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Working Paper

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2005 • 30

Kim Abildgren

Danmarks Nationalbank

**Estimates of the Danish general
government budget balance and the
cyclical budget volatility
1875-2003**

October 2005

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Estimates of the Danish general government budget balance and the cyclical budget volatility 1875-2003¹

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October 2005

¹ The author wishes to thank colleagues from Danmarks Nationalbank for useful comments on preliminary versions of this paper. The author alone is responsible for any remaining errors.

Estimates of the Danish general government budget balance and the cyclical budget volatility 1875-2003

Abstract

The paper presents time series for Danish general government net lending in the period 1875-2003 and analyses the long-term term fiscal development in Denmark. Even though Denmark today has one of the largest public sectors in Europe, relatively speaking, the Danish general government's deficit has only significantly exceeded 3 per cent of GDP during World War II and in the early 1980s. Furthermore, the cyclical impact on the general government budget balance seems most often to be relatively modest compared to that of discretionary fiscal-policy changes. However, calculations on the cyclical budget volatility also seem to suggest that the cyclically adjusted budget balance has to be in surplus in periods with strong economic growth if the automatic stabilisers should be allowed to work freely during a cyclical downturn without violating a 3-per-cent budget criteria (the reference value in the Maastricht Treaty).

Key words: Historical statistics, cyclical adjustment, government budget, business cycles, fiscal policy, Maastricht Treaty.

JEL Classification: E32; E62; N23; N24.

Resumé (Danish summary)

I papiret præsenteres tidsrækker for den danske offentlige sektors nettofordringserhvervelse i perioden 1875-2003. Endvidere analyseres den langsigtede udvikling i de offentlige finanser i Danmark. Selv om den offentlige sektor i Danmark i dag relativt set er blandt de største i Europa, har det offentlige budgetunderskud kun markant oversteget 3 pct. af BNP under 2. verdenskrig samt i begyndelsen af 1980'erne. Konjunkturernes indflydelse på den offentlige budgetsaldo er normalt forholdsvis beskeden sammenlignet med påvirkningen fra diskretionære finanspolitiske ændringer. Dog antyder beregninger af udsvingene i de offentlige budgetter også, at det er nødvendigt at have overskud på den konjunkturrensede offentlige budgetsaldo i perioder med høj økonomisk vækst, såfremt de automatiske stabilisatorer skal have mulighed for at fungere frit i perioder med lav økonomisk vækst uden at budgetunderskuddet overskrider en grænse på 3 pct. af BNP (som er referenceværdien i Maastricht Traktaten).

Table of contents

| | |
|--|----|
| 1. Introduction | 6 |
| 2. Historical statistics on the general government budget balance in Denmark - Some methodological remarks and main principles of calculation | 6 |
| 3. Trends in general government net lending in Denmark 1875-2003 | 8 |
| 4. Cyclical impact on the general government budget balance | 10 |
| 5. Comparisons with other studies..... | 16 |
| 6. Summary and scope for further research | 19 |
| 7. References | 20 |
| Appendix 1: Data..... | 22 |
| Appendix 2: Data sources and calculation methods..... | 31 |

1. Introduction

Denmark has a long tradition for pursuing a fixed-exchange-rate policy: In the pre-World War I period within the Classical Gold Standard, in the inter-war period first within the global gold-exchange system and later vis-a-vis the U.K., and finally in the post-World War II period first within the Bretton Woods system and later the European exchange-rate co-operation.² The ability to pursue a creditable fixed-exchange-rate policy depends to a very high degree of the fiscal policy being sustainable. Also in other monetary regimes a sound fiscal policy is a necessary pre-condition in order to manage inflation expectations in line with a final objective of price stability.

The paper at hand studies the long-term fiscal development in Denmark. The aim is to throw some light on to what extent the annual changes in the general government budget balance can be attributed to cyclical factors or to budgetary impacts from discretionary fiscal policy changes.

The existing versions of Danish historical national-account statistics do not include a full split of the total economy into a public and a private sector with corresponding net lending figures. An important purpose of this paper is therefore to make a first crude attempt to overcome this data shortage by constructing time series for the general government budget balance (net lending) in the period 1875-2003.

The remainder of this paper is organised as follows: Section 2 describes the main principles used for the compilation of the historical figures for the Danish general government net lending 1875-2003. Section 3 outlines the main trends in Danish public finances since 1875 while section 4 focuses on the cyclical influence on the Danish general government budget balance. Section 5 compares the estimates of the cyclical impact on the general government budget balance calculated in section 4 with results found in earlier studies covering various sub-periods over the time-span 1875-2003. Finally, section 6 summarises the main findings in the paper and indicates areas for further research. The background data related to this paper are listed in Appendix A, while Appendix B outlines the sources and compilation methods in details.

2. Historical statistics on the general government budget balance in Denmark - Some methodological remarks and main principles of calculation

Long time series on net lending by institutional sectors are not readily available in Denmark. At the time of this writing the new version of the official national account statistics –

² For a recent survey of the Danish exchange-rate policy since 1875, see Abildgren (2004).

introduced in 2005 – contains only a consistent breakdown of the total economy into a general government sector and a private sector for the period since 1990. Earlier versions of the official national accounts statistics have covered the period back to 1971. However, none of the existing versions of Danish historical national-account statistics covering the pre-1971 period include a full split of the total economy into a general government sector and a private sector with corresponding net lending figures.³

In order to study the development of the general government budget balance in Denmark for a longer period than covered by the current statistics, a set of data covering the period 1875-2003 has therefore been constructed, cf. appendix 1 and 2.

In the data set on general government net lending in appendix 1, the post-1970 figures are based the current and earlier versions of the official national account statistics while the pre-1971 figures are based on accounting statistics for the central government, the local governments and unemployment benefit societies. The applied delimitation of the general government sector is the following:

- In the period 1875-1906 the figures cover only the central government and the local government.
- Public subsidies to unemployment benefits were introduced in 1907. In the period 1907-1970 the figures cover therefore the central government, the local governments and the unemployment benefit societies.
- In 1967 the central government took over the responsibility of financing the share of unemployment benefits not covered by fees from members of the unemployment benefit societies. In the period 1971-1989 the figures for the general government budget balance therefore cover only the central government and the local government, hereby implicitly assuming that the net lending of the unemployment benefit societies is close to zero. In 1990 the net lending of social security funds (e.g. unemployment benefit societies and the Employees' Wage Guarantee Fund) in total amounted to 0.01 per cent of GDP, so the bias resulting from the omission of social securities funds in the period 1971-1989 is believed to be negligible.
- With effect from 1990 the data on general government net lending come from the current official version of the national accounts which include the central government, the local governments and social security funds (e.g. unemployment benefit societies and the Employees' Wage Gurantee Fund) within the general government.

A few comments should be given to the treatment of certain large “special” transactions:

- The proceeds from the sale of the Danish West Indies (87 million kroner) in 1917 are included as revenue in the government net lending.
- The amount paid to Germany (101.4 million kroner) in 1920 as compensation for assets in Sønderjylland (the northern part of the old Duchy of Schleswig) is included as an expenditure item in the government net lending.
- In 1928 an amount of 136 million kroner is included as an expenditure item in the government net lending representing the central governments expenditures in the reconstruction of Den Danske Landmandsbank.

³ For an overview of the available historical national-accounts figures in Denmark, cf. pp. 164-179 in Mogensen (1987), Hyldtoft (1993, 1994), Christensen, Hjerpe, Krantz & Nielsen (1995), and Nielsen (2004).

- The German occupation forces expenditures in Denmark during the years 1940-1945⁴ - compulsorily financed via German accounts at Danmarks Nationalbank against a guarantee from the Danish central government - were never paid by Germany. The amounts are included as expenditures (debt write-off) in the government net lending as they occurred in the period 1940-1945.

Even though an attempt has been made to transform the figures behind appendix 1 into a set of reasonable consistent long time series, the quality of a data set spanning more than 125 years is to a high degree determined by data availability. The accounting principles applied in central and local government accounting statistics have changed over time and the principles are not fully in accordance with the concepts and definitions applied in the national accounts statistics. This introduces undoubtedly measurement errors, and the figures presented in this paper can only be considered as a first crude attempt to overcome the lack of long-span time series for general government net lending in the existing version of Danish historical national accounts.⁵

3. Trends in general government net lending in Denmark 1875-2003⁶

Chart 1 shows the calculated figures for the general government net lending in per cent of GDP for the whole period since 1875. It is worth to notice that the general government's deficit in per cent of GDP has only significantly exceeded 3 per cent during World War II and in the beginning of the 1980s (the "abyss" debate⁷). Only in three other periods the budget deficit exceeded 3 per cent slightly. In two of these cases special factors played a role:

- In 1910 the budget deficit reached 3.1 per cent of GDP. This year an amount of 6 million kroner (equivalent to 0.3 per cent of GDP) is included as expenditures in the central government net lending representing the central government's pay-in to the liquidation fund of 1910 which were to guarantee deposits in a number of failed banks.
- In 1918 – at the end of World War I – the budget deficit reached 3.6 per cent of GDP

The last case with a budget deficit exceeding the 3-per-cent limit occurred in the years 1993-1994 after 7 years of slow economic growth and a fiscal stimulus to "kick-start"⁸ the economy.

⁴ The amounts in million kroner were the following: 1940: 804.6; 1941: 852.6; 1942: 701.7; 1943: 1902.5; 1944: 2728.0; and 1945: 574.1

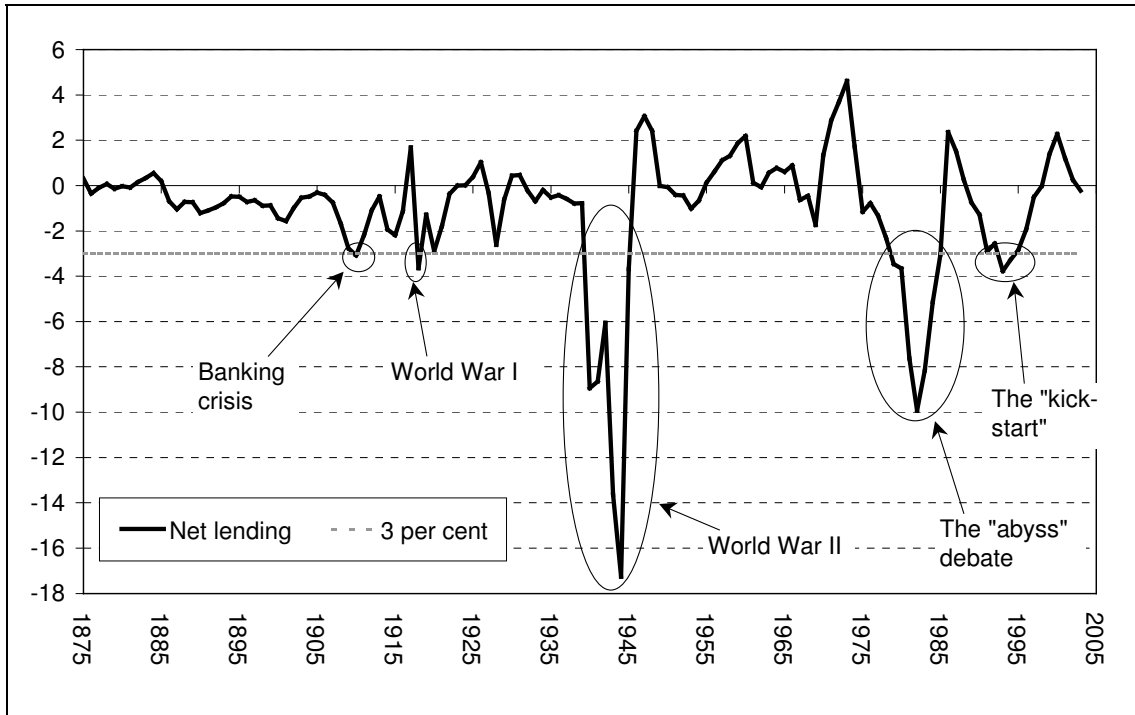
⁵ The treatment of sick benefit associations can be mentioned as an example of one of the measurement errors related to the figures for the general government net lending presented in this paper. Public subsidies to sick benefit associations were introduced in 1892. However, the calculations presented in this paper implicitly assume that the net lending of sick benefit associations are close to zero. The activities of the sick benefit associations were transferred to the local governments in 1973. Hansen (1974) covers the history of the Danish sick benefit associations.

⁶ Other long-span studies on the development of the public sector in Denmark are found in e.g. Rasmussen (1972) and Norstrand (1977).

⁷ Cf. e.g. the description of the budget crisis in Christensen & Topp (1997).

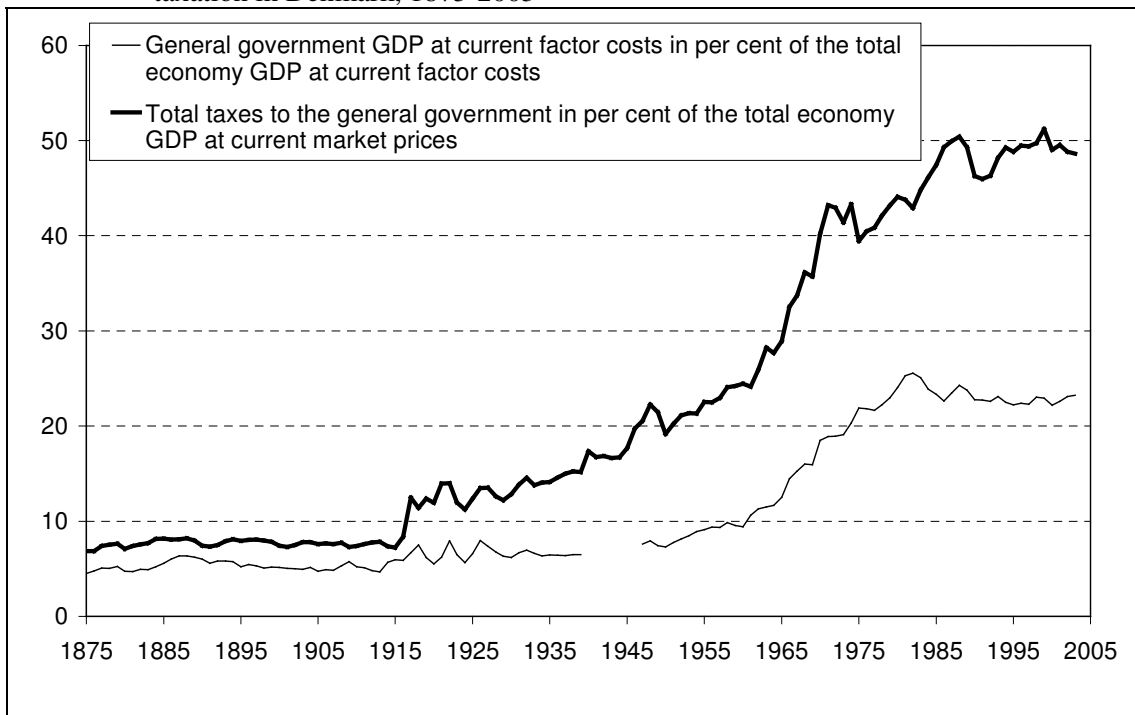
⁸ Also described in e.g. Christensen & Topp (1997).

Chart 1: Danish general government net lending, per cent of GDP at current market prices, 1875-2003



Sources and compilation methods: See appendix 2.

Chart 2: Danish general government's share of the total economy and the total level of taxation in Denmark, 1875-2003



Sources: See appendix 2.

Chart 2 shows the general government's share of the total economy and the level of taxation since 1875. Seen as one the period has been characterised by the build up of a large tax-

financed welfare state where the general government accounts for a substantial share of the economy.

Today Denmark has one of the largest public sectors in Europe measured by the total general government expenditures in per cent of GDP. This was not the case in 1870 where the level of government expenditures in e.g. France, Germany, Italy, UK and Austria exceeded that of Denmark, cf. table 1. Even though the Danish general government budget deficit as shown in figure 1 has not exceeded 3 per cent of GDP in most of the period since 1875 it has not prevented the build up of a large public sector.

Table 1: Total general government expenditures in selected EU countries circa 1870 and 2003, per cent of GDP at current prices

| | circa 1870 | 2003 |
|---------|------------|------|
| France | 12.6 | 54.5 |
| Germany | 10.0 | 48.8 |
| Italy | 13.7 | 48.9 |
| UK | 9.4 | 43.7 |
| Austria | 10.5 | 50.8 |
| Denmark | 8.9 | 56.1 |

Sources:

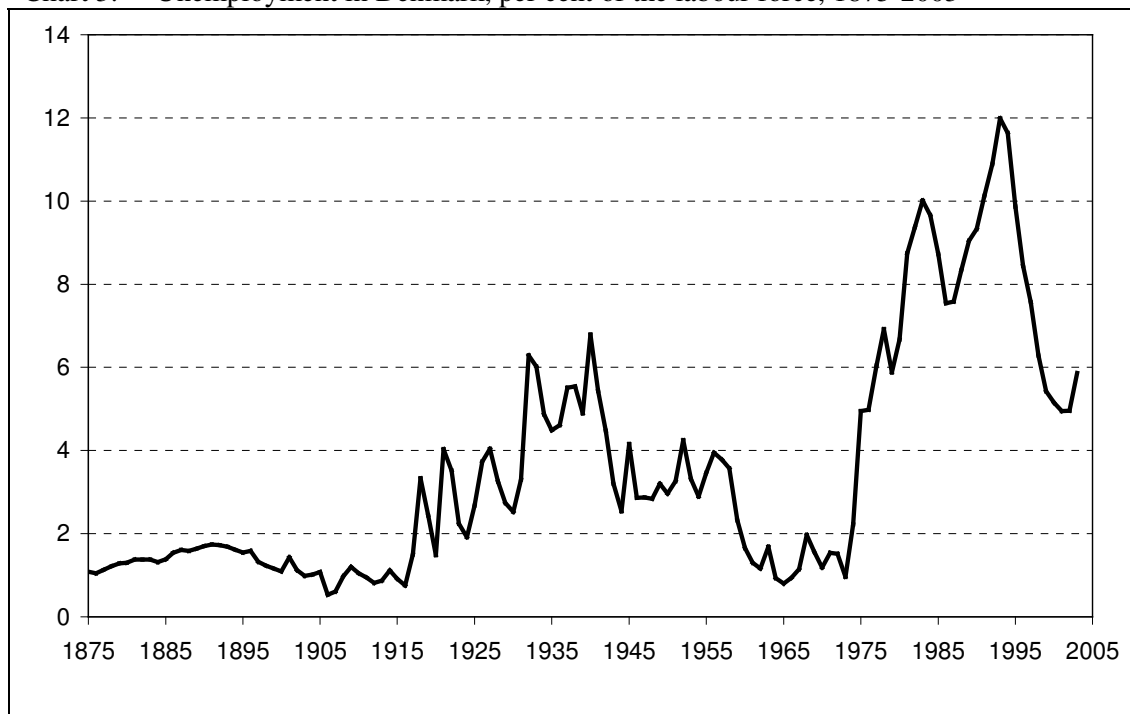
Hansen (1983); OECD (2004); and Schuknecht & Tanzi (2000).

4. Cyclically impact on the general government budget balance

The government budget balance is influenced by the business cycle due to the so-called “automatic stabilisers”. In periods with strong economic growth and a decline in unemployment the government’s expenditures on unemployment benefits will (at unchanged level of unemployment benefits) decline and the government’s direct and indirect tax revenue will (at unchanged tax level) increase, thereby dampening the economic activity. In periods with slow economic growth and increasing unemployment the government budget balance tend to deteriorate, thereby stimulating the economic activity. At unchanged fiscal policy the automatic stabilisers thus contributes to an improved budgetary position in periods with high economic growth and a worse budgetary position in periods with slow economic growth.

The unemployment rate in Denmark since 1875 is shown in chart 3. Before 1900 the figures have been interpolated based on the number of persons receiving social security benefits from the local authorities in Copenhagen. The fluctuations in the level of unemployment can be considered as a proxy for the cyclical variation of the economy that impacts the government budget balance.

Chart 3: Unemployment in Denmark, per cent of the labour force, 1875-2003



Sources and compilation methods: See appendix 2.

Several different methods can be used to derive cyclically adjusted changes in the general government budget balance. They all have their strength and weaknesses and will usually to a certain extent paint different pictures of the fiscal development. Appendix 1 includes a set of rough calculations of the cyclical impact on the general government budget balance in the period 1875-2003 following a methodological approach inspired by Christensen (1984, 1993).⁹ Using the following mnemonics:

| | |
|--------|--|
| T_t | Total taxes (million kroner, current prices) received by the general government in year t. |
| Y_t | Total GDP (million kroner, current prices) at factor costs in year t. |
| L_t | Total employment (1000 persons) in year t. |
| UB_t | Total amount of unemployment benefits (million kroner, current prices) paid out by the general government in year t. |
| U_t | Unemployment (1000 persons) in year t. |
| a | Parameter ($a < 0$) representing the change in the number of employed persons (1000 persons) when the number of unemployed persons increase by 1000 persons. |
| CA_t | Cyclical impact (million kroner, current prices) on the change in the general government net lending from year t-1 to year t. |

⁹ Topp (1995) study the cyclical impact on the general government budget balance 1929-1939 based on an approach close to Christensen (1993). For a discussion and use of other methods to compiled cyclically adjusted budget balances for Denmark for shorter historical time spans, cf. e.g. Andersen (2002), Hansen & Knudsen (1999) and Skaarup (2005).

the cyclical impact on the change in the general government net lending from year t-1 to year t has been calculated as:

$$[1] CA_t = \frac{T_t}{Y_t} \cdot \frac{Y_t}{L_t} \cdot a \cdot (U_t - U_{t-1}) + \frac{T_t}{Y_t} \cdot \frac{UB_t}{U_t} \cdot (U_t - U_{t-1}) - \frac{UB_t}{U_t} \cdot (U_t - U_{t-1})$$

When e.g. the number of unemployed increases ($U_t - U_{t-1} > 0$) the calculation procedure in equation [1] assumes that the government budget is affected by the following three channels:

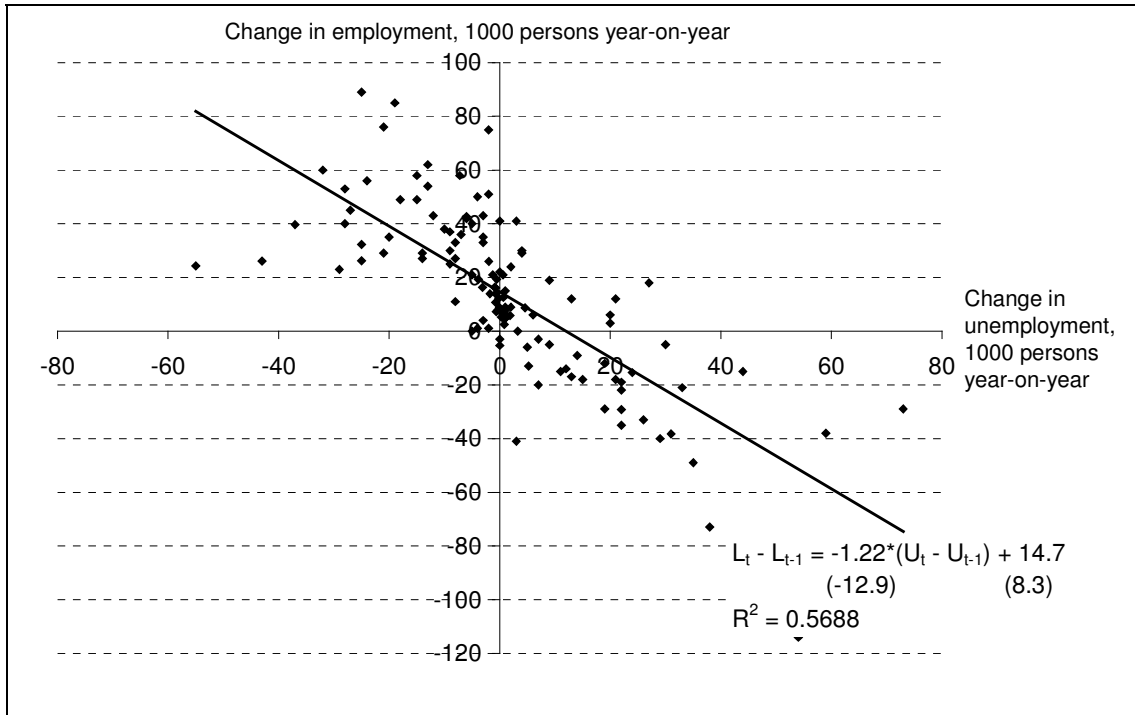
- The total number of employed persons declines thereby reducing the government's tax revenue by an amount corresponding to the implicit tax rate (T_t/Y_t) multiplied by the decrease in employment ($a \cdot (U_t - U_{t-1})$) and the level of GDP per employed person (Y_t/L_t).
- However, the government's tax revenue increases by an amount corresponding to the implicit tax rate (T_t/Y_t) multiplied by the increase in the number of unemployed persons ($U_t - U_{t-1}$) and the level of unemployment benefits (UB_t/U_t).
- Finally, the government's expenditures increases by the increase in the number of unemployed persons ($U_t - U_{t-1}$) multiplied by the level of unemployment benefits (UB_t/U_t).

As mentioned in section 2 unemployment benefit societies are first included within the general government sector with effect from 1907. However, the calculations made on the basis of equation [1] assumes that the development in unemployment also in the pre-1907 period can be used as a proxy for the cyclical variation of the economy that impact the government budget balance.

The parameter a in equation [1] has been estimated at -1.22 on the basis of a simple linear regression of the annual changes in employment and unemployment in the period 1876-2003, cf. chart 4. Employment thus has to be increased by 1,220 persons in order to reduce the unemployment by 1,000 persons, reflecting a pro-cyclical labour-market participation rate (i.e. better employment opportunities causes more people to enter into the labour force, and vice versa).

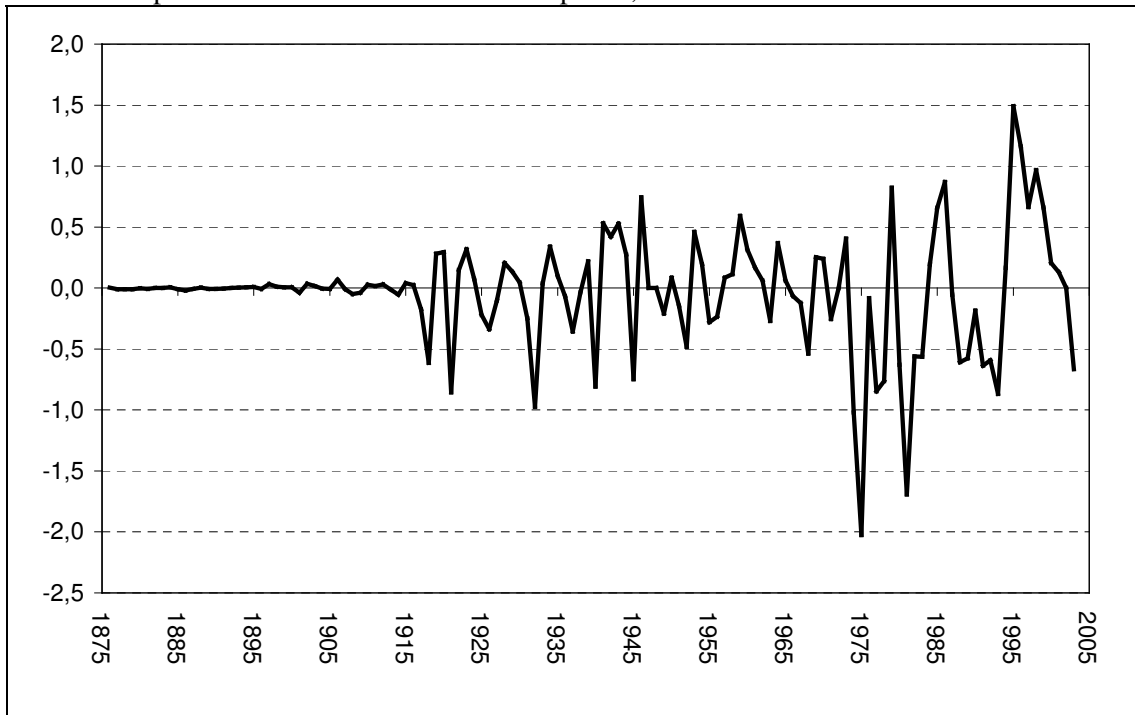
The estimated cyclical impact on the general government budget balance in the period since 1875 measured in per cent of GDP is shown in chart 5. As expected, the cyclical impact has increased over time in step with the increased tax rate and unemployment benefit compensation rate, cf. also chart 6.

Chart 4: Relation between changes in employment and unemployment in Denmark, 1876-2003



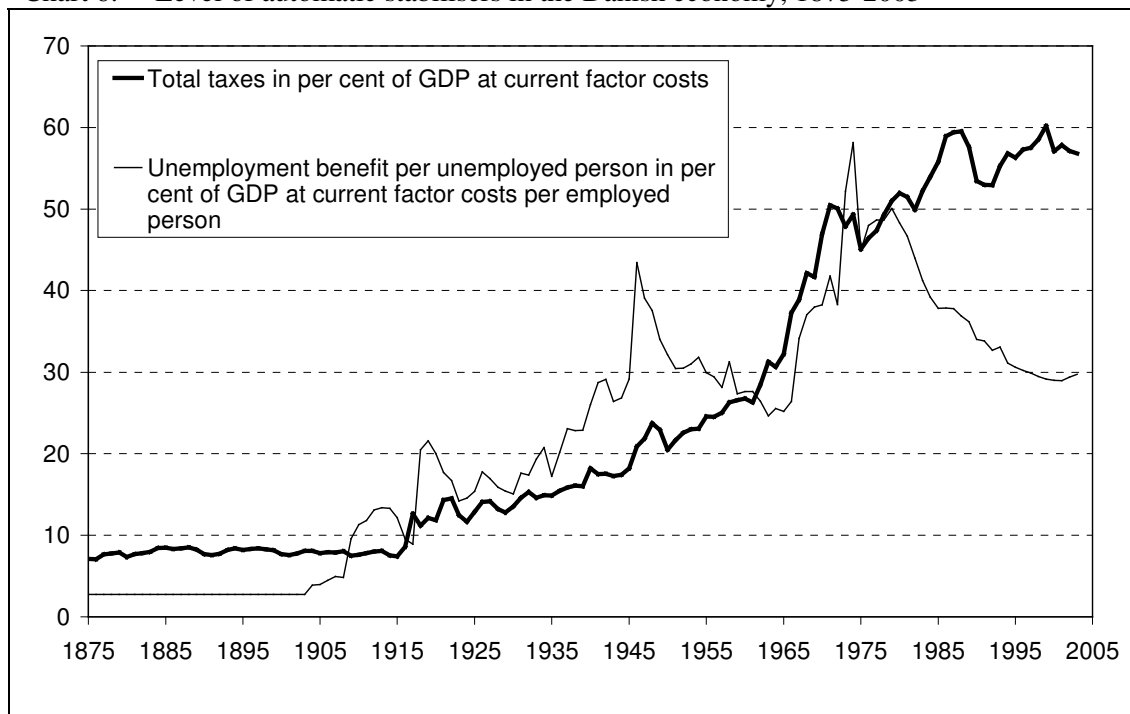
Note: t-values in brackets below the estimated parameters in the regression equation.
Sources: See appendix 2.

Chart 5: Cyclical impact on the change in the Danish general government budget balance, per cent of GDP at current market prices, 1876-2003



Sources and compilation methods: See text and appendix 2.

Chart 6: Level of automatic stabilisers in the Danish economy, 1875-2003

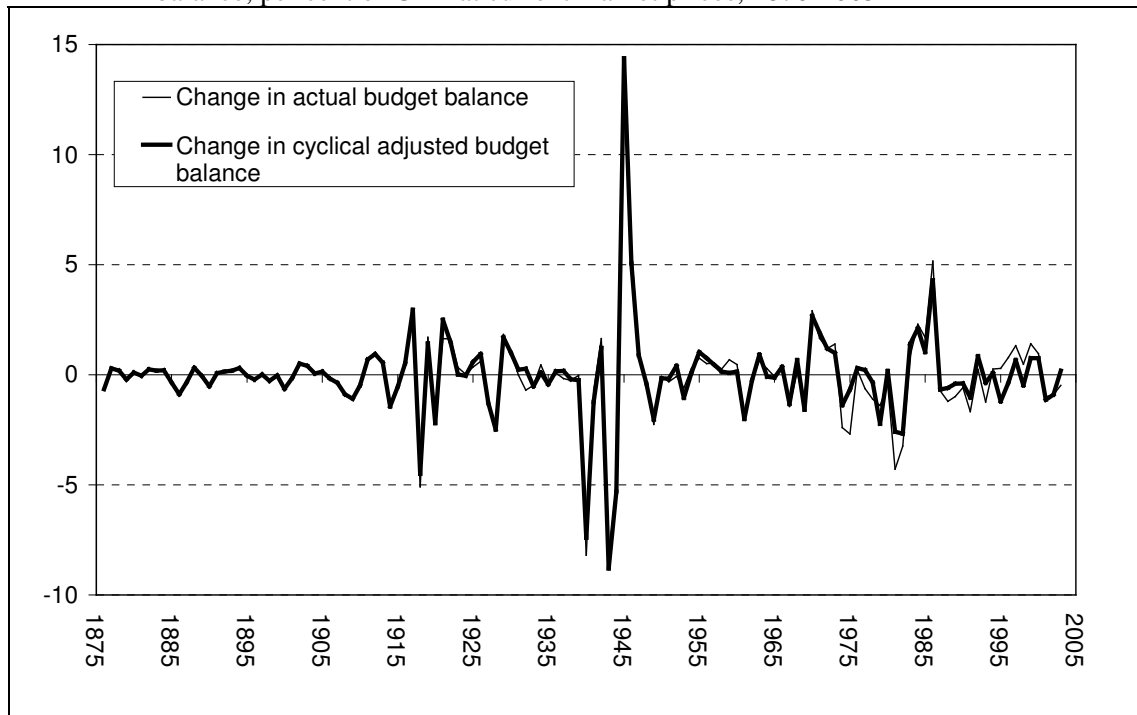


Sources: See appendix 2.

If changes in the actual budget balance are adjusted for cyclical influence one can obtain a measure of the budgetary impact of discretionary fiscal policy changes.¹⁰ When interpreting such figures of cyclically adjusted changes in the budget as a measure of discretionary changes in the stance of the fiscal policy, one should take the following considerations into account:

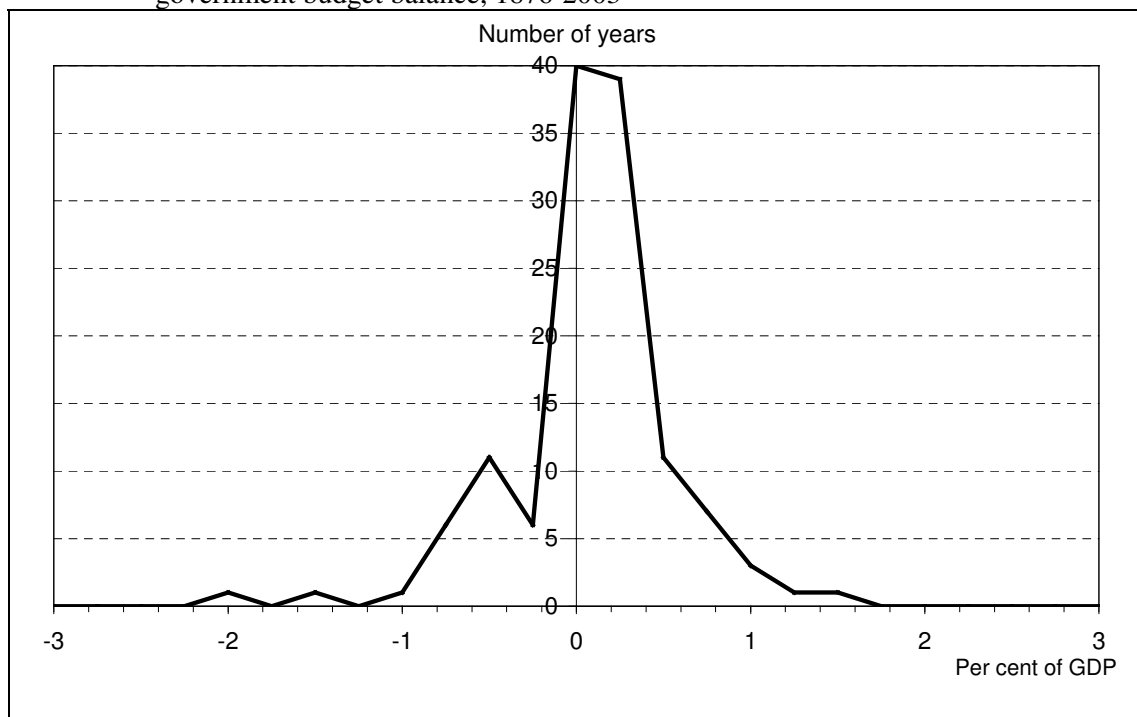
- Any change in the number of unemployed persons gives rise to a cyclical impact on the budget – irrespective of the “nature” of the change in unemployment (i.e. whether it relates to a change in the level of “structural” unemployment or not). This reflects that the fact that any changes in the level of unemployment will automatic have a budget impact due to the government’s unemployment-related expenditures.
- It may be argued that the budget impact of some of the last decades labour-force-reducing measures (such as the early retirement schemes introduced in 1979, the temporary leave schemes introduced in 1994 and the welfare to work programmes also introduced in 1994) ought to be considered as “cyclical” rather than discretionary fiscal policy measures.
- All changes in government net interest payments are treated as non-cyclical. An increase in interest payments due to government borrowing in earlier periods will therefore be considered as an expansive fiscal policy if the increase in interest expenditures is not covered by increased revenue.
- Finally, caution must always be made when long-span data on cyclically adjusted changes in the budget are studied since temporary and extraordinary events (like e.g. the large public expenditures during World War II) influence the figures.

Chart 7: Actual and cyclical adjusted change in the Danish general government budget balance, per cent of GDP at current market prices, 1876-2003



Sources and compilation methods: See text and appendix 2.

Chart 8: Frequency distribution of the cyclical driven annual changes in Danish general government budget balance, 1876-2003



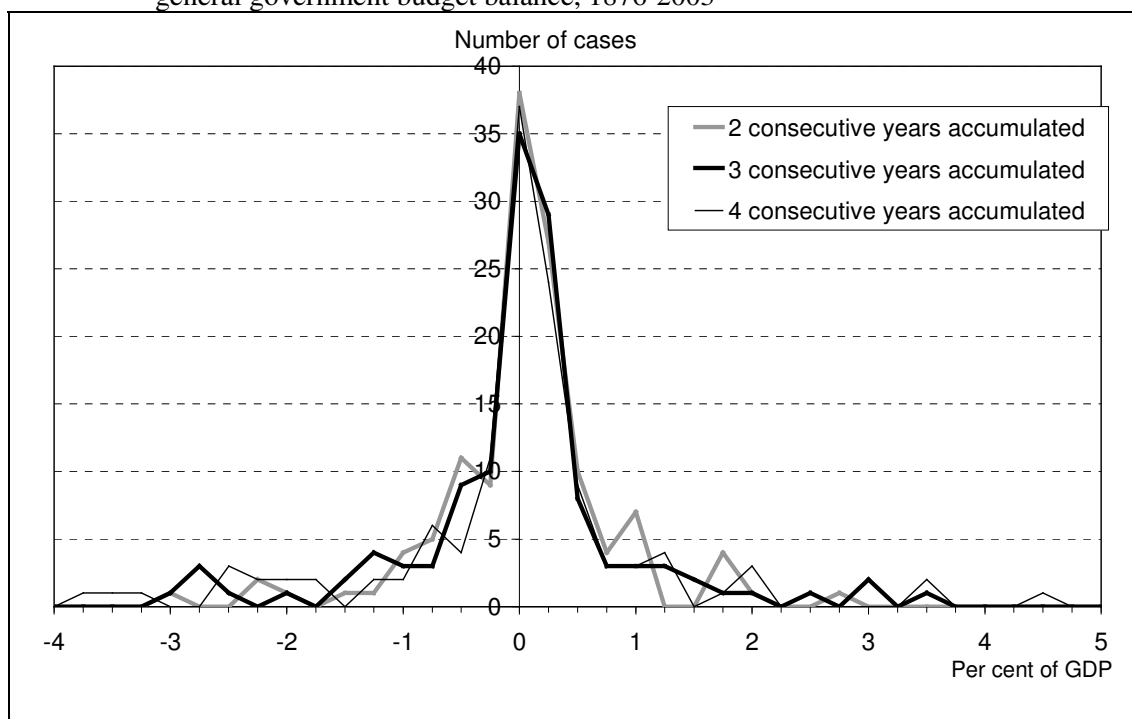
Sources and compilation methods: See text and appendix 2.

¹⁰ The calculations presented in this paper concern only the changes in the cyclically adjusted budget balance – not the absolute level of the cyclically adjusted budget balance.

Chart 7 shows the annual changes in the actual and cyclically adjusted general government budget balance in per cent of GDP in the period 1876-2003. It seems that the cyclical impact on the government budget balance is relatively modest compared to the budgetary impact of discretionary fiscal policy changes.

Chart 8 shows the frequency distribution of the 128 cyclical driven annual changes in Danish general government budget balance in the period since 1876. The largest cyclical deterioration of the general government budget in a single year (in 1975) amounted to around 2 per cent of GDP. If one looks at the accumulated cyclical impact on the budget over 2, 3 or 4 consecutive years, the number of cases where the accumulated negative impact on the budget exceeded more than that 3 per cent of GDP is respectively 1, 1 and 3 during the whole period since 1876, cf. chart 9.

Chart 9: Frequency distribution of the accumulated cyclical driven changes in Danish general government budget balance, 1876-2003



Sources and compilation methods: See text and appendix 2.

5. Comparisons with other studies

The calculations presented in section 4 are based on a methodological approach inspired by Christensen (1984, 1993). Topp (1995) has studied the cyclical impact on the general government budget balance 1929-1939, also based on an approach broadly in line Christensen (1993).

This section compares the estimates of the cyclical impact on the general government budget balance presented in section 4 with the results found in Christensen (1993) and Topp (1995). When studying the results of the comparison one needs to take into consideration that the different author's uses somewhat different compilation methodology and data sets. Some of the major differences are the following:

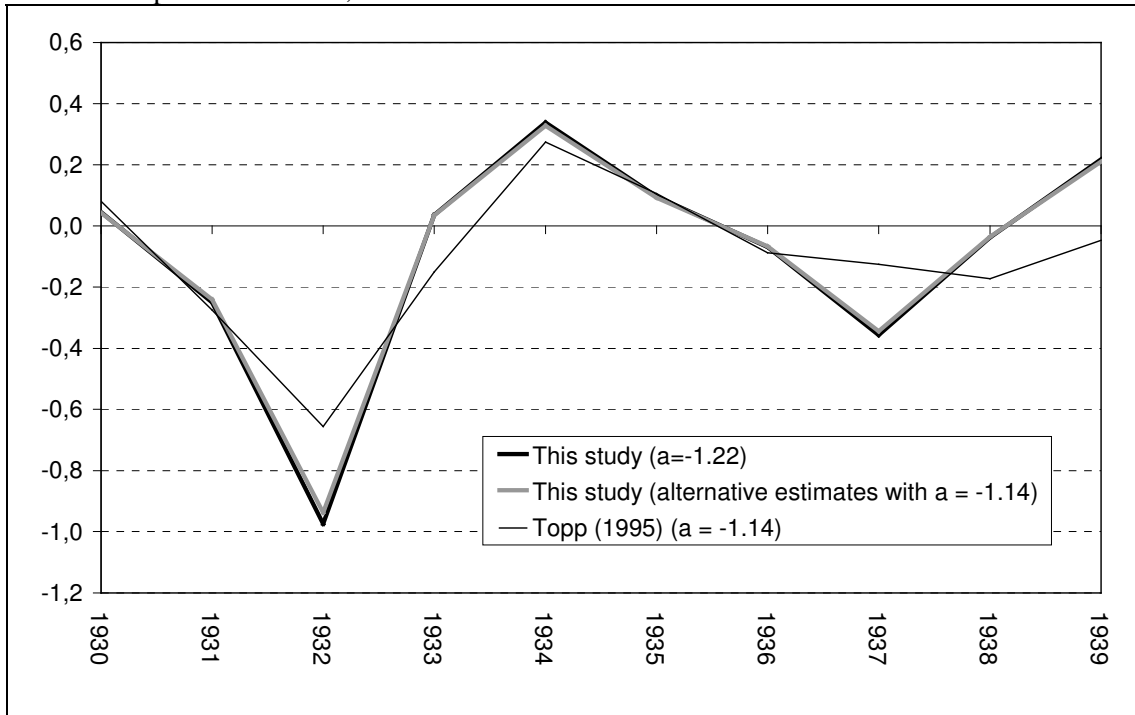
- The parameter (a) represents the change in the number of employed persons (1000 persons) when the number of unemployed persons increases by 1000 persons. In Christensen (1993) $a = -1.67$ whereas this study uses $a = -1.22$. Topp (1995) uses $a = -1.14$.
- The estimates of the cyclical impact on the general government budget balance in section 4 are based on total taxes, the total economy GDP, employment and unemployment figures for the total economy and unemployment benefits, cf. T_t , Y_t , L_t , U_t and UB_t in equation [1]. The calculations in Christensen (1993) involve the total economy unemployment, the unemployment benefit compensation rate, the private sector wage sum, the personal tax rate, indirect taxes and private demand. Topp (1995) uses the total economy unemployment, the unemployment benefit compensation rate, the total economy wage sum, indirect taxes, private consumption, the direct tax ratio and the total economy GDP.
- The data set in Christensen (1993) includes the Labour market Supplementary Pension Fund (ATP) and the Employees' Wage Indexation Fund (LD) within the general government sector, whereas ATP and LD in the figures presented in section 4 are included in the private sector in line with the current definitions in the official national accounts statistics.

Chart 10 compares the results from section 4 with the cyclical impact on the general government budget balance for the period 1930-1939 with that of Topp (1995). The two different sets of calculations show rather similar results.

Chart 11 compares the results the cyclical impact on the general government budget balance in the period 1960-1990 presented in section 4 with that of Christensen (1993). In general Christensen (1993) finds somewhat larger cyclical impact on the general government budget balance than the study at hand. A large part of the differences compared with the results in section 4 can be explained by different choices of the parameter a.

If one looks at the accumulated cyclical impact on the budget over 1, 2, 3 or 4 consecutive years, the number of cases where the accumulated negative impact on the budget exceeded more than that 3 per cent of GDP is respectively 0, 1, 1 and 3 during the period 1960-1990 based on the data from section 4. The corresponding figures based on Christensen (1993) are respectively 1, 4, 5 and 7.

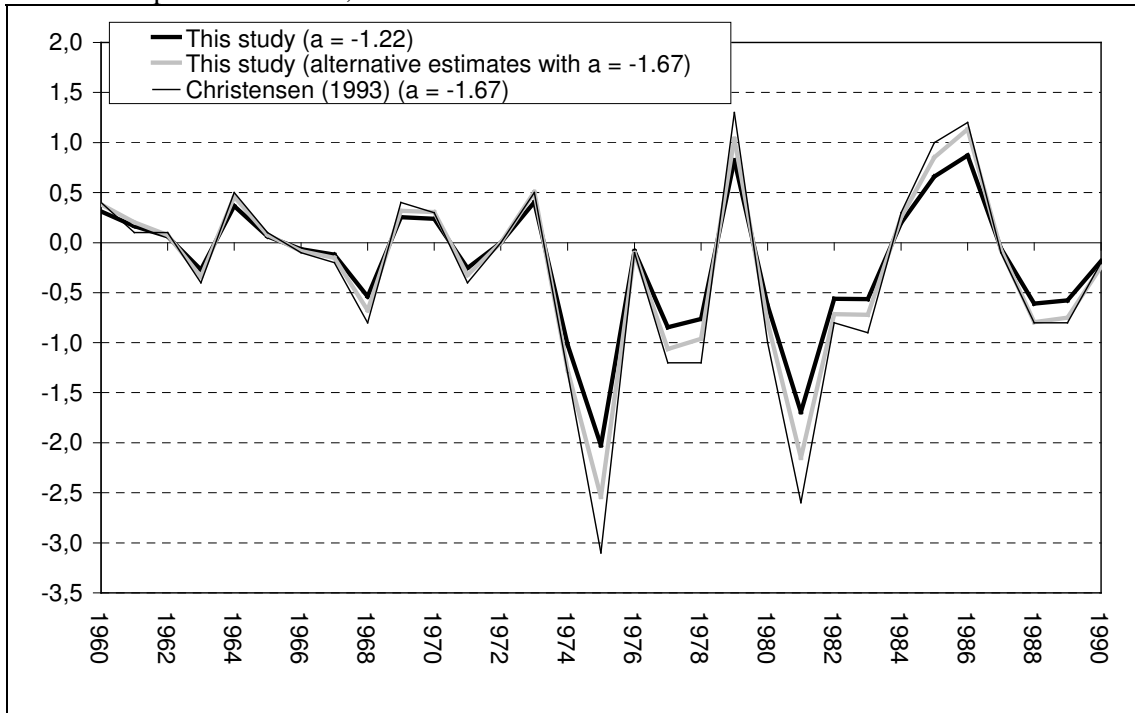
Chart 10: Cyclical impact on the change in the Danish general government budget balance, per cent of GDP, 1930-1939



Note: In order to improve comparability the data from Topp (1995) has been transformed from fiscal-year basis to calendar-year basis.

Sources: Calculations based on Appendix 1 and Topp (1995).

Chart 11: Cyclical impact on the change in the Danish general government budget balance, per cent of GDP, 1960-1990



Sources: Calculations based on appendix 1 and Christensen (1993).

The comparison with the results from Christensen (1993) do not alter the overall conclusion that the cyclical impact on the government budget balance most often seems to be relatively modest compared to that of discretionary fiscal-policy changes. However, the comparisons underline the importance regarding the choice of the parameter (α) representing the change in the number of employed persons (1000 persons) when the number of unemployed persons increase by 1000 persons. The results presented in section 4 based on a value of α equal to $\alpha = -1.22$ (estimated on the basis of the whole period 1875-2003) may tend to underestimate the cyclical impact on the general government budget balance in the post-1960 period.

The economic literature does not provide any unique and clear-cut operational definition of fiscal sustainability.¹¹ A 3-per-cent reference value for the general government deficit relative to GDP was laid out in the Maastricht Treaty that came into force on 1 November 1993. This reference value has served as a key benchmark in the monitoring of public finances within EU member states since the start of the second stage of the Economic and Monetary Union (EMU) in 1994. If the government deficit is limited to 3 per cent of GDP and the nominal GDP grows at 5 per cent per annum the steady state debt/GDP ratio will not exceed a 60 per cent limit. Taking into account that the cyclical budget volatility presented in section 4 may be too low in the post-1960 period the results seems to indicate a need for the cyclically adjusted budget balance to be in surplus in periods with strong economic growth if the automatic stabilisers should be allowed to work freely during a cyclical downturn without violating a 3-per-cent budget criteria.

6. Summary and scope for further research

So far projects on compilation of historical national-account statistics for Denmark has not included a split of the total economy into institutional sectors. This paper has attempted to overcome part of this data shortage by the constructing of time series for public and private net lending in the period 1875-2003. However, the accounting principles applied in central and local government accounting statistics has changed over time and the principles are not fully in accordance with the concepts and definitions applied in modern national accounts statistics. This introduces undoubtedly measurement errors, and the figures presented in this paper can only be considered as a first crude attempt to overcome the lack of time series for general government net lending in the existing version of Danish historical national accounts. It would be useful if future projects on historical national-accounts statistics in Denmark would make an attempt to include a full split of the total economy into at least the general government and the private sector.

¹¹ Cf. e.g. the survey and discussion in Marinheiro (2004).

The paper has also analysed the long-term term fiscal development in Denmark. Even though Denmark today has one of the largest public sectors in Europe, relatively speaking, the Danish general government's deficit in per cent of GDP has only significantly exceeded 3 per cent of GDP during World War II and in the early 1980s. Furthermore, the cyclical impact on the government budget balance seems most often to be relatively modest compared to that of discretionary fiscal policy changes. However, calculations on the cyclical budget volatility also seem to suggest that the cyclically adjusted budget balance has to be in surplus in periods with strong economic growth if the automatic stabilisers should be allowed to work freely during a cyclical downturn without violating a 3-per-cent budget criteria (the reference value in the Maastricht Treaty).

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Appendix 1: Data

Table A.1: Danish general government net lending, current prices, 1875-2003

| Year | million kroner | per cent of GDP at market prices | Year | million kroner | per cent of GDP at market prices |
|------|----------------|----------------------------------|------|----------------|----------------------------------|
| 1875 | 2.6 | 0.3 | 1945 | -530.3 | -3.7 |
| 1876 | -3.1 | -0.4 | 1946 | 376.3 | 2.4 |
| 1877 | -0.8 | -0.1 | 1947 | 529.6 | 3.1 |
| 1878 | 0.6 | 0.1 | 1948 | 454.1 | 2.4 |
| 1879 | -1.2 | -0.1 | 1949 | -1.8 | 0.0 |
| 1880 | -0.3 | 0.0 | 1950 | -18.3 | -0.1 |
| 1881 | -0.8 | -0.1 | 1951 | -100.2 | -0.4 |
| 1882 | 1.4 | 0.2 | 1952 | -118.7 | -0.4 |
| 1883 | 3.1 | 0.3 | 1953 | -289.3 | -1.0 |
| 1884 | 4.9 | 0.6 | 1954 | -199.1 | -0.7 |
| 1885 | 1.8 | 0.2 | 1955 | 37.9 | 0.1 |
| 1886 | -5.9 | -0.7 | 1956 | 208.6 | 0.6 |
| 1887 | -9.0 | -1.1 | 1957 | 396.1 | 1.1 |
| 1888 | -6.2 | -0.7 | 1958 | 488.8 | 1.3 |
| 1889 | -6.8 | -0.7 | 1959 | 769.5 | 1.9 |
| 1890 | -12.1 | -1.2 | 1960 | 974.7 | 2.2 |
| 1891 | -11.5 | -1.1 | 1961 | 64.5 | 0.1 |
| 1892 | -10.0 | -1.0 | 1962 | -41.7 | -0.1 |
| 1893 | -8.0 | -0.8 | 1963 | 335.8 | 0.6 |
| 1894 | -4.9 | -0.5 | 1964 | 522.9 | 0.8 |
| 1895 | -5.4 | -0.5 | 1965 | 465.9 | 0.6 |
| 1896 | -7.9 | -0.7 | 1966 | 695.2 | 0.9 |
| 1897 | -7.5 | -0.7 | 1967 | -554.7 | -0.6 |
| 1898 | -10.8 | -0.9 | 1968 | -434.6 | -0.4 |
| 1899 | -11.1 | -0.9 | 1969 | -1907.8 | -1.7 |
| 1900 | -19.6 | -1.4 | 1970 | 1648.0 | 1.3 |
| 1901 | -22.3 | -1.6 | 1971 | 3899.3 | 2.9 |
| 1902 | -14.4 | -1.0 | 1972 | 5740.0 | 3.7 |
| 1903 | -8.0 | -0.5 | 1973 | 8222.8 | 4.6 |
| 1904 | -7.3 | -0.5 | 1974 | 3428.3 | 1.7 |
| 1905 | -5.1 | -0.3 | 1975 | -2587.3 | -1.2 |
| 1906 | -6.9 | -0.4 | 1976 | -2011 | -0.8 |
| 1907 | -13.5 | -0.8 | 1977 | -3816 | -1.3 |
| 1908 | -30.9 | -1.7 | 1978 | -7382 | -2.3 |
| 1909 | -52.0 | -2.8 | 1979 | -12385 | -3.5 |
| 1910 | -61.0 | -3.1 | 1980 | -14107 | -3.7 |
| 1911 | -45.9 | -2.2 | 1981 | -32214 | -7.6 |
| 1912 | -24.2 | -1.1 | 1982 | -47844 | -9.9 |
| 1913 | -11.3 | -0.5 | 1983 | -43396 | -8.2 |
| 1914 | -50.2 | -1.9 | 1984 | -29994 | -5.1 |
| 1915 | -65.1 | -2.2 | 1985 | -19239 | -3.0 |
| 1916 | -43.8 | -1.1 | 1986 | 16166 | 2.4 |
| 1917 | 68.1 | 1.7 | 1987 | 10924 | 1.5 |
| 1918 | -170.2 | -3.6 | 1988 | 1886 | 0.3 |
| 1919 | -73.2 | -1.3 | 1989 | -5940 | -0.8 |
| 1920 | -212.7 | -2.9 | 1990 | -10762 | -1.3 |
| 1921 | -111.1 | -1.8 | 1991 | -25417 | -2.9 |
| 1922 | -20.2 | -0.4 | 1992 | -23184 | -2.6 |
| 1923 | 0.3 | 0.0 | 1993 | -34453 | -3.8 |
| 1924 | 1.6 | 0.0 | 1994 | -32006 | -3.3 |
| 1925 | 24.3 | 0.4 | 1995 | -29081 | -2.9 |
| 1926 | 59.2 | 1.0 | 1996 | -20610 | -1.9 |
| 1927 | -18.5 | -0.3 | 1997 | -5680 | -0.5 |
| 1928 | -148.7 | -2.6 | 1998 | -146 | 0.0 |
| 1929 | -37.0 | -0.6 | 1999 | 16979 | 1.4 |
| 1930 | 26.8 | 0.4 | 2000 | 29358 | 2.3 |
| 1931 | 26.0 | 0.5 | 2001 | 15876 | 1.2 |
| 1932 | -11.8 | -0.2 | 2002 | 3580 | 0.3 |
| 1933 | -40.4 | -0.7 | 2003 | -3176 | -0.2 |
| 1934 | -12.5 | -0.2 | | | |
| 1935 | -35.4 | -0.5 | | | |
| 1936 | -29.6 | -0.4 | | | |
| 1937 | -43.6 | -0.6 | | | |
| 1938 | -63.2 | -0.8 | | | |
| 1939 | -66.1 | -0.8 | | | |
| 1940 | -808.9 | -8.9 | | | |
| 1941 | -882.0 | -8.6 | | | |
| 1942 | -694.5 | -6.1 | | | |
| 1943 | -1764.9 | -13.6 | | | |
| 1944 | -2491.4 | -17.3 | | | |

Table A.2: Danish GDP, current prices, million kroner, 1875-2003

| Year | GDP at factor costs | | | Indirect taxes net of subsidies | GDP at market prices |
|------|---------------------|----------------|---------------|---------------------------------|----------------------|
| | General government | Private sector | Total economy | | |
| 1875 | 37 | 772 | 808 | 27 | 835 |
| 1876 | 40 | 792 | 832 | 26 | 858 |
| 1877 | 39 | 734 | 773 | 25 | 798 |
| 1878 | 38 | 720 | 758 | 24 | 782 |
| 1879 | 40 | 719 | 759 | 26 | 785 |
| 1880 | 40 | 800 | 840 | 26 | 866 |
| 1881 | 39 | 800 | 839 | 28 | 867 |
| 1882 | 42 | 808 | 850 | 29 | 879 |
| 1883 | 42 | 826 | 868 | 30 | 898 |
| 1884 | 44 | 795 | 839 | 30 | 869 |
| 1885 | 46 | 774 | 820 | 30 | 850 |
| 1886 | 49 | 770 | 819 | 29 | 848 |
| 1887 | 53 | 774 | 827 | 30 | 857 |
| 1888 | 53 | 788 | 841 | 32 | 873 |
| 1889 | 55 | 837 | 892 | 32 | 924 |
| 1890 | 58 | 907 | 965 | 32 | 997 |
| 1891 | 56 | 952 | 1008 | 33 | 1041 |
| 1892 | 58 | 947 | 1005 | 32 | 1037 |
| 1893 | 58 | 942 | 1000 | 34 | 1034 |
| 1894 | 57 | 933 | 990 | 34 | 1024 |
| 1895 | 54 | 985 | 1039 | 37 | 1076 |
| 1896 | 58 | 1001 | 1059 | 38 | 1097 |
| 1897 | 58 | 1039 | 1097 | 42 | 1139 |
| 1898 | 59 | 1098 | 1157 | 45 | 1202 |
| 1899 | 63 | 1154 | 1217 | 47 | 1264 |
| 1900 | 68 | 1254 | 1322 | 46 | 1368 |
| 1901 | 69 | 1303 | 1372 | 47 | 1419 |
| 1902 | 70 | 1326 | 1396 | 49 | 1445 |
| 1903 | 72 | 1390 | 1462 | 51 | 1513 |
| 1904 | 76 | 1403 | 1479 | 52 | 1531 |
| 1905 | 74 | 1484 | 1558 | 53 | 1611 |
| 1906 | 80 | 1547 | 1627 | 60 | 1687 |
| 1907 | 84 | 1655 | 1739 | 62 | 1801 |
| 1908 | 94 | 1679 | 1773 | 64 | 1837 |
| 1909 | 105 | 1723 | 1828 | 51 | 1879 |
| 1910 | 100 | 1822 | 1922 | 54 | 1976 |
| 1911 | 105 | 1946 | 2051 | 57 | 2108 |
| 1912 | 104 | 2055 | 2159 | 64 | 2223 |
| 1913 | 108 | 2193 | 2301 | 67 | 2368 |
| 1914 | 144 | 2385 | 2529 | 64 | 2593 |
| 1915 | 172 | 2715 | 2887 | 75 | 2962 |
| 1916 | 222 | 3545 | 3767 | 89 | 3856 |
| 1917 | 268 | 3735 | 4003 | 41 | 4044 |
| 1918 | 357 | 4409 | 4766 | -91 | 4675 |
| 1919 | 360 | 5461 | 5821 | -120 | 5701 |
| 1920 | 409 | 6987 | 7396 | -56 | 7340 |
| 1921 | 376 | 5681 | 6057 | 147 | 6204 |
| 1922 | 428 | 4978 | 5406 | 208 | 5614 |
| 1923 | 392 | 5638 | 6030 | 245 | 6275 |
| 1924 | 371 | 6195 | 6566 | 248 | 6814 |
| 1925 | 405 | 5748 | 6153 | 239 | 6392 |
| 1926 | 441 | 5088 | 5529 | 236 | 5765 |
| 1927 | 391 | 4927 | 5318 | 250 | 5568 |
| 1928 | 367 | 5070 | 5437 | 258 | 5695 |
| 1929 | 367 | 5435 | 5802 | 285 | 6087 |
| 1930 | 352 | 5353 | 5705 | 295 | 6000 |
| 1931 | 359 | 5010 | 5369 | 296 | 5665 |
| 1932 | 355 | 4757 | 5112 | 272 | 5384 |
| 1933 | 365 | 5141 | 5506 | 323 | 5829 |
| 1934 | 378 | 5589 | 5967 | 361 | 6328 |
| 1935 | 411 | 5969 | 6380 | 354 | 6734 |
| 1936 | 429 | 6261 | 6690 | 390 | 7080 |
| 1937 | 456 | 6685 | 7141 | 418 | 7559 |
| 1938 | 488 | 7026 | 7514 | 422 | 7936 |
| 1939 | 527 | 7600 | 8127 | 450 | 8577 |
| 1940 | ... | ... | 8620 | 428 | 9048 |
| 1941 | ... | ... | 9790 | 417 | 10207 |
| 1942 | ... | ... | 11020 | 446 | 11466 |
| 1943 | ... | ... | 12480 | 458 | 12938 |
| 1944 | ... | ... | 13850 | 587 | 14437 |

Table A.2 (continued): Danish GDP, current prices, million kroner, 1875-2003

| Year | GDP at factor costs | | | Indirect taxes net of subsidies | GDP at market prices |
|------|---------------------|----------------|---------------|---------------------------------|----------------------|
| | General government | Private sector | Total economy | | |
| 1945 | ... | ... | 13960 | 430 | 14390 |
| 1946 | ... | ... | 14770 | 856 | 15626 |
| 1947 | 1234 | 15040 | 16274 | 1018 | 17292 |
| 1948 | 1400 | 16262 | 17662 | 1181 | 18843 |
| 1949 | 1404 | 17491 | 18895 | 1306 | 20201 |
| 1950 | 1578 | 20040 | 21618 | 1514 | 23132 |
| 1951 | 1817 | 21586 | 23403 | 1647 | 25050 |
| 1952 | 2031 | 22954 | 24985 | 1705 | 26690 |
| 1953 | 2242 | 24294 | 26536 | 2014 | 28550 |
| 1954 | 2456 | 25162 | 27618 | 2273 | 29891 |
| 1955 | 2616 | 26091 | 28707 | 2563 | 31270 |
| 1956 | 2877 | 27766 | 30643 | 2760 | 33403 |
| 1957 | 3053 | 29615 | 32668 | 2876 | 35544 |
| 1958 | 3347 | 30634 | 33981 | 3169 | 37150 |
| 1959 | 3575 | 33860 | 37435 | 3643 | 41078 |
| 1960 | 3818 | 36705 | 40523 | 3907 | 44430 |
| 1961 | 4824 | 40551 | 45375 | 4000 | 49375 |
| 1962 | 5743 | 45025 | 50768 | 4918 | 55686 |
| 1963 | 6143 | 47333 | 53476 | 5709 | 59185 |
| 1964 | 7120 | 53951 | 61071 | 6625 | 67696 |
| 1965 | 8547 | 59744 | 68291 | 7774 | 76065 |
| 1966 | 9963 | 58897 | 68860 | 10025 | 78885 |
| 1967 | 11515 | 63847 | 75362 | 11532 | 86894 |
| 1968 | 13317 | 69794 | 83111 | 13714 | 96825 |
| 1969 | 15087 | 79576 | 94663 | 15723 | 110386 |
| 1970 | 19378 | 85272 | 104650 | 17493 | 122143 |
| 1971 | 21883 | 93918 | 115801 | 19453 | 135254 |
| 1972 | 25218 | 107997 | 133215 | 22108 | 155323 |
| 1973 | 29432 | 124716 | 154148 | 24007 | 178155 |
| 1974 | 35639 | 139741 | 175380 | 24276 | 199656 |
| 1975 | 42801 | 152737 | 195538 | 27843 | 223381 |
| 1976 | 49289 | 176533 | 225822 | 33411 | 259233 |
| 1977 | 53862 | 194668 | 248530 | 39427 | 287957 |
| 1978 | 61001 | 213500 | 274501 | 46563 | 321064 |
| 1979 | 69486 | 232939 | 302425 | 54888 | 357313 |
| 1980 | 78745 | 248799 | 327544 | 58264 | 385808 |
| 1981 | 90804 | 268362 | 359166 | 63237 | 422403 |
| 1982 | 106017 | 308511 | 414528 | 67683 | 482211 |
| 1983 | 114572 | 341827 | 456399 | 75328 | 531727 |
| 1984 | 119216 | 379938 | 499154 | 84392 | 583546 |
| 1985 | 125740 | 413515 | 539255 | 94763 | 634018 |
| 1986 | 129981 | 443958 | 573939 | 111627 | 685566 |
| 1987 | 142241 | 463937 | 606178 | 114765 | 720943 |
| 1988 | 153871 | 479882 | 633753 | 114521 | 748274 |
| 1989 | 160600 | 514447 | 675047 | 113553 | 788600 |
| 1990 | 165571 | 562094 | 727665 | 112983 | 840648 |
| 1991 | 172415 | 586291 | 758706 | 115657 | 874363 |
| 1992 | 179116 | 614168 | 793284 | 113311 | 906595 |
| 1993 | 183833 | 611266 | 795099 | 116710 | 911809 |
| 1994 | 190708 | 657142 | 847850 | 129095 | 976945 |
| 1995 | 196739 | 687498 | 884237 | 135308 | 1019545 |
| 1996 | 206808 | 716694 | 923502 | 145986 | 1069488 |
| 1997 | 215584 | 750955 | 966539 | 159102 | 1125641 |
| 1998 | 227567 | 761245 | 988812 | 174804 | 1163616 |
| 1999 | 237047 | 795833 | 1032880 | 180593 | 1213473 |
| 2000 | 246582 | 864846 | 1111428 | 182536 | 1293964 |
| 2001 | 258426 | 886011 | 1144437 | 191174 | 1335611 |
| 2002 | 269175 | 895473 | 1164648 | 197761 | 1362409 |
| 2003 | 279138 | 920988 | 1200126 | 201682 | 1401808 |

Table A.3: Total taxes to the Danish general government, current prices, million kroner, 1875-2003

| Year | Total taxes | Year | Total taxes |
|------|-------------|------|-------------|
| 1875 | 57 | 1945 | 2544 |
| 1876 | 59 | 1946 | 3084 |
| 1877 | 59 | 1947 | 3553 |
| 1878 | 59 | 1948 | 4195 |
| 1879 | 60 | 1949 | 4330 |
| 1880 | 62 | 1950 | 4430 |
| 1881 | 64 | 1951 | 5071 |
| 1882 | 67 | 1952 | 5637 |
| 1883 | 69 | 1953 | 6093 |
| 1884 | 71 | 1954 | 6371 |
| 1885 | 70 | 1955 | 7045 |
| 1886 | 68 | 1956 | 7513 |
| 1887 | 70 | 1957 | 8169 |
| 1888 | 72 | 1958 | 8939 |
| 1889 | 74 | 1959 | 9942 |
| 1890 | 74 | 1960 | 10852 |
| 1891 | 76 | 1961 | 11925 |
| 1892 | 78 | 1962 | 14443 |
| 1893 | 82 | 1963 | 16729 |
| 1894 | 83 | 1964 | 18726 |
| 1895 | 85 | 1965 | 22003 |
| 1896 | 88 | 1966 | 25652 |
| 1897 | 92 | 1967 | 29323 |
| 1898 | 96 | 1968 | 35000 |
| 1899 | 99 | 1969 | 39434 |
| 1900 | 102 | 1970 | 49105 |
| 1901 | 104 | 1971 | 58454 |
| 1902 | 109 | 1972 | 66685 |
| 1903 | 118 | 1973 | 73764 |
| 1904 | 120 | 1974 | 86488 |
| 1905 | 122 | 1975 | 88153 |
| 1906 | 129 | 1976 | 104853 |
| 1907 | 137 | 1977 | 117661 |
| 1908 | 142 | 1978 | 135226 |
| 1909 | 137 | 1979 | 154273 |
| 1910 | 146 | 1980 | 170141 |
| 1911 | 160 | 1981 | 184935 |
| 1912 | 173 | 1982 | 206846 |
| 1913 | 186 | 1983 | 238231 |
| 1914 | 191 | 1984 | 269210 |
| 1915 | 214 | 1985 | 300930 |
| 1916 | 323 | 1986 | 338149 |
| 1917 | 505 | 1987 | 360056 |
| 1918 | 532 | 1988 | 377250 |
| 1919 | 704 | 1989 | 388719 |
| 1920 | 875 | 1990 | 388942 |
| 1921 | 866 | 1991 | 401831 |
| 1922 | 785 | 1992 | 419882 |
| 1923 | 752 | 1993 | 439382 |
| 1924 | 765 | 1994 | 481521 |
| 1925 | 791 | 1995 | 497905 |
| 1926 | 778 | 1996 | 529179 |
| 1927 | 752 | 1997 | 555911 |
| 1928 | 718 | 1998 | 579021 |
| 1929 | 741 | 1999 | 621609 |
| 1930 | 772 | 2000 | 634609 |
| 1931 | 784 | 2001 | 661699 |
| 1932 | 783 | 2002 | 665287 |
| 1933 | 804 | 2003 | 681645 |
| 1934 | 889 | | |
| 1935 | 950 | | |
| 1936 | 1033 | | |
| 1937 | 1133 | | |
| 1938 | 1208 | | |
| 1939 | 1300 | | |
| 1940 | 1570 | | |
| 1941 | 1711 | | |
| 1942 | 1931 | | |
| 1943 | 2154 | | |
| 1944 | 2413 | | |

Table A.4: Unemployment benefits in Denmark, current prices, million kroner, 1875-2003

| Year | Unemployment benefits | Year | Unemployment benefits | | | | |
|------|-----------------------|------|-----------------------|--|--|--|--|
| 1875 | 0.2 | 1945 | 176.6 | | | | |
| 1876 | 0.2 | 1946 | 189.0 | | | | |
| 1877 | 0.2 | 1947 | 187.7 | | | | |
| 1878 | 0.3 | 1948 | 193.8 | | | | |
| 1879 | 0.3 | 1949 | 212.9 | | | | |
| 1880 | 0.3 | 1950 | 212.3 | | | | |
| 1881 | 0.3 | 1951 | 240.5 | | | | |
| 1882 | 0.3 | 1952 | 337.9 | | | | |
| 1883 | 0.3 | 1953 | 282.2 | | | | |
| 1884 | 0.3 | 1954 | 262.1 | | | | |
| 1885 | 0.3 | 1955 | 308.3 | | | | |
| 1886 | 0.4 | 1956 | 370.4 | | | | |
| 1887 | 0.4 | 1957 | 360.8 | | | | |
| 1888 | 0.4 | 1958 | 393.3 | | | | |
| 1889 | 0.4 | 1959 | 243.6 | | | | |
| 1890 | 0.5 | 1960 | 188.3 | | | | |
| 1891 | 0.5 | 1961 | 165.8 | | | | |
| 1892 | 0.5 | 1962 | 158.1 | | | | |
| 1893 | 0.5 | 1963 | 226 | | | | |
| 1894 | 0.4 | 1964 | 147 | | | | |
| 1895 | 0.4 | 1965 | 139 | | | | |
| 1896 | 0.5 | 1966 | 172 | | | | |
| 1897 | 0.4 | 1967 | 297 | | | | |
| 1898 | 0.4 | 1968 | 619 | | | | |
| 1899 | 0.4 | 1969 | 566 | | | | |
| 1900 | 0.4 | 1970 | 480 | | | | |
| 1901 | 0.5 | 1971 | 756 | | | | |
| 1902 | 0.4 | 1972 | 784 | | | | |
| 1903 | 0.4 | 1973 | 784 | | | | |
| 1904 | 0.6 | 1974 | 2325 | | | | |
| 1905 | 0.7 | 1975 | 4573 | | | | |
| 1906 | 0.4 | 1976 | 5682 | | | | |
| 1907 | 0.5 | 1977 | 7774 | | | | |
| 1908 | 0.8 | 1978 | 9930 | | | | |
| 1909 | 2.1 | 1979 | 9460 | | | | |
| 1910 | 2.3 | 1980 | 11319 | | | | |
| 1911 | 2.3 | 1981 | 16078 | | | | |
| 1912 | 2.3 | 1982 | 18863 | | | | |
| 1913 | 2.7 | 1983 | 20952 | | | | |
| 1914 | 3.8 | 1984 | 20940 | | | | |
| 1915 | 3.2 | 1985 | 19509 | | | | |
| 1916 | 2.7 | 1986 | 17740 | | | | |
| 1917 | 5.4 | 1987 | 18792 | | | | |
| 1918 | 33.7 | 1988 | 21270 | | | | |
| 1919 | 31.4 | 1989 | 24290 | | | | |
| 1920 | 22.4 | 1990 | 25453 | | | | |
| 1921 | 45.1 | 1991 | 28872 | | | | |
| 1922 | 32.9 | 1992 | 31706 | | | | |
| 1923 | 19.6 | 1993 | 35819 | | | | |
| 1924 | 18.7 | 1994 | 34720 | | | | |
| 1925 | 26.0 | 1995 | 29648 | | | | |
| 1926 | 38.1 | 1996 | 25741 | | | | |
| 1927 | 38.0 | 1997 | 23660 | | | | |
| 1928 | 29.1 | 1998 | 19547 | | | | |
| 1929 | 25.1 | 1999 | 17284 | | | | |
| 1930 | 22.3 | 2000 | 17490 | | | | |
| 1931 | 32.3 | 2001 | 17254 | | | | |
| 1932 | 59.6 | 2002 | 17854 | | | | |
| 1933 | 68.2 | 2003 | 22225 | | | | |
| 1934 | 63.4 | | | | | | |
| 1935 | 51.6 | | | | | | |
| 1936 | 65.2 | | | | | | |
| 1937 | 96.2 | | | | | | |
| 1938 | 100.6 | | | | | | |
| 1939 | 95.6 | | | | | | |
| 1940 | 163.2 | | | | | | |
| 1941 | 161.4 | | | | | | |
| 1942 | 150.2 | | | | | | |
| 1943 | 109.0 | | | | | | |
| 1944 | 97.0 | | | | | | |

Table A.5: The Danish labour market, 1875-2003

| Year | Labour force | Employment | Unemployment | Unemployment rate |
|------|--------------|--------------|--------------|-------------------|
| | | 1000 persons | | per cent |
| 1875 | 1081 | 1069 | 12 | 1.1 |
| 1876 | 1088 | 1077 | 11 | 1.0 |
| 1877 | 1098 | 1086 | 12 | 1.1 |
| 1878 | 1105 | 1092 | 13 | 1.2 |
| 1879 | 1112 | 1097 | 14 | 1.3 |
| 1880 | 1117 | 1103 | 15 | 1.3 |
| 1881 | 1123 | 1107 | 15 | 1.4 |
| 1882 | 1130 | 1115 | 15 | 1.4 |
| 1883 | 1138 | 1122 | 16 | 1.4 |
| 1884 | 1145 | 1130 | 15 | 1.3 |
| 1885 | 1150 | 1134 | 16 | 1.4 |
| 1886 | 1158 | 1140 | 18 | 1.5 |
| 1887 | 1163 | 1145 | 19 | 1.6 |
| 1888 | 1171 | 1153 | 19 | 1.6 |
| 1889 | 1179 | 1160 | 19 | 1.6 |
| 1890 | 1182 | 1162 | 20 | 1.7 |
| 1891 | 1190 | 1169 | 21 | 1.7 |
| 1892 | 1199 | 1178 | 21 | 1.7 |
| 1893 | 1211 | 1190 | 20 | 1.7 |
| 1894 | 1230 | 1210 | 20 | 1.6 |
| 1895 | 1239 | 1220 | 19 | 1.5 |
| 1896 | 1253 | 1233 | 20 | 1.6 |
| 1897 | 1266 | 1249 | 17 | 1.3 |
| 1898 | 1281 | 1266 | 16 | 1.2 |
| 1899 | 1297 | 1282 | 15 | 1.2 |
| 1900 | 1310 | 1296 | 14 | 1.1 |
| 1901 | 1323 | 1304 | 19 | 1.4 |
| 1902 | 1339 | 1324 | 15 | 1.1 |
| 1903 | 1351 | 1338 | 13 | 1.0 |
| 1904 | 1372 | 1359 | 14 | 1.0 |
| 1905 | 1379 | 1365 | 15 | 1.1 |
| 1906 | 1430 | 1423 | 8 | 0.5 |
| 1907 | 1439 | 1431 | 9 | 0.6 |
| 1908 | 1432 | 1418 | 14 | 1.0 |
| 1909 | 1435 | 1418 | 17 | 1.2 |
| 1910 | 1459 | 1444 | 15 | 1.0 |
| 1911 | 1479 | 1465 | 14 | 0.9 |
| 1912 | 1478 | 1466 | 12 | 0.8 |
| 1913 | 1494 | 1481 | 13 | 0.9 |
| 1914 | 1528 | 1511 | 17 | 1.1 |
| 1915 | 1529 | 1515 | 14 | 0.9 |
| 1916 | 1602 | 1590 | 12 | 0.7 |
| 1917 | 1600 | 1576 | 24 | 1.5 |
| 1918 | 1589 | 1536 | 53 | 3.3 |
| 1919 | 1638 | 1598 | 40 | 2.4 |
| 1920 | 1681 | 1656 | 25 | 1.5 |
| 1921 | 1710 | 1641 | 69 | 4.0 |
| 1922 | 1735 | 1674 | 61 | 3.5 |
| 1923 | 1790 | 1750 | 40 | 2.2 |
| 1924 | 1825 | 1790 | 35 | 1.9 |
| 1925 | 1830 | 1781 | 49 | 2.7 |
| 1926 | 1820 | 1752 | 68 | 3.7 |
| 1927 | 1832 | 1758 | 74 | 4.0 |
| 1928 | 1873 | 1812 | 61 | 3.3 |
| 1929 | 1901 | 1849 | 52 | 2.7 |
| 1930 | 1941 | 1892 | 49 | 2.5 |
| 1931 | 1938 | 1874 | 64 | 3.3 |
| 1932 | 1878 | 1760 | 118 | 6.3 |
| 1933 | 1927 | 1811 | 116 | 6.0 |
| 1934 | 1993 | 1896 | 97 | 4.9 |
| 1935 | 2029 | 1938 | 91 | 4.5 |
| 1936 | 2062 | 1967 | 95 | 4.6 |
| 1937 | 2069 | 1955 | 114 | 5.5 |
| 1938 | 2095 | 1979 | 116 | 5.5 |
| 1939 | 2126 | 2022 | 104 | 4.9 |
| 1940 | 2091 | 1949 | 142 | 6.8 |
| 1941 | 2155 | 2038 | 117 | 5.4 |
| 1942 | 2170 | 2073 | 97 | 4.5 |
| 1943 | 2188 | 2118 | 70 | 3.2 |
| 1944 | 2203 | 2147 | 56 | 2.5 |

Table A.5 (continued): The Danish labour market, 1875-2003

| Year | Labour force | Employment | Unemployment | Unemployment rate |
|------|--------------|------------|--------------|-------------------|
| | 1000 persons | | | per cent |
| 1945 | 2189 | 2098 | 91 | 4.2 |
| 1946 | 2201 | 2138 | 63 | 2.9 |
| 1947 | 2198 | 2135 | 63 | 2.9 |
| 1948 | 2220 | 2157 | 63 | 2.8 |
| 1949 | 2248 | 2176 | 72 | 3.2 |
| 1950 | 2294 | 2226 | 68 | 3.0 |
| 1951 | 2298 | 2223 | 75 | 3.3 |
| 1952 | 2285 | 2188 | 97 | 4.2 |
| 1953 | 2293 | 2217 | 76 | 3.3 |
| 1954 | 2314 | 2247 | 67 | 2.9 |
| 1955 | 2310 | 2230 | 80 | 3.5 |
| 1956 | 2306 | 2215 | 91 | 3.9 |
| 1957 | 2303 | 2216 | 87 | 3.8 |
| 1958 | 2298 | 2216 | 82 | 3.6 |
| 1959 | 2323 | 2269 | 54 | 2.3 |
| 1960 | 2357 | 2318 | 39 | 1.7 |
| 1961 | 2376 | 2345 | 31 | 1.3 |
| 1962 | 2406 | 2378 | 28 | 1.2 |
| 1963 | 2431 | 2390 | 41 | 1.7 |
| 1964 | 2462 | 2439 | 23 | 0.9 |
| 1965 | 2494 | 2474 | 20 | 0.8 |
| 1966 | 2456 | 2433 | 23 | 0.9 |
| 1967 | 2455 | 2427 | 28 | 1.1 |
| 1968 | 2488 | 2439 | 49 | 2.0 |
| 1969 | 2516 | 2477 | 39 | 1.6 |
| 1970 | 2532 | 2502 | 30 | 1.2 |
| 1971 | 2536 | 2497 | 39 | 1.5 |
| 1972 | 2577 | 2538 | 39 | 1.5 |
| 1973 | 2590 | 2565 | 25 | 1.0 |
| 1974 | 2602 | 2544 | 58 | 2.2 |
| 1975 | 2646 | 2515 | 131 | 5.0 |
| 1976 | 2690 | 2556 | 134 | 5.0 |
| 1977 | 2715 | 2551 | 164 | 6.0 |
| 1978 | 2760 | 2569 | 191 | 6.9 |
| 1979 | 2754 | 2592 | 162 | 5.9 |
| 1980 | 2757 | 2573 | 184 | 6.7 |
| 1981 | 2778 | 2535 | 243 | 8.7 |
| 1982 | 2804 | 2541 | 263 | 9.4 |
| 1983 | 2827 | 2544 | 283 | 10.0 |
| 1984 | 2856 | 2580 | 276 | 9.7 |
| 1985 | 2888 | 2636 | 252 | 8.7 |
| 1986 | 2916 | 2696 | 220 | 7.5 |
| 1987 | 2927 | 2705 | 222 | 7.6 |
| 1988 | 2927 | 2683 | 244 | 8.3 |
| 1989 | 2930 | 2665 | 265 | 9.0 |
| 1990 | 2917 | 2645 | 272 | 9.3 |
| 1991 | 2925 | 2629 | 296 | 10.1 |
| 1992 | 2918 | 2600 | 318 | 10.9 |
| 1993 | 2911 | 2562 | 349 | 12.0 |
| 1994 | 2947 | 2604 | 343 | 11.6 |
| 1995 | 2917 | 2629 | 288 | 9.9 |
| 1996 | 2900 | 2655 | 245 | 8.4 |
| 1997 | 2907 | 2687 | 220 | 7.6 |
| 1998 | 2910 | 2727 | 183 | 6.3 |
| 1999 | 2911 | 2753 | 158 | 5.4 |
| 2000 | 2914 | 2764 | 150 | 5.1 |
| 2001 | 2930 | 2785 | 145 | 4.9 |
| 2002 | 2925 | 2780 | 145 | 5.0 |
| 2003 | 2918 | 2747 | 171 | 5.9 |

Table A.6: Cyclical impact on the annual change in the Danish general government net lending, 1876-2003

| Year | Annual change in the general government net lending | Cyclical impact on the annual change in the general government net lending | Cyclical adjusted annual change in the general government net lending | Annual change in the general government net lending | Cyclical impact on the annual change in the general government net lending | Cyclical adjusted annual change in the general government net lending |
|------|---|--|---|---|--|---|
| | million kroner | | | per cent of GDP at market prices | | |
| 1876 | -5.6 | 0.0 | -5.6 | -0.7 | 0.0 | -0.7 |
| 1877 | 2.3 | -0.1 | 2.4 | 0.3 | 0.0 | 0.3 |
| 1878 | 1.4 | -0.1 | 1.5 | 0.2 | 0.0 | 0.2 |
| 1879 | -1.8 | -0.1 | -1.7 | -0.2 | 0.0 | -0.2 |
| 1880 | 0.9 | 0.0 | 0.9 | 0.1 | 0.0 | 0.1 |
| 1881 | -0.5 | -0.1 | -0.4 | -0.1 | 0.0 | 0.0 |
| 1882 | 2.2 | 0.0 | 2.2 | 0.2 | 0.0 | 0.2 |
| 1883 | 1.7 | 0.0 | 1.7 | 0.2 | 0.0 | 0.2 |
| 1884 | 1.8 | 0.1 | 1.7 | 0.2 | 0.0 | 0.2 |
| 1885 | -3.1 | -0.1 | -3.0 | -0.4 | 0.0 | -0.4 |
| 1886 | -7.7 | -0.2 | -7.5 | -0.9 | 0.0 | -0.9 |
| 1887 | -3.1 | -0.1 | -3.0 | -0.4 | 0.0 | -0.4 |
| 1888 | 2.8 | 0.0 | 2.8 | 0.3 | 0.0 | 0.3 |
| 1889 | -0.6 | -0.1 | -0.5 | -0.1 | 0.0 | -0.1 |
| 1890 | -5.2 | -0.1 | -5.1 | -0.5 | 0.0 | -0.5 |
| 1891 | 0.6 | -0.1 | 0.6 | 0.1 | 0.0 | 0.1 |
| 1892 | 1.5 | 0.0 | 1.5 | 0.1 | 0.0 | 0.1 |
| 1893 | 2.0 | 0.0 | 1.9 | 0.2 | 0.0 | 0.2 |
| 1894 | 3.2 | 0.1 | 3.1 | 0.3 | 0.0 | 0.3 |
| 1895 | -0.5 | 0.1 | -0.6 | 0.0 | 0.0 | -0.1 |
| 1896 | -2.5 | -0.1 | -2.5 | -0.2 | 0.0 | -0.2 |
| 1897 | 0.4 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 |
| 1898 | -3.3 | 0.1 | -3.4 | -0.3 | 0.0 | -0.3 |
| 1899 | -0.3 | 0.1 | -0.4 | 0.0 | 0.0 | 0.0 |
| 1900 | -8.6 | 0.1 | -8.6 | -0.6 | 0.0 | -0.6 |
| 1901 | -2.6 | -0.6 | -2.1 | -0.2 | 0.0 | -0.1 |
| 1902 | 7.8 | 0.5 | 7.4 | 0.5 | 0.0 | 0.5 |
| 1903 | 6.4 | 0.2 | 6.2 | 0.4 | 0.0 | 0.4 |
| 1904 | 0.8 | -0.1 | 0.9 | 0.1 | 0.0 | 0.1 |
| 1905 | 2.2 | -0.1 | 2.3 | 0.1 | 0.0 | 0.1 |
| 1906 | -1.8 | 1.1 | -2.9 | -0.1 | 0.1 | -0.2 |
| 1907 | -6.7 | -0.2 | -6.5 | -0.4 | 0.0 | -0.4 |
| 1908 | -17.4 | -0.9 | -16.4 | -0.9 | -0.1 | -0.9 |
| 1909 | -21.1 | -0.8 | -20.4 | -1.1 | 0.0 | -1.1 |
| 1910 | -9.0 | 0.5 | -9.5 | -0.5 | 0.0 | -0.5 |
| 1911 | 15.1 | 0.4 | 14.7 | 0.7 | 0.0 | 0.7 |
| 1912 | 21.7 | 0.6 | 21.0 | 1.0 | 0.0 | 0.9 |
| 1913 | 12.9 | -0.3 | 13.2 | 0.5 | 0.0 | 0.6 |
| 1914 | -38.9 | -1.4 | -37.4 | -1.5 | -0.1 | -1.4 |
| 1915 | -14.9 | 1.2 | -16.1 | -0.5 | 0.0 | -0.5 |
| 1916 | 21.3 | 0.9 | 20.4 | 0.6 | 0.0 | 0.5 |
| 1917 | 111.9 | -7.1 | 118.9 | 2.8 | -0.2 | 2.9 |
| 1918 | -238.3 | -28.6 | -209.7 | -5.1 | -0.6 | -4.5 |
| 1919 | 97.0 | 16.0 | 81.0 | 1.7 | 0.3 | 1.4 |
| 1920 | -139.5 | 21.5 | -161.0 | -1.9 | 0.3 | -2.2 |
| 1921 | 101.6 | -53.0 | 154.7 | 1.6 | -0.9 | 2.5 |
| 1922 | 90.9 | 8.3 | 82.6 | 1.6 | 0.1 | 1.5 |
| 1923 | 20.5 | 20.0 | 0.5 | 0.3 | 0.3 | 0.0 |
| 1924 | 1.3 | 5.0 | -3.7 | 0.0 | 0.1 | -0.1 |
| 1925 | 22.7 | -14.1 | 36.8 | 0.4 | -0.2 | 0.6 |
| 1926 | 34.9 | -19.5 | 54.3 | 0.6 | -0.3 | 0.9 |
| 1927 | -77.7 | -5.8 | -71.9 | -1.4 | -0.1 | -1.3 |
| 1928 | -130.2 | 11.7 | -141.8 | -2.3 | 0.2 | -2.5 |
| 1929 | 111.7 | 8.2 | 103.5 | 1.8 | 0.1 | 1.7 |
| 1930 | 63.8 | 2.7 | 61.1 | 1.1 | 0.0 | 1.0 |
| 1931 | -0.8 | -14.1 | 13.3 | 0.0 | -0.2 | 0.2 |
| 1932 | -37.8 | -52.4 | 14.7 | -0.7 | -1.0 | 0.3 |
| 1933 | -28.6 | 2.1 | -30.7 | -0.5 | 0.0 | -0.5 |
| 1934 | 27.9 | 21.5 | 6.4 | 0.4 | 0.3 | 0.1 |
| 1935 | -23.0 | 6.5 | -29.5 | -0.3 | 0.1 | -0.4 |
| 1936 | 5.8 | -4.9 | 10.7 | 0.1 | -0.1 | 0.2 |
| 1937 | -13.9 | -26.9 | 13.0 | -0.2 | -0.4 | 0.2 |
| 1938 | -19.7 | -2.9 | -16.7 | -0.2 | 0.0 | -0.2 |
| 1939 | -2.9 | 18.7 | -21.6 | 0.0 | 0.2 | -0.3 |
| 1940 | -742.8 | -73.1 | -669.7 | -8.2 | -0.8 | -7.4 |
| 1941 | -73.0 | 54.1 | -127.1 | -0.7 | 0.5 | -1.2 |
| 1942 | 187.4 | 48.3 | 139.1 | 1.6 | 0.4 | 1.2 |
| 1943 | -1070.4 | 68.3 | -1138.7 | -8.3 | 0.5 | -8.8 |
| 1944 | -726.4 | 39.2 | -765.7 | -5.0 | 0.3 | -5.3 |
| 1945 | 1961.1 | -107.4 | 2068.5 | 13.6 | -0.7 | 14.4 |

Table A.6 (continued): Cyclical impact on the annual change in the Danish general government net lending, 1876-2003

| Year | Annual change in the general government net lending | Cyclical impact on the annual change in the general government net lending | Cyclical adjusted annual change in the general government net lending | Annual change in the general government net lending | Cyclical impact on the annual change in the general government net lending | Cyclical adjusted annual change in the general government net lending |
|------|---|--|---|---|--|---|
| | million kroner | | | per cent of GDP at market prices | | |
| 1946 | 906,6 | 115,8 | 790,8 | 5,8 | 0,7 | 5,1 |
| 1947 | 153,3 | 0,0 | 153,3 | 0,9 | 0,0 | 0,9 |
| 1948 | -75,6 | 0,0 | -75,6 | -0,4 | 0,0 | -0,4 |
| 1949 | -455,8 | -42,4 | -413,4 | -2,3 | -0,2 | -2,0 |
| 1950 | -16,6 | 19,7 | -36,2 | -0,1 | 0,1 | -0,2 |
| 1951 | -81,8 | -37,1 | -44,7 | -0,3 | -0,1 | -0,2 |
| 1952 | -18,5 | -128,6 | 110,1 | -0,1 | -0,5 | 0,4 |
| 1953 | -170,6 | 130,6 | -301,2 | -0,6 | 0,5 | -1,1 |
| 1954 | 90,2 | 58,3 | 31,9 | 0,3 | 0,2 | 0,1 |
| 1955 | 236,9 | -88,0 | 324,9 | 0,8 | -0,3 | 1,0 |
| 1956 | 170,7 | -79,4 | 250,1 | 0,5 | -0,2 | 0,7 |
| 1957 | 187,5 | 30,5 | 157,0 | 0,5 | 0,1 | 0,4 |
| 1958 | 92,8 | 42,3 | 50,4 | 0,2 | 0,1 | 0,1 |
| 1959 | 280,7 | 242,7 | 38,0 | 0,7 | 0,6 | 0,1 |
| 1960 | 205,2 | 138,8 | 66,4 | 0,5 | 0,3 | 0,1 |
| 1961 | -910,2 | 81,3 | -991,5 | -1,8 | 0,2 | -2,0 |
| 1962 | -106,2 | 34,4 | -140,6 | -0,2 | 0,1 | -0,3 |
| 1963 | 377,4 | -160,4 | 537,8 | 0,6 | -0,3 | 0,9 |
| 1964 | 187,1 | 248,6 | -61,5 | 0,3 | 0,4 | -0,1 |
| 1965 | -57,0 | 46,7 | -103,7 | -0,1 | 0,1 | -0,1 |
| 1966 | 229,3 | -52,7 | 282,0 | 0,3 | -0,1 | 0,4 |
| 1967 | -1249,9 | -106,2 | -1143,7 | -1,4 | -0,1 | -1,3 |
| 1968 | 120,2 | -521,8 | 642,0 | 0,1 | -0,5 | 0,7 |
| 1969 | -1473,2 | 279,2 | -1752,4 | -1,3 | 0,3 | -1,6 |
| 1970 | 3555,8 | 292,3 | 3263,5 | 2,9 | 0,2 | 2,7 |
| 1971 | 2251,3 | -343,9 | 2595,1 | 1,7 | -0,3 | 1,9 |
| 1972 | 1840,8 | 0,0 | 1840,8 | 1,2 | 0,0 | 1,2 |
| 1973 | 2482,8 | 720,9 | 1761,8 | 1,4 | 0,4 | 1,0 |
| 1974 | -4794,5 | -2041,4 | -2753,1 | -2,4 | -1,0 | -1,4 |
| 1975 | -6015,5 | -4526,2 | -1489,3 | -2,7 | -2,0 | -0,7 |
| 1976 | 576,3 | -218,5 | 794,8 | 0,2 | -0,1 | 0,3 |
| 1977 | -1805,0 | -2439,7 | 634,7 | -0,6 | -0,8 | 0,2 |
| 1978 | -3566,0 | -2448,9 | -1117,1 | -1,1 | -0,8 | -0,3 |
| 1979 | -5003,0 | 2938,8 | -7941,8 | -1,4 | 0,8 | -2,2 |
| 1980 | -1722,0 | -2428,1 | 706,1 | -0,4 | -0,6 | 0,2 |
| 1981 | -18107,0 | -7153,4 | -10953,6 | -4,3 | -1,7 | -2,6 |
| 1982 | -15630,0 | -2708,2 | -12921,8 | -3,2 | -0,6 | -2,7 |
| 1983 | 4448,0 | -2996,5 | 7444,5 | 0,8 | -0,6 | 1,4 |
| 1984 | 13402,0 | 1137,2 | 12264,8 | 2,3 | 0,2 | 2,1 |
| 1985 | 10755,0 | 4169,3 | 6585,7 | 1,7 | 0,7 | 1,0 |
| 1986 | 35405,0 | 5964,7 | 29440,3 | 5,2 | 0,9 | 4,3 |
| 1987 | -5242,0 | -394,1 | -4847,9 | -0,7 | -0,1 | -0,7 |
| 1988 | -9038,0 | -4556,3 | -4481,7 | -1,2 | -0,6 | -0,6 |
| 1989 | -7826,0 | -4559,5 | -3266,5 | -1,0 | -0,6 | -0,4 |
| 1990 | -4822,0 | -1562,8 | -3259,2 | -0,6 | -0,2 | -0,4 |
| 1991 | -14655,0 | -5582,7 | -9072,3 | -1,7 | -0,6 | -1,0 |
| 1992 | 2233,0 | -5373,3 | 7606,3 | 0,2 | -0,6 | 0,8 |
| 1993 | -11269,0 | -7919,6 | -3349,4 | -1,2 | -0,9 | -0,4 |
| 1994 | 2447,0 | 1617,8 | 829,2 | 0,3 | 0,2 | 0,1 |
| 1995 | 2925,0 | 15202,0 | -12277,0 | 0,3 | 1,5 | -1,2 |
| 1996 | 8471,0 | 12401,2 | -3930,2 | 0,8 | 1,2 | -0,4 |
| 1997 | 14930,0 | 7461,4 | 7468,6 | 1,3 | 0,7 | 0,7 |
| 1998 | 5534,0 | 11237,3 | -5703,3 | 0,5 | 1,0 | -0,5 |
| 1999 | 17125,0 | 7985,9 | 9139,1 | 1,4 | 0,7 | 0,8 |
| 2000 | 12379,0 | 2644,4 | 9734,6 | 1,0 | 0,2 | 0,8 |
| 2001 | -13482,0 | 1702,4 | -15184,4 | -1,0 | 0,1 | -1,1 |
| 2002 | -12296,0 | 0,0 | -12296,0 | -0,9 | 0,0 | -0,9 |
| 2003 | -6756,0 | -9343,6 | 2587,6 | -0,5 | -0,7 | 0,2 |

Appendix 2: Data sources and calculation methods

Net lending of the general government sector, current prices

Sources:

Various issues of: Statistics Denmark, *Statistical ten-year review*; and Statistics Denmark, *Statistical Yearbook*. Other sources: Arbejdsdirektoratet (1957); Hansen (1983); Johansen (1985); Statistics Denmark (2001); Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website; Topp (1995) and Vater (ed.) (1932).

Comments:

(1) The public sector covers the central and local government. Furthermore, unemployment benefit societies are included within the public sector with effect from 1907. In 1967 the central government took over the responsibility of financing the share of unemployment benefits not covered by fees from members of the unemployment benefit societies. In the period 1971-1989 the net lending of unemployment benefit societies is assumed to be equal to zero. With effect from 1990 the data on general government net lending comes from the current official version of the national accounts which include unemployment benefit societies within the general government. (2) For the period 1875-1975 data for the central government have been converted from fiscal year to calendar year. (3) In 1910 an amount of 6 million kroner are included as expenditures in the central government net lending representing the central governments pay-in to the liquidation fund of 1910 which were to guarantee deposits in a number of failed banks. (4) The proceeds from the sale of the Danish West Indies (87 million kroner) in 1917 are included as revenue in the central government net lending. (5) The compensation paid to Germany (101.4 million kroner) in 1920 as compensation for assets in Sønderjylland (the northern part of the old Duchy of Schleswig) are included as expenditures in the central government net lending. (6) In 1928 an amount of 136 million kroner are included as expenditures in the central government net lending representing the central governments expenditures in the reconstruction of Landmandsbanken. (7) The German occupation forces expenditures in Denmark during the years 1940-1945 (in million kroner: 1940: 804.6; 1941: 852.6; 1942: 701.7; 1943: 1902.5; 1944: 2728.0; and 1945: 574.1) are included as expenditures (debt write-off) in the central government net lending in the period 1940-1945. In the central government accounts most of these expenditures were recorded in the revaluation account during the years from 1946 and forward while the rest was included among the current and capital expenditures. The appropriate adjustments for the years 1946 and forward have been made to avoid double recording of the expenditures. (8) For the period 1900-1975 data for the local government

have been converted from fiscal year to calendar year. (9) For the fiscal year 1965/66 no suitable figures for the local government capital expenditures are available in the accounting statistics due to changes in the tax assessment of real property. The figure has been estimated so that the net lending of the local government for this year matches the change in the local government debt. (10) Data for the net lending of the unemployment benefit associations in the period 1907-1970 have been converted from fiscal year to calendar year. (11) For the period before 1931 data for the net lending of the unemployment benefit associations has been compiled as movement in the net wealth position of the unemployment benefit associations.

GDP at factor costs, current prices

Sources:

Other sources: Hansen (1983); Hansen & Henriksen (1984); Statistics Denmark (2001); and Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website.

Comments:

(1) Since 1921: Including Sønderjylland (the northern part of the old Duchy of Schleswig).

General government GDP at factor costs, current prices

Sources:

Other sources: Hansen (1983); and Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website.

Comments:

(1) Since 1921: Including Sønderjylland (the northern part of the old Duchy of Schleswig).

Private sector GDP at factor costs, current prices

Comments:

(1) Calculated as total GDP at factor costs less general government GDP at factor costs.

Indirect taxes net of subsidies, current prices

Sources:

Other sources: Hansen (1983); Hansen & Henriksen (1984); and Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website.

Comments:

(1) 1990-2003 calculated as GDP at market prices less GDP at factor costs.

Gross domestic product (GDP) at market prices, current prices

Other sources: Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website.

Comments:

(1) 1875-1989 calculated as GDP at factor costs plus indirect taxes net of subsidies.

Total taxes to general government, current prices

Sources:

Various issues of: Statistics Denmark, *Statistical ten-year review*. Other sources: Kærgård (1991) and Statistics Denmark (2001).

Comments:

(1) Total taxes include social security contributions (including membership contributions to unemployment benefit associations).

Unemployment benefits, current prices

Sources:

Various issues of: Statistics Denmark, *Statistical ten-year review*. Other sources: Kærgård (1991); Schmidt-Sørensen (1985); Statistics Denmark (2001); and Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website.

Comments:

(1) For the period 1875-1962 the general government expenditures on unemployment benefits have been calculated as the number of unemployed persons multiplied by the daily unemployment related government expenditures per unemployed person and the number of working days per year. (2) For the period 1875-1902 the daily unemployment related government expenditures per unemployed person has been interpolated from the level in 1903 and the development in nominal GDP at factor costs per employed person.

Labour force, 1000 persons

Sources:

Other sources: Hansen (1983).

Comments:

(1) In the period since 1903 calculated as employment plus unemployment. (2) Adjusted for break in series in 1903.

Employment, 1000 persons

Sources:

Various issues of: Statistics Denmark, *Statistical ten-year review*. Other sources: Hansen (1983); Statistics Denmark (2001); and Statistics Denmark, *StatBank Denmark*, Statistics Denmark's website.

Comments:

(1) In the period 1875-1902 calculated as labour force less unemployment. (2) Since 1921: Including Sønderjylland (the northern part of the old Duchy of Schleswig). (3) Adjusted for break in series in 1948 and 1990.

Unemployment, 1000 persons

Sources:

Various issues of: Statistics Denmark, *Statistical ten-year review*. Other sources: Christensen (1975); Cohn (1958); Pedersen (1977); Statistics Denmark (2001); and Warming (1913).

Comments:

(1) For the period 1875-1899 interpolated from the number of unemployed persons in 1900 and the development in the number of persons receiving social security benefits from the local authorities in Copenhagen. (2) In the period 1900-1902 interpolated on the basis of the unemployment among labour union members in November of the year concerned and seasonal factors based on the period 1906-1910. (3) 1903-1910 average number of insured unemployed persons multiplied by the ratio between the total number of unemployed (insured and non-insured) and the number of insured unemployed in 1911. (4) Since 1911 average annual number of insured and non-insured unemployed persons. (5) For the years 1931-1939, the calculated figures (64, 118, 116, 97, 91, 95, 114, 116, 104) are quite close to the figures (73, 127, 119, 98, 91, 94, 109, 112, 101) calculated in Topp (1997), also covering the number of thousand insured and non-insured unemployed persons.

Unemployment, per cent

Comments:

(1) Calculated as unemployment in per cent of the total labour force. (2) For the years 1937-1940, the calculated figures (5.5; 5.5; 4.9; and 6.8) are quite close to the figures (5.6; 5.6; 5.2; and 6.8) published in Danmarks Statistik (1996), also covering insured and non-insured unemployed in per cent of the total labour force.