the shipping subsector, which accounts for more than half of the value added from Blue Denmark. The second largest contributing subsector is the equipment sector, closely followed by the maritime services sector.

30 per cent of the income creation stems from the shipping sector. The oil and gas sector and maritime services contributes with roughly one fourth. Since 2007, Blue Denmark has had a receding share of the Danish economy with decreasing production and income in the oil and gas subsector, but rising income in shipping.

As of 2018 the export in Blue Denmark was 258 billion DKK., which is equivalent to 73.6 per cent of the total production value in The Blue Denmark. If the indirect export, from e.g. refined oil product, is included the export account for 82.8 per cent of the production in Blue Denmark. The export from Blue Denmark account for 25.7 per cent of the total Danish export of goods and services. This number is 28.9 per cent if the indirect export is included.

The growth in productivity in Blue Denmark – calculated as gross value added in fixed prices per employed – has in the period 2005-2015 been 0.2 per cent annually on average. The same number is 0.9 per cent for the entire Danish economy. This reflects, in particular, that the production in the oil and gas sector has been declining since 2006. After 2015, changes in Statistics Denmark's definition of the oil and gas industry means that it is not possible to assess the productivity development from 2015 to 2016. However, the equipment sector had an annual growth rate of production of 4.5 per cent average. The shipping sector had annual production growth of 3.7 per cent, despite there being a marked drop of growth in 2009 due to low capacity utilization during the financial crisis.