

De Økonomiske Råd   
Formandskabet

**DANISH ECONOMY  
SPRING 2021  
SUMMARY AND  
RECOMMENDATIONS**

## **SUMMARY AND CONCLUSIONS**

Chapter one comments on current economic issues such as current fiscal policy, COVID-19 related support packages, and the housing market. Given the likely quick recovery, fiscal policy should aim at keeping the structural deficit within the current limit of ½ per cent of GDP.

Chapter II contains a projection for the Danish economy and public finances towards 2025. The employment gap is expected to turn positive in 2022, emphasizing the argument for a contractive fiscal policy.

Chapter III contains an empirical analysis of the Danish retirement reform over the period 2014-19. The analysis shows that the retirement reform has increased labour force participation in the affected age groups quite significantly.

Chapter IV focuses on investment in children early in life. A new study of how changes in staff/child ratios and the proportion of qualified educators affect the children during the course of and at the end of primary school education shows no significant effects.

## SUMMARY AND RECOMMENDATIONS

This report from the Chairmanship of the Danish Economic Council consists of four chapters:

- Chapter I: Current economic policy
- Chapter II: Economic outlook and public finances
- Chapter III: The retirement reform
- Chapter IV: Early childhood measures

Chapters I and II contain the Chairmanship's evaluation of current economic issues, including issues related to COVID-19 economic support packages, the housing market, climate policy, and discretionary and non-discretionary fiscal policy. Chapter II also contains a projection for the Danish economy until 2025 and an assessment of the public finances.

Chapter III contains an analysis of the effect of The retirement reform, which, over the period 2014-19, has gradually increased the early retirement age, shortened the early retirement period and raised the state pension age. The analysis focuses on the effects on labour force participation and employment of the affected age groups.

Chapter IV focuses on various forms of investment aimed at preschool children. The chapter contains, among other things, an empirical analysis of the effects of changed staff to child ratios and changes in the proportion of qualified early learning educators in preschool childcare institutions (nurseries and kindergartens). The analyses primarily focus on the effects on the children's performance in school.

### CHAPTER I, CURRENT ECONOMIC POLICY

Chapter I summarises the economic policy evaluations and recommendations that are based on analyses carried out in Chapter II of this report and on previous reports from the Chairmanship.

**Contingency plan  
should be in place**

The chapter begins with a review of the management of the COVID-19 pandemic thus far. Among other things, a scalable contingency plan

that can be implemented if a third wave of infection should occur during the autumn or winter is recommended.

**The number one rule: the support packages should be phased out when the economy reopens**

The main message from the chapter's discussion of the economic support packages is that the packages have side effects in the form of loss of dynamics in the Danish economy. The problem is limited as long as restrictions effectively shut down businesses. However, as the economy reopens and the restrictions are gradually lifted, the problem with the loss of dynamics increases. Therefore, an easing of restrictions and a phasing out of economic support packages should go hand in hand, even if some restrictions on economic activity are still in place.

**No immediate need for adjustment of fiscal policy in 2021**

Drawing on the projection in Chapter II, Chapter I includes an evaluation of the 2021 and 2022 fiscal policy. The assessment is that there is currently no need for further fiscal policy initiatives in 2021. The economic support packages, COVID testing and vaccinations are associated with a significant government spending. Therefore, fiscal policy must currently be characterised as being highly expansive, and this is in a situation where unemployment is only slightly above the pre-pandemic level.

**Need for a cautious line in fiscal policy in 2022**

It is still too early to assess whether there is a need for adjustments in the fiscal policy for 2022. However, considering the uncertainty, it is relevant to approach next year's fiscal policy cautiously. In practice, it is significantly easier to relax fiscal policy if the need arises than to tighten fiscal policy if it is initially too relaxed. If the economy improves as expected, fiscal policy should not be relaxed in 2022 relative to the assumptions in Chapter II. The Chairmanship's assessment is that the structural deficit in 2022 will exceed the deficit limit in the Budget Act of  $\frac{1}{2}$  a percent of GDP. In the absence of exceptional circumstances, the current Budget Act does not allow for the deficit limit to be exceeded when the Finance Bill is presented in August.

**A uniform taxation of all greenhouse gas emissions is the cheapest way to reach the 2030 target**

Finally, the chapter includes a discussion of climate policy. A uniform taxation of all greenhouse gas emissions is the most cost-effective way to reach the 70 percent target by 2030. The reduction target can be achieved by replacing the existing energy taxes with a uniform greenhouse gas tax of around DKK 1,200 per tonne CO<sub>2e</sub>. The social costs are estimated to be around DKK 4 billion in 2030.

## CHAPTER II, ECONOMIC OUTLOOK AND PUBLIC FINANCES

Chapter II contains an overview of the current economic situation in Denmark, an outlook to 2025 and the Chairmanship's evaluation of the state of the public finances, including the compliance with the Budget Act. The chapter also includes a discussion about fiscal policy rules.

### Prospects for a rapid normalisation of demand

Like many other countries, the Danish economy was hit by a second wave of COVID-19 in the autumn and over the winter. The increased risk of getting COVID-19 and the lockdowns that were imposed contributed to a decline in demand and economic activity in the first quarter of 2021, but the decline in activity was smaller than in the spring of 2020. With the vaccine rollout and the gradual reopening during the spring, prospects are that demand, in many respects, will return to normal. In particular, private consumption is expected to increase, fuelled both by large accumulated savings from the first year of the COVID-19 pandemic and by high house prices.

### Employment may exceed the structural level in 2022

The favourable trend in economic activity in Denmark is expected to continue over the coming years. The growth rate is expected to be approximately 3 percent this year and just over 4 percent next year. Employment is expected to increase by almost 80,000 people from 2020 to 2022, which will bring unemployment down to the relatively low level that prevailed before the outbreak of the pandemic. Employment is expected to exceed the structural level by around 1 percent in 2022.

### The positive outlook is based on the assumption that the spread of COVID remains under control

An important prerequisite for the positive economic outlook is that the infection is kept under control using widespread and effective vaccination and testing. Despite widespread vaccination and testing, it is likely that there will be local and regional increases in COVID cases at times. This may make it necessary to implement temporary, strict restrictions and local lockdowns. However, as long as COVID is perceived to be, and remains, under control, this will not necessarily have significant consequences for the overall economic activity.

**TABEL A KEY FIGURES OF THE OUTLOOK FOR THE DANISH ECONOMY**

	2020	2020	2021	2022	2025 <sup>a)</sup>
	DKK bn.	-----	Real growth rate, per cent.	-----	
Private consumption	1,059	-1.9	2.6	5.3	2.8
Public sector consumption	576	-0.1	3.9	0.2	0.7
Gross fixed capital formation	527	2.1	3.1	1.2	-0.3
consisting of:					
Public sector investment	84	8.3	1.9	3.5	0.4
Residential investment	124	6.9	7.5	1.0	-2.0
Business fixed investment	319	-1.2	1.7	0.7	0.1
Stockbuilding <sup>b)</sup>	11	-0.2	0.0	0.2	0.0
Total domestic demand	2,173	-0.7	3.1	3.1	1.5
Exports of goods and services	1,263	-7.7	4.1	6.2	3.3
Imports of goods and services	1,112	-4.8	4.6	4.2	3.9
GDP	2,324	-2.7	2.9	4.3	1.3
<b>Key indicators</b>					
Consumer prices, percentage change <sup>c)</sup>		0.3	1.4	1.0	1.1
Unemployment, per cent <sup>d)</sup>		4.0	3.4	2.6	3.1
General gov. budget balance, DKK bn.		-27	-71	-9	-2
General gov. budget balance, per cent of GDP		-1.1	-3.0	-0.3	-0.1
Hourly wage costs, percentage change		2.2	2.3	2.7	2.8
Terms of trade, change in percentage points		2.4	-1.4	-0.7	0.0
10-year Danish government bond rate, per cent		-0.4	0.0	0.2	0.6
Employment gap, per cent <sup>e)</sup>		-0.4	0.2	1.1	0.0

a) The columns show projected average annual growth in 2023 to 2025 for all variables except unemployment, the current account, the general government balance, the 10-year Danish government bond rate and the output gap. For these variables, the columns show the projected value in 2025.

b) Contribution to GDP growth in percentage points.

c) Implicit private consumption deflator.

d) Percentage of total labour force. National definition.

e) Percentage of structural employment. National definition.

Source: Statistics Denmark, National Accounts and own calculations.

**If the spread of infection gets out of control, the outlook may look completely different and negative**

However, there is a real risk that the COVID picture will worsen, not just in Denmark, but throughout the world. Slow and incomplete vaccination rollouts in economically less developed parts of the world probably poses the greatest threat, not only to the state of the world's health, but also to the world economy. Therefore, an alternative scenario is presented, which is based on significantly less favourable assumptions about the pandemic. In this scenario, employment falls relative to the main scenario by around 60,000 people in 2022, and unemployment increases to a level higher than it was just after the financial crisis.

**Particular attention to the housing market, ...**

Developments in the housing market attract a great deal of attention. House price increases have been at levels comparable to the years leading up to the financial crisis, but there are many factors that differentiate the current situation from the years leading up to the financial crisis. First, financial regulation has tightened significantly, including new requirements on home buyers. Second, interest rates are low, and thus the mortgage repayment burden is not high despite the higher house prices. There has been a debate about the need for interventions in the housing market. The assessment of the Chairmanship is that there is not an urgent need for intervention at present. If the house prices continue to increase rapidly for a longer period of time, however, the need may arise quickly. In that case, a relevant instrument to consider is to limit the availability of interest only loans. This would dampen price increases and ensure that buyers are better equipped financially if house prices start to fall.

**... but no urgent need for intervention at present**

**Fiscal policy has supported the economy, ...**

The economic activity has been supported by an expansive fiscal policy, particularly in the form of economic support packages and direct COVID-19 related expenditure on treatment, vaccinations and testing. The increased spending has weakened the public finances, which, however, are still sustainable and can withstand the temporary weakening without problems. The general government deficit is expected to be close to 3 percent of GDP in 2021, and the structural deficit is expected to be around 2¼ percent of GDP. The structural deficit is thus significantly higher than the current limit set down in the Budget Act of ½ a percent of GDP.

**... but has also led to large government deficits**

**Structural deficit in 2021 is acceptable, ...**

**... but only if measures are directly COVID-19-related**

However, EU rules and the Budget Act allow for exceedance of the deficit limit in the event of “exceptional circumstances”. It is the Chairmanship’s assessment that the circumstances experienced in 2021 are exceptional. However, it is also the Chairmanship’s assessment that the crisis is a health crisis, and not an economic crisis. The health crisis may justify increased spending directly related to COVID-19, but the Budget Act does not provide carte blanche for other measures that increase the deficit.

**No need for fiscal expansion in 2022, and the deficit limit should be adhered to**

If the exceptional circumstances cease during 2021, it should not be possible to exceed the Budget Act’s current deficit limit in 2022. Also, as the economic outlook is positive provided that the infection remains under control, there is no need to stimulate demand further, either in 2021 or in 2022.

**Budget Act has been a success, ...**

**... but the deficit limit should be increased to 1 percent of GDP**

The Chairmanship notes that the evaluation of the Budget Act has been postponed once again. The Chairmanship assesses that the Budget Act has generally been a success, and this has contributed to the fact that public finances are judged to be more than sustainable. The fiscal policy rules that limit the build-up of debt are well-founded, even though interest rates are currently low. However, it is debateable what the exact deficit limit should be. The Chairmanship recommends an increase in the deficit limit from ½ to 1 percent of GDP.

### **CHAPTER III, THE RETIREMENT REFORM**

**Later retirement to avoid pressure on the public finances**

The Welfare Agreement from 2006 provided for a gradual increase in the early retirement and state pension eligibility ages. The purpose was to counteract the pressure on public finances from the increasing lifetime expectancy. In the 2011 cross-party *Agreement on Later Retirement*, it was decided to advance the increases in the eligibility ages.

**It is now possible to evaluate the impact of the retirement age reforms**

The retirement reform has gradually increased the early retirement age, shortened the early retirement period and raised the state pension age over the period 2014-19. The first age increases took place in 2014, and since then the early retirement age has been raised several times from 60 to 63 years. Likewise, the state pension age was raised from 65 to 66 over the period 2019-20. It is now possible to evaluate if the increases have worked as expected.



### Significant increase in labour force participation and employment

**The later retirement have increased the labour supply**

The analyses show that the retirement reform has increased labour force participation in the affected age groups quite significantly: Among the 60-65-year-olds, the labour supply had increased by 48,000 people by 2019. The increased labour force participation is found for all the affected half-year age groups and for all retirement age increases since 2014.

**Largest contribution in absolute terms from increases in the early retirement age**

The increase in the early retirement age is found to contribute the most to the labour supply in absolute terms, while the contribution from the increase in the state pension age is smaller. This is to be expected, as the labour force participation is significantly lower at the state pension age than at the early retirement age. At higher ages, other factors such as poorer health and a higher wealth gradually become more decisive for the retirement decision, and the direct effect of the reforms carries less weight.

**Largest effects among the unskilled and those with short educations**

The greatest effects of the reform are found among women and among the unskilled and people with short educations. The effects are generally diminishing with the level of education for both women and men, although there are substantial differences between the sexes. Participation in the early retirement scheme is particularly widespread among the unskilled and people with short educations. These groups have, on average, the lowest salaries, so a transition to receiving early retirement benefits means a relatively smaller loss of income. For the same reason, the effects of raising the early retirement age is particularly large among these groups.

**The increased labour supply has led to higher employment**

The increased labour supply has resulted in a significant increase in employment of wage earners in the affected age groups; among the 60-65-year-olds, wage-earner employment in 2019 increased by 37,000 people, corresponding to 34,500 full-time employees, compared to a situation without the changes.

**The labour supply has increased more than employment**

The increase in the supply of labour has exceeded the increase in employment, but it cannot be concluded on this basis that the reforms have in themselves increased unemployment. The result must be viewed in light of the fact that unemployment among those who choose to retire is significantly higher than among those who do not. This means that for some people, early retirement is used as a departure from unemployment. Therefore, it would be wrong to conclude that the increases in the early retirement and state pension eligibility ages in themselves cause unemployment for this group. However, among

those who were already unemployed, the increased eligibility ages for the early retirement scheme and the state pension may mean an extension of the unemployment period, and this will contribute to an increase in total unemployment. On the other hand, it is possible that the increase in eligibility ages will lead to lower unemployment among persons in the age groups that are close to the current eligibility age. Unemployment for groups just below the eligibility age has a tendency to be particularly high and if this tendency follows the increase in eligibility age, it will lead to lower overall unemployment. In addition, other factors have compensated for this such that unemployment among the affected groups is largely unchanged.

### **The effects of the reform are boosted by other factors**

**Effects of the reforms were overestimated ...**

The analysis makes it possible to evaluate the assumptions behind the projections of the labour force over the period 2014 to 2019 made prior to the increases in the retirement ages in 2013. A comparison shows that the 2015 forecast overestimated the labour force growth by almost 14,000 people, or almost 29 percent, for the period up to and including 2019. Given that there was no prior experience with increases in the retirement ages of this magnitude, this is not in itself a remarkable overestimation.

**... but other factors have compensated**

However, the effects on employment and the labour force of the gradual increases in the retirement age are central to fiscal sustainability, and the structural overestimation of 29 percent is significant in that light. Even though the effects of the reforms were overestimated, employment has grown beyond what the reforms and demographics can explain. Overall, employment for those aged 60-65 has increased by approximately 24,000 people in addition to the contributions of the changing demographics and increases in the retirement ages. The improvement in the economic conditions over the period can explain some but not all of this increase in employment. This trend is important for understanding why unemployment has not risen significantly among the age groups affected by the increase in the retirement ages, despite the fact that the reforms have increased the labour force more than employment.

### **Lack of information about other factors**

**The reform has worked as intended, but to a lesser extent than expected**

The bottom line is that the increases in the retirement ages worked as intended, but, on the face of it, to a lesser extent than estimated. However, there are other factors that have contributed to the growth in employment. These factors are not directly related to the demographic

changes, i.e., changes in the relative size of the different age groups or population composition in terms of gender and ethnicity.

**Important to learn more about the other factors behind the employment growth**

It is essential to know more about these factors. If they are of a temporary nature, they cannot be considered to strengthen fiscal sustainability in the future. They may be related to the changes in the population's state of health, the work environment, influx of foreign labour or something else entirely. However, as the nature of these are unknown, it is not possible to determine in advance whether they will continue to contribute to employment growth, which is fundamental to fiscal sustainability. Work will continue on a deeper understanding of this issue.

## CHAPTER IV, EARLY CHILDHOOD MEASURES

**Early childhood investments can help provide equal opportunities**

Chapter IV focuses on investment in children early in life. A person's knowledge and skills, - "human capital" in economic jargon - have a big influence on how the person performs in life. Some skills are innate, but most require investment. Investing in young children's human capital is particularly important because it forms the basis for the return on investment later in life. Lack of investment early in life will, therefore, be difficult and costly to compensate for later. All else equal, this calls for prioritisation of investment in young children's human capital.

**The Heckman curve expresses the potential return on investing in age groups**

Investments in early childhood are often discussed on the basis of the so-called Heckman curve, which describes the return to investments in different age groups. The curve is an expression of the potential return on investments in a hypothetical situation where the same resources are invested at all ages. In this case, the return will be greatest on investments in the younger age groups. If the Heckman curve can be empirically verified for public investments, it suggests that there will be efficiency gains in shifting public expenditure toward investing in programs earlier in life.

**Insufficient evidence to prioritise early investment**

Empirically, there is no evidence that there are clear efficiency gains from further prioritising early interventions in general. However, there are indications that, in a Danish context, there may be efficiency gains in certain areas. However, there is not enough evidence at present to systematically re-prioritise some of the public investment aimed at early interventions. Therefore, the Heckman curve cannot be used to decide how public investments should be prioritised in Denmark in the future. Individual evaluation of each initiative is necessary.

**Most preschool children are enrolled in public childcare**

In the chapter, there is a special focus on the area of childcare, which is one of the areas that affects the most children. The vast majority of children of preschool age in Denmark are enrolled in a public childcare institution, and in 2019 almost DKK 30 bn was spent in this area. There are three main types of childcare for pre-schoolers: family day care, nursery and kindergarten. 27 percent of the enrolled children go to nursery, while 61 percent go to kindergarten.

**Limited knowledge of how childcare affects children's further progress in life**

In general, there is only limited knowledge about how the design of childcare services affects children's development and performance in school in the long term, and only a few studies are relevant in a Danish context. The research has primarily shown a positive correlation between children's development and two parameters: the staff/child ratio in the childcare institutions and the staff's characteristics. Previous Danish studies have found a positive correlation between the staff/child ratio and school results, but have not been able to control for relevant factors, such as unobservable characteristics of the institutions, which may affect the estimated effects.

**New study of the effects of staff/child ratios and proportion of trained educators on school grades...**

The focus of the chapter's empirical analysis is on the effects of changes in the childcare institutions' staff to child ratios and the proportion of staff with a formal qualification in early childhood education. The analysis improves existing Danish studies by controlling for unobserved characteristics of the institutions that are constant over the analysis period but may affect the children's development. Against this background, the new study investigates how changes in staff/child ratios and the proportion of qualified educators affect the children during the course of and at the end of primary school.<sup>1</sup>

**... finds generally small and insignificant effects**

The analysis finds small and insignificant effects of both staff to child ratios and the proportion of qualified early childhood educators in the institutions on the children's school results. The effects were investigated for changes in staff/child ratios and the proportion of early childhood educators in both nurseries and kindergartens.

---

1) The effects were investigated for results in the national tests in Danish in 4th, 6th and 8th grades and mathematics in 6th grade, results of the 9th grade final examination in oral and written Danish as well as mathematics and the probability of receiving special education or having contact with mental health services.

**The results may reflect the high staff to child ratio in Danish childcare institutions**

There are several possible reasons why the analysis does not find an effect of staff to child ratios on the children's school results. Provided that there are initially few children per staff member, there may be no significant additional gains to be achieved from increasing staffing levels. An international comparison supports such an interpretation, as there are generally significantly fewer children per adult in Danish childcare institutions than in most other countries. It is also a possibility that staff to child ratios have an independent effect, but that the effect is counteracted by later unobserved influences. However, the analysis does not find any evidence that improved staff/child ratios or a higher proportion of qualified early childhood educators have led to reduced special education needs during the years of schooling, but this is not sufficient to rule out this explanation .

**The analysis only examines marginal changes**

The analysis examines the effect of marginal changes in staff to child ratios and the proportion of qualified early childhood educators around the existing levels. The fact that there are no statistically significant effects of marginal changes does not give rise to the conclusion that the quality of the childcare institutions is of no importance for children's development. The result only suggests that improvements in the staffing levels above the current level are not associated with positive effects on the children's school results.

**Effect on other human capital parameters**

It is, of course, a possibility that staff to child ratios and the proportion of qualified educators affect children's human capital in dimensions other than those examined in the analysis. For example, it is conceivable that the children's well-being or learning skills in dimensions other than those examined are affected by changes in staff/child ratios and the proportion of qualified educators. Such effects would require well-being to be unrelated to the school results that the analysis focuses on.

**New measures should be implemented such that evaluations of their effectiveness can be undertaken**

In order to increase the knowledge base about the causal relationship between a given initiative and the children's development, it is recommended that new interventions are always implemented in a way that enables quantitative evaluation of the intervention. This can be done, for example, by carrying out a pilot project on a smaller scale, where the children are selected to receive the intervention via a lottery. Such a randomised control trial would make it possible to identify any effects resulting from the intervention. For already adopted measures, a gradual implementation, where the intervention is given to some children before others, can provide an opportunity to establish a credible comparison group. In general, it is recommended to contemplate the possibility for credible evaluations of the causal effects when implementing new initiatives.

