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THE DANISH GOVERNMENT

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# Report on Growth and Competitiveness 2018 – Summary

**Complete report (only in Danish) and data  
available at [www.em.dk](http://www.em.dk)**

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## Denmark as a growth nation

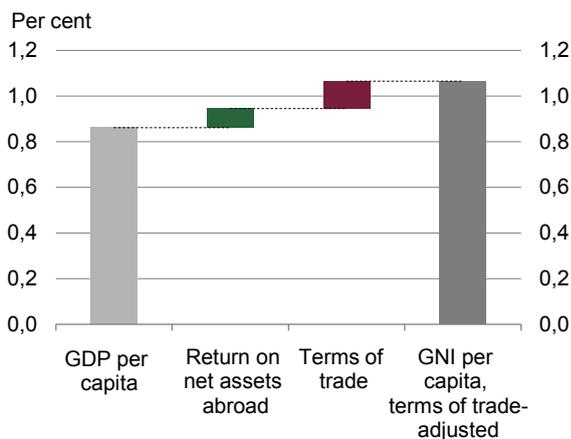
Denmark is one of the richest countries in the world with many well-paid jobs. This is especially due to Denmark achieving higher productivity and boosting employment through sustained focus on healthy growth and the provision of the right framework conditions. Denmark is also one of the countries in which income disparities are lowest.

Prosperity measured by GNI per capita is higher than before the financial crisis and is now the highest ever. Employment has reached the highest level ever, and unemployment is low. This is due to reforms and responsible decisions designed to address ongoing challenges and to prepare Denmark for the future. The Danish economy is more robust now than during the upswing in the '00s, when employment rose faster than at present, while reforms only made modest contributions to a larger workforce.

Prosperity in Denmark is fundamentally determined by how much we work and how productive and innovative we are when we work. The biggest growth contribution has historically come from productivity growth. In other words, Denmark is capable of utilising the resources that are part of production. It is important to build on past efforts and good results if Denmark is to continue to be one of the richest countries in the future.

Since the financial crisis, growth in the Danish economy measured by GDP per capita has been almost 0.9 per cent per year on average, see Figure 1.

➔ **Figure 1** Sources of prosperity, average annual real growth, 2011-2017

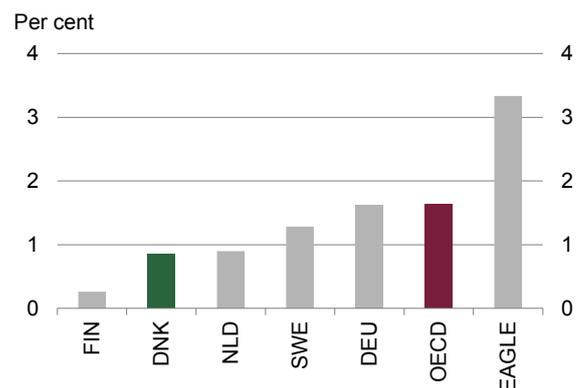


Note: Total of GDP per capita and the return on net assets abroad constitute GNI per capita. See Factbook for description of calculation method. Source: Statistics Denmark and own calculations. Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

However, the growth in Denmark's total output is not in line with countries Denmark normally compares itself to. In Germany and Sweden, annual growth in output (GDP) per capita has thus been around 1.5 per cent since the financial crisis. Nevertheless, Denmark has been particularly successful at increasing value creation in industry, while value creation in Sweden has increasingly come from the private service sector.<sup>1</sup>

Newly-industrialised countries have achieved annual growth rates of over 3 per cent in the same period. In a well-developed and advanced economy such as Denmark's, growth will naturally be more suppressed than in newly-industrialised economies, e.g. in Asia. These countries, referred to as 'EAGLE economies', typically grow faster, because they can utilise known new technologies developed or already in use in more advanced economies. This is known as the 'catch-up effect', when young economies catch up the more advanced economies.

➔ **Figure 2** Growth in selected countries, average annual real GDP growth per capita, 2011-2017



Note: "EAGLE" indicates 15 newly-industrialised countries, defined by BBVA as "Emerging and Growth-Leading Economies" consisting of Indonesia, Nigeria, the Philippines, Iran, Pakistan, Egypt, Bangladesh, Malaysia, Vietnam, BRIC countries (Brazil, Russia, India and China) as well as the two OECD countries Mexico and Turkey. The EAGLE country group is dynamic and updated annually. The figure includes the latest version from 2016.

Source: World Bank.

Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

GDP growth per capita in Denmark has not been among the highest since the financial crisis, see Figure 2. However, Denmark has been successful in creating rising prosperity and income since the financial crisis and is therefore still one of the richest countries in the world. There are several reasons for this.

Danish companies and employees in Denmark and abroad have been able to create production that has

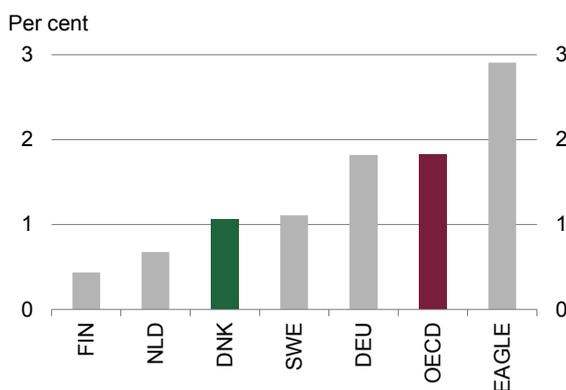
<sup>1</sup> See chapter 1, box 1.1.

## Summary – Denmark as a growth nation

contributed to growth and prosperity. Denmark sells export goods that to a large extent have high value and rising prices relative to imports (improved terms of trade). Danish prosperity has also been favoured for many years by historically high returns on net assets abroad, which is the result of increased Danish exports of goods produced outside Denmark's borders and foreign investment by Danish companies abroad. Both have been made possible by greater free trade and globalisation.

Denmark's overall increase in prosperity (GNI) has thus been on par with Sweden, although Denmark has not created the same increase in GDP per capita. Overall, prosperity in Denmark has increased by almost 1.1 per cent annually since 2011, measured by GNI per capita when taking into account the foreign exchange ratio, see figure 3.

→ **Figure 3** Terms of trade adjusted-GNI per capita, average annual real growth, 2011-2017



Note: See note for Figure 2 and Factbook for a detailed description of the calculation method.

Source: World Bank, Statistics Denmark and own calculations.

Figure Data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

Large and advanced countries can create growth by such means as economies of scale thanks to their large domestic markets. They also have a wider range of economic resources to deploy. This means that they themselves can define the parameters for productivity growth. This is an option not open to small countries such as Denmark to the same extent. Denmark's ability to consistently do well in international competition therefore depends to a large degree on its flexibility and the ability to exploit the opportunities offered by globalisation and to utilise new technological breakthroughs.

For Denmark to remain one of the most prosperous countries in the world, it has to be a growth nation. Business and growth policies must continue to focus on strengthening the foundations of growth for the

Danish economy. The challenges facing Danish companies and the Danish economy, including small and medium-sized enterprises, must be addressed continuously.

Denmark is well placed to create new growth and new private jobs. However, there are also a number of key challenges, including the ability of companies to utilise new technology and new business models within the regulatory framework. Access to relevant competencies and high-quality education is also key, so that companies can recruit the labour they need. Companies still need to be spared unnecessary administrative burdens – particularly small and newly-started companies – and to have access to a highly functional market for venture capital. Small companies with less than 10 employees account for 23 per cent of turnover, and around 14 per cent of employment. They also account for most of the increase in employment between 2009 and 2016.<sup>2</sup> Small companies are therefore both relevant and significant for growth and job creation in Denmark.

Denmark must continue to be well-equipped for growing market internationalisation. It must be attractive for foreign companies to invest in Denmark. In addition, the framework for research and innovation must be good, there must be a growth-promoting entrepreneurial environment and highly functional capital markets. All these factors will support Denmark as a growth nation.

Rapid technological development and globalisation will also make new demands of flexibility on the labour market and in the business community. Therefore, close cooperation between the business community, the authorities and the labour market partners must continue to identify conditions that are important for Denmark to be a growth nation and to support its ability to quickly adapt and respond to the challenges.

The government's business-oriented growth policy must be continuously developed to continue to ensure companies have the best conditions for enhancing competitiveness and generating prosperity for the entire country.

*Report on Growth and Competitiveness 2018* takes stock of changes in the conditions for growth and competitiveness and indicates where action today will affect Danish prosperity and growth prospects in the future.

<sup>2</sup> Statistics Denmark (2018), *Business giants or gazelles – which creates the greatest growth?* This analysis only considers active companies that existed throughout the period 2009 to 2016.

### The government's business-oriented growth policy

Denmark must be a growth nation. A dynamic business community and good framework conditions form part of the foundation for this. Private sector earnings and jobs help create the foundation for the welfare society's key services, such as education, health, etc.

The government's business-oriented growth policy supports Denmark's ability to maintain its position as one of the richest countries in the world. As such, the government has already taken several steps to strengthen growth conditions, see box 1, page 21.

The government entered into the *Agreement on business and entrepreneurial initiatives* in November 2017, designed to create a strong entrepreneurial culture and equity culture, cut costs for the business community and to provide better access to venture capital. The agreement is a significant strengthening of growth conditions in Denmark.

The government entered into a tax agreement *Lower tax on work and pension payments* in February 2018, making it more attractive to save up for retirement and giving everyone in full-time employment tax relief. The agreement will increase the supply of labour and thus the productivity of companies.

The government's energy agreement follows a massive renewable energy expansion in electricity production. This means that fossil fuels are being displaced by green electricity, which is predicted to cover all of Denmark's electricity consumption by 2030. The agreement ensures pace and ambition in the realisation of green growth. It facilitates cost-effective green growth by easing taxes on electricity and electrical heating by approx. 2.4 billion DKK, taking into account the cost to society, the individual and technological developments. The government also presented a climate and air bill that contains a number of initiatives in the fields of environment and agriculture that will improve air quality and reduce greenhouse gas emissions.

Furthermore, the government entered into the *Agreement on initiatives for Denmark's digital growth* which strengthens growth conditions for digital transformation, life sciences, blue Denmark, the sharing economy and the circular economy. In addition, with the budget bill for 2019 *Greater security and more proximity* the government proposes such measures as lower taxes and improving business conditions.

With the rapid technological development and globalisation, new demands are made for flexibility in the labour market and business community. Therefore the government has presented two initiatives designed to strengthen vocational education and the opportunities for companies to recruit labour abroad. They are intended to continue to give companies access to qualified labour in the future, to maintain a strong level of competitiveness for years to come, and to avoid a labour shortage hampering economic recovery.

Denmark's long tradition of close cooperation between the authorities and companies has helped create the foundation for Denmark as a growth nation. This tradition means that the authorities can respond quickly to the challenges faced by companies, and adapt conditions to new global trends and needs. This is also one of the focus areas for the government's Disruption Council, and is particularly important at a time when digital transformation is radically changing the competitiveness of companies. The ability to react quickly requires conscious out-of-the-box-thinking and innovation throughout society, and that Danish legislation is agile. In this respect, Denmark is well-positioned, because institutional design is less rigid than in many of the larger countries, and because the government's business growth policies are adapted to the latest trends, ensuring that Denmark is a leader.

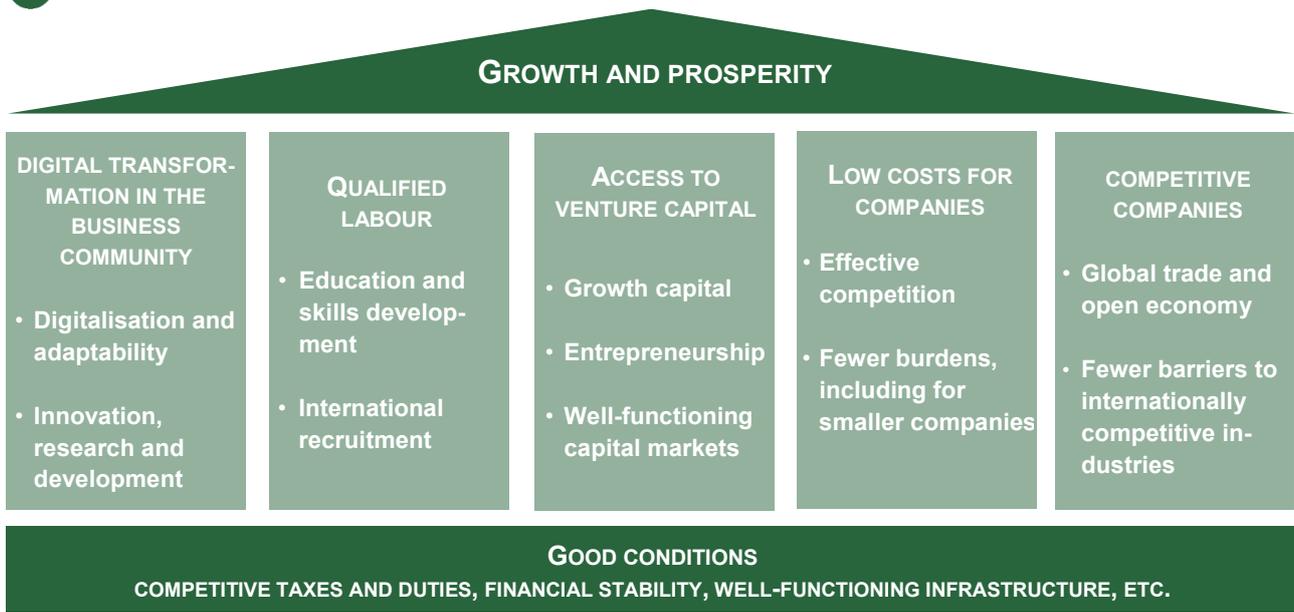
The government emphasises that companies must be relieved of existing burdens and not subjected to unnecessary new ones. This is especially the case for small and medium-sized enterprises with fewer resources. The target is to relieve burdens worth DKK 4 billion between 2015 and 2020, and a total of DKK 6 billion by 2025.

Maintaining and expanding Danish strengths in industries such as the medico, shipping and the green area requires a special understanding of the growth conditions for individual industries and considerable adaptability in the private and public sectors. The government has continuously set up growth teams, which will help to utilise more potential in the business community. The most recent growth teams have been set up to focus on trade and logistics, green energy and environmental technology, creative industries and the food ingredient industry.

The government's business-oriented growth policy is directed particularly at six areas, see Figure 4. The policy is being developed continuously to ensure companies have the best conditions possible for creating Denmark as a growth nation.

# Summary – Denmark as a growth nation

→ **Figure 4** The government's business-oriented growth policy – Denmark as a growth nation



### Digital transformation in the business community

Productivity and prosperity in Denmark depend on how good companies are at using new technology. Technological and global development places increasing demands on using the latest technology to create new innovation, research and development – as well as growth and well-paid jobs. Digitalisation and new technology that require rapid change in the business community are well suited to a small, open, flexible and innovative country like Denmark.

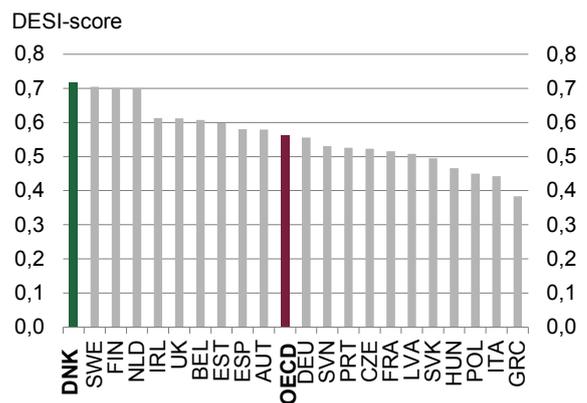
Digitalisation opens up new opportunities for Danish companies. For example, by developing new business models, digitalisation can be a key driver for productivity growth. Digitalisation and new technologies already affect industries such as life sciences, the financial sector and maritime industries, which are of major importance to the Danish economy. The same also applies to the sharing economy, which is growing in Denmark. E-commerce allows companies to offer their products to new customer groups and on emerging markets, whilst increasing competition for retailers. Digitalisation can also help create better welfare, protect the environment and create well-paid jobs.

A number of analyses show that technologies already known offer considerable potential for increased productivity through digitalisation and automation of production for companies. One analysis has specifically estimated that GDP per capita in Denmark can increase by 0.9-3.1 percentage points annually, de-

pending on how rapidly Denmark deploys digital opportunities.<sup>3</sup> However, that analysis does not highlight the causal link between GDP growth per capita and digitalisation.

Denmark is the most digital country in the EU and a digital pioneer in the OECD, see Figure 5. However, the impact of digitalisation on productivity growth for the economy as a whole has yet to be seen.

→ **Figure 5** Index for the digital economy and digital society (DESI), 2018



Note: DESI is an index based on five dimensions with a total of 40 indicators: (a) digital public services; (b) use of the Internet; (c) digital skills; (d) digital infrastructure; and (e) use of digital technology in companies. The OECD indicates the average of the countries shown in the figure. Source: European Commission, Digital Agenda Scoreboard 2018. Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

<sup>3</sup> McKinsey (2017): A future that works: The impact of automation in Denmark, April 2017. The effect covers the period 2016 to 2030, and the estimates are subject to considerable uncertainty.

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In order for the business community to digitally convert, companies need to invest to use the new technologies, which can take time before investment is reflected in higher productivity. This was also the case when companies initially increased IT investment around the mid-1990s. Moreover, the new digital technologies have thus far only gained made inroads into a limited number of industries.<sup>4</sup>

The aim of the government is for Denmark to be the front runner in digitalisation and new business models. It therefore presented the *Strategy for Denmark's Digital Growth*, proposing 38 initiatives to support digital transformation.

In order for Danish companies to be at the forefront of these areas, it is crucial that Danish legislation is agile and flexible. Therefore the government has introduced five principles for agile legislation, applicable from 1 July 2018. The new legislation will allow more new business models and the use of new technologies in companies. A single point of entry has been established to quickly clarify whether new technologies and business models can be used within the framework of existing regulation. The *Agreement on initiatives for Denmark's digital growth* was accompanied by the establishment of *Digital Hub Denmark* and *SME:Digital* which will create a digital boost for small and medium-sized enterprises.

### Qualified labour

Labour is one of the primary production factors for companies. A growing labour supply and access to well-educated and skilled workers is therefore vital for growth and competitiveness. A flexible labour market helps companies have access to skilled workers from Denmark and abroad.

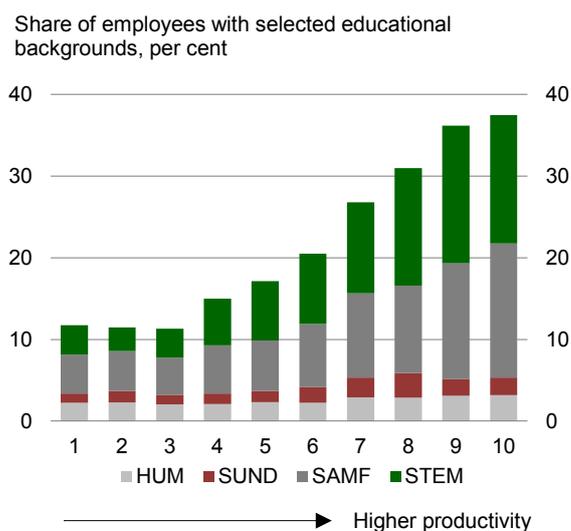
In the long-term, a higher level of education is associated with greater prosperity, because workers with a higher average level of education mean higher productivity. Skilled and talented employees also help to implement new technology more rapidly, which in turn increases productivity.

Denmark is well-equipped to ensure that individuals have the skills that will be needed on the labour market in the future. Employees must be prepared for changing demands on the future digital labour market. The flexibility of the Danish labour market is a big plus in this respect. The level of education in Denmark is slightly above the OECD average – for both primary and lower secondary education – and after the crisis,

Danish education levels have increased relative to OECD countries. It is vital that Denmark continues this trend.

The ability to recruit employees with relevant skills is crucial for companies. For example, engineers, computer scientists, biostatisticians, IT specialists, electricians and people with other digital skills are in demand. These skills are key to developing and maintaining Denmark's international strengths in industries such as GreenTech, FinTech and Robotics, which generate huge value for Denmark. At the same time, there is also a trend towards companies with higher productivity having a higher proportion of employees with either a background in the social sciences – such as economics, law and political science (SAMF) – or in science, technology, engineering and mathematics (STEM), see Figure 6. Both categories appear to be particularly important to the most productive companies, but there is not necessarily a causal link.

**Figure 6** Labour productivity and education, private sector, 2015



Note: The horizontal axis divides companies into deciles by productivity, with 1 being the 10 per cent least productive and 10 the 10 per cent most productive. The vertical axis represents the proportion of employees (average measured by salary) with the specific education. Productivity is measured by value added per man-year. Data contains companies with five or more full-time man-years the following sectors: *industry, trade and transport, etc., information and communication, and business services*. The figure considers higher education programs and PhDs.

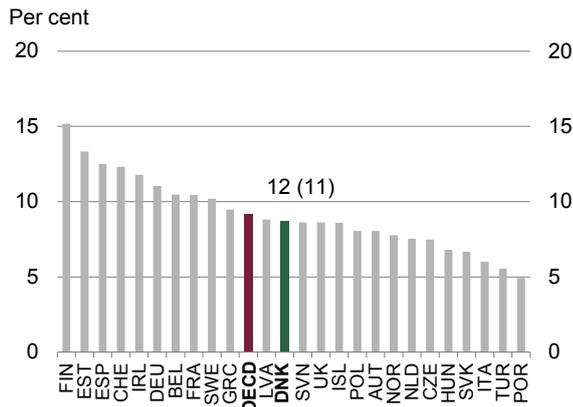
Source: Statistics Denmark based on register data and own calculations.  
Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

<sup>4</sup> OECD.

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However, Denmark does not have as many people in the workforce with a STEM education as other Northern European countries that Denmark is usually compared with, see Figure 7. Nevertheless, Danish companies are currently experiencing a shortage of employees, including those with digital and technical skills.<sup>5</sup>

→ **Figure 7** STEM-educated as a proportion of the workforce (25-64 year-olds), 2013



Note: STEM-educated covers vocationally trained and those with higher education.  
Source: Eurostat.  
Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

The government has therefore cooperated extensively with companies, universities, organisations, etc. to set up a Technology Pact to strengthen Danish STEM skills. The Technology Pact is designed to encourage more young people's interest in and choose STEM educational programs that can lead to productive and well-paid jobs. One of the objectives of the Technology Pact is that 20 per cent more people will complete a STEM-related vocational or higher education over the next 10 years.

STEM skills are also crucial for tackling a number of global challenges in such fields as green growth, global resource shortages and health.

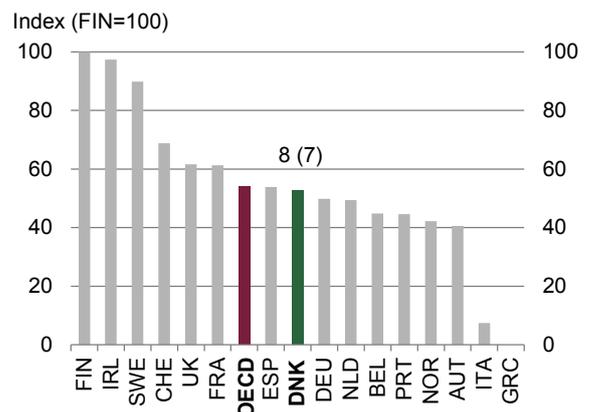
### Access to venture capital

Access to venture capital is an important prerequisite for smaller companies with growth potential in order to develop and grow. Start-up companies such as entrepreneurs may, for example, have difficulty obtaining a regular bank loan. This is because investments in this type of business can be risky for both investors and lenders, as they often have only a short earnings history and limited assets to provide as collateral. Equity investment, in which the investor takes part of the risk with the opportunity to participate in a potential gain, can thus be an important source of funding.

Access to venture capital can play an important role, particularly during the early stages of expansion for growth companies. In addition to capital, in many cases venture capital investors also bring a range of business-related skills. Venture capital is often invested as equity deposits in smaller and/or newer companies with a relatively high risk profile.

The level of venture capital investment in Denmark for the period 2014 to 2016, measured in per cent of GDP, is around the OECD average. It is comparable with the level between 2013 and 2015. The level of investment in Denmark is higher than in Norway, for example, but significantly lower than in Finland and Sweden, see Figure 8.

→ **Figure 8** Venture capital investment as a percentage of GDP, average for 2014-2016



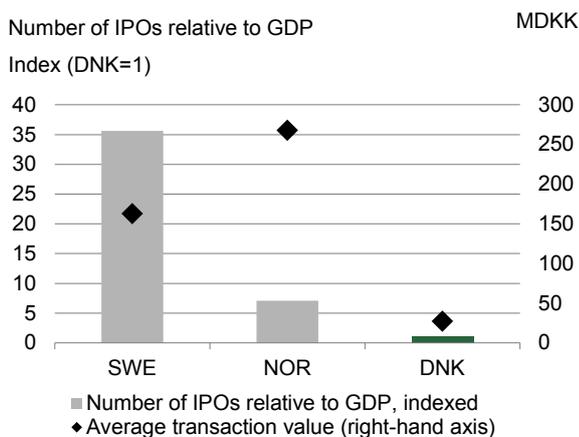
Note: The figure shows the proportion of venture capital investments in the relevant countries – from both domestic and foreign investors – as a percentage of GDP. Venture capital investment is calculated as an average for the years 2014 to 2016. The leading country (FIN) is set as index 100. Investments cover both seed, startup and expansion investments.  
Source: Invest Europe.  
Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

<sup>5</sup> Danish Agency for Labour Market and Recruitment on the basis of labour market data, 1st half 2017.

There are also far fewer stock exchange listings in Denmark than in Sweden, and those that are listed have a low average transaction value compared to Norway and Sweden. This can indicate that it is easier to raise capital on the Swedish stock markets for micro and small companies that have lower capital requirements, see Figure 9.

The government's *Agreement on business and entrepreneurial initiatives* will support the creation of a strong entrepreneurial culture and equity culture by establishing Equity Savings Accounts and introducing tax deductions for investors. The Equity Savings Account is designed to contribute to greater public participation in business ownership. Tax deductions for investors will help make it easier for particularly relatively new start-ups to gain access to growth capital. The right conditions have to be created for new and existing companies to develop into future growth companies. A key element of this is to create a well-functioning market for investment in shares in unlisted and listed companies, allowing them to raise capital when they are set to grow.

→ **Figure 9** Number of micro and small stock exchange listings relative to GDP, 2014-2016



Note: Micro and small IPOs are those worth less than DKK 700 million. The figure includes national and international listings on First North, Merkur and NGM. Double listings and when the business has previously been listed on another stock exchange are not included. In addition, the figure only contains IPOs for which the size of the capital increase is available. If the transaction size on trades from the three stock exchanges is not known, it is assumed that the IPO value is less than DKK 700 million.

Source: Bureau van Dijk, Oslo Stock Exchange, Nasdaq, NGM, FESE database and Copenhagen Economics.  
Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

The government, by applying the *Agreement on business and entrepreneurial initiatives* will examine means of improving conditions for equity financing through Allowance for Corporate Equity (ACE) deductions, including the administrative consequences.

An ACE deduction will give companies a deduction from tax for corporations for the indirect costs they incur from financing investment with equity rather than external capital/loans. The deduction generally means that tax for corporations is only paid if the return on investment exceeds the "normal" return (e.g. a fixed 3 per cent). Unlike at present, the "normal return" on the investment is exempt from tax for corporations. If the investment ultimately gives a higher return on the invested capital than "normal", the surplus return will, in addition to normal return, still be subject to tax for corporations. Presently, only interest on loan financing is deductible.

Given that "normal return" on investment will be exempted from tax for corporations in future, companies will make more investments. With more capital available, each employee can produce more. This will boost productivity and hourly wages. An ACE deduction will thus increase both domestic and foreign investment in Denmark.

### Low costs for companies

Effective competition will benefit society as a whole, and help ensure that companies streamline production, improve quality and develop new and better products and services at lower prices. This will make the best companies more competitive - and in a well-functioning market it will be easy for new companies to establish themselves and be entrepreneurs.

Effective competition has helped to make Danish society prosperous. This applies both when Danish companies compete with each other in Denmark and in export markets.

However, there are signs that Denmark has high prices at international level. This may indicate less effective competition. In addition, companies in the private service sector have less competition intensity compared to industrial companies.<sup>6</sup>

Digitalisation affects competition in most markets. The amount of data is growing fast, and finds ever more uses; companies are also better able to monitor each other's progress and prices on the web. Data can therefore give considerable market power. Current competition regulations do not fully take into account the fact that corporate data can be of great value and of importance to competition. Balance is important to avoid potential market abuse from e.g. the big digital corporations, while there has to be an incentive to continue to invest in data.

<sup>6</sup> This when competition intensity is measured as a mark-up (Lerner index).

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Competition for public sector contracts can create increased innovation for how they are undertaken and thus growth and employment in private companies. A more efficient public sector will also be supported, which provides better service to the public. It is therefore also important that the public sector does not encroach on private markets, as this will often distort competition and inhibit innovation in the private sector – except in sectors where special conditions will actually be in favour of this. The government's agreement on *fair and equal competition between public and private enterprises* will ensure that the public sector only engages in business activities when there are strong arguments for doing so. This must be done on fair and equal terms in relation to private enterprises.

Denmark is currently one of the countries in the world where it is easiest to start a business. However, the government maintains strong focus on minimising the costs imposed on companies via regulations. Unnecessary administrative requirements and costly rules take valuable time and resources from companies that could be used to run the business and create innovation and growth. Therefore, there must be simpler rules for the business community.

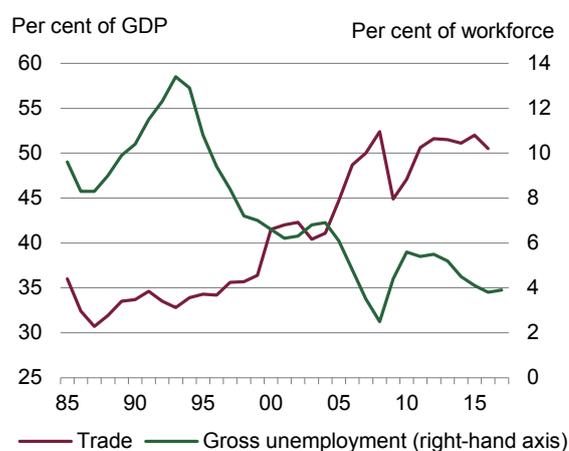
*The business forum for simpler rules* plays a key role in easing the burden on the business community by allowing companies and their organisations to submit simplification proposals directly to the government. Increased digitalisation of dealings with the public sector for businesses has great potential for reducing the bureaucratic burden for companies. For example, the government has entered into an agreement to simplify employment, which will automate 180 000 applications from companies for wage subsidies and internships. The government is also working on automating corporate and financial reporting.

### Competitive companies

Denmark is a small, open economy, where a large part of economic activity is aimed at trade with other countries. This means that Denmark can benefit from the increased trade, cooperation and cross-border investment that globalisation brings with it.

Over the last three decades, Denmark's international trade has risen sharply in line with world trade, see Figure 10. This is due to such factors as China's entry into the world economy, pulling the weight of the world economy gradually towards Asia.

➔ **Figure 10** Trends in Danish trade and unemployment, 1985-2017



Note: Trade is measured as indexed volume growth. Unemployment is measured as gross unemployment as a percentage of the workforce. Source: IMF (trade) and Ministry for Economic Affairs and the Interior (unemployment).

Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

Increasing international trade is of major benefit to Denmark. Danish companies exported goods and services worth almost DKK 1200 billion in 2017, and more than 800 000 Danish jobs in the private sector are linked to exports. This corresponds to almost half of private sector employment.<sup>7</sup>

Denmark has managed to reduce unemployment through a period of increasing international trade. From 1985 to 2007, real wages in industry (the sector most exposed to international competition), increased by 1.6 per cent per year and unemployment fell from 8 per cent in the latter half of the 1980s to 3 per cent in 2016.

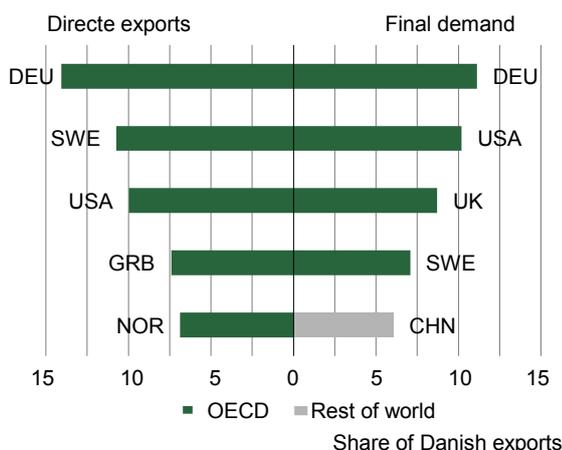
<sup>7</sup> Copenhagen Economics for the Danish Business Authority (February 2018), *The importance of international trade for the economy and employment in Denmark*, on the basis of the OECD.

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Just over half of Danish exports are sold directly to EU countries. A significant part of Denmark's direct exports are semi-manufactured products exported to other countries. If exports are calculated according to the countries in which Danish exports are finally used, the EU countries account for a lesser share (just under half).

Countries in Asia, the Middle East and Russia have become of greater importance, and the United States is the second largest recipient of Danish exports when considering final demand. The Danish economy is thus even more integrated globally than is apparent from direct export statistics and therefore more dependent on trends in the global economy, see Figure 11. A global trade war – e.g. between the USA, China and Europe – can therefore be of major significance to the Danish economy and prosperity. This is due to the fact that Danish prosperity is largely due to earnings from exports, imports and investments abroad. This also applies to the potential consequences of Brexit.

→ **Figure 11** Denmark's 5 largest export markets, 2014



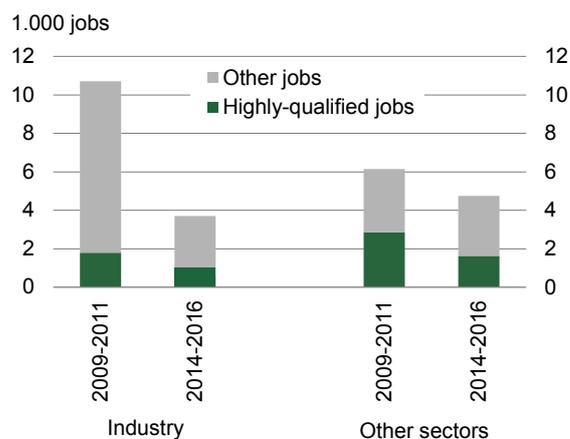
Note: Proportion of Danish exports of goods and services in 2014. Direct exports are calculated from the balance of payments, and final demand is calculated from TiVA estimates as Danish value added from final demand abroad. CHN indicates China. Great Britain (GRB) differs from the UK. Source: Statistics Denmark and the OECD. Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

Strong competitiveness of Danish companies supports exports. Denmark's wage competitiveness is roughly unchanged in recent years. However, there are indications that industry's competitiveness has improved, for example, when looking at the pay quota, while it does not apply to the export-oriented private sector as a whole.

Competitiveness can affect whether Danish companies choose to operate in Denmark or move produc-

tion and employees abroad. Between 2014 and 2016, the number of jobs outsourced by Danish companies abroad fell significantly compared to the previous three years. This trend is seen across sectors, but it is especially apparent in industry, where fewer jobs have moved abroad. The fall in the industry is due to the number of unskilled jobs not being outsourced to the same extent as previously. The fall in outsourced jobs can also be linked to the fact that increased and cheaper automation and digitalisation make it relatively cheaper to produce in Denmark, see Figure 12.

→ **Figure 12** Outsourced jobs abroad, by industry and job type, 2009-2011 and 2014-2016



Note: Danish companies outsourcing jobs from Denmark to abroad. Based on questionnaire from two analysis periods; 2009 to 2011 and 2014 to 2016, each addressing approx. 3200 Danish companies with 50 or more employees. Highly qualified jobs are defined here as work requiring staff who can perform specialist functions, such as academic and technical jobs. Source: Statistics Denmark. Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

The fall in outsourced jobs is not due to lower foreign activity. Many companies have already moved jobs abroad and increased their existing production without outsourcing jobs or establishing production abroad. Companies can now quickly adapt production abroad to demand in export markets. This may mean that companies move investment and growth abroad in the future, if it becomes difficult to gain access to qualified labour in Denmark.

## Summary – Denmark as a growth nation

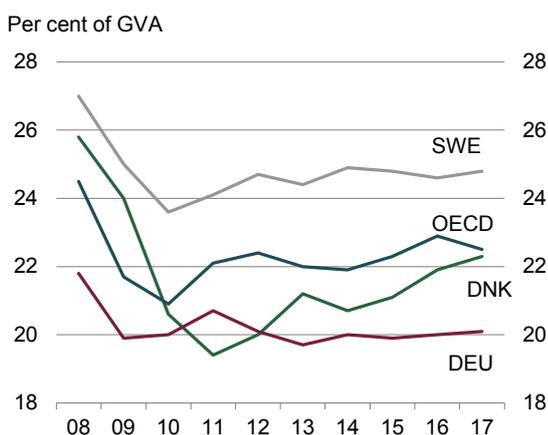
### Good conditions for investment

Denmark must continue to be an open nation that takes advantage of the opportunities offered from knowledge-building worldwide. It must therefore be more attractive for foreign companies to invest in Denmark.

Investments in, for example, new technology and digitalisation, contribute to companies having well-developed and modern production facilities in Denmark. Danish business investment has risen since 2011, but started at a low level after business investment fell sharply in the years after the crisis. Denmark is still below the level of Sweden, but above Germany, see Figure 13.

A higher investment level will strengthen growth opportunities for business. Denmark is among the countries with the highest number of industrial robots per employee, and that number is increasing relatively rapidly. This indicates that Danish industrial companies are doing well. Prices for a number of assets have also fallen, for example in new technology, and there are signs that companies are globally increasingly investing in intangible assets, such as digital databases, computer software, patents, etc. There is also a tendency towards companies increasingly converting IT investments into service purchases (hire of IT). These are investments that are not necessarily included in the statistics of business investments.

→ **Figure 13** Business investment in selected OECD countries, 2008-2017

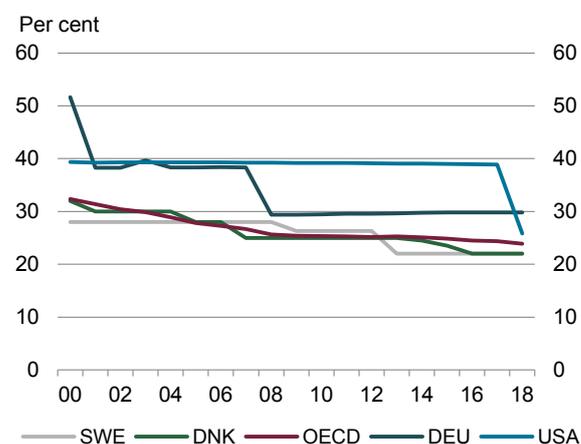


Note: Business investment is defined as gross fixed investment, minus public investment and housing investment. This definition is also used in the Danish Government's Economic Report. Business investments are measured in current prices and as a percentage of gross added value (GVA) for private urban businesses excluding property transactions. Source: OECD. Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

Corporate taxation is important to encourage business investment in Denmark. Capital mobility between countries has grown in line with globalisation. This has helped to sharpen competition to attract and maintain investment. A relatively low-cost tax level makes it easier to attract and maintain investment.

There is a continuing international focus among OECD countries on attracting foreign investment and making domestic investment more attractive. In Denmark, the tax for corporations rate is 22 per cent, which is slightly lower than the OECD average, see Figure 14.<sup>8</sup> Several countries (including the USA and Sweden), have recently adopted reductions in their formal tax for corporation rates. However, in the USA the corporate tax threshold was also raised.

→ **Figure 14** Formal tax for corporations rates, 2000-2018



Note: The rates indicate combined state and local tax for corporation rates. In some countries, there are several tax for corporation rates. For these countries the stated rate is the highest. Source: OECD. Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

<sup>8</sup> This also applies to the average Danish effective tax for corporations rate, which is approx. 20 per cent (2017 level), see chapter 19.

# Summary – Denmark as a growth nation

## Key conditions for growth and competitiveness in Denmark since the crisis

Denmark, in common with most other Western countries, was significantly affected by the international finance crisis in 2008, which affected growth in subsequent years.

Since then, Denmark's growth and competitive conditions have improved in a number of key areas. Figure 15 shows Denmark's relative position today (marked in green in the figure) and immediately after the financial crisis (marked in grey in the figure) relative to the OECD countries for selected parameters where Denmark performed best.

For example, Denmark has increased its productivity level between 2011 and 2017 relative to the other OECD countries. This means that Denmark remains one of the richest OECD countries.

In addition, business investment in terms of gross value added (GVA) has risen since the crisis, although investment is below the OECD average.

The level of education has also risen in Denmark. The vocational skills of young people in primary and lower secondary schools have been improved. More adolescents complete upper secondary education. Signif-

icantly more of them go on to take higher education than in other countries.

This helps provide companies with a good foundation for recruiting competent employees now and in the future.

Denmark has also increased the amount of renewable energy it consumes, which will contribute to the government's goals for green growth. Denmark has also managed to maintain a high digital level right throughout its society.

On other indicators, developments indicate that Denmark's relative growth and competitive conditions have developed less favourably since the crisis. As a result of the crisis, it was harder for companies to achieve high and sustained growth rates, and there are still fewer growth companies than just after the crisis. There are also slightly fewer innovative companies compared to the OECD countries. Denmark faces a challenge in attracting foreign investment. The government's *Agreement on business and entrepreneurial initiatives* from November 2017 introduced initiatives to strengthen these areas.

➔ **Figure 15** Selected key indicators of growth conditions – Denmark now and after the crisis

### Prosperity, productivity and labour

Prosperity (GDP per capita), current prices

Productivity level, current prices

Business investment, share of GVA

Academically level in primary school

Share of 25-34 year-olds with at least a higher education

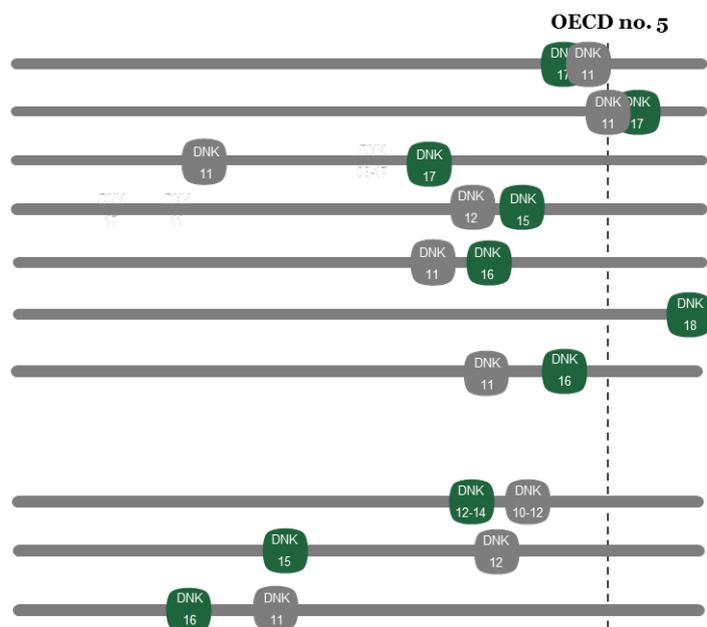
DESI-Score (measure for digitalization)

Renewable energy, share of total energy consumption

Innovative companies, share of all companies

Growth companies, share of all companies

Foreign direct investment, share of GDP



Note: Figures in the figure indicate the year of statistics for each indicator of growth. The indicator values for "DNK" and "OECD" are scaled in relation to the fifth-best OECD country and the lowest-ranked OECD country, where the former is set as index 100 and the latter as 0. Thus, the indicator indicates the relative deviation from the fifth-best OECD country and the lowest-ranked OECD country respectively. The scale in the figure goes from index 0 to index 110. For a more detailed description of measurement method and data base, see Appendix.

Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

### Key conditions for growth and competitiveness

Figure 16 summarises Denmark's international position on key growth conditions. There has been a significant focus on a growth-oriented business policy, especially after the crisis in the late '00s. One of the things that has contributed to is the fact that Denmark's current position on a number of key indicators of growth has improved, and is better than the average for the OECD countries.

There are also indicators where Denmark's position is below the OECD average. Examples include **labour supply** (stated in working hours per 15-64 year-old). Unlike many other countries, Denmark has a relatively high employment rate for women. On the other hand, each employee has shorter working hours on average.<sup>9</sup>

Compared to the OECD countries, Denmark is characterised by a relatively high level of **prosperity** combined with a high degree of **social balance** in the form of free access to education, health care, etc. Denmark remains one of the most equal countries in the OECD. This is due to the fact that Denmark has a relatively well-educated workforce and that many have a strong connection to the labour market, which has an impact on the individual's ability to support themselves and their family.

An important criterion for continued growth is that the education is of high quality, and that companies have access to the skills they are seeking. The skills of Danish students in reading, mathematics and science (**primary school**) have been improved from 2012 to 2015 according to the OECD PISA survey and are above the OECD average. Over 80 per cent of pupils complete an **upper secondary education** in Denmark. This is on a par with the OECD average and countries like Sweden, and slightly above Norway.

There is an increasing proportion of the Danish population who have completed **higher education**. The proportion is slightly higher than the OECD average and on a par with, for example, Sweden. Fewer Danish adolescents are taking vocational education, but the proportion is higher than the OECD average.

Denmark ranks highly in terms of publicly financed **research**. The country has a high level of public fund-

ing for research and development (R&D) of 1.01 per cent of GDP in 2017, which is significantly above the OECD average. In addition, grants are provided via the tax system for private research, and Danish companies invest relatively significantly in R&D.

Danish prices are generally high compared with six other EU countries. This also applies when adjusting for taxes and duties, as well as differences in prosperity. This is an indication of less effective **competition** in Denmark. The price of services is especially higher in Denmark. That may be due to the fact that the market for services is subject to a smaller degree of foreign competition.

Danish investors make more **direct investment abroad** than foreign investors do in Denmark. However, this is not necessarily due to the fact that Danish growth conditions are not sufficiently attractive to attract investment from abroad. For example, there is a general tendency towards wealthy countries having greater outbound investment than inbound.

The Danish **capital markets** are overall relatively well-developed, measured by value relative to the economy (GDP), and are one of the largest in the world. This is due to such factors as mortgage lending for housing.

Public finances in Denmark are fundamentally healthy. Denmark is one of the OECD countries that have the smallest government debt, the **structural government deficit** is low in an international perspective, and the structural budget balance is close to balance. Denmark is one of the OECD countries with the lowest structural unemployment. Confidence in the Danish economy is high, which is reflected in the currently low interest rates.

Denmark is slightly below the OECD average when it comes to the proportion of tax revenue generated from **taxes and duties**, which is relatively more distorting (most growth-inhibiting). Note that international comparisons are associated with significant methodological difficulties, as whether a tax is relatively more growth-inhibiting than other taxes not only depends on the nature of the tax, but also the level of taxation.

On **climate, energy and environment** Denmark is generally relatively good compared to the OECD countries. This applies especially to renewable energy and recycling of waste. These support green growth and sustainable growth.

<sup>9</sup> The comparison of working hours between countries must be interpreted with reservations. This is because countries use different methods and sources to calculate working hours. However, alternative sources and methods do not change the overall conclusion that working hours in Denmark are relatively short compared to other countries. The short working hours in Denmark must be seen in the light of a relatively high part-time rate, relatively short-term contractual working weeks (working hours per week) and long vacations.

# Summary – Denmark as a growth nation

→ **Figure 16** Central indicators for growth conditions – latest figures for Denmark and the OECD countries

## Prosperity, productivity and labour

Prosperity (GDP per capita), current prices

Productivity level, current prices

Productivity growth (2008-2017)

Labour supply, 15-64 year-olds, hours

Business investment, share of GVA

## Education and skills

Academically level in primary school

Share of 25-34 year-olds with at least an upper secondary education

Share of 25-34 year-olds with at least a higher education

## Innovation, knowledge and infrastructure

DESI-Score (measure for digitalization)

Innovative companies, share of all companies

Public fundings to science and development, share of GDP

## Efficient markets in a global economy

Growth companies, share of all companies

Foreign direct investments, share of GDP

Prosperity-adjusted net prices\*

Size of capital market, relative to GDP

## Sustainable growth

Renewable energy, share of total energy consumption

Resource productivity

Recycling of waste

Experienced quality in transport infrastructure

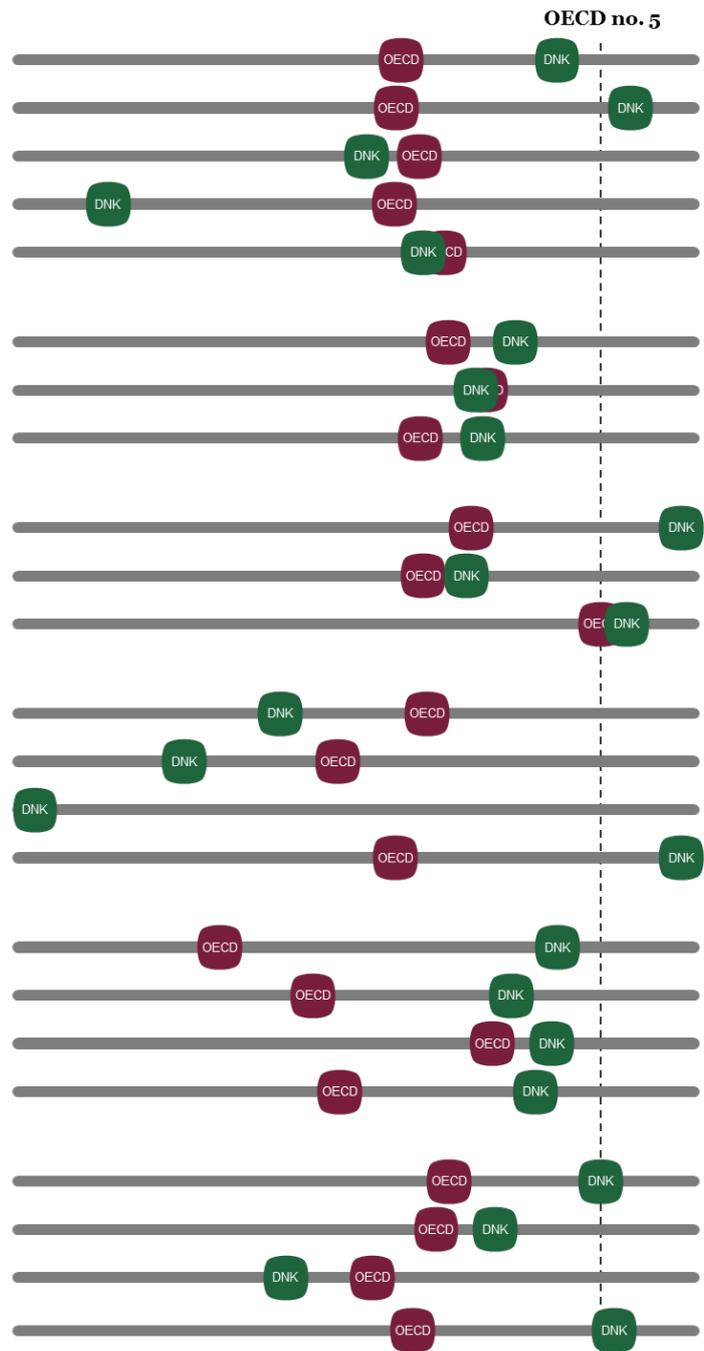
## Public economy

Income inequality (Gini coefficient)

Structural budget balance, share of GDP

Growth-friendly tax structure

Efficiency in public administration



Note: The indicator values for "DNK" and "OECD" are scaled in relation to the fifth-best OECD country and the lowest-ranked OECD country, where the former is set as index 100 and the latter as 0. Thus, the indicator indicates the relative deviation from the fifth-best OECD country and the lowest-ranked OECD country respectively. The scale in the figure goes from index 0 to index 110. For a more detailed description of measurement method and data base, see Appendix. \*Data for less than 10 countries, the OECD average is therefore not presented.

Figure data: [https://doi.org/10.30452/RVK\\_SAMMENFATNING](https://doi.org/10.30452/RVK_SAMMENFATNING)

### → Box 1 Selected government initiatives – implemented and planned

**Agreement on business and entrepreneurial initiatives.** The agreement from November 2017 allocated almost DKK 15 billion up to 2025 for strengthening the Danish business community and creating a strong entrepreneurial culture and equity culture. Initiatives are being implemented in five areas to strengthen the basis for future growth: 1) Strengthened entrepreneurial culture and equity culture, including an Equity Savings Account and tax deductions for investors, 2) Restrictions on border trade and tax relief, including lower taxes on typical border trade sensitive goods, and the removal of duty on nuts, 3) Digitalisation, new business models and green growth, including funding for a Strategy for Denmark's Digital Growth and the easing of the electricity heating tax to the benefit of renewable energy, 4) A tourism and rural district package, including funds for shared economic initiatives and 5) Competition conditions and globalisation, including a higher tax deduction for corporate research and development activities.

**Lower tax on work and pension payments.** The tax agreement from February 2018 makes it more attractive to save up for retirement and gives everyone in full-time employment a tax deduction. The agreement means that the 'interaction problem' has been dealt with for the wide spectrum of full-time employees who have ordinary occupational retirement pensions, thus giving greater incentives for saving up for retirement. The agreement introduced a new tax deduction of 4.5 per cent on earnings over DKK 187 500 per year, although not exceeding DKK 2500. In addition, a new pension deduction for pension contributions with deduction or right of withdrawal was introduced up to DKK 70 000. The agreement extends the basis for the employment deduction to include income from employment including pension contributions, while the maximum employment allowance is increased by DKK 1000.

**Agreement on security for housing taxation.** A new housing tax system is being introduced to ensure that total housing taxes do not rise when transitioning to and because of the new property valuation system. The new housing tax system will be introduced with effect from 2021. The agreement reduced property valuation tax rates and the average basic property tax premium will be significantly reduced by 2021, so that new and fairer valuations do not increase total revenues from property taxes.

**Tax freeze.** A freeze on taxes remains the principle for tax policy. The government also has a goal of lowering structural tax burden. Since mid-2015, the government's tax policy has resulted in taxes and duties being reduced overall by approximately DKK 26.5 billion by 2025.

**Burden freeze.** The government has introduced a 'burden freeze' which implies that no new legislation, etc., will be introduced that will apply burdens to business, unless compelling reasons arise. The burden freeze can be waived by EU regulation and other international legal obligations, rules that are necessary to protect compelling societal considerations and agreements with the business community. In addition to the burden freeze, the government will ease business burdens by DKK 4 billion between 2015 and 2020 and a total of DKK 6 billion by 2025, except for burdens resulting from EU regulation.

**Agreement on Denmark's digital growth.** The government has entered into a political agreement on initiatives for Denmark's digital growth. The agreement releases digitalisation funds from the Business and Entrepreneurship Agreement from November 2017. The agreement sets up Digital Hub Denmark, initiates a digital boost for Danish SMEs, sets up a Technology Pact, focusing on data as a growth driver, better regulation that allows for new business models as well as initiatives to enhance IT security for companies. Just under DKK 1 billion has been earmarked up to 2025 for the initiatives.

**Agreement on broadband and mobile in digital top class – the telecom policy of the future for the whole of Denmark.** In May 2018, the government entered into a new telecommunications agreement. The agreement strengthens mobile and broadband coverage throughout Denmark and maintains the current principles of market-based roll-out and technology-neutral regulation in the telecommunications sector.

**Energy agreement.** In June 2018, the government entered into a politically broad agreement to enhance Denmark's international strengths within on renewable energy, energy efficiency, research and energy regulation. The agreement ensures three new large offshore wind farms, a new pool for wind power and solar energy, a targeted energy saving campaign and targeted strengthening of energy and climate research. The agreement puts Denmark firmly on its way to meeting the government's goals of a low-emission society, independent of fossil fuels. It also provides the framework for cost-effective green growth, taking into account the cost to society and the individual, as well as technological developments. Among other things, electricity and electricity heating taxes are reduced by approx. DKK 2.4 billion, which promotes green growth and ensures better utilisation of rising volumes of renewable energy. The energy agreement is

## Summary – Denmark as a growth nation

based on the agreement for abolition of the PSO tax, agreement on a new technology-neutral supply model for wind and solar support in 2018 to 2019, as well as the agreed easing of the electricity heating tax, taking the first steps towards the development of a new energy policy.

**Growth plan for life sciences.** The government will strengthen growth and development in the Danish life sciences industry and make Denmark a leading life sciences nation in Europe. The growth plan will promote positive development of the life sciences industry with 36 specific initiatives aimed at barriers and opportunities for the entire value chain of the industry, from research to commercialisation, approval and sales on the international export markets.

**Growth plan for the blue Denmark.** The government has defined 36 initiatives to develop and strengthen the entire maritime sector, to make Denmark even stronger in future international competition. By 2025, the growth plan will make Denmark a global leader in tests of maritime autonomous technology, ensure competitive conditions, create more internships at sea and increase enrolment for captain and ship officer training, and create a comprehensive maritime marketing strategy in collaboration with the industry.

**Agreement on fair and equal competition between public and private bodies.** In April 2018, the Government entered into an agreement designed to ensure fairer and equal competition between public and private bodies. In cases where there are convincing arguments for public business activity, the agreement will implement fair and equal in relation to private sector bodies. This means that public sector activities must be priced so as not to distort competition and that companies receive more effective and transparent appeals process.

**Agreement on better terms for growth and correct tax payment in the sharing and platform economies.** The government entered into an agreement on the sharing and platform economies in May 2018. The 10 initiatives of the agreement make it more attractive for public participation in the sharing and platform economies, ensure proper tax payments and will support the sharing and platform economies, contributing to new job opportunities and ensuring that Denmark will continue to keep up with developments in the future.

**Entrepreneurship Panel.** The government has set up an entrepreneurial panel, which in June 2018 presented its new recommendations on access to foreign talent, attracting capital and developing a strong entrepreneurship culture, including the ability and desire of entrepreneurs to create the next generation of growth successes in Denmark. The panel is composed of entrepreneurs, experts and other business representatives.

**Growth Teams.** The government has set up four growth teams: The growth team for **green energy and environmental technology** will strengthen green growth through strong frameworks for market-driven business development, including by bringing the traditional energy industry together with the digital frontrunners and making recommendations for how digital and other technological opportunities can best be exploited. The growth team for **the creative professions** will make recommendations to strengthen the growth of music, gaming, furniture, fashion, architecture, design and film. The growth team for **trade and logistics** will make recommendations for how best to support and secure the trade and logistics industry in an increasingly digital world, where consumption patterns are changing significantly, not least as a result of increasing international e-commerce and new business models. **The growth team for the ingredients industry** will improve the basis for exploiting the industry's potential even better, both in terms of higher export value, healthier and better food, feeds and job creation.

**Agreement on simplifying the business promotion system.** The Government and the Danish People's Party concluded an agreement in May 2018 on a simplified and future-proof business promotion system focusing on business needs. The agreement establishes seven inter-municipal commercial centres, which will serve as strong competence centres with specialised professional competencies in business operations and development.

**Coherence reform – more freedom, trust and security.** The government presented the next major steps in the development of the public sector in September 2018, which will face growing bureaucracy and put the public, managers and employees in focus. The reform focuses on six areas: less bureaucracy, digital services, coordinated actions, management and competencies, health and youth. The results of all six areas of the Cohesion Reform will be presented throughout the autumn of 2018 and will be implemented over the coming years.

**Strategy for the circular economy.** The government launched its strategy for the circular economy in September 2018. The government will invest DKK 116 million divided among 15 initiatives pushing for a more sustainable society, recycling materials and products, exploiting their value to the full and minimising waste. Huge benefits can potentially be gained for the environment and the economy.

## Summary – Denmark as a growth nation

**Lower taxes and better business conditions.** The budget bill for 2019 will prioritise over DKK 500 million annually for tax and business initiatives. The government will increase activity in the holiday home areas by reducing the tax on electricity heating for holiday homes and improving conditions for commuters living in remote municipalities by continuing the increased travel allowance. Finally, a provision will be made for further reductions in excise duties, etc. The government will also reduce the burdens borne by the business community and strengthen business development by, for example, abolishing the administration fee for commercial waste management.

**The Disruption Council – Partnership for Denmark's Future.** The government set up the *Disruption Council – Partnership for Denmark's Future*, which will analyse the opportunities and challenges of the future. The Disruption Council will help ensure that the workforce is well-equipped for the future labour market. The Council consists of labour market partners, companies, experts and relevant ministers. It will discuss a wide range of topics at a total of eight meetings to the end of 2018.

**From primary school to skilled – vocational education for the future.** The government presented its proposal to strengthen primary and secondary schools, the 10th grade, guidance for young people, municipal support and the structures around and content of vocational education in September 2018. A total of DKK 2 billion has been allocated for initiatives over four years.

**Agreement on further initiatives to strengthen efforts to combat money laundering and the financing of terrorism.** This agreement implies a marked increase in the level of fines by eight times for money laundering in large banks. The level of fines is the absolute highest in Europe.

**Proposal for enhanced recruitment of foreign labour.** The government presented a proposal with 21 initiatives in October 2018 to make it easier and less bureaucratic for Danish companies to attract and hire foreign workers.

**Together for a greener future.** The government's climate and air bill contains a number of initiatives in the fields of environment and agriculture that will improve air quality and reduce greenhouse gas emissions. Overall, the proposal means that Denmark is well on its way to fulfilling its climate target in the EU for non-quota emissions by 2030.

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