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# EMPLOYMENT AND PRODUCTION IN BLUE DENMARK 2020



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## Main conclusions of the analysis

- > In 2019, Blue Denmark accounted for the direct employment of 60,880 persons. In total, Blue Denmark employed 97,290 persons, including the indirect contribution from the demand for goods and services in other Danish sectors. This corresponded to 2.1 per cent and 3.4 per cent, respectively, of the total employment in Denmark. These figures were comparable to 2018.
- > The total employment contribution of Blue Denmark decreased during the period from 2009 to 2019. Direct employment decreased by 12,087 persons, while indirect employment decreased by 5,057 persons.
- > In 2019, the production in Blue Denmark amounted to DKK 394 billion and gross value added (GVA) amounted to DKK 104 billion. This corresponded to 9.7 per cent of total production and 5.1 of GVA, respectively, of the overall economy. If the indirect contribution is included, the total contributions amounted to 11.4 and 7.3 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 287 billion in 2019. This is a little more than the previous year and corresponded to 26.5 per cent of total exports. If indirect exports are included, the proportion corresponded to 29.1 per cent. This is a little more than the previous year.
- > In 2019, exports made up 79.8 per cent of the production value of Blue Denmark – 72.8 per cent directly and 7.0 indirectly. This is a little less than in 2018.
- > It is not possible to conclude on the productivity growth in Blue Denmark in the period 2007 to 2017 due to changes in Statistics Denmark's industry definition of the oil and gas industry. The shipping subsector experienced a productivity growth of 2.0 per cent annually compared to 1.2 per cent in the overall Danish economy in the period 2007 to 2017. The subsector equipment saw a high average productivity growth of 5.2 per cent annually until 2017.



# 1 Summary

## 1.1 The employment in Blue Denmark

As of 2019, the total number of persons directly employed in Blue Denmark was 60,880, corresponding to 2.1 per cent of the total number of employed persons in Denmark. The employment was largest within the maritime services and equipment subsectors. Since the start of the recession in 2009, the employment decreased by 12,087 persons. The largest relative decline happened within the equipment and shipbuilding subsectors, whereas employment within maritime services dropped moderately.

The indirect contribution to the total employment from sectors outside Blue Denmark through subcontracting to Blue Denmark was 36,410 persons as of 2019 whereas the contribution was 39,695 people in 2009. Thus, total contribution to employment was 97,290 persons, corresponding to 3.4 per cent of the total employment in Denmark. The share has declined since 2009. The contribution in 2009 was 4 per cent.

Since 2009, the level of education among those employed within Blue Denmark has increased gradually. Vocationally educated persons represented 35.3 per cent of the total number of employed persons; However, the number of employed persons with a vocational education has declined by 32 per cent since 2009. The number of unskilled people has decreased by 54 per cent. Unskilled people were still the second largest employment group within Blue Denmark, accounting for 12.2 per cent of the employed persons. Persons with a medium-term further education made up the third largest group of employed people in Blue Denmark and accounted for 10.7 per cent. The share of employed persons with a long further education was at 8.6 per cent, an increase of 3.5 percentage points since 2009.

The Region of Southern Denmark, which includes Southern Jutland and Funen, is the largest residential region among people employed in Blue Denmark. 31.5 per cent of all persons employed in Blue Denmark lived there. The second largest residential region among people employed in Blue Denmark was the Capital Region of Denmark, which also includes Bornholm, accounting for 24.7 per cent.

Since 2009, the employment share has increased in the Capital Region of Denmark, leaving the Region of Southern Denmark and the Central Denmark Region with a lower employment share. People employed in the equipment and ship-building subsectors primarily resided on Funen and in Jutland; however, people employed in shipping predominantly resided in the Capital Region of Denmark. People employed within the oil and gas subsectors mainly resided in the Region of Southern Denmark and the Capital Region of Denmark.

24.5 per cent of those employed in Blue Denmark belonged to the 40-49 age group. Since 2009, the age of those employed in Blue Denmark has increased gradually. As of 2009, the 30-39 age groups were 25 %. However, in 2019, the 30-39 age group only accounted for 20.2 per cent.

## 1.2 Production and export in Blue Denmark.

The production in Blue Denmark had a total value of DKK 394 billion as of 2019. This corresponded to 9.7 per cent of the total value of the Danish production. When the indirect contribution through supply-chain linkages is included, Blue Denmark contributed 11.4 per cent of the total value of Danish production. The gross value added within Blue Denmark was DKK 104 billion as of 2019. Another DKK 33.2 billion was added if the indirect contribution is included. Blue Denmark contributed 5.1 per cent of the total gross value added directly and 7.3 per cent when the indirect contribution is included.

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

35 per cent of the income creation stemmed from the shipping sector. The oil and gas sector and maritime services contributed roughly one fifth. Since 2009, Blue Denmark has contributed a receding share of the Danish economy, seeing decreasing production and income in the oil and gas subsector, but rising income in shipping.

As of 2019, the export in Blue Denmark was DKK 287 billion, which corresponded to 72.8 per cent of the total production value in The Blue Denmark. If the indirect export, from, e.g., refined oil products, is included, the export accounted for 79.8 per cent of the production in Blue Denmark. The export from Blue Denmark accounted for 26.5 per cent of the total Danish export of goods and services. This percentage is 29.1 if the indirect export is included.

The annual average growth in productivity in Blue Denmark cannot be calculated for the period 2007 to 2017 due to changes in Statistics Denmark's definition of the oil and gas industry from 2015 to 2016. However, in the period from 2007 to 2017 the equipment sector had an annual average growth rate of production of 5.2 per cent. The shipping sector saw an annual production growth of 2.0 per cent, despite there being a marked drop of growth in 2009 due to low capacity utilisation during the financial crisis.