



Good jobs

RECOMMENDATIONS TO THE DANISH GOVERNMENT FOR STRENGTHENING PRODUCTION IN DENMARK

EXECUTIVE SUMMARY

MAY 2015


The Production Council

Good Jobs - The Production Council's recommendations to the Danish Government for strengthening production in Denmark

FOREWORD

Production is an invaluable driving force of Danish economic growth and a precondition for some of the country's most value-adding jobs and, consequently, for maintaining the welfare state. The recognition that knowledge, development and production are closely connected has contributed to curbing the negative development that has characterised Danish production since the first decade of the 21st century. With the right ambitions, we can now take a further step and ensure a positive development. But it takes an effort. Politically, steps must be taken to stimulate investments, develop competencies and reduce the costs of manufacturing businesses.

The Production Council was set up by the Danish Government in October 2014 to draw up ideas and recommendations for how to strengthen the development of Denmark as an attractive country for production. The Government has in the last couple of years established a number of growth teams within larger business areas where Denmark has international competitiveness. The work taking place in the various growth teams has shown that advanced production plays an important role for Denmark's competitiveness. In continuation of the various growth teams, the Production Council has decided to focus broadly on the opportunities and challenges facing production in Denmark.

The Production Council presents six recommendations and a number of specific proposals to secure a sound future for production for the benefit of society. The assessment of the Production Council is that these recommendations will contribute to preparing the companies for creating growth and jobs in Denmark.

During the Council's work we have received a great number of proposals and input. Introductory dialogue meetings have been held with a wide circle of stakeholders as well as an international conference on future production attended by decision-makers, CEOs and organisations from Denmark and other countries. The Production Council has, consequently, considered a broad array of potential proposals for initiatives and it has been necessary to prioritise in order to present the recommendations which in the opinion of the Council will have the greatest impact on production conditions in Denmark.

In the first instance the recommendations are aimed at the politicians. It is, however, our hope that a focus on the good jobs in manufacturing businesses will make more young people interested in taking this path. We need that.

Global competition is becoming increasingly fierce and there is a need for a proactive approach if Denmark is to continue to be an attractive place to carry out production activities. This report is only a starting point. There is a need for continuous and persistent effort. We must have high ambitions for production in Denmark, and together we can achieve increased growth and good jobs.

Niels B. Christiansen
Chairman of the Production Council and CEO of Danfoss A/S

VISION

After decades of decline in the manufacturing sectors share of the Danish economy, we now see indications that the share is stabilizing and maybe even slightly increase. Responsible collective agreements and improved wage competitiveness as well as the political focus on reforms, education and level of costs have contributed to making the conditions for manufacturing businesses more favourable. With new technological opportunities and with increased application of robots interacting with competent employees, we have the opportunity to be even more ambitious.

Modern manufacturing businesses and manufacturing jobs have great earning power. Productivity, exports and the basis for Denmark as a prosperous society will therefore be strengthened if we succeed in seizing the new opportunities. Our vision is that production in Denmark will be strengthened so that production's share of the economy will be further increased – but most important, that the interaction between production, research, development and service will give rise to good jobs in Denmark.

This is a matter of far more than manufacturing jobs in a traditional sense. The development of new products often takes place in close interaction with the manufacturing process and industrial firms are responsible for the bulk of private investments in research and development in Denmark. Having a physical product to sell also opens up for selling highly specialised services and advice on integrated product-service solutions. Lastly, production in Denmark creates jobs not only in manufacturing but also in companies that supply knowledge and services to manufacturing businesses.

But we are standing on a burning platform: Either we seize the new opportunities or – as has often been the case in better economic situations – we lose competitiveness and more good jobs will leave Denmark. The Production Council recommends focusing on three objectives to strengthen the incentives and make it possible to have competitive production in Denmark:

- We must ensure that it continues to be *attractive to invest in Denmark*.
- We must ensure good conditions for *development and competitive production*.
- We must ensure more *competent employees* for production.

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The manufacturing sector has an earning power that is important for our society. Therefore, it is important for Denmark to be an attractive country for production activities. In recent years, the development have shown small signs of improvement, , but there is still a long way to go. There is a need for continuous and persistent effort if we are to succeed in reversing the downward trend and strengthening Denmark as a production country also in the longer term.

Production accounts for a large share of Denmark's productivity growth, exports as well as investments in research, development and innovation. And production in Denmark creates good and well-paid jobs that are very valuable for society. These are jobs directly in the production processes as well as jobs in the development and service functions that are closely linked to production. Activities from production also create jobs in e.g. construction, transport and other private service industries. For each new job created in a manufacturing business, another new job is also created within services and other industries.

Denmark has many strengths to build upon when it comes to production; a flexible and innovative workforce as well as large investments in research and development. Innovation and production are inseparably linked in many manufacturing businesses. Close interaction between production, research and innovation enables Danish companies to develop high-quality products and solutions that can be exported to customers in the large markets in e.g. Germany, the US and Asia.

Production today is often very different from what we usually associate with traditional manufacturing processes. People will often associate manufacturing with heavy machinery, men in overalls cutting metal with sparks flying. Today, production has moved on and is evolving rapidly. Experts in Denmark and the rest of the world state that we are on the edge of a new industrial revolution, driven in particular by developments within new production technology, advanced materials, automation and digitalization.

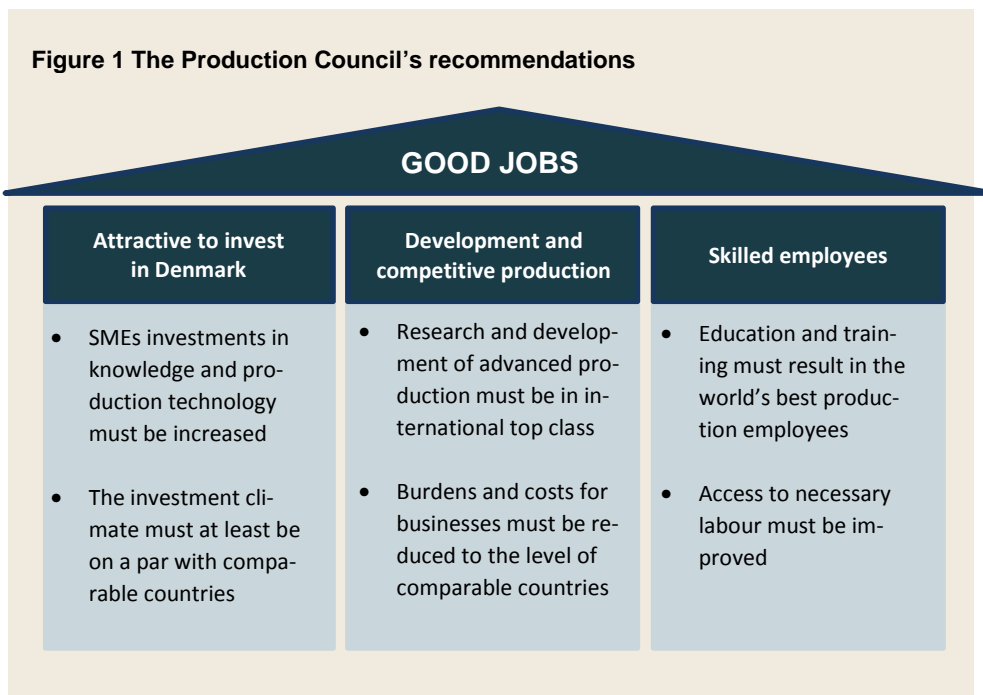
New technology is changing the fabric of production. The monotonous and heavy part of the manufacturing processes is taken care of by advanced machinery, and the industrial operator controls and monitors the processes in close interaction with high-technology equipment. In the pharmaceutical industry where production is highly automated, an industrial operator may take home a paycheck as big as a chemical engineer's. In the food industry, highly specialised employees have implemented systems which by means of cameras, sensors, light and data processing have made it possible for a factory to sort and pack 180,000 eggs an hour. The ability to use new technologies and to improve the interaction between humans and robots is crucial if Denmark also in is to be a competitive production country in the future.

For a long period of time and up to 2010, there was a significant decline in the number of manufacturing jobs in Denmark. Especially during the first decade of this century, the decline accelerated and Denmark experienced a reduction in the number of manufacturing jobs that was larger than in our neighbouring countries. After decades of decline for Danish production, it looks as if we are now standing at a possible turning point. After the onset of the crisis in 2008, many companies have put extra focus on productivity improvements and in that way strengthened their competitiveness. Recent years' improved wage competitiveness, reforms of the labour market and the educational system as well as reduction of a number of direct and indirect taxes have at the same time contributed to strengthening the conditions for production in Denmark.

However, we still face considerable challenges which we should maintain focus on to, significantly reverse the negative trend.

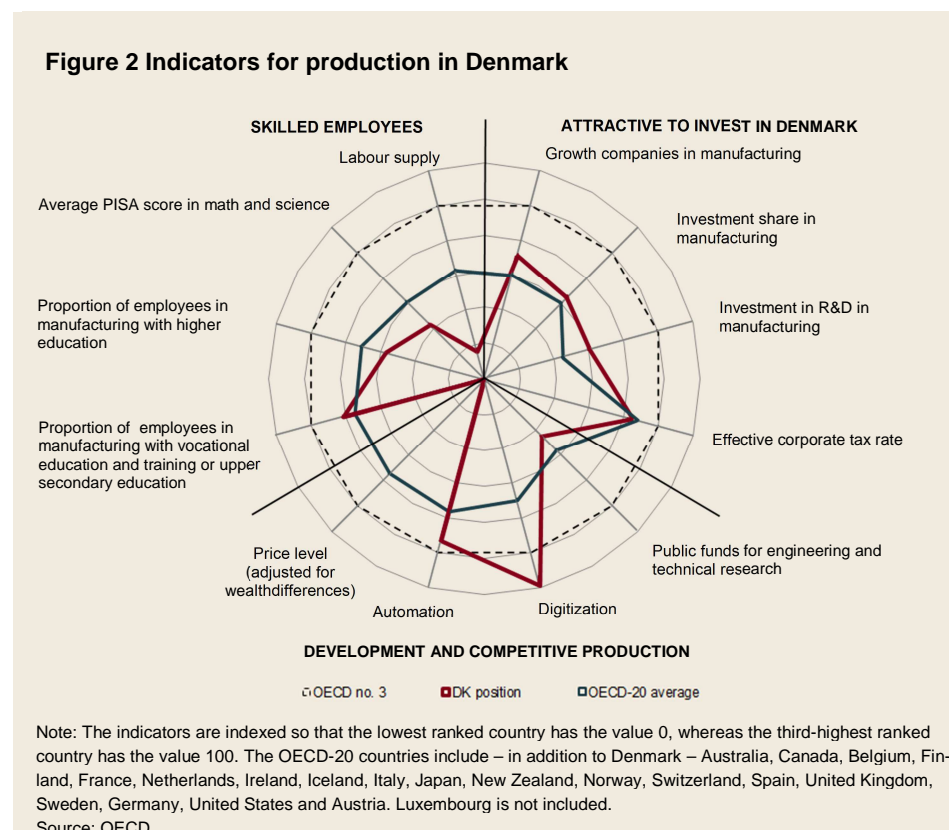
- *Shortage of investments:* Investments in manufacturing in Denmark has been on the decline after the crisis – also more than in other countries. The main reason is the economic trend, but low investments in the development of new products and more efficient processes will ultimately implicate that Danish companies lose competitiveness. It is therefore important to strengthen incentives for investments that support advanced production in Denmark. This applies not least to small and medium-sized enterprises (SMEs).
- *Strengthened research and development of advanced production as well as a competitive level of costs:* The development of competitive production in Denmark depends on enhanced interaction between production, research and innovation as well as dissemination of new technology. If Denmark is to play a leading role regarding innovation and advanced production, it is important that the overall level of costs for operations, establishment, reshoring or expansion of production in Denmark is at a competitive level compared to other countries
- *More skilled employees in production:* Companies must have access to competent employees and knowledge environments within production. Therefore, it is a big challenge that too few young people in Denmark find jobs in a manufacturing business. More young people must learn about production in primary and lower secondary school and complete a vocational education and training programme. Similarly, more young people with a higher education degree, especially in technology and relevant subjects within natural science and health science must find jobs in manufacturing businesses. A more targeted effort is necessary in order to avoid bottlenecks and a shortage of qualified labour in manufacturing businesses.

The Production Council has drawn up six recommendations targeted at improving the framework conditions for Danish production for the benefit of growth and employment in Denmark, cf. Figure 1.



In spite of recent years improved wage competitiveness and reform initiatives, a persistent effort is required to stay competitive in the fierce global competition. Unless we manage to keep up the momentum – also when the Danish economy begins to recover – we may soon put the good tendencies at risk. The Government must ensure that the conditions for production in Denmark are monitored on an ongoing basis also in the longer term as well as during a boom. Appointing a national expert for production to monitor the conditions for production and present proposals for improvements may contribute to ensuring a persistent focus.

In Figure 2, Denmark is compared on 12 indicators with the 20 richest countries in the OECD. The red line indicates Denmark's position. The dark grey line shows a simple average of the 20 richest countries in the OECD. Denmark is ranked high on digitization, automation, and ranked low on costs (measured by price level) and supply of labour. The effective corporate tax rate and the manufacturing sectors investments are approximately at the average of the OECD-20 countries.



We must be ambitious for production in Denmark, but we cannot be the best in the world in all areas. In research and development as well as in the area of education and training, Denmark should be among the leading countries. At the same time, it is important that we in other areas, including the investment climate and the general level of costs, do not fall behind other comparable countries.

Against this background, the Production Council has drawn up a number of specific proposals that are set out in Table 1. Some of the proposals will require that politicians provide considerable financing for their implementation, but the proposals will contribute to maintaining a strong production base in Denmark. This base will promote high-productive jobs in manufacturing industry and other sectors and thereby contribute to maintaining our high level of prosperity and welfare.

Table 1 The Production Council's recommendations and proposals

ATTRACTIVE TO INVEST IN DENMARK	
<ul style="list-style-type: none"> • SMEs investments in knowledge and production technology must be increased <ul style="list-style-type: none"> - Additional tax relief for small and medium-sized enterprises' investments in research and development as well as better possibility to carry forward deficits - Better access to financing of manufacturing businesses' growth and exports of systems solutions - Lower and uniform capital gains tax and equity income tax - Better advice and assistance for SMEs on development, growth and exports through a changed focus in public business promotion services 	
<ul style="list-style-type: none"> • The investment climate must at least be on a par with comparable countries <ul style="list-style-type: none"> - The depreciation rules for machinery and IT equipment must promote investments in advanced production - When establishing, reshoring and expanding production facilities, the special needs of companies should be considered e.g. in terms of infrastructure, education and training etc. - Continued competitive corporate tax 	
DEVELOPMENT AND COMPETITIVE PRODUCTION	
<ul style="list-style-type: none"> • Research and development of advanced production must be in international top class <ul style="list-style-type: none"> - Companies must have access to strengthened research environments through increased public investments in technological research as well as business-oriented natural science and health science - Significantly increased effort to disseminate production technology, materials, automation and digitisation, including through the Manufacturing Academy of Denmark (MADE) as well as the continuation of the Market Development Fund and the Danish National Innovation Foundation - An overall strategy for attracting private research and development investments and knowledge environments to Denmark 	
<ul style="list-style-type: none"> • Burdens and costs for businesses must be reduced to the level of comparable countries <ul style="list-style-type: none"> - Change of the PSO system to less distorting taxes - Strengthened competition for construction and services and thereby lower costs for manufacturing businesses - Continued reduction of administrative and economic burdens on businesses - Better conditions for production in environmental and physical planning regulation 	
SKILLED EMPLOYEES	
<ul style="list-style-type: none"> • Education and training must result in the world's best production employees <ul style="list-style-type: none"> - More skilled labour for manufacturing industry through more practical training placements and greater priority given to vocational adult education and training funds, etc. for the production industries - New technological equipment at vocational education and training colleges to provide the foundation for up-to-date learning about technology and advanced production - More employees with a higher education degree in technology, natural science and health science that will provide job opportunities within advanced production - Increased focus on production, technology and natural science in primary and lower secondary school 	
<ul style="list-style-type: none"> • Access to necessary labour must be improved <ul style="list-style-type: none"> - Prevention of bottlenecks in the labour market - Better framework for the recruitment of highly qualified or specialised foreign labour 	

By comparing Denmark on relevant indicators with selected other countries, a government appointed national expert or a similar public body should monitor the conditions for production in Denmark and present proposals for improvements on an ongoing basis.