



Small Great Nation

Mission possible? The welfare state towards 2040

Executive summary



Preface

The collaboration between Kraka and Deloitte on the Small Great Nation project is a private initiative that analyses the long-term prospects for the Danish society. The initiative is independent of political ideologies and interests. The purpose is to map Denmark's strengths and weaknesses and to identify ways of ensuring welfare and cohesion in Denmark in the future. The initiative utilises existing research-based knowledge and contributes new, independent analyses that result in expert-based proposals for creating a better Denmark. This is the fourth collaborative report under the Small Great Nation project.

The Danish welfare state emerged in the 20th century and has been continually evolving and adapting since. The welfare model, which is admired by many in the world, helps to reduce income differences and create cohesion in the Danish society by providing, among other things, public services for all, a well-developed education system and economic redistribution that ensures relatively low inequality. At the same time, the public sector is crucial for ensuring a supportive environment for the business sector. As the business sector creates most of the value added in society, it plays a pivotal role in financing the welfare state.

However, public services, in the form of childcare, education, health, business services, aged care, etc., have lower productivity growth than the rest of the economy. This puts pressure on financing the welfare state.

According various measures, inequality in Denmark has been increasing for a number of years. The optimal level of inequality is a political decision; however, limited inequality is a central element of the welfare state. In addition to redistribution through direct and indirect taxes, redistribution also occurs through the consumption of public services, which is relatively high for low-paid employees, particularly in relation to their incomes.

Can the welfare state continue to ensure an inclusive society for everyone in the future? Is the stability and cohesion that follows from a low degree of polarisation in Denmark threatened? In a range of Western countries, frustrations over the direction in which society is moving have been expressed by, for example, Brexit in the UK, the Yellow Vest movement in France and the election of Trump in the United States.

In this Small Great Nation report, we examine the state of the welfare system in Denmark, focusing on a range of challenges that the Danish society and welfare state face.

We would like to thank the secretariat's staff members: Jesper Kühn, Mikael Bjørk Andersen, Kristian Binderup Jørgensen, Anne Marie Krogsgaard Andersen, Thomas Wilken, Phillip Henriks, Therese Aunbirk Jeppesen, Sebastian Hørlück, Jakob Langager Christensen, Amanda Egelund-Müller, Katarine Bonde, Frederik Degn Pedersen, Christian Lund Sørensen, Oliver Elmeskov Mortensen and Bastian Hjelm Bech-Nielsen. In addition, we are very grateful to the Confederation of Danish Industry for their cooperation and assistance in the analysis of how the municipal structure affects business satisfaction.

Happy reading!

Hans Jørgen Whitta-Jacobsen, Professor, University of Copenhagen, and Senior Fellow, Kraka
Jakob Roland Munch, Professor, University of Copenhagen, and Senior Fellow, Kraka
Jørgen Søndergaard, Senior Fellow, Kraka
Peter Mogensen, Director, Kraka
Jens Hauch, Deputy Director, Kraka

1. Executive Summary¹

Mission Possible?

Is it possible to maintain the public sector and the welfare state as cornerstones of the Danish economy up to 2040? Is this "Mission Possible" or "Mission Impossible"?

The welfare state is a cornerstone of the Danish economy...

This fundamentally means ensuring the best possible overall living conditions for current and future Danes. One of the cornerstones comprises the business community and the market-based economy, which play a crucial role in securing employment and income for the Danes. A second cornerstone comprises the Danish people, who supply the labour for the companies and the public sector. The welfare state and the public sector constitute a third cornerstone: They ensure a generally well-educated and healthy workforce, take care of the weakest and maintain the institutions that ensure a safe and stable environment for both citizens and business. Thus, the public sector also contributes to a stable and prosperous society that is without major contentions between different groups within the population.

... which enjoys broad support ...

The Danish welfare system enjoys broad fundamental support among the parties that have historically held political power, but can the welfare state continue to fulfil its role going towards 2040?

... but is it stable looking forward to 2040?

Overall, we conclude that it is possible to have a Danish welfare state in 2040, but not without effort: The volume of public services cannot keep pace with the amount of private consumption without additional funding, from, for example, higher taxes, lower transfer payments or privatisation of some public services. The volume of public services has probably also developed at a slower pace than private consumption since the 1980s, and today the Danes are not impressed with the public service and have low confidence in the welfare state going forward. However, Danes do not want accelerating public expenditure compared to the trend since the 1980s, and if savings in public expenditure have to be made, Danes, to a large extent, want to maintain the core functions of the welfare system. By contrast, the Danes want slightly shorter working hours, which would put further pressure on public funding. These are problems that will not disappear automatically.

Evolution of the welfare state

The Danish welfare state evolved throughout the 20th century and continues to do so right up to today. In the post-war period, in particular, the education system and the care sector, among other things, developed at a fast pace. These developments coincided with the entry of women into the labour market, which required that society take on, to an increasing extent, the tasks previously performed mainly at home by women.

Unsustainable public finances in the 2000s

However, shortly after the turn of the millennium it became clear that the path of the public finances was unsustainable. Due, in large part, to demographic trends, if nothing changed, public sector revenue would not have been able to keep pace with expenditure. The country's politicians should be praised for their timely recognition of this as a serious problem, and for their prompt implementation of major reforms that have increased the labour supply. The most important of these reforms are the welfare agreement and the retirement age agreement, which means that the retirement age in Denmark must follow the trend in average life expectancy.

¹ This document serves as a summary in English of the full report titled "Mission Possible? Velfærdsstaten frem mod 2040". The full report (Danish only) is available at www.sgnation.dk.

Reforms have provided sustainability, but not without costs

The reforms have ensured sustainable public finances according to current accounting principles. However, the calculations assume constant working hours, which is not necessarily realistic, and the reforms have not been cost-free. Some of the reforms have contributed to the increasing inequality, and the retirement age adjustments were a hot topic during the recent election campaign, and are still the subject of much political debate.

Large public sector

In 2017, Denmark's total government expenditure amounted to 51 per cent of GDP, which gives Denmark the fourth largest percentage out of all the OECD countries. The public service production accounts for almost half of the total public expenditure, and includes remuneration to employees and goods purchased in connection with public services in the form of childcare, education, health, aged care, etc. In a ranking of most OECD countries, Denmark has the second largest public service share of the total economy. A significant proportion of the population regularly comes into contact with public services, either personally or through immediate family members. Almost 90 per cent of all 3 to 5-year-old children use public day care facilities, while more than 90 per cent of citizens have had contact with their GP within the past year. An important aspect of the public sector is that it provides a safety net: All Danes are at risk of, for example, loss of ability to work due to accidents or illness. The public sector ensures that, in this situation, one is taken care of and can maintain an acceptable standard of living. If the public sector did not perform this task, individuals would have to take out private insurance against such risks.

The welfare state going forward

In this report we analyse one of the great challenges for the Danish economy; namely, the future of the welfare state. Although, according to standard accounting principles, the public finances are sustainable, and the Danish economy is basically in good shape, political decisions still need to be made. After many years where inequality declined in step with the expansion of the welfare state, inequality has again begun to increase. Should the tendency towards increasing inequality be countered? From the beginning of the 1980s until 2010, public service expenditure followed the general economic trend, but since 2010 it has slowed. Should public service expenditure again grow faster? In some areas, the provision of public services is threatened by recruitment challenges. For example, qualified teachers are recruited from an increasingly academically weaker group of students, as measured by their final year senior secondary school exam results (in other words, their teachers college entrance scores). How should the welfare state develop in the future? And what are the implications of the various choices?

Slowdown in public expenditure warns of new times

From 1980 to 2010, public service expenditure grew at approximately the same rate as the rest of the Danish economy. Since 2010, there has been a marked slowdown in the public service expenditure trend, which thus, no longer follows the general economic trend. The political parties that have historically formed governments in Denmark have similar policies on how much public service expenditure should increase up to 2025, however, they do not include growth in service expenditure per user that keeps pace with the general economic trend, i.e., the trend in GDP. Our analysis shows that if the service expenditure per user is to keep pace with the general economic trend, then a small increase in tax rates will be required towards 2040.

Desire for public sector growth requires increased taxes

If, instead, an economy wants to keep the volume of public services per user a constant proportion of private consumption, then this means that public expenditure must, over time, constitute an increasing share of the total economy, and thus, the tax burden must increase significantly, with consequent lower labour supply and private consumption.

Weak public sector productivity growth

The challenge arises because productivity growth in the production of public services is lower than in the private sector. This is not necessarily because the public sector has inferior workers, rather, it is because of the nature of the tasks: It is, for instance, easier to replace human work processes with automated processes in industry than it is to replace a primary school teacher with a robot. The increasing productivity means that, over time, in industrial production, 1,000 working hours produces more and more. This also occurs in some parts of the public sector production of services, but it is slower than in industrial production.

B-a-u-m-o-l

If, over time, an economy continues to spend 1,000 working hours on industrial production and 1,000 hours on producing public services, the volume of public services produced will not keep

pace with the volume of industrial products produced. This is not some abstract theory; it is the hard reality that public sector service production and the Danish society will face in the coming decades. The challenge has a name: The "Baumol Effect".² In this report, we analyse the Baumol Effect thoroughly, and not only do we confirm that the problem exists, but also that, within a few decades, political decisions will have to be made regarding the amount of public service production there will be and how it is to be financed.

How can growth be a problem?

Productivity growth in private production makes Danes more prosperous. How can that ever become a problem? Take two hypothetical situations: In one, there is no productivity growth in the private sector, while in the other there is brisk private sector productivity growth. There is no productivity growth in the public sector in either of them. The second situation is obviously best, as private sector productivity growth gives a gain that, depending on preferences, can be used for private or public consumption. A problem arises only if the population expects the level of public services to keep pace with private consumption. In this case, it is necessary to employ more and more public sector employees and raise the necessary revenue to fund them.

Recruitment problem

In certain areas, the provision of public services is threatened by recruitment challenges. In particular, we demonstrate that the primary education sector (which, in Denmark, covers the primary and middle school/lower secondary years – from kindergarten up to year 9) has a double recruitment problem. Those who train as teachers are recruited from an increasingly academically weaker group of students, as measured by final year senior high school exam results. What's more, the primary school sector has difficulty attracting and retaining qualified teachers, and particular difficulty retaining the best of them. The latter problem does not seem to have worsened over time, but, all else being equal, the problems mentioned must make it more difficult for students to acquire the necessary skills for the labour market of the future.

Nurses are not leaving the profession

In another area of the public service, a comprehensive survey shows that the widely held impression that nurses are increasingly leaving the profession is not correct. The newly graduated nurses enter and stay in the public health service to approximately the same degree as they have always done.

The perceived quality of public service is typically decreasing

It is possibly the effects of the Baumol Effect and the recruitment challenges that are reflected in the falling confidence in the public sector. If you ask the Danes, the general view is that the quality of childcare (nurseries and kindergartens), primary education, and health and aged care is decreasing, while confidence that, in ten years, the welfare state will ensure acceptable conditions for people in difficulty has also fallen. On the other hand, the quality of the police force and the judiciary is largely perceived as unchanged. Even though the quality of public services is generally perceived as falling, there are differences in the perceived quality levels. Thus, the quality levels of healthcare, the police force and the courts are perceived to be higher than in the other areas. What's more, interestingly, the experience of quality only depends to a limited extent on whether or not one actually uses the service.

A more positive picture for the business sector

The public sector is not only important for private individuals, but, to a large extent, also for businesses. Here, in general, there is a positive picture: The legal system is, for example, efficient and experienced, to a large extent, as being independent, and, the overall business environment is experienced as being good. However, there are differences between companies' satisfaction with municipal services, which, to a certain extent, depend on the characteristics of the companies and on expenditure of the municipalities. There are also differences in the satisfaction with the municipalities that cannot easily be explained, but which may be related to personal relationships and the political focus of the municipalities. It is a prerequisite for the welfare state that the business

² The Baumol Effect gets its name from the American economist, William Baumol, who first identified the problem together with William Bowen. The Baumol Effect has two aspects – one is related to costs and the other to growth. The growth problem is that, over time, the sectors with low productivity growth come to occupy a larger part of society's resources, which is why overall economic growth will be lower. The cost problem arises in relation to public funding because costs in the public services sector, with low productivity growth, increase in response to wage increases in sectors with high productivity growth. For the public service sector, this means that additional funding must be provided on an ongoing basis in order to maintain a constant share of the total volume of production. When we refer to the Baumol Effect in this report, we mean the cost problem.

sector functions well and has a supportive environment. A well-functioning business sector ensures high employment, high pay and a high return on capital, and it accounts for the majority of value creation in society. Therefore, supporting a well-functioning business sector is a key role of the welfare state - not for the sake of the companies, but for the sake of the Danish population.

Distribution and redistribution

A central aspect of the welfare state, which puts the role of public services in perspective, is the degree of equality and the extent of redistribution from rich to poor. The optimal level for these is a political decision. Economic theory does not provide evidence for whether one degree of equality and redistribution is better than another. However, equality and redistribution can be politically important: If broad sections of a population feel bypassed, they may react through the democratic process to express their dissatisfaction. What's more, if significant minorities become very dissatisfied, situations such as the one we see with the Yellow Vests in France can arise. We conclude, however, in an analysis across the European countries, that Denmark is far from a situation like the one in France.

Increasing pay gaps

There are several factors behind the increasing inequality: First and foremost, hourly wages have developed very differently. We show that, in the past 20 years, the highest hourly wages have increased considerably, while the lowest hourly wages have not increased at all in real terms. In a separate analysis, we also show that the income share of the top income earners is increasing.

Lower redistribution via taxes and transfers

The tax and transfer system is mainly designed to smooth out income inequality. However, we show that, overall, taxes and transfer incomes have all evolved in such a way that there is less redistribution today than was the case in, for example, the early 1990s.

Redistribution via public service expenditure

The public sector's service expenditure also contributes greatly to redistribution, even though it is not included in the usual analyses of income differentials. Free access to services such as healthcare, education and aged care particularly benefits low income groups, but this cannot be seen directly in their incomes. Taking this into account, the income differences are less than the impression gained from conventional income inequality measures. However, this also means that, if public services do not keep pace with the trends in private consumption, the actual, and thus, the experienced difference between rich and poor will increase, although this is not reflected in conventional inequality measures.

The potential economic opportunities won't automatically be realised

In the previous Small Great Nation reports, we analysed a number of aspects of the welfare state and its redistribution. In the first report - Opportunities and Challenges - we focused on the foundations for a prosperous Danish economy and concluded that, overall, Denmark is well equipped to face the challenges of the future. We found that the basic social institutions were of high quality and of great importance for economic growth. We also found that, while we are now experiencing lower productivity growth than in the past, it is not lower than in comparable countries. In the present report we also examine productivity, but this time we focus on the public sector. Finally, we found that the business sector in Denmark is solid and in a good position to meet future demand - but we can only fulfil this potential if the workforce has the relevant education and training, which is one of the public sector's core tasks.

Good social cohesion, but cracks in the foundations

In the second report - Social Cohesion in Denmark - we found that overall cohesion is good, but that there are cracks in the foundations that should be rectified before problems develop. For example, we found that, overall, we gain from globalisation, but there is a group of people who find it hard to bounce back after losing a job because of competition from imports, outsourcing/offshoring of jobs, the influx of foreign labour or the introduction of new technology to the workplace. Generally speaking, we found that Danes are positive about globalisation, but significant minorities are turning against it. The analysis showed that cohesion is also challenged by the hostile tone of the debate across ethnic groups and by the uncritical flow of information on social media. Furthermore, we found that there are geographical divides, for example, the highly educated are moving to the larger cities in higher numbers than the less highly educated, and the wealthy and the poor increasingly live in geographically separate areas. Finally, we showed that this leads to skewed primary school outcomes, where resource-weak pupils are pulled down by other resource-weak pupils in predominantly lower socioeconomic areas, while the strong ones

are lifted by each other in more affluent areas. This reinforces inheritance of socioeconomic status and reduces social mobility.

Future reforms will be harder but can still be clever

In the third report - The High-Hanging Fruits - we focused on the labour market. We found that the low hanging fruits, i.e. labour market reforms that are simple, effective and that have broad political support, have been reaped. Hence, if Denmark is to adopt policies that call for further reforms along this path, we will have to look higher in the tree for the fruit. We also found that the Danish economy, contrary to the widely held view, will not be sustainable if the Danes exchange some of their prosperity for more leisure, as we have been doing for many years. Our analysis showed, however, that there are still fruits that can be harvested. Following our finding that a small but growing group of people on the edge of the labour market have been in part-time employment for years, even though they want to work more hours, we suggest that public funding for continuing education should be directed, to a greater extent, towards those who need to improve their skills. The third report also examined stress levels in the population and found that the extent of severe stress is increasing. Another finding showed that Denmark has been able to utilise foreign labour with good skills and that the economy has gained from the increasing number of foreigners working in Denmark: In the short term, foreign labour helps stabilise the economy and, in the longer term, income per capita increases.

Contents of the summary

In this summary, we first summarise the key results of the many analysis that form the basis of the report. Next, in Section 1.2, we set up a number of discussion points that politicians, business leaders and the general population will contribute to as part of the endeavour to ensure a well-functioning public sector in the future.

1.1 The key analytical results

The report's key analytical results are:

Challenges for the welfare state

- With the help of a newly constructed "Riot index", we show that there are significant differences between the European countries in terms of satisfaction and confidence in the political system, etc. Denmark is quite low on the dissatisfaction scale, hence, there is nothing in our analysis that suggests that Denmark is likely to experience social unrest, such as the Yellow Vests in France, in the foreseeable future. Unemployment and the economic situation in general affect the levels of satisfaction with and confidence in the political systems in the EU countries, and we find a positive correlation between dissatisfaction and inequality across the countries.
- In a survey, the Danes responded that they have low confidence in the welfare state's ability to care for them should they, for some reason, be unable to manage themselves, e.g., because of unemployment, illness, disability, old age, etc. They also responded that their current level of confidence is lower than it was 10 years ago, and nearly two-thirds of respondents expect the welfare state to be inferior in 10 years compared to today. In other words, the Danes are worried about the future of the welfare state.
- Danes believe that the quality of a range of public services has fallen over the past 10 years. The decline is experienced most strongly in aged care, where over two-thirds of Danes believe that the quality is lower or much lower than 10 years ago. In childcare (kindergartens and nurseries), in primary education and in the health service, there are many more who believe that the quality has gone backwards than who believe it has improved. The picture is the same both for the users and for the others.
- When Danes are asked where savings should be made in government budgets, if savings are to be made at all, it becomes evident that they want expenditure maintained in what are normally considered to be core welfare areas: They only want minor savings in areas such as the health service, social expenditure, including aged care, and in education. On the other hand, the Danes indicate that large savings should be made on foreign aid, in particular, but also on

defence, housing, environmental protection, culture and leisure, and business-related expenses.

- On average, Danes respond that they want balanced economic progress between the private and public sectors. When viewed over the entire period, the governments' fiscal policies since the start of 1980s through to 2010 have generally been in line with this preference.
- On average, Danes would prefer to have a slightly shorter working week than they have today. Thus, there is no sign of a push for dramatic changes in working hours in the near future based on our study. Over the longer term, however, it is likely that the Danes will want shorter working hours, just as working hours have gradually decreased over the past many years.
- Productivity is rising more slowly in the public sector than in the private sector. This means that the volume of public services cannot keep pace with increases in private consumption unless the tax burden increases. If public service expenditure increases in line with the general economic trend, this corresponds to, all else being equal, the tax burden remaining unchanged: however, if this is the case, the volume of public services cannot keep pace with the volume of private consumption, which has been the situation from the beginning of the 1980s up to 2010. If, in the future, the volume of public services is to keep pace with the volume of private consumption up to 2040, for example, the base tax rate would have to increase by almost 5 per cent to finance the public services. This would result in reduced labour supply and, hence, lower economic growth. Thus, it is unrealistic to expect that the volume of public services can be increased so that it continues to keep pace with private consumption.
- The problems for public funding that follow from the Baumol Effect could, alternatively, be solved by accepting that the volume of public services does not keep pace with the general economic trend. In recent times, public service expenditure has kept pace with the general economic trend, but, due to differences in productivity growth, the volume of services has not kept up. Alternatives to increasing public expenditure include privatising some parts of the production of public services, or introducing full or partial user payments. Exposure to competition, e.g. in the form of outsourcing, could probably increase the productivity of the services to a certain extent, but this would only postpone the problem stemming from the Baumol Effect for a short time.
- There is a significant difference in productivity growth in different areas of public services. It is good in the health service, but close to zero in the primary school sector. Therefore, the financial challenge of funding the production of public services will not be removed by continual privatisation of the health service, almost the exact opposite holds true.
- Denmark is placed at the top in international comparisons of business environments. This is due, among other things, to a highly qualified workforce, a healthy macroeconomic climate and well-functioning public institutions. However, the studies also point to areas that Denmark, from the viewpoint the companies, can improve. This applies, for example, to the amount of government regulation, the environment for new company start-ups, and the challenges of attracting qualified foreign labour.
- Business satisfaction with their home municipality depends on the level of municipal taxes, especially land tax and property tax, and on the fees and charges for municipal services. Lower taxes and higher levels of service increase satisfaction. The degree of exposure to competition in the municipality does not seem to affect companies' level of satisfaction. There are significant unexplained differences in satisfaction across municipalities. This indicates that non-measurable conditions, such as effective administration or personal relationships, can be crucial.
- The Danish legal system performs well by international comparison. The case processing times are in the better half for Europe, resource consumption is low and the perceived independence is very high. This is crucial for business, as a well-functioning legal system supports economic development and provides an important framework for business.
- For a number of years fewer of the most talented young people have completed teacher training, while more of the academically weaker ones have. Over the past 20 years, both the

How long can the
bumblebee keep
flying?

Business environ-
ment

Public sector
employees

best and the worst of the qualified teachers achieved gradually worsening teachers college entrance scores in their final secondary school exams.

- Many qualified primary school teachers don't work in a school, nor are they employed in a job within this field in general, and only about 45 per cent of a cohort of graduates are working in the public primary school sector one year after graduation. At the same time, an increasing proportion of the teachers in the public primary school sector are not qualified teachers. They accounted for 18 per cent in 2017. This increase is not due to a larger number of people teaching in schools who are trained as infant or kindergarten teachers, but is primarily due to an increase in the proportion of teachers who have not completed tertiary education.
- The public primary school sector continues to employ a larger proportion of the most-talented, newly-qualified teachers than of the least skilled, but the most-talented continue to leave the profession at a higher rate. The primary school sector has an ongoing challenge to retain the most-talented employees, but this is not a problem that has become worse over the last 20 years. Overall, we find no indication that the recruitment challenge of hiring new graduates or retaining employees has changed significantly over the past 20 years, but this does not mean that the challenge does not exist.
- When tested in their own reading, mathematics and problem-solving skills, Danish teachers scored on the average level in an international comparison, while the teachers in the other Nordic countries scored significantly higher, especially in Finland. What's more, Denmark is one of the countries in which teachers have the lowest skills relative to others college graduates in the workforce.
- Over the past 20 years, a clear pattern has emerged, which shows that newly qualified nurses tend to remain in the public sector and leave only very gradually, and there is no evidence that the nurses have begun a mass exodus from the public sector in recent years, rather the opposite is the case. However, this does not change the fact that a significant proportion of qualified nurses do not work in a job that is in or related to the profession at all.
- Internationally, Danish nurses are ranked among the top in terms of their skills in reading, mathematics and problem solving. What's more, Denmark is one of the countries where, in terms of these skills, nurses lag the least behind the rest of the workforce with college degrees.
- The public sector generally recruits new employees who are just as good as those recruited in the private sector. This picture has remained unchanged for the past 20 years. Thus, the public sector in Denmark does not have a challenge in attracting employees at the beginning of their careers, nor is there any sign that the recent graduates have shifted away from the public sector any faster than in the past.
- The most talented new employees in the public sector leave the sector slightly faster than the least skilled. The difference in retention between the strongest and the weakest is less for more recent cohorts of new employees - this indicates that the public sector has become better at retaining the best employees.
- Public sector employees in Denmark score a little better than average in international comparisons that measure reading, mathematical and problem-solving skills. However, our neighbouring countries, Norway, Sweden and Finland, score higher. Denmark is one of the countries where the public employees' skills overall are weakest compared to the private employees. This reflects the fact that private employees in Denmark have very strong skills relative to other countries.
- Employees in the public and private sectors rate their management and their workplaces fairly equally. This applies to the assessment of their colleagues, their immediate managers, the management's focus on the workplace environment and on customers and/or users, and their overall job satisfaction. The assessment of top management is a little worse in the public sector, and public sector employees are also more negative in their assessment of whether there is enough time to carry out all their tasks.

Inequality and redistribution

- Income inequality in Denmark has increased over the last 30 years, both in terms of gross income, i.e. income from labour and income derived from wealth, etc. and before taxes and transfers, and in terms of disposable income, where taxes and transfers are accounted for.
- Inequality has increased more for disposable income than for gross income. This means that the redistributive effects of public transfers and of the tax system have fallen since the early 1990s. This needs to be viewed in light of the implemented reforms that have increased the economic incentives for employment. Increasing inequality is not, however, only a Danish phenomenon. A large number of other Nordic, Continental European and Anglo-Saxon countries are experiencing the same tendency towards increasing inequality. However, Denmark still has one of the lowest degrees of income inequality among the OECD countries.
- Income mobility in a society reflects the opportunities citizens have to realise their plans and dreams. Recent studies indicate that income mobility in Denmark has been declining over the past 15 years.
- Over the past three decades, income increases in Denmark have particularly benefited the individuals in the society who have the highest incomes. The share of total income of the one per cent of the population with the highest incomes has increased from approximately 7 per cent in the early 1990s to approximately 10 per cent. The increase in the top income group's income share has been driven by larger increases in the wages of high-income earners and higher dividend incomes from shares, while housing values have not had any effect.
- Today, the top income share in Denmark, in terms of gross income from employment, capital and property, is in line with other European countries such as France, Germany and the UK, but has become higher than in Norway and Sweden. This ranking is mainly due to a greater increase in top income shares in Denmark since the financial crisis than in the other European countries.
- Unlike other countries, employees in Denmark, as a whole, have retained their share of the total income from value creation in Denmark. In recent years, employees have received approximately 60 per cent of the total gross factor income, which is roughly equivalent to the average labour share over the last almost 50 years. Thus, there is no indication that the remuneration in Denmark goes to a greater extent to owners of capital.
- However, the differences in hourly wages have increased relatively sharply over the past 20 years. The highest hourly wages have actually increased by just over 20 per cent in real terms since 1997, while the lowest hourly wages have not risen in real terms over the past 20 years. The increasing difference between high and low paid workers is found both for groups with strong labour market attachment, when excluding students from the analysis, and when account is taken of the variation in wages over time for the individual worker.
- Public services in the form of, e.g., childcare, education, healthcare, social services and aged care are made available to all citizens free of charge, or are heavily subsidised. Utilisation in childcare, social services and aged care areas are especially high for low-income groups. Public service utilisation in healthcare, and especially in the education area, on the other hand, is more evenly distributed. Overall, the public service increases income redistribution and reduces inequality corresponding to a decrease in the Gini coefficient from 27 per cent to 23 per cent.³

1.2 Questions for discussion

The analytical results raise a number of questions and suggest some possible answers. The purpose of the work of Small Great Nation is to open up discussion, not close it. Therefore, we will not suggest any answers below, rather, we only ask the questions.

³ This is based on a statement in "*Økonomi- og Indenrigsministeriet*" (2017) (*Ministry of the Economy and the Interior*) and is not fully comparable to the statement and figures mentioned above [according to own calculations].

Challenges for the welfare state

- Our analysis indicates that we are not close to having social unrest and "yellow vests" in Denmark. The welfare state is undoubtedly a significant contributing factor to this. Can this reassuring situation be maintained over the next decades, especially in the light of the challenges arising from the Baumol Effect?
- The confidence of Danes in the welfare state is relatively low. The Danes believe that the quality of the public service is decreasing, and are pessimistic about the future of the welfare state. Is there a risk that support for the welfare state could collapse because it is not experienced as being good enough?
- The Danes want to largely protect the costly, classic welfare areas, such as healthcare, aged care, childcare and education, from budget cuts, if there are to be budget cuts, while they prefer to save on relatively small items such as foreign aid and defence. How can the problems arising from the Baumol Effect be handled in practice when the population does not have a great appetite for curbing spending on the core welfare items? Should one, for example, consider add-ons in connection with public services, or other "intermediate solutions" that ensure a certain level of service for everyone, but with greater flexibility built in?
- Many Danes want the public sector to expand in line with the increasing wealth of the country, but the parties that normally form government are currently planning a slower rate of increase up to 2025. Are the politicians out of step with the voters, or have the voters not realised the consequences of their wishes?
- The Danes today would prefer slightly shorter working hours. If this preference were realised, public finances would become less sustainable. Should the desire for shorter working hours be counteracted politically for the sake of, for example, the public finances - and would this even be possible? If not, is the answer lower public spending, higher taxes or more labour supply reforms?

How long can the bumblebee keep flying?

- Almost inevitably, productivity advances in the public sector fall short of those in the private sector - the so-called Baumol Effect. Should the level of public services follow the growth in private consumption, with the consequent substantial tax increases? Should the current level of service per citizen be maintained and, hence, lag behind private consumption growth? Or should expenditure on public services follow general economic trends, as has been the case since the early 1980s and up to 2010? Should any eventual savings be broad-based or focused on selected areas? Is the solution, for example, privatisation and/or outsourcing, or should the service level be maintained at the expense of transfer incomes?

Business sector environment

- The environment for business in Denmark is good, but we have seen that there are increasing challenges in key areas, such as tax collection and organised crime. How is Denmark's top position with regard to the business environment to be best maintained and expanded, taking into account other key socio-economic priorities, such as climate action?
- Municipalities can increase the business sector's satisfaction through lower taxes and a higher level of service, but there are also a number of other factors that affect business satisfaction. How do the municipalities ensure the best environment for the business community without simultaneously sacrificing tax revenues and thus the citizens' services?
- The Danish legal system is considered to be well-functioning and effective in international comparisons. How do we best ensure that the legal system utilises the new technologies in terms of digitisation, automation, blockchain, etc. and maintains its place as one of the world's best legal systems?

Public sector employees

- The quality of the primary school sector, and thus the quality of the teachers, is absolutely central to our welfare state. How do we ensure that more of the most talented young people train as teachers? How can the primary school sector attract more of the qualified teachers, especially the most skilled ones? And what can be done to ensure that more of the most talented teachers remain in the profession?
- Nurses in Denmark are skilled, but a large fraction of qualified nurses do not work in the profession at all. Will we be faced with a shortage of nurses in the future, and if so, how can we ensure that there will be enough nurses in the public health service?

Inequality and redistribution

- The public sector employees in Denmark have, on average, slightly better skills than those in other countries, but nevertheless, they lag far behind the private sector employees. Are the public sector employees good enough, or should one try to attract more skilled labour from the private sector, or perhaps from abroad?
- Income inequality in Denmark has increased over the past 30 years. This follows an international trend and should be viewed in light of the implemented reforms that have increased the economic incentives for employment. At the same time, the income mobility of younger generations compared to their parents has declined over the past 15 years. Is the increasing inequality and declining mobility worrying for the Danish society, which otherwise had built up historically and internationally high degrees of equality and income mobility?
- The economic development in Denmark over the past three decades has particularly benefited the people with the highest incomes, and they increasingly live in Copenhagen and Frederiksberg, and in several eastern and central Jutland municipalities. This trend follows the international trend, but since the financial crisis, Denmark has seen a greater increase in the top income shares than other comparable countries. Is it at all a development that society needs to worry about, and if so, what should be done?
- The difference between the highest and lowest hourly wages has increased significantly in Denmark over the past 20 years, and the real hourly wages of the lowest paid have not increased over this period. Is this a development that should cause concern? What trends in the Danish labour market lie behind this development? Could it be a breeding ground for dissatisfaction and frustration for sub-groups in the labour market and in the Danish population?
- The redistribution effect of public services reduces the degree of inequality in Denmark. This is often overlooked, which means the decision-making basis for many economic policy measures is insufficient. Should an assessment of the redistribution effects be included as a standard procedure when, for example, considering changes to the extent or targeting of public services?

