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Stress scenarios from the tails of historical distributions of macro-financial risk factors in Denmark [1]

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Abstract

The paper puts the outcome during the most recent financial crisis in a historical perspective by taking a closer look at the frequency of extreme events in the economic history of Denmark, in some cases based on time series back to the late 1600s. We focus on the frequency distribution of a range of key macro-financial risk factors that are commonly believed to be important drivers of credit risks and market risks faced by financial institutions. We suggest that marginal historical distributions of macro-financial risk factors might serve as inspiration for design of sensitivity tests and "worst case" scenarios in risk management and macro stress tests.

Key words: Extreme events; Macro stress tests; Financial stability; Financial crisis; Danish Economic History.

JEL Classification: E32, E44, G01, G21, G28, G32, N23, N24.

Resumé (Danish summary)

I papiret sættes den seneste finanskrise i historisk perspektiv ved at se nærmere på hyppigheden af ekstreme hændelser i dansk økonomisk historie, i nogle tilfælde baseret på tidsserier tilbage til slutningen af 1600-tallet. Vi fokuserer på hyppighedsfordelingen af en række centrale makro-finansielle risikofaktorer, som normalt antages at have indflydelse på kredit- og markedsrisici i finansielle institutioner. Vi foreslår, at marginale historiske hyppighedsfordelinger af makro-finansielle risikofaktorer muligvis kan anvendes som inspiration ved design af følsomhedsanalyser og "værste udfald" scenarier i forbindelse med risikostyring og makro stress tests.

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1. Introduction

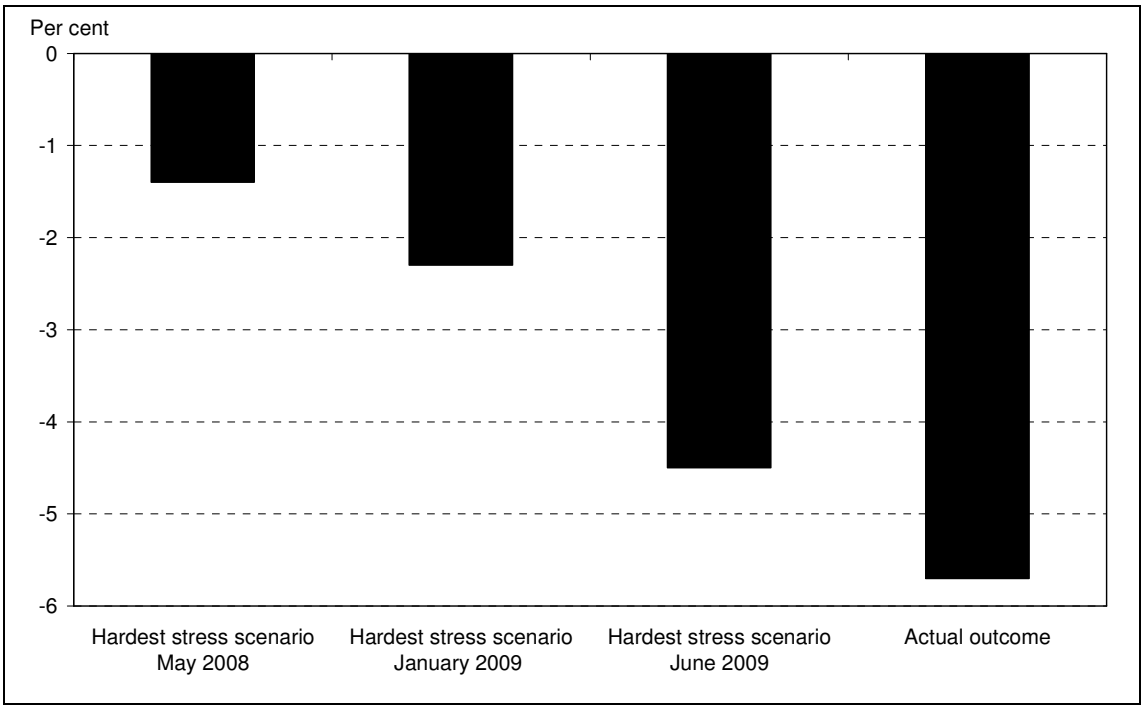
Since the outbreak of the most recent international financial crisis there has been a growing academic research interest in macro stress tests of financial institutions. Macro stress tests usually serves as a basis for discussions and actions on potential threats to financial stability and as a framework for communicating these risks. There is therefore also a huge focus on refining the approaches and methods used for macro stress tests among financial regulators and central banks since better stress tests have the potential to improve the basis for assessment of financial stability and the need for macroprudential regulations.

Typically, macro stress testing implies the construction of stress scenarios for hypothetical developments with adverse shocks to the macro economy and evaluation of the potential loan loss provisions *etc*. in the financial system in such scenarios. The purpose of macro stress scenarios is to throw light on the financial system's resilience to rare but plausible shocks and thereby uncover key vulnerabilities and systemic risks in the financial sector, cf. e.g. Sorge and Virolainen (2006), Foglia (2009), Gaglianone and Schechtman (2012) and Henry and Kok (eds.) (2013).

In the so-called Rangvid report on the causes of the recent financial crisis in Denmark the Committee noted that experience "... from the financial crisis has exposed the limitations of the stress tests used by the authorities", cf. page 19 in Erhvervs- og Vækstministeriet (2013). Furthermore the Committee recommended that "... the models should also be further improved in the future via new knowledge and a focus on including low-probability but high-consequence scenarios ...", cf. page 20 in Erhvervs- og Vækstministeriet (2013).

The call for "low-probability" scenarios in stress tests can be illustrated by Danmarks Nationalbank's stress tests prior to and during the recent financial crisis. In the Nationalbank's report on financial stability published in May 2008, the real GDP growth in 2009 was -1.4 per cent in the "hardest" stress scenario. In the two subsequent reports – published in respectively January 2009 and June 2009 – the hardest stress scenarios showed a decline in real GDP in 2009 of respectively 2.3 and 4.5 per cent. The actual outcome for 2009 turned out to be a 5.7 per cent drop in real GDP, cf. Figure 1. Similar examples can be found in many other countries, cf. Alfaro and Drehmann (2009).

Figure 1: Real GDP growth in 2009 in Danmarks Nationalbank's hard stress scenarios



Source: Danmarks Nationalbank, *Financial stability*, various issues, and Statistics Denmark.

Design and implementation of stress scenarios constitutes a considerable challenge to the traditional toolbox used in macroeconomic modelling. Usually macroeconomic models are designed to capture average rather than extreme outcomes, and the correlation between the macro-financial risk factors might be subject to tail dependence. Estimated statistical relationships might therefore break down during crises. Furthermore, the dynamic interactions between the financial sector and the real economy are rich and complicated. Especially the feedback effects from a distressed banking sector to the real economy are difficult to quantify and therefore often left out. In addition, standard macro models are often based on the assumption of linear relationships that may be reasonable when shocks to the economy are small. However, the transmission from the macroeconomic development to the health of the financial system is not necessary linear. During periods of severe macroeconomic stress where the shocks to the economy are large, non-linearities might be important. Non-linearities might e.g. emerge during a financial crisis due to fire sales of assets, illiquid financial markets, collateral constraints or non-linearities in the repayment capability of the banks' customers. The latter might e.g. reflect that the wealth status of firms in financial distress and unemployed households deteriorates in step with the length of a financial crisis. As noted by e.g. Borio *et al*. (2013) non-linearities are still not well captured by traditional economic models used for macro stress tests.

In the absence of superior economic models suitable for the design of macro stress scenarios a supplementary approach could be base the scenarios on shocks from the tail of the historical distribution of specific macro-financial risk factors, cf. Haldane (2009), Abildgren (2013a) and Parker and Whaples (eds.) (2013). Economic history is rich on extreme events and it might therefore be useful to have an eye for the long-term historical perspective as a source of inspiration when designing low-probability scenarios in relation to risk assessments and stress tests by financial institutions or regulators.

The paper at hand puts the outcome during the most recent financial crisis in a historical perspective by taking a closer look at the frequency of extreme events in the economic history of Denmark, in some cases based on time series back to the late 1600s. We focus on the frequency distribution of a range of key macro-financial risk factors that are commonly believed to be important drivers of credit risks and market risks faced by financial institutions, cf. e.g. Abildgren and Damgaard (2012) and Castro (2013).

2. Main macro-financial risk factors driving the non-performance ratio of loans

The non-performance ratio of loans – i.e. non-performing loans as a share of credit exposures – in the Danish banking sector will normally depend on developments in macro-financial factors. Experience shows that borrowers find it more difficult to service their loans in periods of economic downturn.

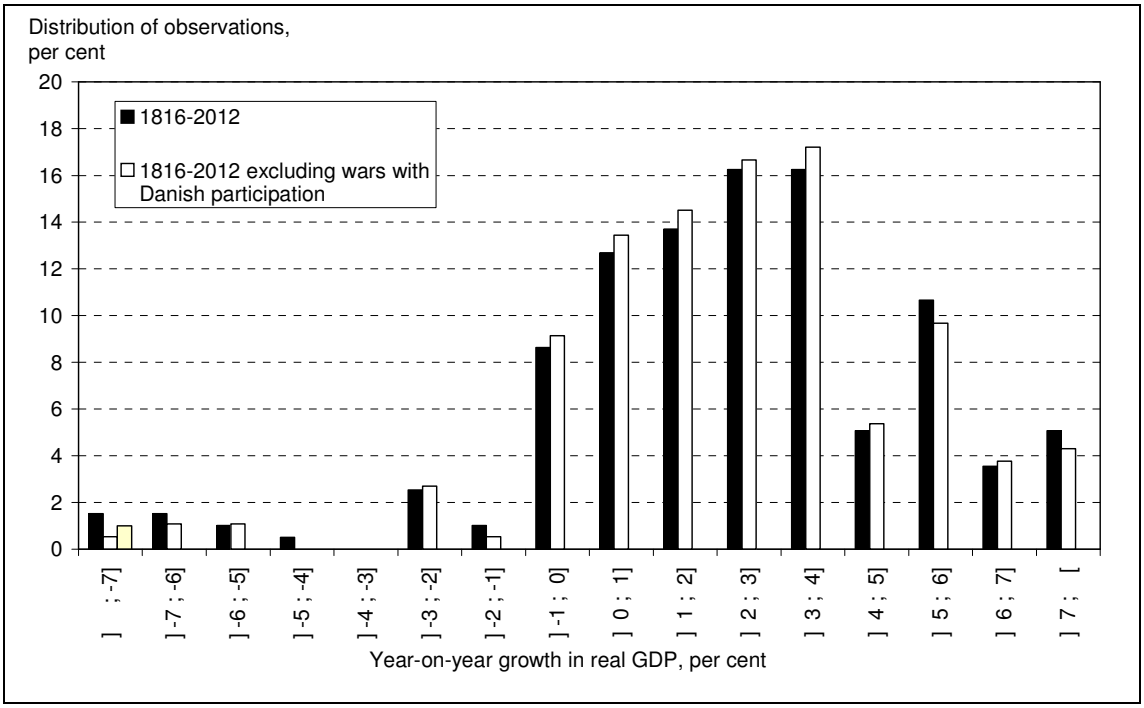
Real growth in GDP is often regarded to be a relevant driver of the banking sector's loan impairment charges on corporate credit exposures. When the economy is slowing down and firms' earnings are under pressure, there is a higher risk that the corporate borrowers fail to pay the instalments stipulated in their loan contracts.

The 5.7 per cent drop in real GDP in 2009 was the largest annual decline in economic activity in Denmark since the end of World War II. However, seen in a longer-term perspective a drop in real GDP of this magnitude was not an event that was only supposed to happen only once in every 1,000 years or so. Since 1816 an annual drop in real GDP of 5 per cent or more has occurred in 8 of the 197 years during this period or around 4 per cent of the years, cf. Figure 2. Based on our historical experience since 1816 an annual drop in real GDP of 5 per cent or more can thus be expected to occur approximately once every 25 years.

If one exclude war periods with Danish participation – as defined in annex A – an annual drop in real GDP of 5 per cent or more has on average occurred once every 37 years. Most of these large declines in economic activity occurred during World War I where Denmark was a neutral country. There was also a large drop in real GDP in 1856 where the international economy suffered from the so-called "peace crisis" after the end of the Crimean War, cf. annex B.

From the early 1920s to the early 1930s Denmark experienced a period with severe banking crises where many banks ran into troubles, including all of the five main banks, cf. Hansen (1996). This period saw three years with an annual drop in real GDP in the range of 2-3 per cent. There was also a decline in real GDP of this magnitude in 1877 in the middle of the so-called Savings Bank Crisis.

Figure 2: Frequency distribution of year-on-year growth in real GDP in Denmark



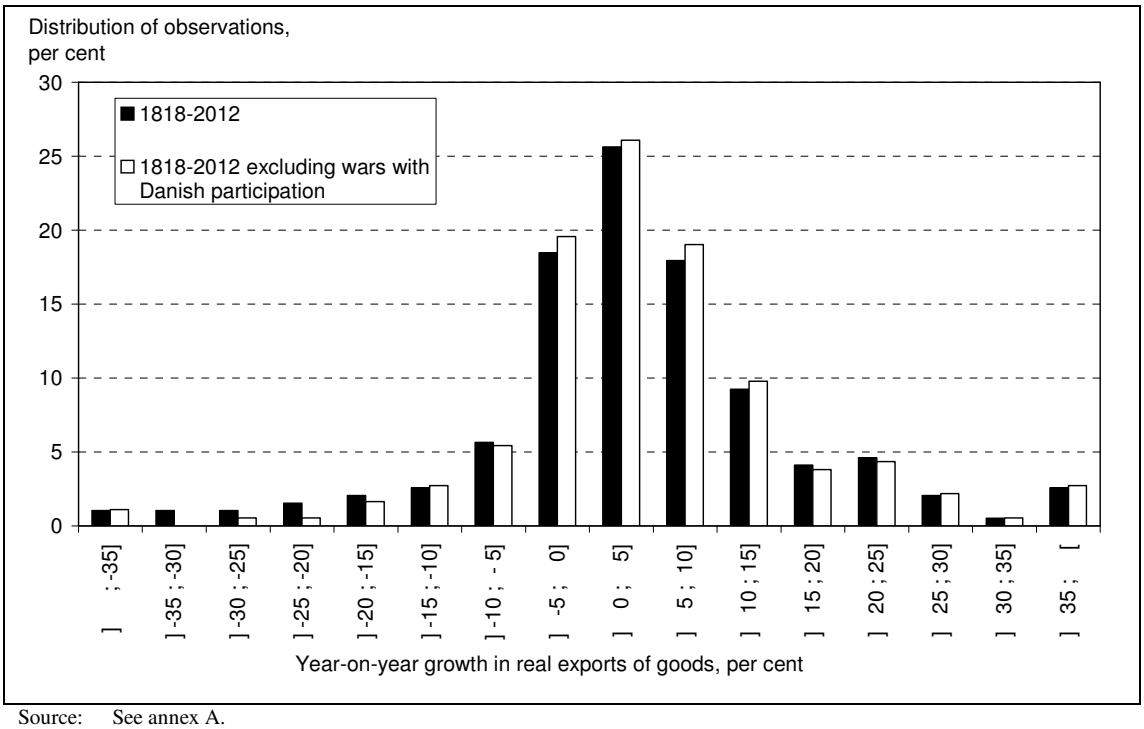
Source: See annex A.

Episodes of large declines in real GDP have naturally also occurred in other countries. Barro (2006) lists e.g. 65 episodes of a 15 percent or greater annual drop in real per capita GDP for 35 countries in the period 1900-2000. The ratio of non-performance loans to export firms in the Danish banking sector depends crucially on international cyclical developments.

In 2009, the real Danish exports of goods declined by almost 18 per cent. Since 1818 an annual drop in real exports of goods of 15 per cent or more has on average occurred approximately once every 15 years – or once every 26 years if one exclude war periods with Danish participation, cf. Figure 3. Some of these large drops occurred during World War I. There was also e.g. a large decline in real exports in 1857 during the international Monetary Crisis, cf. annex B.

The years 1931 and 1932 during the Great Depression saw declines in real exports of goods in the range of 12-14 per cent per annum, and the 1920s saw three years with an annual decline in real exports of more than 10 per cent.

Figure 3: Frequency distribution of year-on-year growth in real exports of goods in Denmark



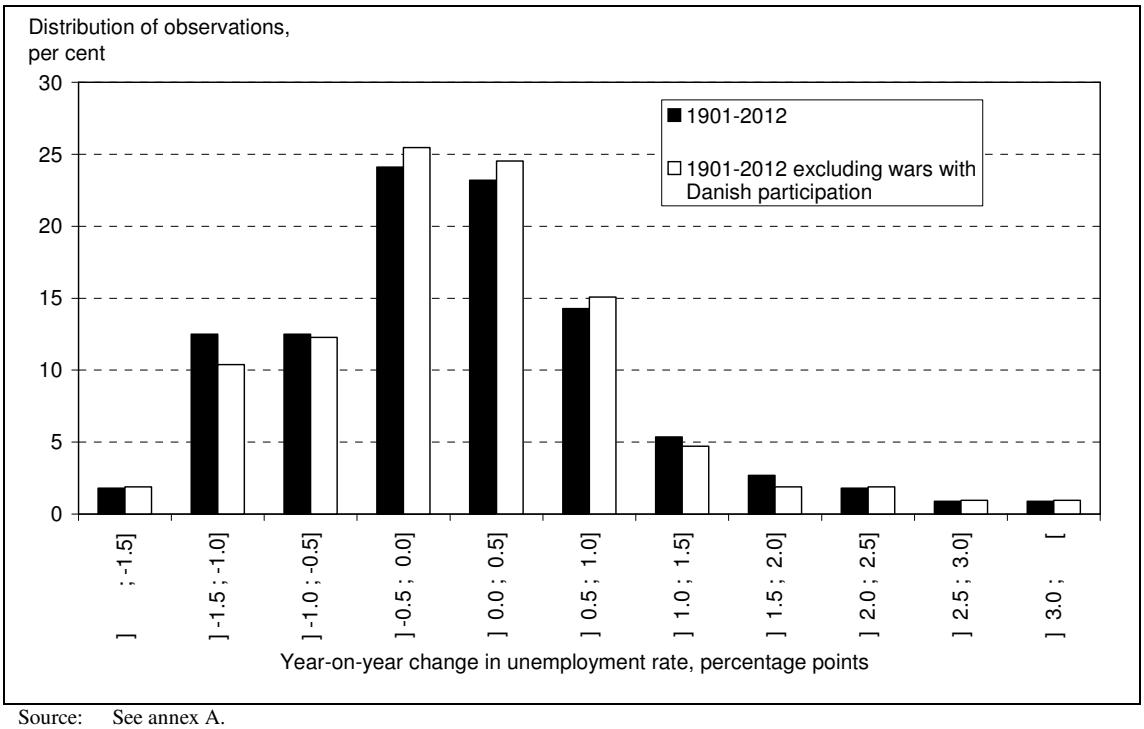
Source: See annex A.

Movements in the unemployment rate is usually considered to be a key driver for impairment charges on loans to households since unemployment reduces the households' ability to pay. In 2009, the unemployment rate in Denmark increased by 1.7 percentage points. Based on the experiences since 1901 an annual increase in the rate of unemployment of 1.5 percentage points or more has occurred once every 18 years on average (disregarding wars with Danish participation), cf. Figure 4. The largest increases in the unemployment rate occurred in the interwar period and following the oil price shocks of the 1970s, cf. annex B.

Not only the size of an increase in the unemployment rate but also the level of the unemployment rate might be of importance for the impact on the financial sector of negative shocks to the economy. Households may have weaker balance sheets if the economy is in a state of a high level of unemployment rate prior to the shock.

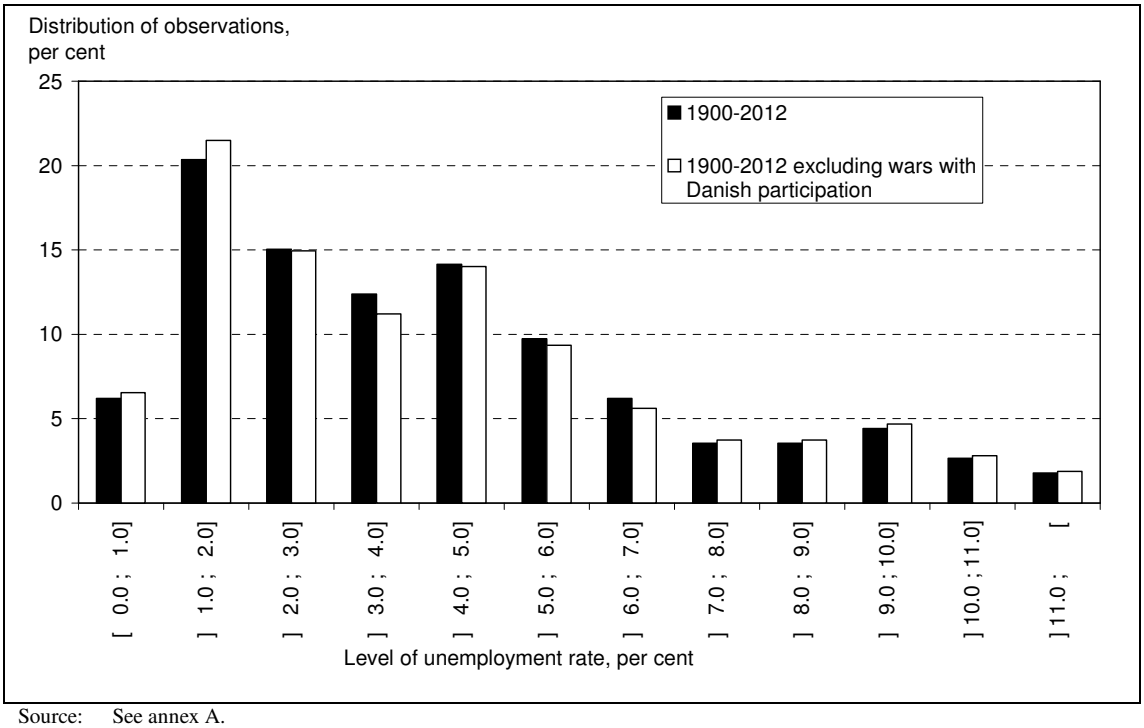
At the outbreak of the most recent financial crisis in 2008, the unemployment level was very low (1.9 per cent) and in 2012 it was still relatively low (4.4 per cent), cf. Figure 5. The same was the case during the interwar banking crisis in the 1920s and early 1930s. In contrast the level of unemployment was very high (9-12 per cent) during the banking crisis in the early 1990s.

Figure 4: Frequency distribution of year-on-year change in unemployment rate in Denmark



Source: See annex A.

Figure 5: Frequency distribution of the level of unemployment rate in Denmark

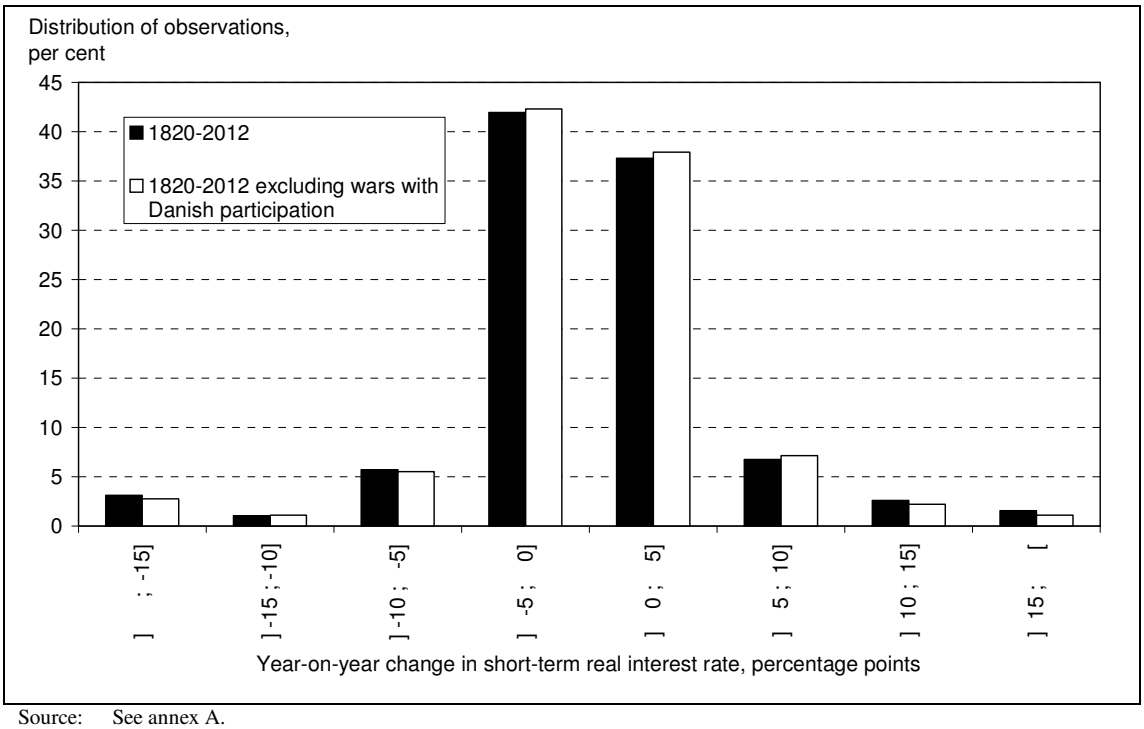


Source: See annex A.

Rising short-term real interest rates are usually expected to increase the loan impairment charge ratio of banking institutions, since a higher level of real interest rates increases the real interest burden of households and firms.

The year 2009 saw a modest drop in the short-term real interest rate in Denmark – here defined as the difference between the contemporaneous lending rate of Danmarks Nationalbank and the contemporaneous rate of consumer price inflation. However, Danish economic history has seen many cases of substantial increases in the short-term real interest rate, cf. Figure 6. Disregarding wars with Danish participation, an annual increase in the short-term real interest rate by 5 percentage points or more has occurred once every 10 years on average since 1820. As shown in annex B there were e.g. large increases in the short-term real interest rate during the deflation periods in the 1820s (dominated by crises within the Danish agricultural sector) and in the 1920s (characterised by a severe banking crisis) as well as during The Monetary Crisis 1857-1858.

Figure 6: Frequency distribution of year-on-year change in short-term real interest rate in Denmark



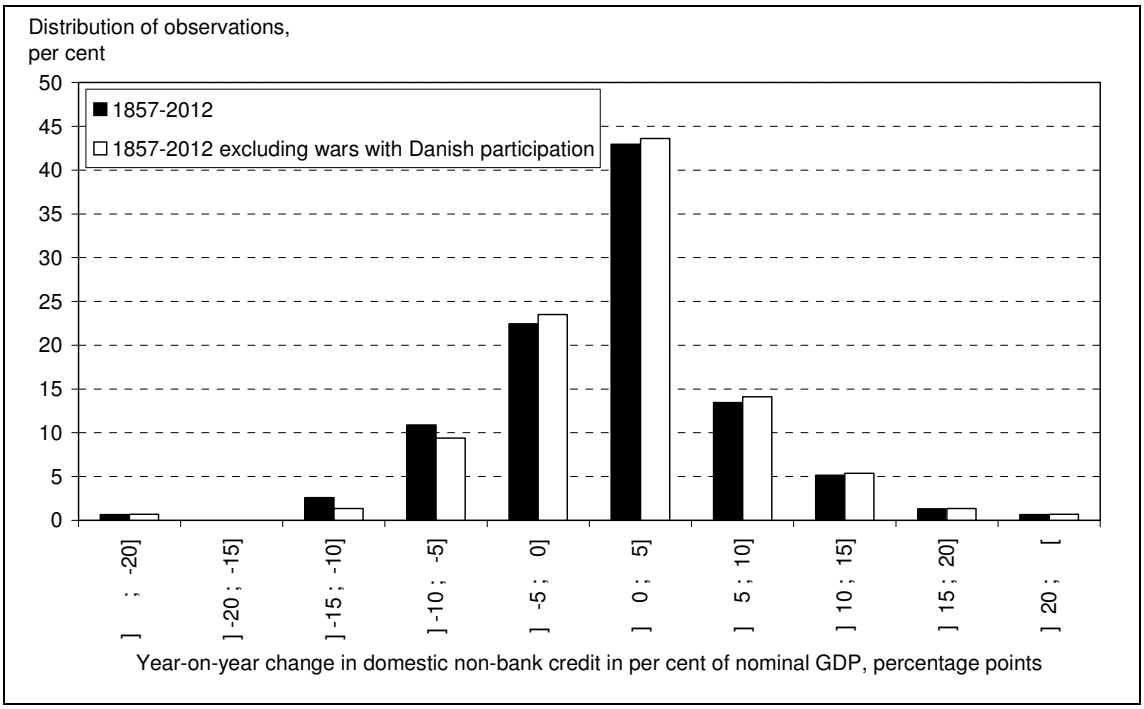
Source: See annex A.

Usually, credit risk is assumed to increase in step with the rise of the debt-to-income ratio of the borrowers. Furthermore, it might be argued that credit quality tends to deteriorate during periods of strong lending growth, cf. Cardarelli *et al*. (2011).

Prior to the recent financial crisis there was a rapid growth in domestic credit relative to GDP in Denmark. In each of the years during the period 2005-2008, domestic non-bank credit

in per cent of GDP grew by 14-16 percentage points, cf. annex B. An annual increase in this debt-to-income ratio by 10 percentage points or more has occurred once every 14 years on average since 1857, cf. Figure 7. There were also large annual increases in the debt-to-income ratio in 1906 just prior to the Construction and Banking Crisis and in the early 1920s prior to the first reconstruction of Landmandsbanken – at that time the largest bank in Scandinavia.

Figure 7: Frequency distribution of year-on-year change in domestic non-bank credit in per cent of nominal GDP in Denmark



Source: See annex A.

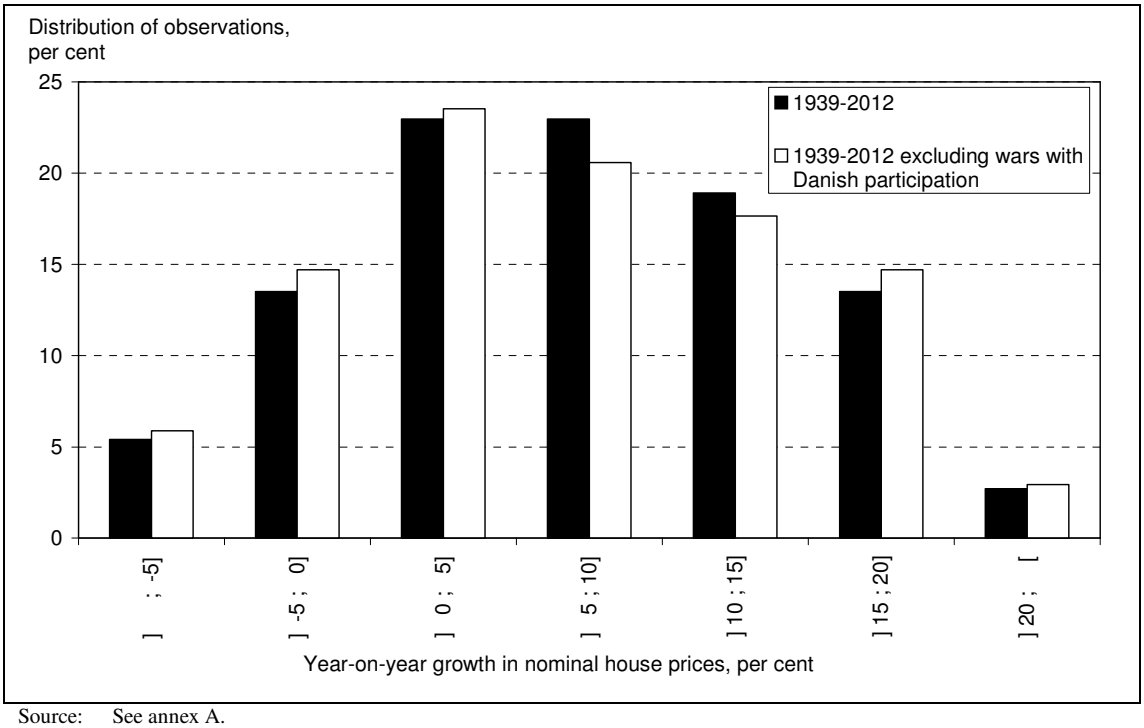
3. Main macro-financial risk factors driving loss on loans given default

Loss given default – i.e. the share of the non-performing loans that should be regarded as lost in the event of default of the debtor – depends among other things on the extent and quality of the collateral pledged by the debtor in connection with the loan. The value of the collateral will normally be related to macro-financial factors, for instance property prices if the collateral for a loan consists of real estate.

In 2009, the price of one-family houses declined by 12 per cent. This was the largest drop in nominal house prices since 1939. Disregarding World War II an annual drop in nominal house prices of 5 per cent or more has occurred once every 17 years on average since 1939, cf. Figure 8. The second half of the 1980s and early 1990s saw two cases of decline in nominal house prices by more than 5 per cent per annum, cf. annex B.

However, it must be kept in mind that the time series on nominal house prices is relative short and that a large part of the time span covered by the series includes the 1960s and 1970s with a high and rising consumer price inflation. There has therefore been a positive growth rate in nominal house prices during most of the sample period.

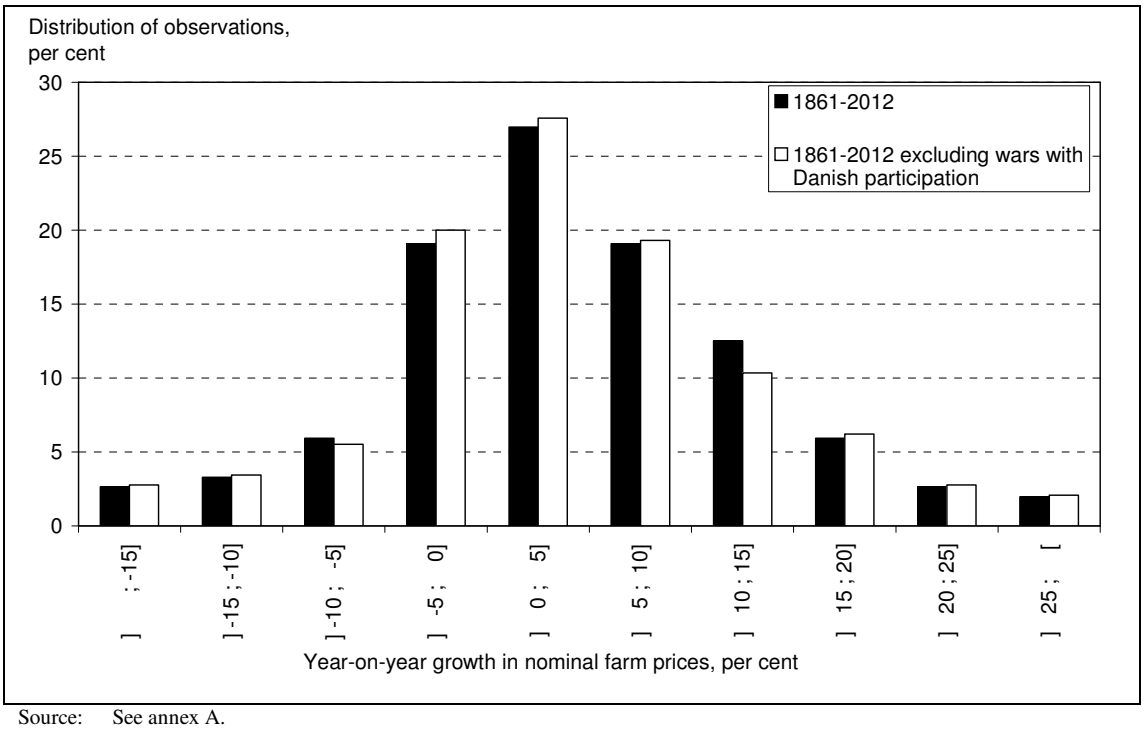
Figure 8: Frequency distribution of year-on-year growth in nominal house prices Denmark



Source: See annex A.

The price index for sale of farms declined by 16 per cent in 2009. This was the largest annual nominal drop in farm prices since 1861. An annual drop in nominal farm prices of 5 per cent or more has occurred once every 8 years on average since 1861 – or once every 9 years excluding periods with wars with Danish participation, cf. Figure 9. Most of these large annual declines in farm prices have occurred during and following the most recent financial crises, in the early 1980s and during the 1920s and early 1930s, cf. annex B.

Figure 9: Frequency distribution of year-on-year growth in nominal farm prices in Denmark



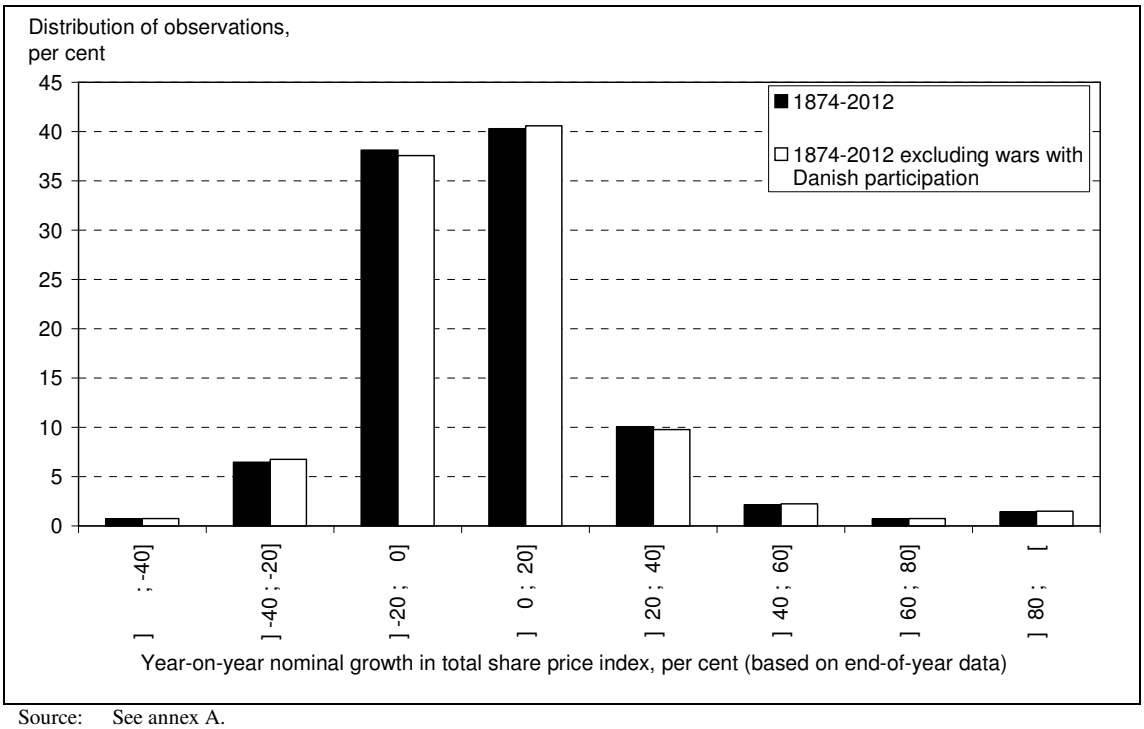
Source: See annex A.

4. Main macro-financial risk factors driving market risks

Financial institutions usually hold large portfolios of net financial assets (including derivatives) on their balance sheets stated at market values. Market risk is the risk of losses as a consequence of price fluctuations. The main macro-financial risk factors behind market risk in are share prices, long-term interest rates and exchange rates.

Value adjustments of shares traditionally show a high degree of volatility. From end of 2008 to end of 2009, the total share price index in Denmark declined by almost 47 per cent. This was the largest annual nominal drop in end-of-year share prices since 1874. An annual drop in nominal end-of-year share prices of 20 per cent or more has occurred once every 13 years on average since 1874 if one disregard the development during World War II, cf. Figure 10. Several of these large annual drops in share prices occurred during the banking crisis in the early 1920s. There was also a large drop in share prices after the first oil price shock in the 1970s, during the crisis in the European exchange-rate co-operation in 1992 and in 2002 following corporate accounting scandals in the United States, cf. annex B.

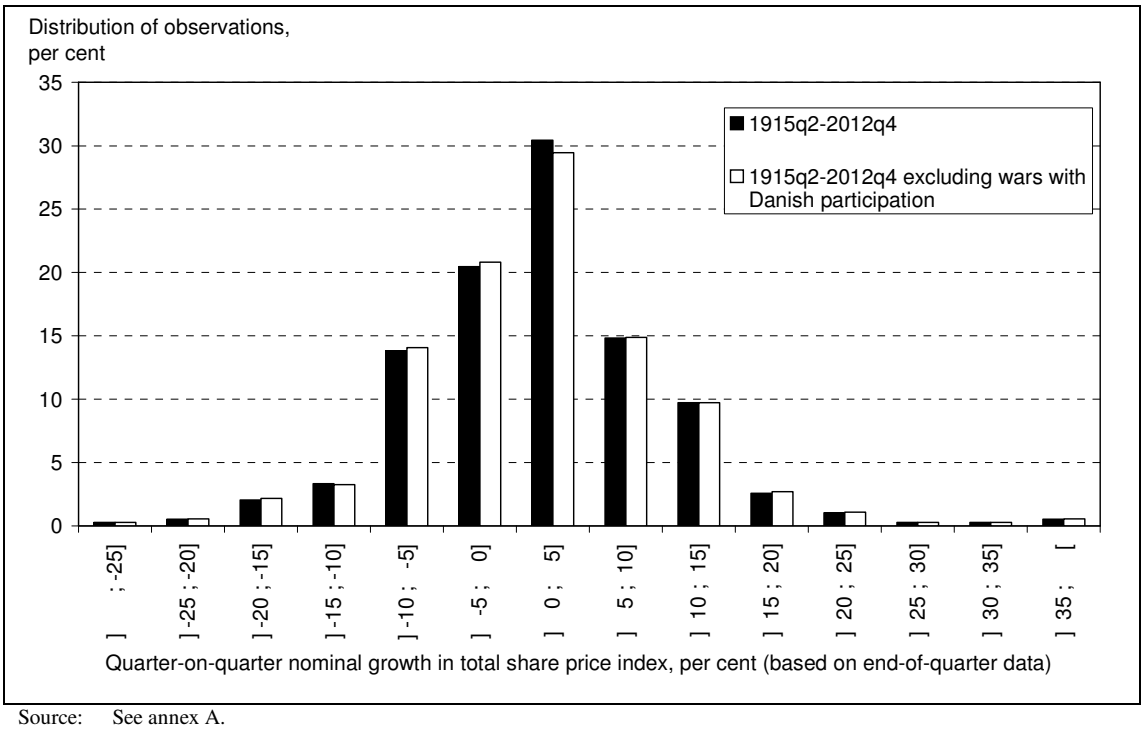
Figure 10: Frequency distribution of year-on-year nominal growth in the total share price index in Denmark (based on end-of-year data)



Source: See annex A.

Due to the high volatility of share prices it might be of interest to study the distribution of price movements at a higher frequency than annual. In the fourth quarter of 2008 – following the collapse of the American investment bank Lehman Brothers – the total share price index in Denmark declined by more than 29 per cent. This was the largest quarterly nominal drop in end-of-quarter share prices since the second quarter of 1915, cf. Figure 11. A quarterly drop in share prices of more than 20 per cent also occurred in third quarter of 2002 following corporate accounting scandals in the United States and in the third quarter of 1992 following the outbreak of a currency crisis in the European exchange-rate co-operation. There were e.g. also large declines in stock prices in the third quarter of 2001 (after the terrorist attacks on the USA on 11 September) and in the third quarter of 1998 (after Russia had suspended her payments on foreign debt and a large US hedge fund, Long Term Capital Management, LTCM, experienced problems), cf. annex C.

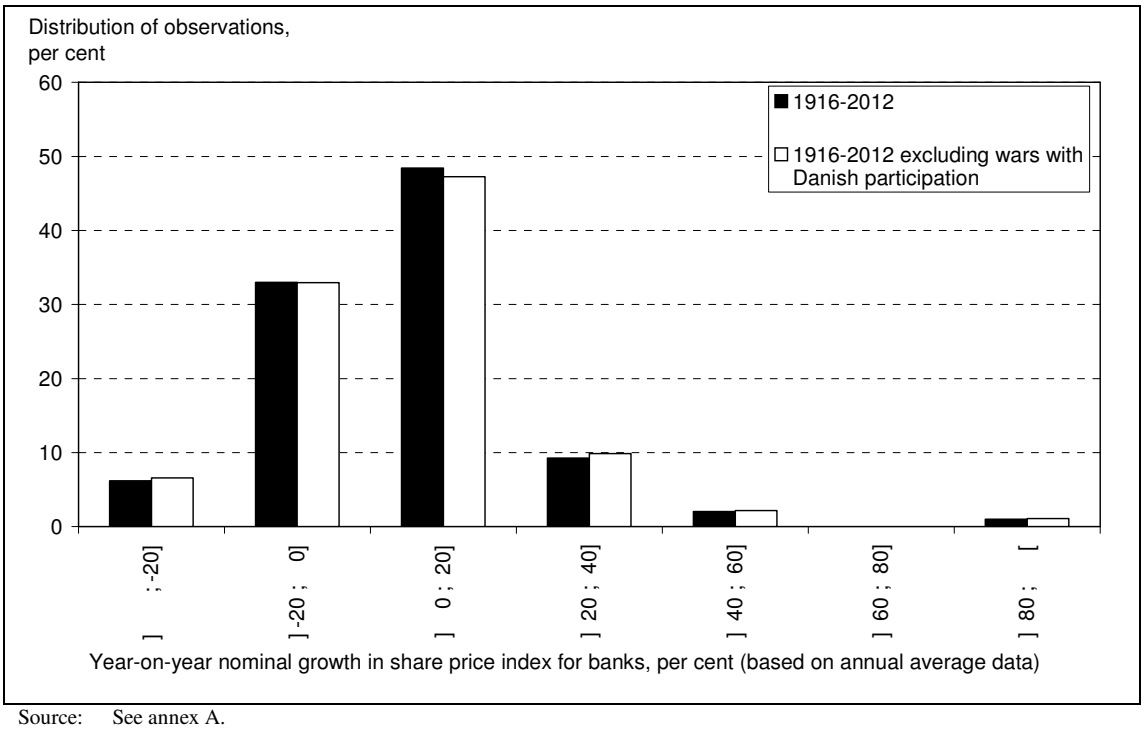
Figure 11: Frequency distribution of quarter-on-quarter nominal growth in the total share price index in Denmark (based on end-of-quarter data)



Source: See annex A.

The annual average of the nominal Danish share price index for banks declined by 38 per cent in 2008 and 32 per cent in 2009. These were the two largest declines in the index since 1916. Disregarding World War II, a drop in the annual average of nominal prices for bank shares of 20 per cent or more has occurred once every 15 years on average since 1916, cf. Figure 12.

Figure 12: Frequency distribution of year-on-year nominal growth in the Danish share price index for banks (based on annual average data)



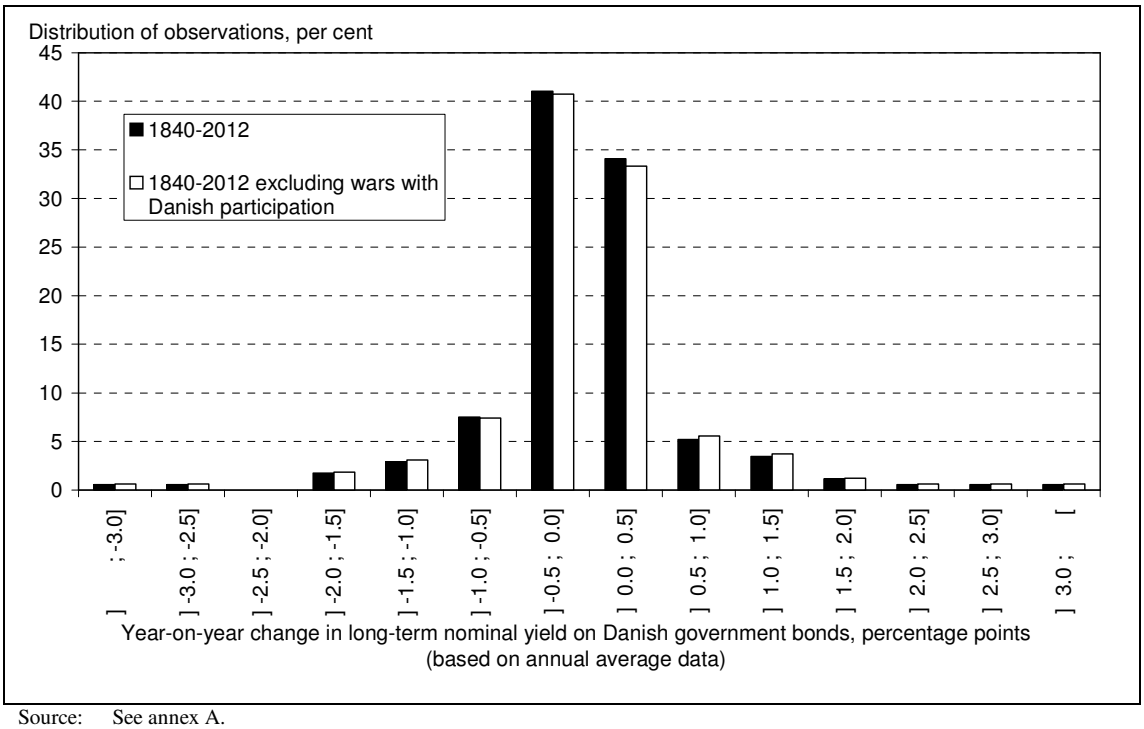
Source: See annex A.

Financial institutions in Denmark might have placements in foreign shares and therefore also be subject to price risks on foreign stock markets. In a recent study Mehl (2013) identify 43 global stock market volatility shocks over the period 1885-2011. On average, global equity market valuations corrected by about 20 per cent in the month when such shocks occurred. The three largest stock market shocks identified in this study were the crash in 1929, the crash following the collapse of Lehman Brothers in 2008 and the "Black Monday" crash in 1987.

Market risk related to bond portfolios is primarily related to the market value of bonds with long duration, that all else equal declines when long-term interest rates increases. The most important long-term domestic bonds in the portfolio of financial institutions in Denmark are Danish government bonds and Danish mortgage bonds.

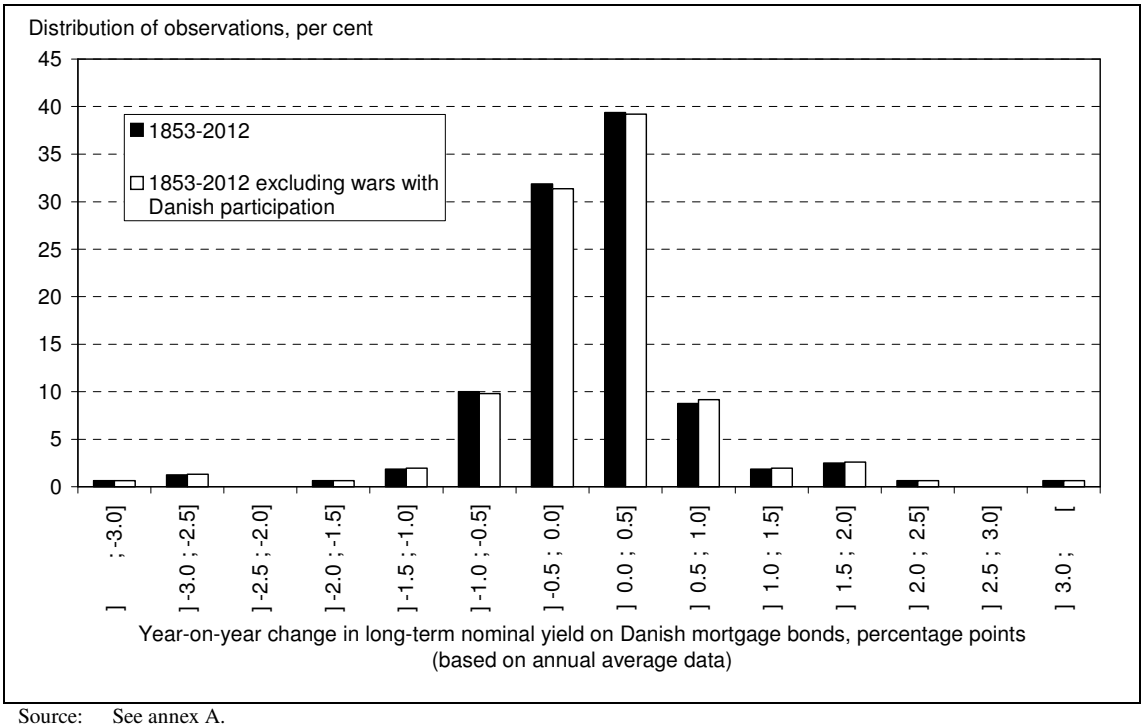
The annual average nominal yield to maturity of long-term Danish government bonds as well as long-term Danish mortgage bonds declined in 2009. However, Danish economic history has seen several cases of increases in the long-term nominal interest rates, cf. Figure 13 and 14.

Figure 13: Frequency distribution of year-on-year change in long-term nominal yield on Danish government bonds (based on annual average data)



Source: See annex A.

Figure 14: Frequency distribution of year-on-year change in long-term nominal yield on Danish mortgage bonds (based on annual average data)



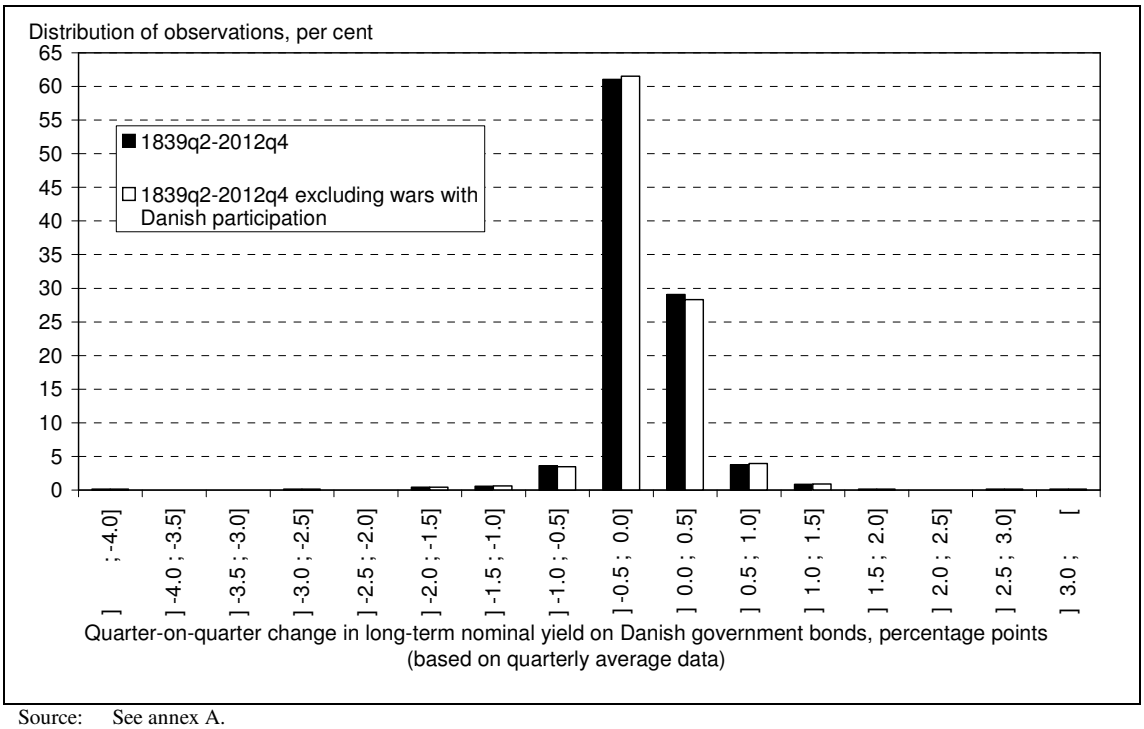
Source: See annex A.

Disregarding wars with Danish participation, an increase in the annual average nominal yield on long-term Danish government bonds by 1.5 percentage points or more has occurred once every 32 years on average since 1840. Regarding the annual average yield on long-term Danish mortgage bonds the corresponding figure is once every 26 years on average since 1853. As shown in annex B increases in the long-term interest rates of this magnitude occurred in the mid-1970s following the first oil-price shocks and in the early 1980s characterised by large devaluations of the Danish krone and a huge deficits on the government budget.

Figure 15 and 16 shows the frequency distributions of changes in the long-term nominal interest rates based on quarterly average data. In the early 1980s there were two quarters where the nominal long-term government bond yield increased by 2-3 percentage points from one quarter to another, cf. annex C.

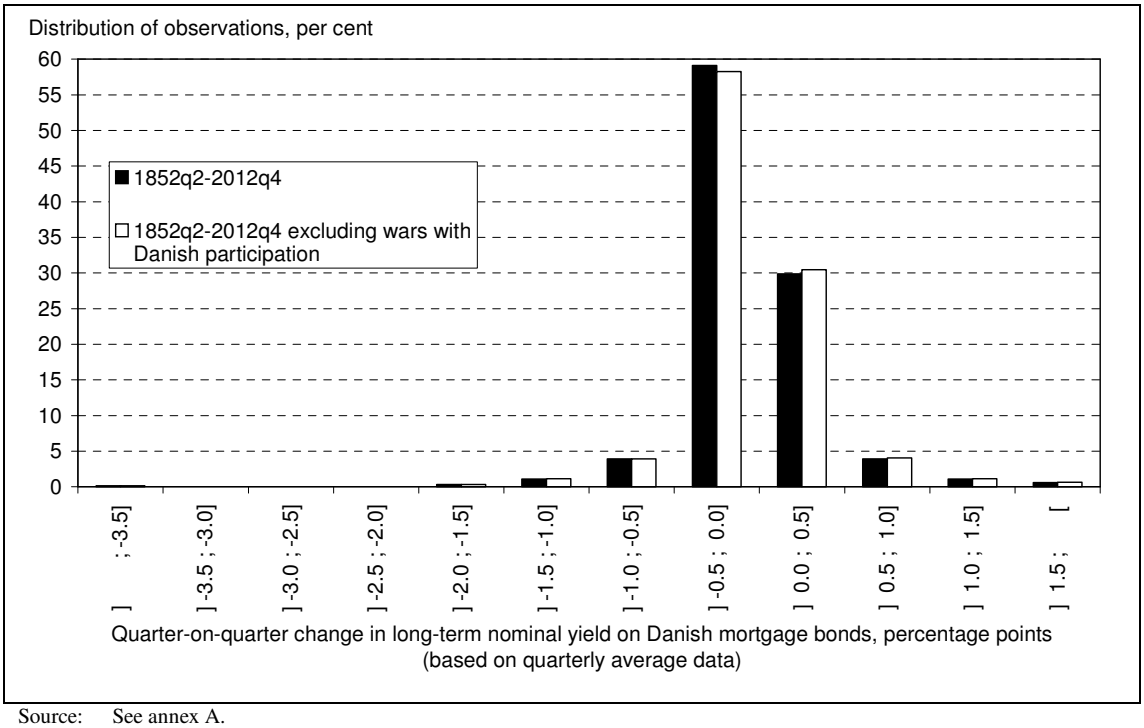
It might also be noted that the nominal long-term government bond yield increased by around 5 percentage points in total from the second quarter of 1979 to the second quarter of 1980 when the government ran large budget deficits. During the same period the yield on long-term mortgage bonds increased only by around 2.5 percentage points. As a result the yield on long-term Danish government bonds exceeded the yield on long-term Danish mortgage-credit bonds in the beginning of the 1980s. Previously this had only occurred during World War I and II. The nominal long-term mortgage bond yield increased by around 5 percentage points in total from the second quarter of 1973 to the second quarter of 1974 following the first oil price shock of the 1970s.

Figure 15: Frequency distribution of quarter-on-quarter change in long-term nominal yield on Danish government bonds (based on quarterly average data)



Source: See annex A.

Figure 16: Frequency distribution of quarter-on-quarter change in long-term nominal yield on Danish mortgage bonds (based on quarterly average data)



Source: See annex A.

A historical perspective on interest-rate risk related to long-term government bonds in eight foreign countries is offered by Gerlach *et al*. (2006) whereas Giesecke et al. (2011) covers US corporate bonds.

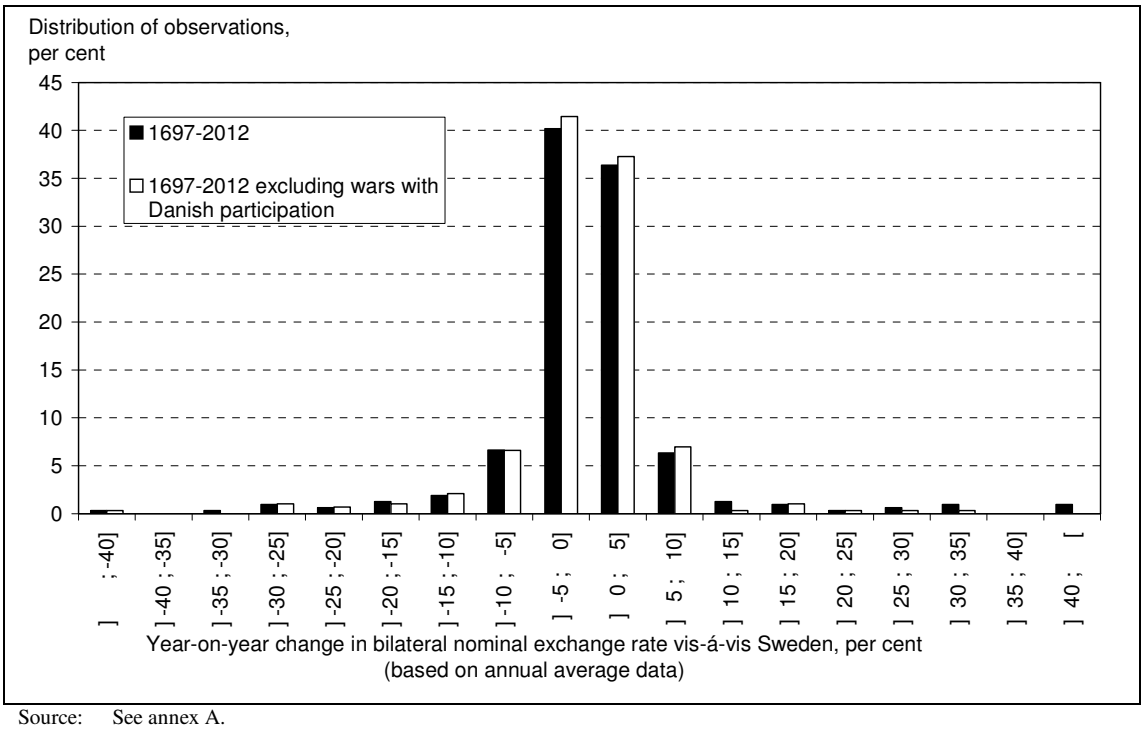
Finally, experience shows that exchange rates can fluctuate quite considerably and thereby lead to substantial losses on foreign-exchange rate exposures. Figures 17-21 show the annual average changes in the Danish bilateral nominal exchange rate vis-à-vis a range of non-euro currencies in a long-term historical perspective. An increase denotes a depreciation of the Danish currency.

A depreciation of the Danish exchange rate makes it more expensive to service foreign-currency denominated debt if the base-currency is Danish. Disregarding wars with Danish participation, an annual average depreciation of the Danish bilateral nominal exchange rate by 5 percentage points or more has occurred once every 11-13 years vis-à-vis Sweden, Norway and United Kingdom and once every 6 years vis-à-vis United States and Switzerland, cf. annex B for details.

An appreciation of the Danish exchange rate lowers the value of foreign-currency denominated assets if the base-currency is Danish. Disregarding wars with Danish participation, an annual average appreciation of the Danish bilateral nominal exchange rate by 5 percentage points or more has occurred once every 6-12 years vis-à-vis Sweden, Norway, United Kingdom and United States but only once every 26 years vis-à-vis Switzerland, cf. annex B for details.

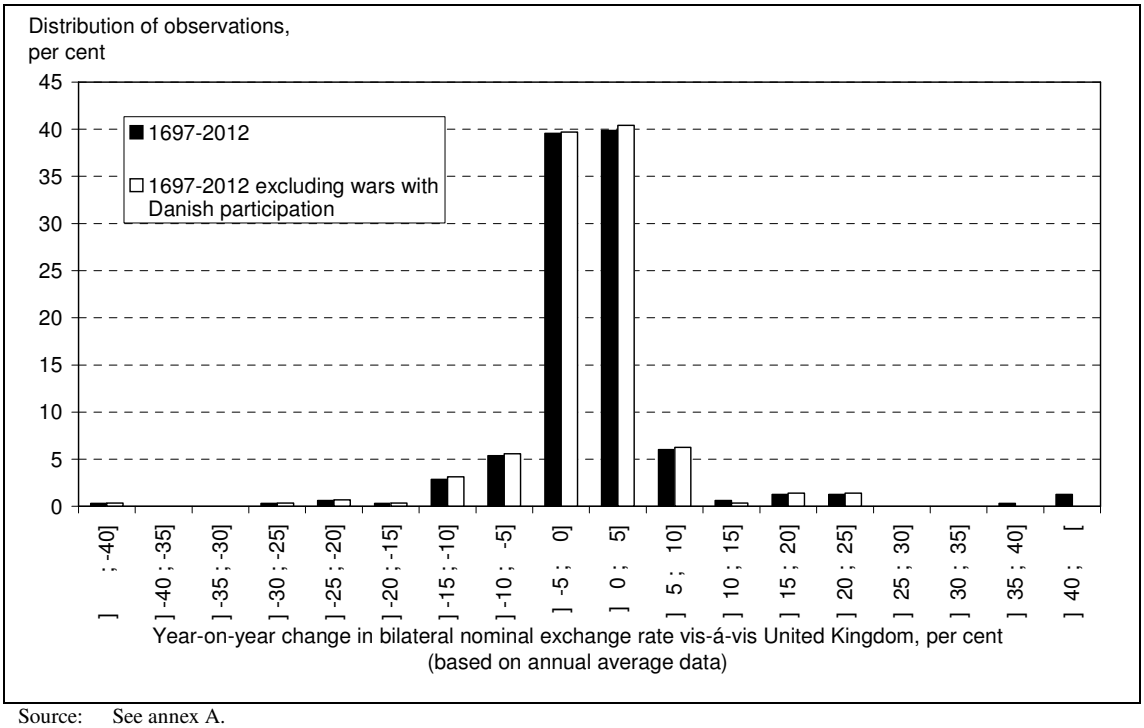
Abildgren (2013a) offers a closer look at the frequency distribution of nominal price changes in the foreign exchange markets for a sample of 10 European exchange-rate pairs on the basis of a quarterly data set spanning 273 years.

Figure 17: Frequency distribution of year-on-year change in bilateral nominal exchange rate vis-à-vis Sweden (based on annual average data)



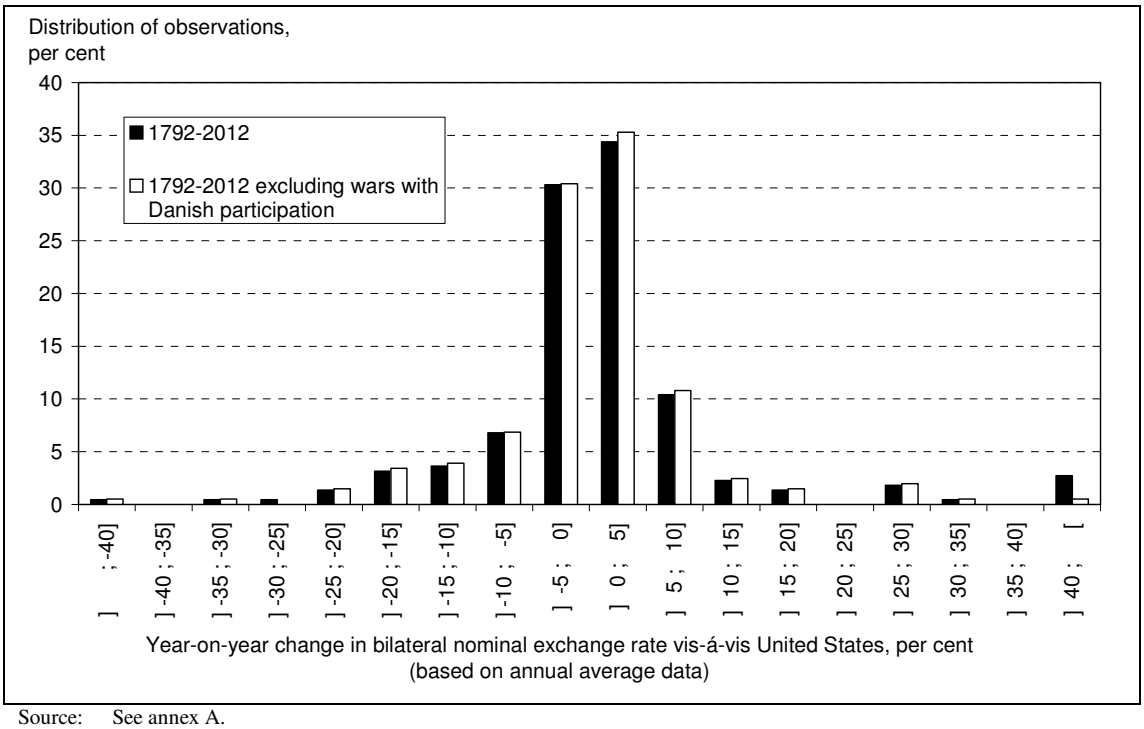
Source: See annex A.

Figure 18: Frequency distribution of year-on-year change in bilateral nominal exchange rate vis-à-vis United Kingdom (based on annual average data)



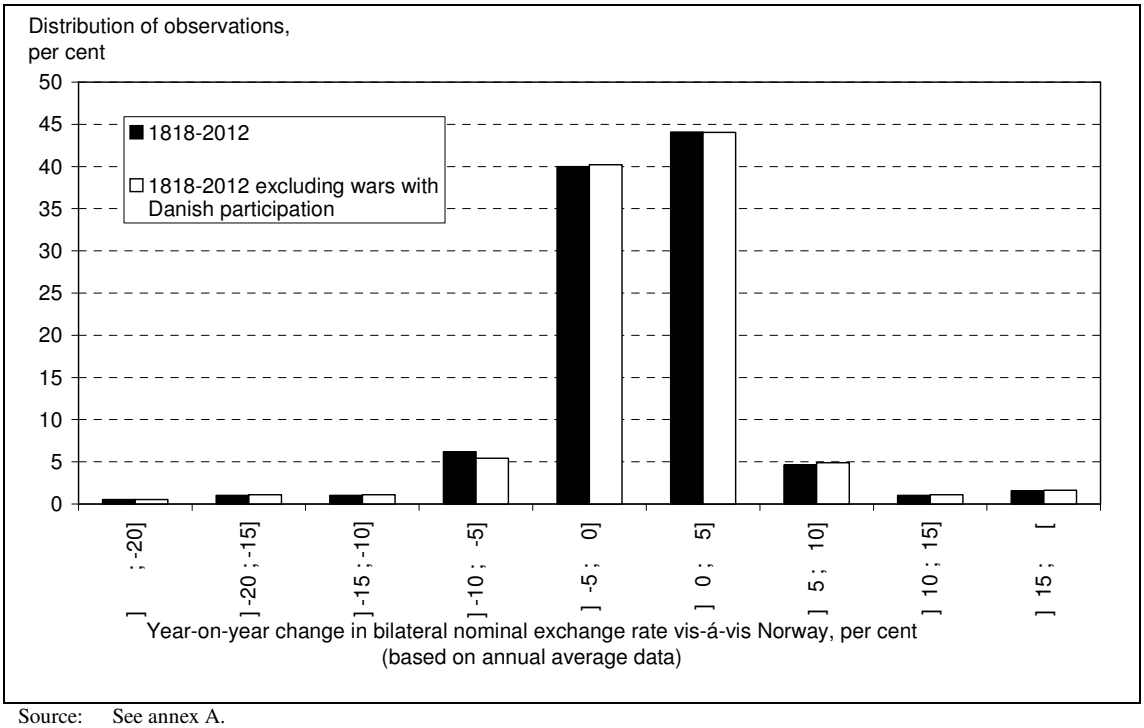
Source: See annex A.

Figure 19: Frequency distribution of year-on-year change in bilateral nominal exchange rate vis-à-vis United States (based on annual average data)



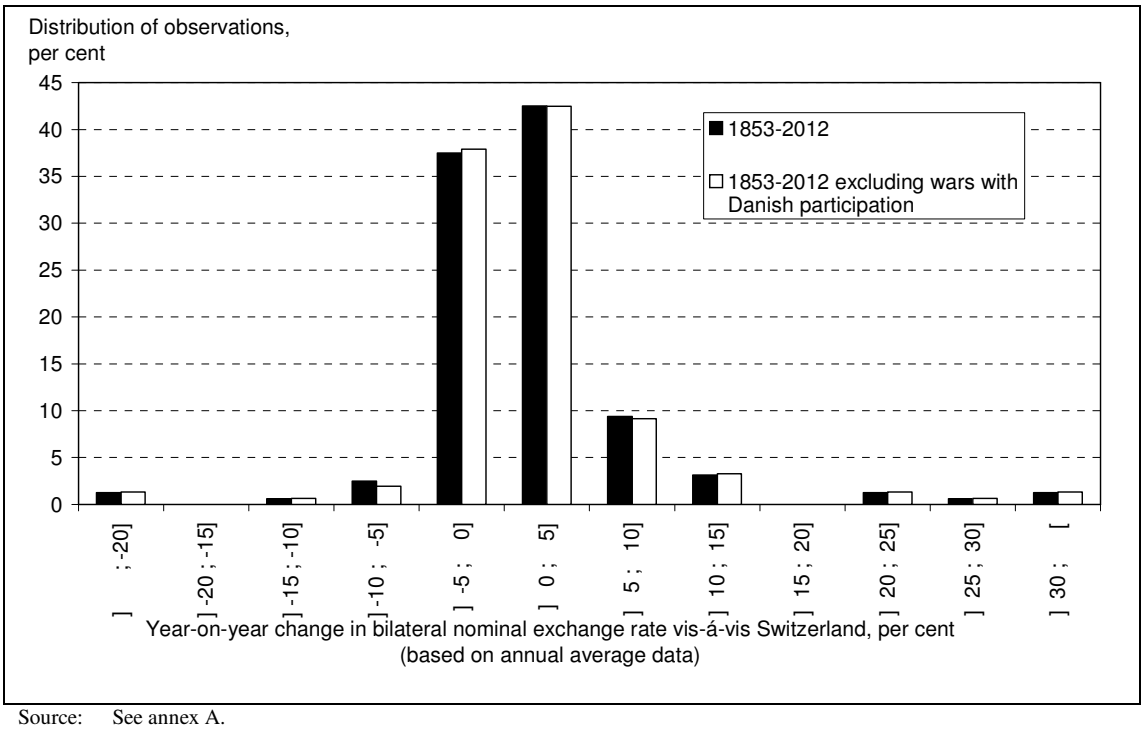
Source: See annex A.

Figure 20: Frequency distribution of year-on-year change in bilateral nominal exchange rate vis-à-vis Norway (based on annual average data)



Source: See annex A.

Figure 21: Frequency distribution of year-on-year change in bilateral nominal exchange rate vis-à-vis Switzerland (based on annual average data)



Source: See annex A.

5. Marginal versus simultaneous historical distributions of macro-financial risk factors

In this paper we have so far only looked at the marginal (also referred to as "unconditional") historical distribution of each macro-financial risk factor in isolation, and naturally simultaneous historical distributions would be of even greater interest.

However, for simultaneous historical distributions not even annual or quarterly data sets spanning several centuries are sufficient – at least not based on long historical time series for a single country. In the non-parametric econometric literature this problem is usually referred to as "the curse of dimensionality", cf. e.g. Li and Racine (2007) or Ahamada and Flachaire (2010). To illustrate the point, just think of five different macro-financial risk factors where the outcome of each factor is classified into five different categories. This gives 3,125 different possible simultaneous outcomes! With an annual or quarterly data set for only one country spanning at best a couple of centuries estimation of simultaneous distributions would require strong *a priori* assumptions regarding the form of the multivariate distributions followed by the macro-financial risk factors.

In recent years several central banks have published collections of historical monetary statistics, including Norges Bank[2], Sveriges Riksbank[3], Bank of England[4] and Swiss National Bank[5]. In time such efforts from the central-banking community might generate databases with sufficient historical statistics to allow us to get a picture of the joint historical distributions of those macro-financial risk factors that drives financial instability.

The importance of simultaneous distributions might be illustrated by a closer look at the economic developments during the periods with banking crises in Danish economic history since 1857, cf. Table 1. Table 2 shows the occurrence of events in the 10 per cent tail during these periods. The table clearly underlines that banking crises can be very different and that simultaneous distributions matters. The most recent International Financial Crisis 2008-2012 was characterised by large drops in real GDP, real exports and asset prices. However, there were no large shocks to interest rates and the level of unemployment has been very low. In contrast the Seven-Year Slump 1987-1993 saw high levels of unemployment rates but no large drops in real GDP or real exports. The Interwar Banking Crisis was characterised by a broad range of negative shocks whereas the Liquidity Crisis of 1885, the Construction and Banking Crisis 1907-1909 and the Kronebank Crisis 1984-1985 occurred despite the absence of major negative shocks to the economy.

[2] Cf. Eitrheim *et al*. (eds.) (2004, 2007).
[3] Cf. Edvinsson (2007) and Edvinsson *et al*. (eds.) (2010).
[4] Cf. Dimsdale *et al*. (2010).
[5] Cf. Selz (2007) and Baumgartner (2007).

Table 1: Banking crises in Danish economic history since 1857

Crisis	Brief description	Extraordinary government measures	International dimension?
The Monetary Crisis 1857-1858	A number of Danish banks and trading houses dependent on foreign financing experienced liquidity problems.	The government established a "Temporary Loan Fund", which provided loans to commercial/savings banks, trading houses *etc*.	International liquidity crisis that spread from the U.S. to Europe.
The Savings Bank Crisis 1876-1878	Several savings banks and a few commercial banks came into crisis.	The Nationalbank had to provide extraordinary loans to a few banks.	In 1873 the global economy was hit by a prolonged recession.
The Liquidity Crisis 1885	During a wave of bankruptcies among non-financial firms the banking sector's liquidity came under pressure.	Liberal lending policy on the part of the Nationalbank.	No.
The Construction and Banking Crisis 1907-1909	Several medium-sized commercial banks experienced difficulties after a building boom in the Copenhagen area.	The government, the Nationalbank and a number of large private banks established a Banking Committee with a view to providing guarantees for depositors and other creditors in crisis-stricken banks. Denmark's largest savings bank was reconstructed with government help after an incidence of serious fraud.	The U.S. banking crisis in 1907 impeded international financing.
The Interwar Banking Crisis 1920-1933	A large number of Danish commercial banks, including the five largest, experienced difficulties.	Several large commercial banks, including Scandinavia's largest bank – Landmandsbanken – received capital and/or liquidity support from the government and the Nationalbank.	The late 1920s and the early 1930s were characterised by financial, banking and currency crises in many countries (cf. the U.S. stock market crash in 1929 and the collapse of the international gold standard system in 1931).
The Kronebank Crisis 1984-1985	Denmark's seventh largest bank, Kronebanken, experienced difficulties.	Danmarks Nationalbank and a number of large banks provided a guarantee aimed at depositors and other creditors in Kronebanken.	No.
The seven-year slump 1987-1993	A number of commercial/savings banks encountered difficulties (including Denmark's ninth largest bank, Varde Bank). In addition, the Faroe Islands experienced a banking crisis.	The government and Danmarks Nationalbank were involved in finding solutions for five distressed Danish banks and for the banks on the Faroe Islands.	Currency crisis in the European Monetary System 1992-1993. Systemic banking crises in Norway, Sweden and Finland.
The International Financial Crisis 2008-2012	A number of banks experienced difficulties and had to cease as independet firms (including several of the 15 largest banks).	The government provided a safety net for the banks by way of a comprehensive government guarantee for depositors *etc*. In addition, the government provided capital injections to a large number of credit institutions and gave credit institutions the opportunity to purchase an individual government guarantee on debt issues. Danmarks Nationalbank established additional credit facilities and expanded the collateral base.	A liquidity crisis spread from the U.S. to Europe in the second half of 2007, developing into a genuine global financial crisis in 2008. The financial crisis was followed by a government-debt crisis in several European countries.

Source: Based on Abildgren *et al*. (2011).

Table 2: Occurrence of events in the 10 per cent tails during banking crises in Danish economic history since 1857

	Banking crisis							
Macro-financial risk factor	The Monetary Crisis 1857-1858	The Savings Bank Crisis 1876-1878	The Liquidity Crisis 1885	The Construction and Banking Crisis 1907-1909	The Interwar Banking Crisis 1920-1933	The Kronebank Crisis 1984-1985	The Seven-Year Slump 1987-1993	The International Financial Crisis 2008-2012
Drop in real GDP	YES	YES	NO	NO	YES	NO	NO	YES
Drop in real exports	YES	YES	NO	NO	YES	NO	NO	YES
Increase in unemployment rate	n.a.	n.a.	n.a.	NO	YES	NO	NO	YES
High level of unemployment	n.a.	n.a.	n.a.	NO	NO	NO	YES	NO
Increase in real short-term interest rate	YES	NO	NO	NO	YES	NO	NO	NO
Drop in nominal house prices	n.a.	n.a.	n.a.	n.a.	n.a.	NO	YES	YES
Drop in nominal farm prices	n.a.	NO	NO	NO	YES	NO	NO	YES
Drop in nominal share prices	n.a.	NO	NO	NO	YES	NO	YES	YES
Increase in nominal government bond yields	NO	NO	NO	NO	YES	NO	YES	NO
Increase in nominal mortgage bond yields	NO	NO	NO	NO	YES	NO	YES	NO
Depreciation of the Danish currency vis-a-vis Sweden	NO	NO	NO	NO	YES	NO	NO	YES
Appreciation of the Danish currency vis-a-vis Sweden	NO	NO	NO	NO	YES	NO	YES	YES
Depreciation of the Danish currency vis-a-vis U.K.	NO	NO	NO	NO	YES	NO	YES	YES
Appreciation of the Danish currency vis-a-vis U.K.	NO	NO	NO	NO	YES	NO	YES	YES
Depreciation of the Danish currency vis-a-vis U.S.	NO	NO	NO	NO	YES	YES	NO	NO
Appreciation of the Danish currency vis-a-vis U.S.	NO	NO	NO	NO	YES	NO	YES	NO
Depreciation of the Danish currency vis-a-vis Norway	NO	NO	NO	NO	YES	NO	NO	YES
Appreciation of the Danish currency vis-a-vis Norway	NO	NO	NO	NO	YES	NO	YES	YES
Depreciation of the Danish currency vis-a-vis Switzerland	NO	NO	NO	NO	YES	NO	NO	YES
Appreciation of the Danish currency vis-a-vis Switzerland	NO	NO	NO	NO	YES	YES	YES	NO

Notes: n.a. denotes that data are not available.
The 10 per cent tails are based on the distributions of all available data on an annual frequency (including war periods).
Source: See annex A.

6. The use of marginal historical distributions of macro-financial risk factors in the field of risk assessments and stress tests

There are, however, several ways that marginal historical distributions of macro-financial risk factors might serve as inspiration in relation to risk assessments and stress tests by financial institutions or regulators.

First, they might be used to evaluate the likelihood of shocks studied in simple static sensitivity analyses. In a sensitivity analysis one accesses how a large shock to a single macro-financial risk factor in isolation – for instance a 20 per cent drop in stock prices – affects the resilience of the financial system, all other things being equal.

Second, they might be used to identify relevant historical scenarios of interest for scenario-based stress tests. If the current focus among the authorities or financial institutions, for instance, is resilience to a large drop in farm prices, one can use the marginal historical distributions of changes in farm prices to identify those historical periods where large drops in farm prices have occurred. We can then use those historical periods as stress scenarios, taking into account the movements of all other macro-financial risk factors in those periods as well. As noted by Varotto (2012) one of "... the main advantages of historical scenarios is the fact that they are plausible, if only because they have occurred before, and are not as sensitive to model risk as hypothetical scenarios".

Third, they might be used for so-called "reverse stress testing", cf. also Breuer *et al.* (2012). If the current focus among the authorities or financial institutions is resilience to rising long-

term interest rates we can for instance calculate the increase in long-term interest rates that the financial system can handle without a need for further capitalisation. We can then use the marginal historical distributions to get an idea of the likelihood of an increase in long-term interest rates of this magnitude.

Finally, they can be used as a source of inspiration for designing "worst case" scenarios. A "worst case" scenario could for instance be the simultaneous occurrence of the largest drop in farm prices and the largest increase in long-term interest rates that we have experienced in the economic history of Denmark covered by our historical statistics.

Naturally, we can't evaluate the probability of such "worst case" scenarios based solely on marginal historical distributions of macro-financial risk factors. Furthermore, it might be argued that some "worst case" scenarios are not plausible or internally consistent based on conventional economic theory. However, low-probability scenarios are per definition very unlikely, but they might happen, especially taken into account that normal statistical correlations might break down during severe financial stress, cf. Asai *et al*. (2013). Furthermore, stress test based on the well-known relationships from traditional macroeconomic models generally have turned out to generate too "mild" stress scenarios since such models are designed to capture average rather than extreme outcomes. With our current state of knowledge and modelling capabilities in the economic profession there thus seems to be a trade-off between theoretically well founded and internally consistent stress scenarios and sufficiently "hard" stress scenarios matching the observed reality during severe financial crises.

Designing "worst case" scenarios based on inspiration from the marginal historical distribution of macro-financial shocks should be seen as more in line with a traditional ad-hoc "risk management" approach. With "worst case" scenarios the sensitivity of the financial system to large simultaneous shocks to selected macro-financial risk factors is uncovered without at the same time specifying and explaining those transmission channels and structural relationships that would generate such outcomes or determining the exact likelihood of the scenarios.

To address the risk that "worst case" scenarios are considered too implausible, one might consider the use of conditional scenarios. If e.g. the focus is on the financial system's resilience to a large drop in stock prices, one could find those years where stock prices declined by 10 per cent per or more from one year to another. One could then randomly pick one of those years and use the actual historical values of all macro-financial risk factors for this year and the following years as the stress scenario. Alternatively on could use the average values of the risk factors in those years (and the following years) as the stress scenario, cf.

also Buncic and Melecky (2013) for a somewhat similar approach based on cross-country data.

Another way to partly take into account the correlations between the macro-financial risk factors is to consider the use of mixed scenarios based on linear combinations of historical outcomes in different periods. This could for instance be a linear combination of the outcomes from the years characterised by large drops in house prices, real GDP and real exports with the outcome from the years characterised by a large increase in long-term interest rates, cf. also Breuer and Csiszár (2013).

7. Final remarks

Today, there exist a variety of different approaches to macro stress testing used by financial institutions and authorities, and quantitative macro stress testing methodologies will no doubt remain under rapid development in many years to come. However, there will properly always be a considerable element of choices and judgements involved in the design of proper stress scenarios, cf. Alfaro and Drehmann (2009),

It might be argued that purely "statistical" approaches to stress tests such as the historical sensitivity tests or "worst case" scenarios outlined above are less suitable in the context of macroprudential surveillance due to the importance of storytelling in the communication of macroprudential policy initiatives, cf. Foglia (2009). Understanding the links between macro-financial risk factors and financial instability is surely important and the key stories of stress scenarios are usually easier to tell within the framework of structural macroeconomic models.

It should also be noted that extensive support measures from the authorities such as government guarantees or capital injections in the financial sector or extraordinary central-bank liquidity measures might be implemented during periods with financial crisis. Without such initiatives, the historical economic outcome during periods of financial crisis would undoubtedly have been different. Purely "statistical" approaches based solely on observed historical outcomes might therefore not be suitable if one wishes to construct stress scenarios for an assessment of the resilience of the financial system to negative economic shocks without such support measures. Here one needs structural macro-economic models.

However, historical sensitivity tests and "worst case" scenarios might at least be useful as some of the tools available within a larger suite of stress-test approaches. Applying different approaches for stress testing might provide a more robust picture of the risks faced by the financial system. Different approaches may have different strengths and provide different opportunities for illustrating the respective risks in terms of coverage, degree of detail, *etc*.

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Annex A: Data sources and compilation methods

General notes

- The Danish currency unit of account changed from "rigsdaler specie" (introduced 1625) to "rigsdaler kurant" in 1727, from "rigsdaler kurant" to "riksbankdaler" in 1813, from "riksbankdaler" to "rigsdaler" in 1854 and from "rigsdaler" to "kroner" (DKK) in 1875. 1 rigsdaler is divided into 96 skilling and 1 DKK is divided into to 100 øre. Figures stated in DKK prior to 1875 has been converted using the following official conversion rates: 6 rigsdaler specie = 6 rigsdaler kurant = 1 rigsbankdaler = 1 rigsdaler = 2 DKK.
- Foreign exchange rates are partly compiled as cross rates based on an assumption of perfect international arbitrage. In the latter case the cross rates might have been adjusted to take into account differences in the levels of cross rates and direct rates. Furthermore, in some cases adjustments have been made in order to take into account differences between bid, mid and offer rates.
- Many of the time series have been adjusted for break in series. The adjustments relate e.g. to changes in the base year for series in index form or changes in compilation methods and statistical classifications *etc*. in the primary statistical sources from which the indicators are drawn. In most of the cases adjustments for breaks have been made by chaining old and new series.
- To the extent possible figures have been adjusted for breaks relating to territorial changes in order to reflect economic activity within the current borders. The adjustments related to territorial changes concern mainly Schleswig and Holstein. Schleswig and Holstein were attached to the Danish monarchy in 1460 but became part of Germany after the Second Schleswig War in 1864. In June 1920 Sønderjylland (the northern part of the old Duchy of Schleswig) was reunited with Denmark after a referendum in accordance with the Versailles Treaty.
- "A" denotes annual frequency whereas "QNSA" denotes quarterly frequency, not seasonally adjusted.

Documentation of individual time series

Time series	Frequenncy and sample period	Notes	Sources
Gross Domestic Product, constant prices	A: 1815-2012	Million 2000-kroner. Notes: Market prices.	Hansen and Svendsen (1968); Hansen (1983); Hansen and Henriksen (1984); Abildgren (2010a, 2012a); and Statistics Denmark's website.
Exports of goods, constant prices	A: 1817-2012	Million 1980-kroner. Notes: Deflated by the CPI. Exports of non-agricultural products for the years 1817-1821, 1823, 1825-1826 and 1828 are based on estimates.	Hansen and Svendsen (1968); Hansen (1960, 1983); Cohn (1957); Johansen (1985); Bjerke and Ussing (1958); Abildgren (2004b, 2010a); Statistics Denmark, *Statistical Yearbook*, various issues; and Statistics Denmark's website.

Unemployment rate	A: 1900-2012	Per cent of the total labour force Notes: Unemployed persons in per cent of the total labour force. Period averages. Data for the period 1900-1902 has been 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.	Abildgren (2012e); Pedersen (1977a); Hansen (1983); Statistics Denmark (1996a); Topp (1997, 2008); Statistics Denmark, *Statistical Yearbook*, various issues; Statistics Denmark, *Statistical ten-year review*, various issues; Statistics Denmark, *Konjunkturstatistik*, various issues; and Statistics Denmark's website.
Short-term real interest rate	A: 1819-2012	Per cent per annum. Notes: Measured as the difference between the contemporaneous lending rate of Danmarks Nationalbank and the contemporaneous rate of consumer price inflation. Period averages. Danmarks Nationalbank is the central bank of Denmark.	Rubow (1918, 1920); Mikkelsen (1993); Carlsen and Fæste (2007); Abildgren (2010a); Danmarks Nationalbank, *Report and Accounts*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Domestic non-bank credit	A: 1856-2012	Per cent of nominal GDP. Notes: End of period. Covers domestic non-bank credit extended by resident commercial banks, savings banks and mortgage banks. Adjusted for the expansion of the population of reporting commercial banks with FIH (Finance for Danish Industry) in 2003. Data for mortgage banks 1928-1980 has been calculated on the basis of accumulated flow-of-funds.	Hansen and Svendsen (1968); Hansen (1969, 1983); Hansen and Henriksen (1984); Hoffmeyer (1960); Jeppesen (1969); Johansen (1985); Abildgren (2012a, 2012e); Danmarks Nationalbank, *Report and Accounts*, various issues; Statistics Denmark, *Statistical Yearbook*, various issues; Statistics Denmark, *Statistiske Efterretninger*, various issues; Statistics Denmark, Statistiske Meddelelser, various issues; and Danmarks Nationalbank, *Finansiel statistik*, various issues.
House price index	A: 1938-2012	2006=100. Notes: Period averages. 1950-1967: Covers the price development for sale of one-family houses in provincial towns. 1938-1949 and since 1968: Covers the cash-price development for one-family houses in ordinary free trade in all of Denmark.	Abildgren (2006a, 2012a); Økonomiministeriet (1966); Thygesen (1971); Statistics Denmark, *Statistiske Efterretninger*, various issues and Statistics Denmark's website.
Price index for sale of farms	A: 1860-2012	2006=100. Notes: Period averages. Prior to 1960: Covers the cash-price development (per unit of land valuation based on estimated productivity) for farms in ordinary free trade. 1960-1967: Covers the cash-price development per ha in ordinary free trade for all sizes of farms. 1968-1975: Covers the cash-price development per ha in ordinary free trade for farms of a size of 10-100 ha. 1976-1991: Covers the cash-price development per ha in ordinary free trade for farms of a size of 15-60 ha. Since 1992: Covers the cash-price development per ha in ordinary free trade for all farms of a size of at least 0.55 ha.	Hansen and Svendsen (1968); Abildgren (2006a); Danmarks Statistik (1911); Det Statistiske Departement (1958); and Statistics Denmark's website.

Share price index, total	A: 1873-2012 QNSA: 1915q1-2012q4	3rd July 1989 = 100. Notes: End of period. Regarding compilation methods the following notes should be given: • 1915-1994: Covers all shares at the Copenhagen Stock Exchange. Since 1994: OMXC20 (KFX). • Since 1937 adjusted for dividend payments. • For 1921 and 1922 Statistics Denmark has published share price indices including and excluding Landmandsbanken which was reconstructed in 1922. The share price index chosen includes Landmandsbanken. • 1915-1920: Based on a weighted average of indices for manufacturing, banks and shipping. The weights are based on paid-in equity capital as of end 1920. • Prior to 1915: Baed on a geometric weighted average of the price development (bid prices) for the 7 largest companies listed on Copenhagen Stock Exchange. The weighting basis is the paid-in equity capital as of 1 January 1890.	Cohn (1928); Abildgren (2006a, 2012e); Statistics Denmark, *Statistiske Efterretninger*, various issues; Statistics Denmark, Statistisk Månedsoversigt, various issues; Statistics Denmark, *Statistical Yearbook*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Share price index, banks	A: 1915-2012	End-1995=100. Notes: Period averages. Since 1996: OMXC Finance index. For 1921 and 1922 Statistics Denmark has published share price indices including and excluding Landmandsbanken which was reconstructed in 1922. The share price index chosen includes Landmandsbanken.	Statistics Denmark, *Statistiske Efterretninger*, various issues; Statistics Denmark, *Statistical Yearbook*, various issues; and Statistics Denmark's website.
Yield on long-term Danish government bonds	A: 1839-2012 QNSA: 1839q1-2012q4	Per cent per annum. Notes: Period averages. Prior to 1983: Yield to maturity on long central government bonds. Since 1983: Yield to maturity on 10-year central government bonds. Prior to 1960q1: The quarterly figures refer to 15 March, 15 June, 15 September and 15 December. A few quarterly observations prior to 1915q4 have been interpolated.	Abildgren (2005b, 2012e); Hansen (1969); Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Yield on long-term Danish mortgage bonds	A: 1852-2012 QNSA: 1852q1-2012q4	Per cent per annum. Notes: Period averages. Prior to 1960: Yield on long-term mortgage bonds. Since 1960: Yield on 30-year mortgage bonds. Prior to 1960: The quarterly figures refer to 15 March, 15 June, 15 September and 15 December. A few quarterly observations prior to 1914q4 have been interpolated.	Abildgren (2005b, 2012e); Hansen (1969); Thygesen (1971); Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Bilateral nominal exchange rate vis-á-vis Sweden	A: 1696-2012	DKK per 100 SEK Notes: Period averages. The Swedish currency unit of account changed from "daler kopparmynt" (introduced 1633) (=72 marks kopparmynt = 18 daler kopparmynt) to "riksdaler banco" (= 48 skilling banco) in 1777, from "riksdaler banco" to "riksdaler riksmynt" in 1858 and from "riksdaler riksmynt" to "krona" (SEK) in 1873. The Swedish currency prior to 1873 has been converted to SEK using the following official conversion rates: 48 marks kopparmynt = 12 daler kopparmynt = 32 skilling banco = 48 skilling riksgälds = 1 riksdaler riksmynt = 1 SEK.	Abildgren (2013a); Friis and Glamann (1958); Edvinsson *et al*. (2010); Wilcke (1929); Rubow (1918); Statistics Denmark (1995); Statistics Denmark, *Sammendrag af statistiske oplysninger angaaende Kongeriget Danmark*, various issues; Statistics Denmark, *Statistical Yearbook*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.

Bilateral nominal exchange rate vis-á-vis United Kingdom	A:	1696-2012	DKK per 100 GBP Notes: Period averages. The British Pound (GBP) dates back to the 8th century, cf. Chown (1994).	Abildgren (2013a); Friis and Glamann (1958); Edvinsson *et al*. (2010); Eitrheim *et al*. (2004); Wilcke (1929); Rubow (1918); Denzel (1999); Statistics Denmark (1995); Statistics Denmark, *Sammendrag af statistiske oplysninger angaaende Kongeriget Danmark*, various issues; Statistics Denmark, *Statistical Yearbook*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Bilateral nominal exchange rate vis-á-vis United States	A:	1791-2012	DKK per 100 USD Notes: Period averages. The US dollar (USD) dates back to the late 18th century, cf. Chown (1994).	Craighead (2007); NBER Macrohistory Database (series ID: m14004a); Edvinsson *et al*. (2010); Eitrheim *et al*. (2004); Statistics Denmark (1995); Statistics Denmark, *Statistical Yearbook*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Bilateral nominal exchange rate vis-á-vis Norway	A:	1817-2012	DKK per 100 NOK Notes: Quarterly averages. The Norwegian currency unit of account changed from "speciedaler" (introduced 1817) to "kroner" (NOK) in 1875. The Norwegian currency prior to 1875 has been converted to NOK using the following official conversion rates: 1 speciedaler = 4 NOK.	Klovland (2013); Edvinsson *et al*. (2010); Eitrheim *et al*. (2004); Statistics Denmark (1995); Statistics Denmark, *Sammendrag af statistiske oplysninger angaaende Kongeriget Danmark*, various issues; Statistics Denmark, *Statistical Yearbook*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.
Bilateral nominal exchange rate vis-á-vis Switzerland	A:	1852-2012	DKK per 100 CHF Notes: Period averages. The Swiss franc (CHF) dates back to 1850, cf. Chown (1994).	Edvinsson *et al*. (2010); Denzel (2010); Statistics Denmark (1995); Statistics Denmark, *Statistical Yearbook*, various issues; Danmarks Nationalbank, *Monetary Review*, various issues; and Danmarks Nationalbank's website.

Definition of "periods with wars with Danish participation"

War	Annual data	Quarterly data
The Great Nordic War	1709-1720	
The Napoleonic Wars	1808-1813	
The First Schleswig War	1848-1851	1848q1-1851q1
The Second Schleswig War	1864	1864q1-1864q4
World War II	1940-1945	1940q2-1945q2

Annex B: Historical developments in macro-financial risk factors - sorted by size (data on an annual frequency)

Year-on-year growth in real GDP 1816-2012, per cent							
1940	-14,0	1952	1,1	1982	3,0	1914	5,8
1941	-10,2	1881	1,1	1934	3,0	1953	5,8
1917	-7,2	1888	1,1	1954	3,0	1890	5,9
1915	-6,9	2011	1,1	1910	3,0	1930	5,9
1945	-6,8	1988	1,2	1933	3,1	1961	5,9
1918	-6,1	1931	1,2	1845	3,1	1903	5,9
2009	-5,7	1991	1,3	1948	3,1	1920	6,1
1856	-5,4	1992	1,5	1852	3,2	1863	6,2
1851	-4,4	1822	1,5	1973	3,2	1960	6,3
1921	-2,9	1977	1,5	1862	3,2	1959	6,4
1877	-2,7	1889	1,5	1970	3,2	1929	6,4
1932	-2,6	1978	1,5	2000	3,3	1859	6,5
1829	-2,4	1839	1,6	1879	3,3	1976	6,7
1925	-2,3	2010	1,6	1824	3,3	1969	8,1
1975	-1,4	2007	1,6	1900	3,3	1950	8,2
1864	-1,0	1826	1,6	2006	3,4	1964	8,9
1974	-1,0	1875	1,7	1928	3,4	1922	10,0
1981	-0,9	1857	1,7	1887	3,4	1944	10,2
1858	-0,9	1828	1,7	1883	3,5	1943	10,6
2008	-0,8	1868	1,7	1979	3,6	1923	10,7
1993	-0,8	1905	1,7	1896	3,6	1855	11,2
1860	-0,7	1998	1,8	1971	3,7	1919	12,7
1831	-0,6	1893	1,9	1865	3,7	1946	16,1
1818	-0,4	1861	1,9	1986	3,7		
1980	-0,4	1898	1,9	1882	3,7		
2012	-0,4	1846	1,9	1913	3,8		
1833	-0,4	1891	2,0	1909	3,8		
1836	-0,4	1956	2,0	1907	3,8		
1835	-0,4	1927	2,0	1949	3,8		
1847	-0,3	1894	2,1	1886	3,8		
1873	-0,2	1876	2,1	1967	3,9		
1823	-0,2	1935	2,2	1878	3,9		
1816	0,0	1966	2,2	1916	4,0		
1866	0,1	1897	2,3	1901	4,1		
1951	0,1	1902	2,3	1870	4,2		
1989	0,1	2005	2,3	1899	4,3		
1841	0,2	1938	2,3	1985	4,3		
1867	0,2	1942	2,3	1984	4,3		
1825	0,2	1904	2,3	1968	4,5		
1955	0,2	1892	2,4	1939	4,8		
1924	0,2	2004	2,4	1994	4,9		
1963	0,2	1937	2,4	1843	4,9		
1987	0,3	1880	2,4	1957	5,0		
1854	0,4	1996	2,5	1965	5,1		
1853	0,4	1832	2,5	1872	5,2		
1817	0,4	1983	2,6	1844	5,2		
1820	0,4	1936	2,6	1848	5,2		
2003	0,4	1874	2,6	1834	5,2		
1912	0,5	1958	2,7	1821	5,3		
1838	0,5	1997	2,7	1850	5,3		
2002	0,6	1837	2,7	1911	5,4		
1884	0,6	1999	2,8	1947	5,5		
1842	0,7	1906	2,9	1972	5,5		
1885	0,7	1908	2,9	1869	5,6		
2001	0,7	1840	2,9	1962	5,6		
1830	0,8	1995	2,9	1895	5,6		
1871	0,9	1827	2,9	1849	5,7		
1990	1,0	1819	2,9	1926	5,7		

Year-on-year growth in real exports of goods 1818-2012, per cent							
1818	-43,0	1858	-0,6	1988	5,1	1824	17,9
1918	-38,5	1922	-0,6	1955	5,1	1837	19,8
1945	-34,2	1871	-0,6	1999	5,2	1834	20,0
1864	-30,9	1862	-0,5	1838	5,2	1827	20,4
1941	-29,3	1882	-0,5	1960	5,3	1844	21,5
1917	-29,3	1961	-0,5	1823	5,3	1924	21,7
1940	-22,9	1861	-0,2	1972	5,8	1819	22,8
1942	-21,4	1906	0,0	1958	6,3	1950	23,5
1829	-21,1	2012	0,1	1997	6,3	1872	24,7
1857	-18,4	1909	0,2	1847	6,4	1943	24,7
2009	-17,6	1873	0,4	1831	6,5	1830	24,9
1921	-16,7	1904	0,7	2005	6,7	1859	25,3
1848	-16,6	2007	0,8	1954	6,9	1880	27,1
1932	-14,1	1962	0,8	1959	6,9	1821	28,3
1931	-12,4	1944	0,8	1983	7,1	1949	28,4
1877	-11,0	1833	0,8	1982	7,2	1870	34,3
1925	-10,6	1976	0,9	2010	7,2	1923	37,4
1926	-10,5	1939	1,1	1852	7,2	1947	39,5
1856	-9,7	1849	1,2	1936	7,4	1920	58,1
1910	-9,7	1996	1,4	1902	7,5	1946	80,1
1881	-9,4	1981	1,6	2006	7,5	1865	81,2
1885	-9,0	2001	1,6	1989	7,6		
1884	-7,0	1992	1,7	1964	7,7		
1867	-6,9	2002	1,8	1963	7,8		
1860	-6,2	1900	2,0	1927	7,9		
1851	-6,1	1895	2,0	2011	8,1		
1842	-5,9	1965	2,2	1994	8,1		
1822	-5,3	1957	2,2	1874	8,1		
2003	-5,0	1907	2,3	1974	8,4		
1841	-4,9	1971	2,4	1928	8,6		
1875	-4,8	1840	2,5	1886	8,6		
1878	-4,7	1845	2,8	1889	8,9		
1832	-4,4	2008	2,9	1979	9,0		
1967	-3,8	1990	2,9	1905	9,4		
1898	-3,5	1913	3,0	1853	10,1		
1893	-3,3	1828	3,1	1980	10,1		
1938	-2,9	1891	3,2	1915	10,3		
1952	-2,8	1995	3,3	1969	10,7		
1975	-2,7	1953	3,4	1899	10,8		
1993	-2,6	1888	3,5	1903	10,8		
1835	-2,6	1876	3,5	1855	10,9		
1987	-2,4	1991	3,5	1890	11,4		
1868	-2,0	1901	3,7	1897	11,7		
1934	-1,9	1883	3,9	2000	12,7		
1984	-1,8	1968	3,9	1911	12,9		
1978	-1,8	1896	4,1	1937	13,0		
1930	-1,6	1879	4,1	1951	13,2		
1916	-1,6	1933	4,2	1919	13,7		
1836	-1,6	2004	4,2	1839	13,8		
1892	-1,6	1986	4,3	1973	14,0		
1863	-1,5	1929	4,3	1854	14,5		
1966	-1,3	1970	4,4	1843	14,5		
1977	-1,2	1908	4,4	1948	15,2		
1998	-1,1	1869	4,6	1887	15,4		
1985	-1,0	1846	4,7	1894	15,4		
1866	-0,9	1912	4,8	1850	17,1		
1935	-0,9	1825	4,9	1820	17,2		
1956	-0,7	1826	5,1	1914	17,5		

Year-on-year change in unemployment rate 1901-2012, percentage points			
1995	-1,9	1972	0,0
1996	-1,6	1987	0,0
1998	-1,4	2004	0,1
1943	-1,3	1913	0,1
1923	-1,3	1936	0,1
1941	-1,2	1904	0,1
1986	-1,2	1905	0,1
2006	-1,2	1907	0,1
2007	-1,2	1966	0,1
1946	-1,2	1967	0,1
1934	-1,2	1990	0,2
1942	-1,1	2002	0,2
1959	-1,1	1938	0,2
1979	-1,1	1914	0,3
1985	-1,1	1976	0,3
1920	-1,0	1927	0,3
1919	-0,9	1971	0,3
2008	-0,9	1901	0,4
1999	-0,9	2012	0,4
1953	-0,9	1980	0,4
1906	-0,9	1951	0,4
1997	-0,9	1909	0,4
1928	-0,8	1963	0,4
2005	-0,7	1955	0,5
1944	-0,6	1949	0,5
1964	-0,6	1908	0,6
1960	-0,6	1956	0,6
1939	-0,6	1982	0,6
1922	-0,6	2010	0,7
1929	-0,5	1983	0,7
1973	-0,5	1992	0,7
1984	-0,4	1937	0,7
1954	-0,4	1925	0,8
1957	-0,4	1968	0,8
1970	-0,4	1988	0,8
1969	-0,4	1917	0,8
1924	-0,3	1991	0,9
1961	-0,3	1978	0,9
1902	-0,3	1989	0,9
1935	-0,3	1952	0,9
1950	-0,3	2003	0,9
2000	-0,3	1926	1,0
1910	-0,3	1993	1,1
1915	-0,2	1931	1,1
1930	-0,2	1977	1,1
1994	-0,2	1974	1,1
1911	-0,2	1945	1,4
2011	-0,2	1940	1,5
1933	-0,2	2009	1,7
1912	-0,2	1918	1,9
1916	-0,2	1981	2,2
1903	-0,1	1932	2,3
1965	-0,1	1921	2,6
1958	-0,1	1975	3,0
1962	-0,1		
1948	-0,1		
2001	-0,1		
1947	0,0		

Level of unemployment rate 1900-2012, per cent			
1965	0,7	1956	3,8
1966	0,8	1945	3,8
1964	0,9	2006	4,0
1906	0,9	1952	4,0
1973	0,9	1918	4,1
1967	1,0	2011	4,1
1907	1,0	1931	4,1
1970	1,0	1922	4,1
1962	1,1	1926	4,2
1961	1,2	2010	4,3
1916	1,3	1942	4,4
1971	1,3	2012	4,4
1972	1,4	1927	4,5
1912	1,4	1921	4,7
1969	1,4	1935	4,7
1913	1,5	2001	4,8
1915	1,5	1936	4,8
1963	1,5	2000	4,8
1960	1,5	2002	4,9
1911	1,6	1934	5,0
1908	1,6	1975	5,1
1903	1,6	1999	5,1
1904	1,7	2005	5,2
1914	1,7	1939	5,2
1900	1,7	1976	5,4
1910	1,7	1937	5,5
1968	1,8	1941	5,5
1902	1,8	1938	5,8
1905	1,8	2003	5,9
2008	1,9	2004	5,9
1909	2,0	1998	6,0
1974	2,0	1933	6,2
1901	2,1	1979	6,2
1920	2,1	1932	6,4
1959	2,1	1977	6,5
1917	2,1	1980	6,6
1944	2,4	1940	6,7
1924	2,5	1978	7,3
1948	2,5	1986	7,4
1946	2,6	1987	7,4
1947	2,6	1997	7,4
1950	2,7	1988	8,2
1954	2,7	1996	8,3
2007	2,8	1985	8,6
1923	2,8	1981	8,8
1949	3,0	1989	9,1
1930	3,0	1990	9,2
1943	3,0	1982	9,4
1951	3,1	1984	9,7
1953	3,1	1995	9,9
1919	3,1	1991	10,1
1955	3,2	1983	10,1
1929	3,2	1992	10,8
1925	3,2	1994	11,7
1958	3,2	1993	11,9
1957	3,4		
2009	3,6		
1928	3,7		

Year-on-year change in short-term real interest rate 1820-2012, percentage points							
1823	-21,8	1999	-1,6	1890	0,6	1868	5,5
1940	-20,1	1898	-1,5	1985	0,6	1969	5,9
1825	-16,5	1836	-1,5	2004	0,6	1869	6,2
1820	-16,4	1961	-1,5	2006	0,8	1821	6,2
1915	-16,4	1977	-1,4	1854	0,8	1847	7,0
1923	-15,3	1865	-1,4	1886	0,8	1837	7,1
1829	-10,9	2002	-1,4	1998	0,8	1952	7,1
1853	-10,5	2008	-1,3	2001	0,8	1857	7,2
1846	-9,5	1904	-1,3	1989	0,9	1858	7,5
1835	-9,0	1956	-1,3	1949	0,9	1855	7,9
1827	-8,9	1885	-1,2	1979	0,9	1832	8,6
1927	-8,6	1896	-1,2	1944	0,9	1843	10,3
1859	-7,8	1839	-1,1	2000	1,0	1922	10,9
1849	-6,2	1967	-1,1	1963	1,0	1828	13,1
1845	-6,2	1937	-1,1	1938	1,1	1926	13,9
1951	-6,1	1972	-1,0	1935	1,1	1942	14,8
1842	-5,8	1991	-0,9	1946	1,1	1848	18,0
1873	-5,2	1909	-0,9	1841	1,2	1824	21,4
1920	-5,2	1959	-0,8	1992	1,2	1921	27,1
1932	-4,9	2003	-0,7	1894	1,2		
1860	-4,7	1983	-0,7	2007	1,3		
1994	-4,7	1971	-0,7	1874	1,3		
1924	-4,6	2005	-0,6	1960	1,3		
1933	-4,6	1919	-0,6	1973	1,3		
1844	-4,4	1875	-0,6	1895	1,4		
1974	-4,2	2009	-0,6	1958	1,4		
1850	-3,9	2012	-0,5	1981	1,4		
1870	-3,7	1866	-0,5	1905	1,5		
1955	-3,6	1918	-0,4	1852	1,6		
1962	-3,6	1997	-0,3	1903	1,7		
1928	-3,6	1929	-0,3	1882	1,7		
1838	-3,5	1880	-0,3	1876	1,9		
1831	-3,3	2011	-0,3	1913	1,9		
1965	-3,3	1993	-0,3	1901	2,0		
1864	-3,2	1986	-0,3	1863	2,1		
1947	-3,1	1906	-0,2	1930	2,1		
1912	-3,1	1966	-0,2	1943	2,3		
1851	-3,0	1887	-0,2	1830	2,3		
1871	-3,0	1945	-0,1	1892	2,4		
1834	-2,9	1899	-0,1	1908	2,4		
1902	-2,8	1877	-0,1	1917	2,5		
1867	-2,7	1916	-0,1	1941	2,5		
1881	-2,6	1911	0,0	1976	2,6		
1822	-2,6	1995	0,0	1893	2,6		
1856	-2,5	1910	0,1	1957	2,6		
1984	-2,5	1948	0,1	1936	2,7		
1889	-2,5	1954	0,2	1964	2,8		
1888	-2,5	1883	0,2	1872	2,8		
1934	-2,5	1968	0,3	1931	2,8		
1891	-2,3	1879	0,3	1925	3,1		
1950	-2,3	1900	0,4	1884	3,2		
1996	-2,1	1980	0,4	1990	3,3		
1861	-2,1	1978	0,4	1840	3,5		
1970	-2,1	1982	0,5	1833	3,5		
1897	-1,8	1987	0,5	1953	3,7		
1907	-1,8	1914	0,6	1975	4,5		
2010	-1,7	1939	0,6	1862	5,1		
1988	-1,7	1878	0,6	1826	5,5		

Year-on-year change in domestic non-bank credit in per cent of nominal GDP 1857-2012, percentage points					
1920	-26,9	1861	0,1	1905	3,9
1941	-13,8	1990	0,2	2002	4,0
1943	-12,6	1889	0,2	1882	4,3
1923	-11,5	1864	0,3	1858	4,4
1916	-10,3	1988	0,5	1887	4,6
1933	-10,0	1993	0,5	1874	4,6
2010	-9,5	1891	0,5	1875	4,9
1924	-9,4	1880	0,6	1883	4,9
1944	-9,2	1980	0,6	1896	5,3
1994	-9,0	1967	0,6	1893	5,5
1940	-8,6	1974	0,7	1885	5,6
1914	-8,3	1867	0,7	1963	5,7
1915	-8,2	1863	0,8	1917	6,1
1942	-8,0	1962	0,9	2004	6,2
1934	-7,7	1965	0,9	2003	6,2
1919	-7,5	1898	1,1	1904	6,3
1937	-6,9	1866	1,1	1925	6,3
2011	-6,9	1961	1,1	1932	6,4
1939	-6,3	1996	1,1	1894	6,5
1982	-6,2	1977	1,1	1927	6,7
1950	-5,6	1972	1,1	2009	7,0
1935	-5,2	1897	1,2	1998	7,5
1992	-4,7	1857	1,2	1881	7,5
1890	-4,5	1859	1,3	1987	7,8
1900	-4,2	1954	1,3	1985	8,0
1938	-4,0	1869	1,4	2001	8,2
1911	-3,8	1946	1,6	1884	8,3
2012	-3,5	1868	1,7	1918	9,3
1910	-3,1	1862	1,8	1902	9,4
1991	-3,0	1971	1,9	1930	10,4
1908	-2,8	1973	1,9	1906	12,1
1929	-2,6	1912	2,0	1922	12,1
1981	-2,6	1966	2,1	1926	12,8
1928	-2,5	1886	2,1	1986	13,1
1951	-2,4	1878	2,1	2006	14,0
1865	-2,3	1968	2,1	2008	14,1
1936	-2,0	1901	2,3	2005	14,2
1952	-1,8	1969	2,3	1931	15,3
1976	-1,7	1860	2,4	2007	16,4
1970	-1,0	1945	2,4	1921	23,8
1956	-0,9	1999	2,6		
1953	-0,8	1984	2,6		
1995	-0,8	1895	2,6		
1949	-0,8	1877	2,7		
1947	-0,5	1871	2,8		
1979	-0,3	1959	2,8		
1983	-0,3	1997	2,9		
1975	-0,3	1888	3,1		
1955	-0,3	1909	3,1		
1870	-0,3	1873	3,1		
1978	-0,2	1903	3,2		
1899	-0,2	1958	3,2		
1964	-0,2	2000	3,3		
1948	-0,1	1907	3,3		
1989	-0,1	1872	3,3		
1913	-0,1	1879	3,4		
1876	0,0	1960	3,7		
1957	0,0	1892	3,8		

Year-on-year growth in nominal house prices 1939-2012, per cent			
2009	-12,0	1966	12,8
1990	-7,5	1977	13,4
1987	-7,4	1970	13,5
1949	-7,0	1962	13,9
1981	-4,7	1946	15,4
2008	-4,5	1984	15,4
2012	-3,2	1973	15,5
2011	-2,8	1947	15,6
1982	-2,3	1978	16,0
1992	-1,6	1985	17,0
1958	-1,5	1972	17,2
1980	-1,5	2005	17,6
1993	-1,0	1975	17,9
1989	-0,7	1961	19,3
1957	0,6	1983	21,5
1988	1,1	2006	21,6
1939	1,2		
1991	1,3		
1950	1,4		
2010	2,8		
1940	3,2		
2003	3,2		
1952	3,3		
1968	3,5		
2002	3,6		
1956	3,9		
1955	4,2		
1951	4,5		
2007	4,6		
1974	4,8		
1953	4,9		
1969	5,3		
2001	5,8		
1941	6,1		
2000	6,5		
1999	6,7		
1971	6,8		
1995	7,6		
1967	8,2		
1945	8,6		
1948	8,6		
2004	8,9		
1998	9,0		
1976	9,6		
1965	9,6		
1954	9,8		
1979	9,9		
1943	9,9		
1959	10,0		
1996	10,7		
1942	10,8		
1964	11,4		
1997	11,5		
1986	11,7		
1960	12,0		
1994	12,3		
1944	12,4		
1963	12,7		

Year-on-year growth in nominal farm prices 1861-2012, per cent					
2009	-16,4	1938	2,2	1875	10,0
1932	-16,1	1945	2,2	1959	10,0
1981	-15,6	1910	2,3	1998	10,1
1980	-15,2	1920	2,4	1924	10,4
1926	-14,8	1903	2,4	2000	10,7
1927	-13,2	1889	2,5	1913	11,0
1922	-12,5	1882	2,9	1997	11,4
2010	-12,0	1905	2,9	1917	11,4
1931	-11,0	1866	2,9	1942	11,7
1886	-9,7	1867	3,0	1975	11,8
1982	-9,4	1908	3,1	1984	11,9
1864	-7,4	1968	3,2	1966	12,1
2011	-6,3	1912	3,3	1964	12,2
2012	-5,9	1979	3,4	1940	12,4
1921	-5,7	1876	3,5	1944	12,4
1987	-5,6	1953	3,6	1941	12,9
1888	-5,4	1925	3,6	1950	13,1
1870	-5,2	1930	3,7	1868	13,5
1993	-5,0	1880	3,7	2007	14,2
1878	-4,8	1871	4,0	1960	14,7
1946	-4,1	1902	4,3	2008	15,0
1865	-4,0	1935	4,4	2005	15,9
1879	-3,6	1990	4,4	1986	16,7
1958	-3,4	1923	4,5	1977	17,4
1891	-3,2	1904	4,5	1919	17,6
1900	-3,1	1906	4,6	1965	18,8
1894	-2,5	1869	4,8	1972	19,0
1937	-2,4	1914	4,9	1976	19,4
1897	-2,0	1994	4,9	1970	19,6
1928	-2,0	1939	4,9	1978	22,1
1885	-2,0	1947	5,3	1973	22,7
1896	-2,0	1911	5,9	1985	23,8
1955	-1,5	2003	5,9	1983	24,3
1887	-1,5	1999	6,1	1918	25,8
1991	-1,1	2004	6,5	2006	26,9
1988	-0,9	1943	6,5	1974	27,4
1893	-0,8	1874	6,6		
1877	-0,7	1948	6,6		
1861	-0,6	1863	6,7		
1881	0,0	2002	7,1		
1892	0,0	1956	7,1		
1895	0,0	1957	7,1		
1898	0,0	1952	7,6		
1899	0,0	1872	7,7		
1901	0,0	1907	7,8		
1989	0,0	1971	7,9		
1992	0,0	1967	8,1		
1963	0,6	1916	8,1		
1954	0,7	1995	8,4		
1909	0,7	1915	8,4		
1883	0,7	1929	8,4		
1890	0,8	1951	8,7		
1933	0,9	1873	8,9		
1936	1,0	1862	9,1		
1962	1,4	1961	9,1		
1969	1,9	1934	9,2		
1949	2,0	1996	9,7		
1884	2,1	2001	9,7		

Year-on-year nominal growth in total share price index 1874-2012, per cent (based on end-of-year data)					
2008	-46,6	1881	-0,7	1956	17,7
1922	-29,1	1898	-0,5	1958	19,3
2002	-26,8	1940	0,0	1915	19,6
1992	-25,8	1973	0,0	1941	20,2
1921	-25,6	1976	0,0	2003	22,5
1984	-22,0	1896	0,3	2000	22,8
1931	-21,7	1901	0,6	2012	27,2
1974	-21,3	1883	0,7	1923	27,3
1920	-20,9	1882	0,7	1996	28,3
1919	-20,1	1960	0,8	1933	29,5
1917	-19,6	1969	0,8	1989	33,5
1986	-19,2	1910	0,9	1975	33,8
2011	-14,8	1894	1,3	2010	35,9
1990	-13,2	1942	1,5	2009	35,9
2001	-13,2	1903	1,6	2005	37,3
1957	-13,1	1893	1,9	1981	38,3
1877	-12,9	1962	2,4	1993	39,7
1885	-11,2	1935	2,9	1985	43,1
1967	-10,0	1905	2,9	1988	49,5
1970	-9,9	1906	3,2	1997	54,7
1948	-9,7	1929	3,2	1916	79,2
1924	-8,4	1889	3,4	1972	88,7
1937	-8,1	1887	3,5	1983	114,0
1875	-8,1	1953	3,5		
1930	-7,8	1904	3,6		
1876	-7,5	1902	3,7		
1945	-6,8	1998	4,2		
1926	-6,8	1950	4,2		
1979	-6,5	1946	4,9		
1978	-6,1	1886	4,9		
1939	-6,0	2007	5,1		
1987	-5,7	1911	5,3		
1951	-5,7	1949	5,4		
1899	-5,7	1918	5,4		
1884	-5,2	1888	5,4		
1890	-5,1	1909	5,6		
1925	-4,9	1964	5,8		
1914	-4,8	1895	6,3		
1994	-4,6	1954	6,7		
1891	-4,4	1965	6,9		
1908	-3,9	1934	9,9		
1947	-3,9	1927	9,9		
1928	-3,3	1963	10,3		
1966	-3,2	1880	10,6		
1944	-2,9	1995	11,0		
1971	-2,8	1936	11,0		
1912	-2,5	1968	11,1		
1932	-2,2	1991	12,1		
1892	-2,0	2006	12,2		
1913	-1,7	1980	12,2		
1907	-1,6	1982	12,4		
1961	-1,6	1878	12,8		
1897	-1,6	1879	13,2		
1938	-1,5	1959	13,8		
1900	-1,2	1943	14,3		
1977	-1,0	1955	15,7		
1874	-1,0	1999	16,6		
1952	-0,9	2004	17,3		

Year-on-year nominal growth in share price index for banks 1916-2012, per cent (based on annual average data)			
2008	-38,1	1994	7,3
2009	-32,2	1942	7,6
1974	-29,8	1982	8,1
1923	-23,6	1950	8,3
1992	-23,1	1969	8,3
1922	-21,8	1960	8,5
1932	-16,1	1953	8,6
1920	-15,5	1975	9,0
2011	-13,5	1989	9,0
1999	-10,9	2007	9,3
1951	-10,8	1956	9,4
1970	-10,7	1954	9,5
1980	-10,4	1981	9,8
1945	-8,8	1958	10,0
1940	-8,3	1966	10,3
1967	-8,2	1946	10,5
1978	-7,9	1984	10,6
1931	-7,6	1993	10,8
2002	-7,6	1918	11,2
1926	-6,8	1964	12,3
1971	-6,0	1996	12,4
1925	-5,9	1916	13,7
1990	-5,6	1934	14,4
1921	-5,5	1941	14,6
1924	-5,1	1962	16,3
1977	-4,8	1959	17,4
1991	-3,6	1998	18,1
1949	-3,2	1933	21,3
1979	-3,1	2000	21,3
1930	-3,1	2010	22,6
1937	-2,7	2001	23,2
1948	-2,4	1985	28,1
1935	-1,5	2004	29,9
2012	-1,4	2005	32,3
1968	-0,6	1972	33,1
1929	0,0	2006	36,4
1952	0,0	1973	43,6
1955	0,0	1997	46,3
1917	0,3	1983	111,8
1987	0,4		
1976	0,7		
1947	0,8		
1988	0,8		
1957	0,9		
1919	1,3		
1936	1,5		
1939	1,7		
1943	1,7		
1995	1,8		
1938	2,1		
2003	2,4		
1928	2,9		
1963	3,8		
1927	5,4		
1986	5,7		
1944	5,9		
1961	6,3		
1965	6,9		

Year-on-year change in long-term nominal yield on Danish government bonds 1840-2012, percentage points (based on annual average data)					
1983	-7,3	1865	-0,1	1950	0,1
1985	-2,8	1841	-0,1	1957	0,1
1975	-1,7	1916	-0,1	1964	0,1
1993	-1,7	1972	-0,1	1854	0,1
1986	-1,5	1860	-0,1	1877	0,1
1988	-1,4	1842	-0,1	1900	0,1
1991	-1,4	1888	-0,1	1956	0,1
2012	-1,3	1902	-0,1	1959	0,1
1998	-1,2	1905	-0,1	1866	0,1
1996	-1,1	1853	0,0	1891	0,2
1997	-0,9	1867	0,0	1899	0,2
2005	-0,9	1874	0,0	1952	0,2
1933	-0,9	1881	0,0	1869	0,2
1981	-0,8	1884	0,0	1912	0,2
1921	-0,8	1903	0,0	1929	0,2
2003	-0,7	2002	0,0	1937	0,2
1941	-0,7	1856	0,0	1954	0,2
2009	-0,7	1862	0,0	1914	0,2
2010	-0,7	1883	0,0	1967	0,2
1922	-0,6	1909	0,0	1932	0,3
1971	-0,6	1917	0,0	1955	0,3
2001	-0,6	1926	0,0	1913	0,3
1958	-0,6	1889	0,0	1849	0,3
1930	-0,4	1892	0,0	1919	0,3
1984	-0,4	1893	0,0	1924	0,3
1944	-0,4	1925	0,0	1940	0,3
1992	-0,3	2008	0,0	1943	0,3
1938	-0,3	2004	0,0	1935	0,3
1852	-0,3	1845	0,0	1949	0,3
1887	-0,3	1859	0,0	1939	0,4
1978	-0,2	1870	0,0	1864	0,4
1945	-0,2	1878	0,0	1848	0,4
1872	-0,2	1882	0,0	2006	0,4
1879	-0,2	1885	0,0	1995	0,4
1946	-0,2	1897	0,0	1948	0,5
2011	-0,2	1898	0,0	2007	0,5
1968	-0,2	1844	0,0	1966	0,5
1989	-0,2	1861	0,0	1994	0,5
1953	-0,2	1875	0,0	1962	0,6
1880	-0,2	1906	0,0	1961	0,6
1901	-0,2	1910	0,0	1915	0,6
1928	-0,2	1918	0,0	1951	0,6
1934	-0,2	1876	0,0	1969	0,7
1886	-0,2	1907	0,0	2000	0,7
1895	-0,2	1911	0,0	1960	0,8
1927	-0,2	1847	0,1	1990	0,9
1942	-0,2	1857	0,1	1979	1,1
1851	-0,1	1858	0,1	1920	1,1
1871	-0,1	1863	0,1	1987	1,2
1963	-0,1	1868	0,1	1965	1,3
1855	-0,1	1890	0,1	1970	1,4
1894	-0,1	1896	0,1	1973	1,4
1999	-0,1	1908	0,1	1977	1,5
1840	-0,1	1923	0,1	1976	1,8
1850	-0,1	1931	0,1	1974	2,3
1873	-0,1	1936	0,1	1982	2,6
1846	-0,1	1904	0,1	1980	3,8
1843	-0,1	1947	0,1		

Year-on-year change in long-term nominal yield on Danish mortgage bonds 1853-2012, percentage points (based on annual average data)					
1983	-5,7	1893	-0,1	1913	0,2
1975	-2,9	1910	-0,1	1966	0,2
1985	-2,6	1853	0,0	1869	0,3
1993	-2,0	1868	0,0	1919	0,3
1988	-1,3	1878	0,0	1932	0,3
1989	-1,3	1918	0,0	1981	0,3
1998	-1,1	1929	0,0	1900	0,3
2012	-1,0	1881	0,0	1923	0,3
1986	-1,0	1911	0,0	1907	0,3
2005	-0,9	1874	0,0	1915	0,3
1958	-0,9	1885	0,0	1937	0,3
1996	-0,9	1867	0,0	1999	0,3
2003	-0,9	1870	0,0	2007	0,3
2010	-0,9	1883	0,0	1949	0,4
1933	-0,9	1888	0,0	1858	0,4
1991	-0,8	1889	0,0	1954	0,5
1941	-0,8	1992	0,0	1899	0,5
1997	-0,8	1904	0,0	1935	0,5
2001	-0,7	1906	0,0	1994	0,5
1968	-0,7	1890	0,0	1955	0,5
1922	-0,6	1903	0,0	1948	0,5
2009	-0,5	1912	0,0	1924	0,5
1921	-0,5	1925	0,0	1951	0,6
2002	-0,4	2011	0,0	2000	0,6
1879	-0,4	1963	0,0	2008	0,6
1945	-0,4	1861	0,0	1977	0,6
1942	-0,3	1884	0,0	1979	0,7
1886	-0,3	1892	0,0	1969	0,7
1928	-0,3	1896	0,0	1990	0,7
1934	-0,3	1898	0,0	2006	0,7
1855	-0,3	1856	0,1	1964	0,8
1894	-0,3	1957	0,1	1995	0,8
1930	-0,3	1863	0,1	1960	0,8
1872	-0,2	1882	0,1	1920	0,8
1944	-0,2	1891	0,1	1978	0,9
1972	-0,2	1875	0,1	1982	1,1
1953	-0,2	1914	0,1	1961	1,2
1984	-0,2	1917	0,1	1965	1,2
1880	-0,2	1936	0,1	1973	1,5
1860	-0,2	1939	0,1	1987	1,6
1971	-0,2	1897	0,1	1970	1,6
1871	-0,2	1947	0,1	1980	1,7
1916	-0,2	1967	0,1	1976	2,1
1938	-0,2	1877	0,1	1974	3,2
1859	-0,2	1943	0,1		
1887	-0,2	1952	0,1		
1895	-0,2	1908	0,1		
1902	-0,2	1931	0,2		
2004	-0,1	1854	0,2		
1865	-0,1	1950	0,2		
1901	-0,1	1962	0,2		
1926	-0,1	1956	0,2		
1927	-0,1	1959	0,2		
1873	-0,1	1857	0,2		
1946	-0,1	1866	0,2		
1905	-0,1	1864	0,2		
1862	-0,1	1940	0,2		
1909	-0,1	1876	0,2		

Year-on-year change in bilateral nominal exchange rate vis-á-vis Sweden 1697-2012, per cent (based on annual average data)									
1818	-41,8	1977	-3,1	1965	-0,1	1955	0,0	1843	0,9	1917	6,3
1718	-33,0	1727	-3,1	1928	-0,1	1880	0,0	1729	0,9	1775	6,6
1770	-29,5	1784	-3,0	2007	-0,1	1934	0,0	1707	1,0	1968	7,0
1814	-27,6	1837	-2,8	1755	-0,1	1912	0,0	1833	1,0	1800	7,1
1819	-25,3	1700	-2,8	1878	-0,1	1890	0,0	1972	1,0	1815	8,0
1926	-21,1	1932	-2,7	1881	-0,1	1960	0,0	1991	1,2	1946	8,2
1817	-20,7	1713	-2,5	1836	-0,1	1883	0,1	1734	1,2	1947	8,4
1993	-19,8	1703	-2,5	1785	-0,1	1938	0,1	1967	1,2	1980	8,5
1717	-19,2	1998	-2,5	1954	0,0	1862	0,1	1916	1,2	1924	9,2
1925	-18,2	1732	-2,3	1852	0,0	1879	0,1	1849	1,3	1996	10,0
1758	-15,7	1838	-2,3	1930	0,0	2004	0,1	1856	1,3	1720	11,0
1760	-14,3	1840	-2,0	1956	0,0	1999	0,1	1778	1,4	2010	11,3
1762	-14,2	1823	-2,0	1884	0,0	1882	0,1	1850	1,4	1808	12,1
1757	-12,6	1705	-1,9	1891	0,0	1861	0,1	1730	1,4	1715	13,0
1790	-12,5	1829	-1,9	1885	0,0	1953	0,1	1839	1,5	1923	15,9
1747	-11,9	1848	-1,8	1914	0,0	1962	0,1	1845	1,5	1933	17,6
1983	-10,6	1985	-1,7	1867	0,0	1945	0,1	1792	1,6	1920	18,9
2009	-9,7	1927	-1,7	1895	0,0	1929	0,2	1753	1,7	1766	21,2
1772	-9,3	1807	-1,6	1913	0,0	1957	0,2	1702	1,8	1811	27,6
1978	-9,2	1992	-1,6	1888	0,0	1871	0,2	1988	1,8	1768	30,0
2001	-8,7	1754	-1,6	1789	0,0	1961	0,2	1804	1,9	1719	30,3
1825	-8,4	2005	-1,5	1997	0,0	1931	0,2	1749	1,9	1767	31,9
1765	-8,1	1780	-1,5	1853	0,0	1841	0,3	1826	2,0	1810	32,8
1990	-7,8	1874	-1,5	1876	0,0	1915	0,3	1701	2,1	1809	42,0
1986	-7,7	1764	-1,4	1877	0,0	1976	0,3	1714	2,2	1812	65,6
1793	-7,2	1854	-1,4	1896	0,0	1971	0,3	1939	2,2	1813	280,0
1942	-7,1	1706	-1,2	1897	0,0	1743	0,3	1779	2,6		
1728	-6,3	1994	-1,2	1898	0,0	1763	0,3	1802	2,7		
1773	-6,2	1731	-1,1	1899	0,0	1739	0,3	1698	2,9		
1827	-6,2	1721	-1,0	1900	0,0	1868	0,3	1788	3,0		
1744	-5,9	1922	-1,0	1901	0,0	1869	0,3	1711	3,0		
1716	-5,8	1806	-1,0	1902	0,0	1860	0,3	1835	3,0		
1824	-5,8	1846	-0,9	1903	0,0	1857	0,3	1989	3,2		
1797	-5,8	1855	-0,9	1904	0,0	1736	0,3	1710	3,5		
1831	-5,6	1974	-0,9	1905	0,0	2006	0,4	1786	3,5		
1973	-5,5	1724	-0,8	1906	0,0	1738	0,4	1782	3,5		
1982	-5,5	1803	-0,8	1907	0,0	2003	0,4	1751	3,6		
1748	-5,2	1712	-0,7	1908	0,0	1733	0,4	2012	3,7		
1987	-5,0	1866	-0,7	1909	0,0	1969	0,4	1769	3,7		
1726	-4,8	1740	-0,6	1910	0,0	1776	0,4	1795	4,0		
1832	-4,7	1963	-0,6	1911	0,0	1863	0,5	1828	4,1		
1737	-4,7	1735	-0,6	1936	0,0	1873	0,5	1781	4,3		
1830	-4,6	1799	-0,6	1941	0,0	1851	0,5	1940	4,5		
1742	-4,6	1970	-0,6	1944	0,0	1865	0,6	2000	4,6		
1995	-4,6	1704	-0,6	1948	0,0	1847	0,6	1746	4,6		
1709	-4,4	1777	-0,6	1949	0,0	1979	0,6	1699	4,8		
1771	-4,3	1858	-0,5	1950	0,0	1794	0,7	1801	4,8		
1761	-4,1	1820	-0,5	1951	0,0	1783	0,7	1787	4,8		
1822	-3,8	1943	-0,5	1952	0,0	2002	0,7	1984	5,0		
1791	-3,7	1708	-0,4	1892	0,0	1859	0,7	1723	5,4		
2008	-3,5	1844	-0,4	1935	0,0	1759	0,7	1725	5,6		
1816	-3,5	1959	-0,3	1893	0,0	1796	0,7	1745	5,6		
1774	-3,5	1958	-0,3	1894	0,0	1919	0,8	2011	5,7		
1756	-3,5	1722	-0,3	1886	0,0	1975	0,8	1752	5,7		
1798	-3,4	1966	-0,2	1887	0,0	1918	0,8	1981	5,9		
1921	-3,4	1697	-0,2	1889	0,0	1842	0,8	1750	6,0		
1741	-3,3	1864	-0,2	1870	0,0	1872	0,8	1834	6,2		
1805	-3,2	1875	-0,2	1937	0,0	1964	0,9	1821	6,3		

Year-on-year change in bilateral nominal exchange rate vis-á-vis United Kingdom 1697-2012, per cent (based on annual average data)									
1818	-43,6	1939	-2,7	1835	-0,2	1878	0,1	1849	1,1	1773	6,6
1817	-28,1	1750	-2,7	1871	-0,2	1948	0,1	1712	1,1	2012	6,9
1814	-24,5	1836	-2,5	1963	-0,2	1889	0,1	1914	1,2	1988	7,0
1926	-20,4	1827	-2,5	1958	-0,2	1703	0,1	1841	1,2	1808	7,4
1973	-15,4	1748	-2,5	1966	-0,2	1962	0,1	1744	1,3	1789	7,7
1976	-14,2	1834	-2,4	1876	-0,2	1893	0,1	1873	1,3	1804	7,8
2008	-13,8	1839	-2,4	1930	-0,2	1965	0,1	1982	1,3	2000	8,4
1825	-13,3	1922	-2,3	1857	-0,2	1912	0,1	1717	1,5	1820	8,8
1986	-12,9	1776	-2,3	1769	-0,2	1913	0,2	1759	1,6	1826	9,4
1925	-11,7	1844	-2,3	1894	-0,1	1902	0,2	1821	1,7	1981	9,6
1795	-11,2	1780	-2,2	1904	-0,1	1899	0,2	1725	1,7	1797	9,9
1819	-11,2	1853	-2,2	1866	-0,1	1875	0,2	1999	1,7	1697	14,2
2009	-10,9	1838	-2,2	1880	-0,1	1877	0,2	1767	1,7	1715	14,9
1975	-10,6	2001	-2,0	1864	-0,1	1957	0,2	1701	1,7	1980	17,4
1794	-9,8	1927	-1,9	1891	-0,1	1947	0,2	1782	1,8	1923	17,8
1995	-9,1	1698	-1,8	1964	-0,1	1895	0,2	1843	1,9	1933	18,9
2003	-9,1	1736	-1,7	1892	-0,1	1837	0,2	1700	1,9	1997	19,4
1993	-8,5	1768	-1,6	1882	-0,1	1863	0,3	1745	1,9	1919	20,3
1916	-8,4	1713	-1,5	1897	-0,1	1907	0,3	1711	1,9	1815	22,2
1990	-8,1	1854	-1,5	1915	-0,1	1906	0,3	1861	2,0	1920	22,2
1921	-7,5	1806	-1,5	1896	-0,1	1729	0,3	1739	2,0	1816	22,9
1765	-7,4	1708	-1,5	1994	-0,1	1945	0,3	1785	2,0	1811	36,3
1791	-7,1	2002	-1,3	1956	-0,1	1954	0,3	2004	2,1	1809	45,0
1942	-7,0	1985	-1,2	1883	-0,1	1869	0,3	1796	2,1	1812	67,2
1968	-6,6	2011	-1,1	1960	0,0	1753	0,3	1832	2,1	1810	72,1
1799	-6,5	1721	-1,1	1911	0,0	1845	0,3	1856	2,3	1813	325,5
1917	-6,3	1862	-1,1	1970	0,0	1969	0,3	1803	2,3		
1728	-5,7	1851	-1,0	1910	0,0	1918	0,3	1719	2,3		
1987	-5,7	1840	-1,0	1900	0,0	1881	0,3	1996	2,4		
1992	-5,6	1833	-1,0	1847	0,0	1898	0,3	1991	2,4		
1805	-5,5	1831	-1,0	1733	0,0	1727	0,4	1755	2,5		
1716	-4,9	1786	-0,9	1935	0,0	1760	0,4	1998	2,6		
1737	-4,9	1770	-0,9	1936	0,0	1705	0,4	1842	2,7		
1983	-4,8	1746	-0,9	1937	0,0	2006	0,4	1743	2,8		
1709	-4,7	1846	-0,9	1938	0,0	1860	0,5	1718	2,8		
1940	-4,7	1730	-0,9	1944	0,0	1704	0,5	1932	2,9		
1824	-4,5	1874	-0,8	1949	0,0	1852	0,5	1761	3,2		
1792	-4,4	1706	-0,8	1950	0,0	1941	0,5	1707	3,3		
1775	-4,3	1747	-0,8	1951	0,0	1855	0,5	1722	3,3		
1828	-4,2	1859	-0,7	1952	0,0	1751	0,6	1783	3,5		
1977	-4,1	1870	-0,7	1961	0,0	1731	0,7	2010	3,8		
1822	-4,0	1714	-0,7	1905	0,0	1971	0,7	1788	3,9		
1726	-3,9	2005	-0,6	1867	0,0	1868	0,7	1787	3,9		
1758	-3,8	1967	-0,6	1989	0,0	1735	0,7	1734	4,0		
1974	-3,7	1752	-0,6	1903	0,0	1766	0,8	1710	4,0		
1800	-3,7	1931	-0,6	1953	0,0	1738	0,8	1756	4,0		
1763	-3,6	1742	-0,5	1928	0,0	1865	0,8	1798	4,1		
1781	-3,6	1720	-0,5	1929	0,1	1732	0,9	1807	4,2		
1972	-3,5	1984	-0,5	1887	0,1	1772	0,9	1778	4,3		
1790	-3,4	2007	-0,4	1885	0,1	1830	0,9	1802	4,9		
1724	-3,3	1943	-0,4	1890	0,1	1872	0,9	1784	5,5		
1702	-3,2	1908	-0,4	1909	0,1	1771	0,9	1979	5,6		
1829	-3,1	1901	-0,4	1888	0,1	1978	0,9	1793	5,7		
1699	-3,1	1858	-0,3	1946	0,1	1934	1,0	1924	5,8		
1774	-2,9	1850	-0,3	1749	0,1	1723	1,0	1801	5,8		
1777	-2,8	1955	-0,3	1959	0,1	1740	1,0	1764	5,9		
1757	-2,8	1886	-0,3	1884	0,1	1754	1,0	1762	6,5		
1741	-2,7	1879	-0,3	1823	0,1	1848	1,1	1779	6,5		

Year-on-year change in bilateral nominal exchange rate vis-á-vis United States 1792-2012, per cent (based on annual average data)							
1818	-42,3	1859	-1,2	1946	0,2	1999	4,1
1814	-32,9	1805	-1,0	1964	0,2	1861	4,1
1864	-25,7	1850	-1,0	1887	0,2	1807	4,4
1986	-23,6	1848	-0,9	1910	0,2	1793	4,7
1863	-22,8	2006	-0,8	1961	0,2	2010	4,9
1926	-20,9	1799	-0,7	1903	0,2	1940	5,1
1925	-19,3	1977	-0,7	1840	0,2	2009	5,2
1817	-18,5	1873	-0,7	1833	0,2	1798	5,3
1934	-17,2	1882	-0,6	1929	0,3	1976	5,3
2003	-16,5	1868	-0,6	1945	0,3	1815	5,6
1987	-15,5	1908	-0,5	1857	0,3	1869	5,8
1990	-15,3	1901	-0,5	1947	0,3	1797	6,1
1922	-15,3	1943	-0,4	1896	0,3	1877	6,9
1862	-14,6	1894	-0,4	1890	0,3	1939	7,0
1794	-14,3	1888	-0,4	1893	0,3	1968	7,1
1973	-13,5	1892	-0,3	1881	0,4	1980	7,2
1825	-12,6	1930	-0,3	1918	0,4	1826	7,4
1800	-12,5	1845	-0,3	1937	0,5	1993	7,4
1921	-12,3	1880	-0,3	1969	0,5	1804	7,6
1995	-11,9	1858	-0,3	1879	0,5	1796	7,8
1819	-11,4	1970	-0,3	1883	0,5	2012	8,1
2004	-9,0	1886	-0,2	1906	0,5	1931	8,1
1916	-8,6	1959	-0,2	1855	0,6	1989	8,6
2007	-8,5	1899	-0,2	1898	0,6	1820	8,7
1978	-8,2	1904	-0,2	1841	0,6	1924	9,7
1822	-7,1	1909	-0,2	1974	0,9	1866	9,7
1942	-7,0	1891	-0,2	1852	0,9	1983	9,7
1795	-6,9	1895	-0,1	1933	1,0	1801	9,9
1917	-6,9	1966	-0,1	1847	1,0	1949	12,4
2008	-6,3	1846	-0,1	1803	1,0	1984	13,3
1824	-5,8	1962	-0,1	1967	1,1	1997	13,9
1972	-5,8	1928	-0,1	1938	1,1	1923	14,0
1975	-5,7	1954	-0,1	1872	1,2	1870	14,7
1992	-5,6	1960	-0,1	1860	1,2	1816	15,3
1835	-5,4	1955	0,0	1874	1,3	2000	15,9
2002	-5,2	1884	0,0	1998	1,5	1982	17,0
2011	-4,7	1911	0,0	1914	1,5	1981	26,3
1837	-4,6	1965	0,0	1867	1,6	1950	28,0
1821	-4,6	1958	0,0	1834	1,7	1865	29,5
1979	-4,5	1944	0,0	1843	1,9	1919	29,8
1828	-4,0	1951	0,0	1832	1,9	1932	32,1
1844	-3,6	1952	0,0	1856	1,9	1809	47,2
1839	-3,5	1953	0,0	1849	1,9	1920	48,0
1806	-3,4	1956	0,0	1871	2,3	1811	54,1
1827	-2,8	1957	0,0	1985	2,3	1812	75,1
1792	-2,7	1941	0,0	1802	2,5	1810	82,5
1875	-2,7	1905	0,0	1808	2,6	1813	310,4
1831	-2,4	1963	0,0	1935	2,7		
1853	-2,2	1900	0,1	1876	2,7		
1836	-2,0	1885	0,1	1830	2,8		
1829	-1,9	2005	0,1	1838	2,8		
1994	-1,9	1897	0,1	1915	3,0		
1927	-1,9	1889	0,1	2001	3,0		
1851	-1,7	1912	0,1	1991	3,4		
1988	-1,6	1948	0,1	1996	3,5		
1936	-1,4	1913	0,1	1823	3,8		
1854	-1,3	1902	0,1	1878	4,0		
1971	-1,2	1907	0,2	1842	4,0		

Year-on-year change in bilateral nominal exchange rate vis-á-vis Norway 1818-2012, per cent (based on annual average data)							
1819	-23,4	1837	-0,2	1880	0,0	1833	3,6
1921	-20,0	1931	-0,2	1964	0,0	1997	4,0
1822	-15,1	1960	-0,2	1878	0,0	2012	4,2
1821	-14,8	1877	-0,1	1887	0,0	1982	4,2
1986	-11,1	1875	-0,1	1961	0,1	1840	4,5
1924	-8,1	1963	-0,1	1871	0,1	2005	4,6
1827	-7,5	1966	-0,1	1884	0,1	1974	4,9
1987	-7,3	1859	-0,1	1870	0,1	1835	5,1
1945	-7,2	1864	-0,1	1965	0,1	2002	6,9
1942	-7,0	1914	0,0	1947	0,1	1968	7,2
1978	-6,8	1896	0,0	1926	0,2	1841	7,4
1990	-6,6	1885	0,0	1934	0,2	1923	8,6
1826	-6,6	1930	0,0	1957	0,2	1981	8,8
2009	-6,1	1882	0,0	1929	0,2	2010	9,0
2003	-6,0	1892	0,0	2007	0,2	1834	9,0
1993	-6,0	1900	0,0	1971	0,2	1980	9,8
1828	-5,1	1879	0,0	1915	0,2	1824	12,5
1998	-4,9	1962	0,0	1869	0,3	1825	13,4
2004	-4,4	1894	0,0	1954	0,3	1927	15,0
1932	-4,3	1886	0,0	1831	0,3	1933	17,2
1946	-4,2	1890	0,0	1851	0,3	1823	17,9
1818	-4,2	1907	0,0	1857	0,3		
1838	-3,8	1910	0,0	1849	0,3		
1829	-3,6	1902	0,0	1860	0,4		
1983	-3,2	1898	0,0	1948	0,4		
1985	-3,0	1881	0,0	1969	0,4		
2008	-2,1	1883	0,0	1863	0,5		
1843	-2,0	1935	0,0	1916	0,5		
1820	-2,0	1936	0,0	1865	0,6		
1832	-1,9	1937	0,0	1847	0,6		
1995	-1,8	1938	0,0	1872	0,6		
1854	-1,7	1944	0,0	1972	0,7		
1992	-1,5	1949	0,0	1999	0,7		
1994	-1,4	1950	0,0	1976	0,8		
1874	-1,2	1951	0,0	2001	0,8		
1979	-1,2	1952	0,0	1850	0,8		
1855	-1,2	1953	0,0	1861	0,9		
1844	-1,2	1901	0,0	1873	0,9		
1920	-1,1	1905	0,0	1839	1,0		
1846	-1,0	1908	0,0	1967	1,2		
1862	-0,8	1906	0,0	1984	1,4		
1973	-0,8	1904	0,0	1939	1,4		
1836	-0,6	1903	0,0	1845	1,4		
1848	-0,5	1911	0,0	1830	1,5		
1943	-0,4	1889	0,0	1996	1,6		
1917	-0,4	1909	0,0	1918	1,6		
1922	-0,3	1899	0,0	1853	1,6		
1867	-0,3	1941	0,0	1988	1,7		
1852	-0,3	1893	0,0	1925	1,8		
1958	-0,3	1959	0,0	1977	1,8		
2006	-0,3	1897	0,0	1856	2,0		
1970	-0,3	1913	0,0	1842	2,0		
1955	-0,3	1876	0,0	1928	2,5		
1858	-0,3	1912	0,0	1989	2,5		
1866	-0,2	1888	0,0	2000	2,7		
1868	-0,2	1956	0,0	2011	2,8		
1991	-0,2	1891	0,0	1940	3,1		
1975	-0,2	1895	0,0	1919	3,5		

Year-on-year change in bilateral nominal exchange rate vis-á-vis Switzerland 1853-2012, per cent (based on annual average data)					
1937	-23,4	1897	-0,1	1998	1,6
1926	-20,8	1909	0,0	1972	1,8
1925	-14,5	1888	0,0	1987	1,8
1921	-9,6	1965	0,0	1995	2,0
1936	-8,6	1858	0,0	2012	2,1
1942	-7,9	1944	0,0	1941	2,1
1922	-6,4	1948	0,0	1993	2,2
2007	-4,3	1951	0,0	1979	2,2
1992	-3,7	1952	0,0	2002	2,6
1915	-3,6	1893	0,0	2000	3,0
1916	-3,5	1894	0,0	2001	3,1
2003	-3,5	1912	0,0	1935	3,1
1997	-3,0	1902	0,0	1917	3,6
1989	-2,9	1963	0,0	2008	3,6
1927	-2,1	1991	0,1	1977	3,7
1985	-2,0	1884	0,1	1986	4,3
2006	-1,5	1957	0,1	1973	4,4
2004	-1,4	1890	0,1	1971	4,6
1960	-1,2	1945	0,1	2009	4,9
1853	-1,1	1905	0,1	1939	5,4
1854	-1,1	1907	0,1	1994	6,0
1996	-1,0	1913	0,1	1983	6,0
1859	-0,9	1867	0,2	1980	6,3
1862	-0,7	1964	0,2	1940	6,4
1871	-0,7	1961	0,2	1968	7,1
1870	-0,5	1954	0,2	1974	7,3
1947	-0,4	1882	0,2	1919	7,7
1864	-0,4	1863	0,2	1981	8,0
1879	-0,4	1900	0,2	1923	8,1
1955	-0,3	1930	0,2	1918	8,3
1910	-0,3	1899	0,3	1975	8,7
1874	-0,3	1875	0,3	1931	8,7
1885	-0,3	1906	0,3	1976	8,8
1904	-0,3	1881	0,3	2010	9,4
1876	-0,3	1869	0,3	1924	10,4
1970	-0,3	1988	0,3	1934	11,1
1891	-0,3	1892	0,3	1949	11,4
1990	-0,2	1953	0,3	2011	12,1
1880	-0,2	1929	0,3	1982	13,1
1887	-0,2	1903	0,3	1978	23,5
1855	-0,2	1889	0,3	1933	24,9
1878	-0,2	1943	0,4	1950	26,9
1908	-0,2	1877	0,4	1920	31,0
1898	-0,2	1969	0,5	1932	32,0
1958	-0,1	1999	0,5		
2005	-0,1	1872	0,6		
1883	-0,1	1868	0,7		
1886	-0,1	1959	0,8		
1866	-0,1	1946	0,8		
1962	-0,1	1860	0,9		
1966	-0,1	1938	0,9		
1857	-0,1	1967	1,1		
1896	-0,1	1861	1,2		
1911	-0,1	1865	1,2		
1928	-0,1	1873	1,2		
1901	-0,1	1984	1,3		
1956	-0,1	1856	1,5		
1895	-0,1	1914	1,5		

Annex C: Historical developments in macro-financial risk factors - sorted by size (data on a quarterly frequency)

Quarter-on-quarter nominal growth in total share price index 1915q2-2012q4, per cent (based on end-of-quarter data)						
01-11-2008 -29,5	01-11-2000 -6,3	01-05-1969 -2,4	01-05-1963 0,7	01-11-1935 3,0	01-02-1940 5,6	01-11-1993 11,0
01-08-2002 -21,9	01-02-1974 -6,3	01-11-1916 -2,4	01-08-1948 0,7	01-08-1935 3,1	01-08-1949 5,6	01-08-1932 11,0
01-08-1992 -20,3	01-05-1994 -6,2	01-05-1979 -2,2	01-08-1959 0,8	01-05-1918 3,2	01-08-1956 5,6	01-02-1933 11,0
01-05-1921 -18,8	01-08-1977 -6,2	01-05-1947 -2,2	01-08-1952 0,8	01-08-1934 3,3	01-08-1995 5,7	01-05-1997 11,1
01-08-2001 -18,8	01-02-2001 -6,2	01-11-1920 -2,1	01-02-1963 0,9	01-08-1936 3,3	01-02-2007 5,7	01-11-2011 11,3
01-08-2011 -18,7	01-08-1989 -6,2	01-02-1935 -2,0	01-11-1915 1,0	01-05-2004 3,4	01-08-1927 5,7	01-08-1997 11,6
01-02-1917 -18,1	01-05-2006 -6,1	01-05-1939 -2,0	01-02-1968 1,1	01-08-2007 3,4	01-02-1979 5,9	01-02-1972 11,7
01-08-1998 -17,8	01-11-1919 -5,9	01-11-1946 -2,0	01-11-1945 1,1	01-11-1943 3,4	01-02-2004 5,9	01-02-1962 11,7
01-08-2008 -17,2	01-05-1970 -5,9	01-05-1919 -1,8	01-11-1951 1,1	01-08-1926 3,4	01-08-2010 6,1	01-08-1915 12,0
01-11-1918 -16,6	01-11-1950 -5,8	01-05-1960 -1,7	01-11-1952 1,1	01-05-1987 3,4	01-08-1996 6,1	01-11-1981 12,0
01-05-1920 -15,6	01-05-1957 -5,7	01-05-1962 -1,7	01-11-1953 1,1	01-08-1958 3,4	01-11-2005 6,2	01-02-1981 12,1
01-08-1990 -14,4	01-08-1965 -5,6	01-11-1929 -1,7	01-05-1942 1,1	01-05-1999 3,5	01-05-1933 6,2	01-05-1975 12,2
01-08-1974 -13,3	01-05-1917 -5,5	01-05-2000 -1,5	01-02-1945 1,2	01-11-1958 3,5	01-02-1987 6,3	01-05-1993 12,2
01-08-1931 -13,1	01-08-1979 -5,5	01-05-1990 -1,4	01-11-1969 1,3	01-11-1925 3,5	01-02-1954 6,3	01-02-1973 12,4
01-08-1919 -12,9	01-05-1924 -5,2	01-11-1928 -1,3	01-11-1970 1,4	01-05-1958 3,6	01-02-1950 6,3	01-08-1941 12,7
01-08-1922 -12,4	01-08-1973 -5,2	01-11-1960 -1,3	01-11-1917 1,6	01-02-1978 3,6	01-02-1929 6,4	01-02-1969 13,3
01-11-1973 -12,4	01-05-1967 -5,2	01-08-1924 -1,3	01-02-1930 1,6	01-02-1947 3,6	01-11-2001 6,7	01-11-1998 13,3
01-02-1984 -12,4	01-11-1978 -5,1	01-11-1947 -1,3	01-05-1964 1,6	01-08-1963 3,6	01-02-1960 6,7	01-02-1997 13,6
01-08-1986 -11,8	01-08-1981 -5,0	01-11-1954 -1,2	01-08-1953 1,6	01-02-1951 3,7	01-11-1933 6,8	01-02-1965 13,6
01-11-1987 -11,7	01-11-1957 -5,0	01-11-1924 -1,2	01-05-1956 1,6	01-05-2007 3,7	01-05-1976 6,8	01-02-2010 13,8
01-05-2002 -11,7	01-02-1926 -4,9	01-05-1984 -1,2	01-08-1940 1,6	01-05-1968 3,8	01-05-2001 6,8	01-02-1991 13,9
01-05-1986 -11,3	01-08-1961 -4,8	01-11-1986 -1,1	01-02-1961 1,7	01-02-1936 3,8	01-08-1918 7,0	01-02-2012 14,0
01-05-1940 -10,7	01-11-1990 -4,8	01-05-1935 -1,1	01-11-1934 1,7	01-11-1965 3,8	01-05-1995 7,1	01-02-2000 14,2
01-05-1922 -10,3	01-08-1945 -4,8	01-05-1978 -1,1	01-11-2004 1,7	01-11-2002 3,9	01-02-1966 7,1	01-05-1988 14,3
01-08-1969 -9,9	01-05-1925 -4,7	01-02-1932 -1,1	01-02-1939 1,7	01-11-1968 3,9	01-05-1973 7,2	01-02-1918 14,4
01-08-1944 -9,7	01-05-1952 -4,6	01-05-1977 -1,1	01-05-1950 1,8	01-02-1956 4,1	01-11-1949 7,5	01-05-1983 15,1
01-02-1980 -9,5	01-02-1921 -4,5	01-02-1924 -0,9	01-11-1944 1,9	01-11-1936 4,1	01-02-1958 7,6	01-05-2003 15,1
01-02-1999 -9,5	01-11-1979 -4,4	01-08-1942 -0,9	01-05-1943 1,9	01-02-1996 4,2	01-08-2005 7,7	01-08-2009 15,2
01-11-1948 -9,4	01-05-1945 -4,4	01-05-2008 -0,9	01-08-1968 1,9	01-11-1926 4,3	01-02-1946 7,8	01-02-1916 15,8
01-11-1922 -9,4	01-11-1962 -4,3	01-08-1954 -0,9	01-02-1948 2,0	01-11-1927 4,3	01-02-1990 7,9	01-05-1981 16,0
01-05-1930 -9,4	01-05-1929 -4,2	01-08-1946 -0,8	01-02-1949 2,0	01-11-1967 4,3	01-02-1975 7,9	01-02-1998 16,3
01-08-1984 -9,2	01-05-1965 -4,0	01-11-1984 -0,8	01-02-1952 2,0	01-02-1986 4,4	01-08-1985 8,5	01-05-1989 16,4
01-05-1931 -9,1	01-08-1947 -3,9	01-02-1919 -0,7	01-08-1988 2,0	01-02-1959 4,4	01-11-1985 8,6	01-08-2000 16,5
01-05-1926 -9,1	01-05-1928 -3,8	01-08-1928 -0,6	01-02-2011 2,1	01-02-1957 4,4	01-05-2005 8,6	01-11-1988 16,7
01-05-1949 -9,0	01-11-1976 -3,7	01-11-1931 -0,6	01-02-1970 2,1	01-11-1940 4,4	01-08-2006 8,7	01-11-1999 18,4
01-08-1967 -8,6	01-05-1998 -3,7	01-05-1936 -0,5	01-08-1993 2,2	01-02-1942 4,4	01-08-1980 8,9	01-02-1923 20,0
01-05-1923 -8,5	01-05-1953 -3,7	01-02-1967 -0,5	01-02-1938 2,2	01-05-1966 4,5	01-11-1983 9,1	01-05-1916 20,9
01-05-1932 -8,4	01-11-1964 -3,7	01-11-1971 -0,5	01-08-1950 2,2	01-08-1923 4,6	01-11-1982 9,1	01-05-1972 21,5
01-11-1941 -8,3	01-11-1961 -3,7	01-02-1922 -0,3	01-08-1917 2,2	01-02-1976 4,6	01-02-1994 9,3	01-08-1983 24,4
01-11-1939 -8,2	01-02-1992 -3,7	01-02-1931 -0,2	01-05-1955 2,3	01-02-1953 4,7	01-11-2006 9,4	01-05-2009 27,3
01-08-1925 -8,2	01-08-1991 -3,5	01-05-1934 -0,1	01-02-2002 2,3	01-02-1934 4,8	01-11-2010 9,7	01-08-1916 31,1
01-02-2009 -7,8	01-05-1974 -3,5	01-11-1930 -0,1	01-02-1937 2,3	01-11-1963 4,8	01-02-1993 9,7	01-11-1972 35,8
01-02-2008 -7,8	01-05-1937 -3,5	01-11-1992 0,0	01-08-1972 2,4	01-11-1995 4,8	01-11-1997 9,8	01-02-1983 37,1
01-05-2011 -7,7	01-08-1978 -3,5	01-05-1946 0,1	01-11-1955 2,5	01-05-1991 4,8	01-02-1985 9,8	
01-08-1970 -7,6	01-11-1977 -3,3	01-11-1938 0,1	01-02-1928 2,5	01-08-1955 5,0	01-02-1988 9,9	
01-08-1951 -7,3	01-05-1992 -3,3	01-02-1971 0,1	01-02-1927 2,6	01-02-1944 5,0	01-11-1975 10,0	
01-08-1994 -7,3	01-11-1942 -3,0	01-08-1937 0,2	01-05-1954 2,6	01-02-1925 5,1	01-11-1996 10,3	
01-11-1966 -7,2	01-05-1951 -2,9	01-05-2012 0,3	01-11-2003 2,6	01-05-1915 5,1	01-02-1977 10,3	
01-11-2007 -7,2	01-05-1948 -2,9	01-08-1930 0,3	01-05-2010 2,6	01-08-1999 5,1	01-11-1989 10,4	
01-11-1937 -7,1	01-05-1927 -2,8	01-08-1971 0,4	01-02-1920 2,7	01-02-1955 5,2	01-02-2005 10,5	
01-08-1957 -7,1	01-05-1982 -2,8	01-11-1994 0,4	01-05-1980 2,7	01-05-1996 5,2	01-05-1941 10,5	
01-08-1976 -7,0	01-05-1971 -2,8	01-02-2006 0,4	01-08-1939 2,8	01-02-1941 5,2	01-05-1985 10,6	
01-08-1921 -6,9	01-08-1987 -2,8	01-08-1975 0,4	01-05-1959 2,8	01-11-1956 5,3	01-08-2012 10,6	
01-08-1920 -6,8	01-11-1932 -2,7	01-11-1974 0,4	01-08-1938 2,8	01-11-1959 5,4	01-02-1989 10,6	
01-08-1966 -6,7	01-11-1991 -2,6	01-11-2009 0,5	01-08-1933 2,8	01-02-1982 5,4	01-02-1964 10,8	
01-02-2003 -6,4	01-08-1960 -2,6	01-08-1982 0,5	01-02-1943 2,9	01-08-2004 5,4	01-11-1923 10,8	
01-05-1938 -6,4	01-08-1962 -2,5	01-05-1944 0,5	01-08-1929 2,9	01-08-1943 5,4	01-08-2003 10,8	
01-02-1995 -6,4	01-08-1964 -2,4	01-11-2012 0,6	01-11-1921 3,0	01-05-1961 5,5	01-11-1980 10,9	

Quarter-on-quarter change in long-term nominal yield on Danish government bonds 1839q2-2012q4, percentage points (based on quarterly average data) - part I																				
01-02-1983	-4,4	01-08-1997	-0,3	01-05-1972	-0,2	01-08-1934	-0,1	01-08-1841	0,0	01-05-1868	0,0	01-05-1891	0,0
01-05-1983	-2,8	01-02-1997	-0,3	01-05-2003	-0,2	01-11-1934	-0,1	01-11-1841	0,0	01-08-1868	0,0	01-11-1891	0,0
01-11-1982	-1,9	01-11-1991	-0,3	01-05-1998	-0,2	01-08-1942	-0,1	01-02-1842	0,0	01-02-1869	0,0	01-02-1892	0,0
01-05-1985	-1,7	01-08-1963	-0,3	01-11-2002	-0,2	01-02-1946	-0,1	01-05-1842	0,0	01-02-1870	0,0	01-08-1892	0,0
01-02-1975	-1,6	01-11-1988	-0,3	01-08-1975	-0,2	01-08-1946	-0,1	01-08-1842	0,0	01-05-1870	0,0	01-11-1892	0,0
01-02-1988	-1,2	01-11-1985	-0,3	01-08-1971	-0,2	01-05-1841	-0,1	01-02-1843	0,0	01-08-1870	0,0	01-02-1893	0,0
01-08-1985	-1,2	01-02-1992	-0,3	01-08-1996	-0,1	01-08-1852	-0,1	01-05-1843	0,0	01-11-1870	0,0	01-05-1893	0,0
01-11-1981	-1,2	01-02-2005	-0,3	01-05-1973	-0,1	01-11-1853	-0,1	01-08-1843	0,0	01-02-1871	0,0	01-08-1893	0,0
01-05-1978	-1,1	01-08-1989	-0,3	01-11-1969	-0,1	01-05-1855	-0,1	01-11-1843	0,0	01-02-1872	0,0	01-11-1893	0,0
01-05-1993	-1,0	01-05-1987	-0,3	01-11-2007	-0,1	01-11-1866	-0,1	01-08-1844	0,0	01-05-1872	0,0	01-05-1894	0,0
01-08-1980	-1,0	01-11-1998	-0,3	01-11-1965	-0,1	01-08-1867	-0,1	01-11-1844	0,0	01-11-1872	0,0	01-08-1894	0,0
01-02-1991	-0,9	01-08-1916	-0,3	01-11-2006	-0,1	01-05-1871	-0,1	01-02-1845	0,0	01-02-1873	0,0	01-05-1895	0,0
01-02-1985	-0,9	01-02-1922	-0,3	01-02-1964	-0,1	01-11-1871	-0,1	01-05-1845	0,0	01-02-1874	0,0	01-08-1895	0,0
01-11-1980	-0,9	01-05-1937	-0,3	01-08-1974	-0,1	01-08-1872	-0,1	01-08-1845	0,0	01-05-1874	0,0	01-02-1896	0,0
01-11-1983	-0,7	01-05-1941	-0,3	01-11-1966	-0,1	01-05-1878	-0,1	01-05-1846	0,0	01-08-1874	0,0	01-05-1896	0,0
01-02-1971	-0,7	01-08-1849	-0,3	01-11-1972	-0,1	01-11-1878	-0,1	01-08-1846	0,0	01-11-1874	0,0	01-08-1896	0,0
01-08-1932	-0,7	01-08-1850	-0,3	01-05-2000	-0,1	01-11-1879	-0,1	01-02-1847	0,0	01-02-1875	0,0	01-11-1896	0,0
01-02-1986	-0,7	01-05-1921	-0,3	01-02-1840	-0,1	01-05-1881	-0,1	01-05-1847	0,0	01-11-1875	0,0	01-02-1897	0,0
01-02-1984	-0,7	01-02-1930	-0,3	01-05-1852	-0,1	01-08-1882	-0,1	01-08-1847	0,0	01-02-1876	0,0	01-05-1897	0,0
01-08-1993	-0,7	01-11-1940	-0,3	01-08-1858	-0,1	01-05-1883	-0,1	01-11-1847	0,0	01-08-1876	0,0	01-08-1897	0,0
01-08-2011	-0,6	01-02-1958	-0,3	01-08-1859	-0,1	01-02-1884	-0,1	01-05-1849	0,0	01-11-1876	0,0	01-11-1897	0,0
01-05-1940	-0,6	01-11-1970	-0,3	01-02-1860	-0,1	01-05-1892	-0,1	01-05-1850	0,0	01-02-1877	0,0	01-02-1898	0,0
01-11-2008	-0,6	01-08-1998	-0,3	01-05-1861	-0,1	01-11-1913	-0,1	01-11-1851	0,0	01-08-1877	0,0	01-05-1898	0,0
01-02-1981	-0,6	01-02-1968	-0,3	01-08-1866	-0,1	01-08-1921	-0,1	01-11-1852	0,0	01-02-1878	0,0	01-08-1898	0,0
01-02-1998	-0,6	01-02-2004	-0,3	01-11-1869	-0,1	01-02-1923	-0,1	01-02-1853	0,0	01-08-1878	0,0	01-11-1898	0,0
01-05-1990	-0,6	01-08-2012	-0,3	01-08-1871	-0,1	01-08-1926	-0,1	01-05-1853	0,0	01-02-1879	0,0	01-05-1899	0,0
01-02-1993	-0,5	01-11-2000	-0,3	01-05-1873	-0,1	01-08-1927	-0,1	01-08-1854	0,0	01-08-1879	0,0	01-11-1899	0,0
01-11-1996	-0,5	01-02-1996	-0,2	01-11-1873	-0,1	01-02-1928	-0,1	01-11-1854	0,0	01-02-1880	0,0	01-02-1900	0,0
01-05-1995	-0,5	01-02-2008	-0,2	01-08-1875	-0,1	01-11-1928	-0,1	01-02-1855	0,0	01-08-1880	0,0	01-08-1900	0,0
01-02-2009	-0,5	01-11-1997	-0,2	01-05-1879	-0,1	01-02-1931	-0,1	01-08-1855	0,0	01-11-1880	0,0	01-11-1900	0,0
01-08-1988	-0,5	01-08-2005	-0,2	01-05-1880	-0,1	01-05-1934	-0,1	01-11-1855	0,0	01-02-1881	0,0	01-05-1901	0,0
01-05-1916	-0,5	01-11-1974	-0,2	01-05-1917	-0,1	01-11-1938	-0,1	01-02-1856	0,0	01-11-1881	0,0	01-08-1901	0,0
01-02-1921	-0,5	01-02-2012	-0,2	01-08-1922	-0,1	01-05-1942	-0,1	01-05-1856	0,0	01-02-1882	0,0	01-11-1901	0,0
01-08-1940	-0,5	01-11-1968	-0,2	01-11-1925	-0,1	01-11-1952	-0,1	01-08-1856	0,0	01-05-1882	0,0	01-02-1902	0,0
01-11-1995	-0,5	01-02-1846	-0,2	01-08-1930	-0,1	01-11-1953	-0,1	01-11-1856	0,0	01-02-1883	0,0	01-08-1902	0,0
01-05-2010	-0,5	01-08-1848	-0,2	01-11-1932	-0,1	01-11-1957	-0,1	01-02-1857	0,0	01-08-1883	0,0	01-05-1903	0,0
01-05-1991	-0,5	01-02-1851	-0,2	01-05-1933	-0,1	01-02-2010	-0,1	01-05-1857	0,0	01-05-1884	0,0	01-08-1903	0,0
01-05-1986	-0,5	01-02-1852	-0,2	01-05-1936	-0,1	01-08-2001	-0,1	01-02-1858	0,0	01-08-1884	0,0	01-11-1903	0,0
01-11-2011	-0,5	01-05-1854	-0,2	01-11-1937	-0,1	01-08-2006	-0,1	01-05-1858	0,0	01-11-1884	0,0	01-05-1904	0,0
01-11-1993	-0,5	01-02-1901	-0,2	01-02-1942	-0,1	01-11-2009	-0,1	01-11-1858	0,0	01-02-1885	0,0	01-08-1904	0,0
01-08-2010	-0,5	01-11-1920	-0,2	01-02-1950	-0,1	01-08-1968	-0,1	01-02-1859	0,0	01-05-1885	0,0	01-11-1904	0,0
01-05-1975	-0,5	01-05-1924	-0,2	01-05-1953	-0,1	01-02-1967	0,0	01-05-1860	0,0	01-08-1885	0,0	01-05-1905	0,0
01-11-1984	-0,5	01-08-1925	-0,2	01-08-1958	-0,1	01-02-1994	0,0	01-08-1860	0,0	01-11-1885	0,0	01-11-1905	0,0
01-08-2002	-0,4	01-05-1927	-0,2	01-02-1959	-0,1	01-08-1962	0,0	01-11-1860	0,0	01-05-1886	0,0	01-08-1906	0,0
01-02-2003	-0,4	01-11-1929	-0,2	01-11-1960	-0,1	01-05-1968	0,0	01-08-1861	0,0	01-02-1887	0,0	01-11-1906	0,0
01-11-1963	-0,4	01-11-1933	-0,2	01-11-1842	-0,1	01-11-2012	0,0	01-11-1861	0,0	01-05-1887	0,0	01-02-1907	0,0
01-11-1992	-0,4	01-08-1943	-0,2	01-05-1844	-0,1	01-02-1961	0,0	01-02-1862	0,0	01-08-1887	0,0	01-11-1907	0,0
01-11-2004	-0,4	01-11-1943	-0,2	01-02-1886	-0,1	01-05-2011	0,0	01-05-1862	0,0	01-11-1887	0,0	01-05-1908	0,0
01-11-1971	-0,4	01-02-1944	-0,2	01-08-1888	-0,1	01-08-1990	0,0	01-08-1862	0,0	01-02-1888	0,0	01-08-1908	0,0
01-11-1886	-0,4	01-11-1944	-0,2	01-02-1894	-0,1	01-02-1989	0,0	01-11-1862	0,0	01-05-1888	0,0	01-11-1908	0,0
01-02-1933	-0,4	01-05-1945	-0,2	01-11-1894	-0,1	01-11-1967	0,0	01-02-1863	0,0	01-11-1888	0,0	01-02-1909	0,0
01-05-2012	-0,4	01-08-1945	-0,2	01-02-1895	-0,1	01-05-1839	0,0	01-05-1863	0,0	01-02-1889	0,0	01-05-1909	0,0
01-02-1999	-0,4	01-08-1949	-0,2	01-05-1902	-0,1	01-08-1839	0,0	01-08-1864	0,0	01-05-1889	0,0	01-02-1910	0,0
01-02-2001	-0,4	01-05-1958	-0,2	01-02-1903	-0,1	01-11-1839	0,0	01-02-1865	0,0	01-08-1889	0,0	01-05-1910	0,0
01-02-1978	-0,4	01-11-1864	-0,2	01-02-1905	-0,1	01-05-1840	0,0	01-05-1865	0,0	01-02-1890	0,0	01-08-1910	0,0
01-08-1995	-0,4	01-05-1922	-0,2	01-02-1906	-0,1	01-08-1840	0,0	01-11-1865	0,0	01-05-1890	0,0	01-11-1910	0,0
01-05-2005	-0,4	01-08-1937	-0,2	01-08-1907	-0,1	01-11-1840	0,0	01-05-1867	0,0	01-08-1890	0,0	01-02-1911	0,0
01-11-2001	-0,4	01-02-1955	-0,2	01-08-1909	-0,1	01-02-1841	0,0	01-11-1867	0,0	01-11-1890	0,0	01-05-1911	0,0

Quarter-on-quarter change in long-term nominal yield on Danish government bonds 1839q2-2012q4, percentage points (based on quarterly average data) - part II												
01-11-1911	0,0	01-08-2000	0,0	01-02-1891	0,1	01-11-1914	0,1	01-05-1977	0,3
01-02-1912	0,0	01-08-2008	0,0	01-11-1895	0,1	01-08-1915	0,1	01-08-1979	0,3
01-11-1912	0,0	01-08-2009	0,0	01-02-1899	0,1	01-08-1914	0,2	01-08-1965	0,4
01-02-1914	0,0	01-08-2004	0,1	01-08-1899	0,1	01-02-1915	0,2	01-11-1977	0,4
01-11-1917	0,0	01-08-2007	0,1	01-11-1902	0,1	01-05-1915	0,2	01-05-1961	0,4
01-02-1918	0,0	01-05-1996	0,1	01-02-1904	0,1	01-11-1915	0,2	01-02-2002	0,4
01-05-1918	0,0	01-02-1965	0,1	01-08-1905	0,1	01-05-2002	0,2	01-05-2007	0,4
01-08-1918	0,0	01-05-1960	0,1	01-05-1906	0,1	01-02-2006	0,2	01-02-1960	0,4
01-11-1918	0,0	01-11-1962	0,1	01-05-1907	0,1	01-05-1966	0,2	01-11-1939	0,4
01-02-1919	0,0	01-02-1962	0,1	01-02-1908	0,1	01-11-1990	0,2	01-02-1849	0,4
01-05-1919	0,0	01-02-1963	0,1	01-11-1909	0,1	01-08-1960	0,2	01-05-1920	0,4
01-02-1920	0,0	01-02-1969	0,1	01-05-1912	0,1	01-11-2005	0,2	01-02-1935	0,4
01-11-1921	0,0	01-02-1977	0,1	01-08-1912	0,1	01-08-1966	0,2	01-02-1937	0,4
01-11-1922	0,0	01-08-1991	0,1	01-05-1944	0,1	01-05-2001	0,2	01-05-1989	0,4
01-08-1924	0,0	01-11-1848	0,1	01-02-1945	0,1	01-05-2004	0,2	01-05-2008	0,4
01-02-1925	0,0	01-11-1849	0,1	01-05-1946	0,1	01-11-2010	0,2	01-08-1976	0,4
01-05-1925	0,0	01-02-1850	0,1	01-11-1946	0,1	01-08-2003	0,2	01-08-1967	0,4
01-02-1927	0,0	01-05-1851	0,1	01-02-1948	0,1	01-02-2007	0,2	01-02-1987	0,4
01-11-1927	0,0	01-08-1853	0,1	01-05-1948	0,1	01-02-1929	0,2	01-02-1979	0,5
01-05-1928	0,0	01-08-1857	0,1	01-11-1850	0,1	01-08-1950	0,2	01-02-1972	0,5
01-05-1929	0,0	01-11-1863	0,1	01-08-1851	0,1	01-05-1951	0,2	01-11-1976	0,5
01-05-1930	0,0	01-05-1864	0,1	01-11-1857	0,1	01-11-1954	0,2	01-02-2011	0,5
01-11-1930	0,0	01-08-1865	0,1	01-05-1859	0,1	01-05-1955	0,2	01-05-2006	0,5
01-05-1931	0,0	01-02-1866	0,1	01-11-1859	0,1	01-11-1959	0,2	01-11-1986	0,5
01-02-1932	0,0	01-02-1867	0,1	01-02-1861	0,1	01-05-1848	0,2	01-11-1973	0,5
01-08-1935	0,0	01-02-1868	0,1	01-08-1863	0,1	01-02-1864	0,2	01-08-1961	0,5
01-11-1935	0,0	01-05-1869	0,1	01-05-1866	0,1	01-02-1916	0,2	01-08-1970	0,5
01-08-1936	0,0	01-05-1877	0,1	01-11-1868	0,1	01-02-1917	0,2	01-08-1992	0,6
01-02-1938	0,0	01-11-1877	0,1	01-08-1869	0,1	01-02-1924	0,2	01-11-1979	0,6
01-05-1938	0,0	01-08-1881	0,1	01-08-1873	0,1	01-11-1924	0,2	01-11-1931	0,6
01-08-1938	0,0	01-11-1882	0,1	01-05-1875	0,1	01-08-1931	0,2	01-02-1940	0,6
01-08-1941	0,0	01-11-1883	0,1	01-05-1876	0,1	01-11-1936	0,2	01-05-1969	0,6
01-05-1943	0,0	01-08-1891	0,1	01-05-1913	0,1	01-11-1947	0,2	01-08-1969	0,7
01-11-1945	0,0	01-05-1900	0,1	01-11-1916	0,1	01-11-1950	0,2	01-08-1977	0,7
01-02-1947	0,0	01-08-1911	0,1	01-08-1917	0,1	01-05-1959	0,2	01-05-1981	0,7
01-05-1947	0,0	01-02-1913	0,1	01-11-1923	0,1	01-11-2003	0,2	01-05-1964	0,7
01-08-1947	0,0	01-08-1913	0,1	01-02-1926	0,1	01-08-1982	0,2	01-05-1970	0,7
01-05-1949	0,0	01-05-1914	0,1	01-08-1929	0,1	01-05-1979	0,2	01-11-1989	0,7
01-02-1952	0,0	01-08-1919	0,1	01-05-1932	0,1	01-11-1999	0,2	01-05-1976	0,8
01-05-1952	0,0	01-08-1920	0,1	01-08-1933	0,1	01-02-2000	0,2	01-05-1980	0,8
01-08-1952	0,0	01-08-1923	0,1	01-02-1936	0,1	01-11-1994	0,2	01-02-1990	0,8
01-02-1953	0,0	01-05-1926	0,1	01-05-1939	0,1	01-05-1999	0,2	01-05-1965	0,8
01-08-1953	0,0	01-11-1926	0,1	01-02-1941	0,1	01-11-1975	0,2	01-05-1982	0,8
01-02-1954	0,0	01-08-1928	0,1	01-11-1941	0,1	01-02-1970	0,2	01-08-1999	0,9
01-08-1955	0,0	01-02-1934	0,1	01-11-1949	0,1	01-05-1992	0,3	01-02-1976	0,9
01-11-1955	0,0	01-05-1935	0,1	01-05-1950	0,1	01-02-1848	0,3	01-08-1981	0,9
01-02-1956	0,0	01-02-1939	0,1	01-02-1951	0,1	01-02-1854	0,3	01-08-1973	1,0
01-05-1956	0,0	01-08-1944	0,1	01-08-1951	0,1	01-05-1923	0,3	01-11-1919	1,0
01-02-1957	0,0	01-08-1948	0,1	01-08-1956	0,1	01-08-1939	0,3	01-02-1973	1,0
01-05-1957	0,0	01-02-1949	0,1	01-11-1958	0,1	01-11-1942	0,3	01-08-1994	1,1
01-08-1957	0,0	01-11-1951	0,1	01-08-1959	0,1	01-02-1943	0,3	01-08-1983	1,1
01-08-1972	0,0	01-05-1954	0,1	01-08-1984	0,1	01-11-1948	0,3	01-05-1994	1,2
01-05-1967	0,0	01-11-1956	0,1	01-05-1997	0,1	01-08-1954	0,3	01-05-1984	1,3
01-02-1966	0,0	01-02-1844	0,1	01-02-1995	0,1	01-02-1974	0,3	01-08-1986	1,4
01-08-1987	0,0	01-11-1845	0,1	01-11-1964	0,1	01-08-1964	0,3	01-05-1974	1,7
01-05-1962	0,0	01-11-1846	0,1	01-05-1971	0,1	01-11-1987	0,3	01-02-1982	2,5
01-05-1963	0,0	01-08-1886	0,1	01-11-1961	0,1	01-08-1978	0,3	01-02-1980	3,3
01-05-1988	0,0	01-11-1889	0,1	01-05-2009	0,1	01-11-1978	0,3		

Quarter-on-quarter change in long-term nominal yield on Danish mortgage bonds 1852q2-2012q4, percentage points (based on quarterly average data) - part I																				
01-02-1983	-3,7	01-05-1924	-0,3	01-02-2010	-0,2	01-11-1858	-0,1	01-11-1953	0,0	01-08-1879	0,0	01-08-1903	0,0
01-02-1975	-2,0	01-05-1916	-0,3	01-02-1979	-0,2	01-05-1864	-0,1	01-02-1959	0,0	01-11-1879	0,0	01-11-1903	0,0
01-11-1974	-1,8	01-08-1916	-0,3	01-02-1966	-0,2	01-11-1864	-0,1	01-08-2005	0,0	01-05-1880	0,0	01-08-1904	0,0
01-08-1985	-1,5	01-11-1932	-0,3	01-02-2001	-0,2	01-05-1865	-0,1	01-05-1988	0,0	01-11-1880	0,0	01-02-1905	0,0
01-11-1982	-1,3	01-05-1933	-0,3	01-08-1989	-0,1	01-11-1866	-0,1	01-08-1953	0,0	01-02-1881	0,0	01-05-1905	0,0
01-05-1993	-1,3	01-11-1933	-0,3	01-02-1999	-0,1	01-08-1867	-0,1	01-08-2006	0,0	01-11-1881	0,0	01-08-1905	0,0
01-11-1983	-1,2	01-11-1940	-0,3	01-02-1992	-0,1	01-02-1870	-0,1	01-05-1997	0,0	01-02-1882	0,0	01-11-1905	0,0
01-05-1983	-1,1	01-11-1944	-0,3	01-05-2012	-0,1	01-11-1870	-0,1	01-05-1955	0,0	01-05-1882	0,0	01-02-1906	0,0
01-02-1985	-1,1	01-05-1998	-0,3	01-02-1957	-0,1	01-08-1871	-0,1	01-02-1956	0,0	01-08-1882	0,0	01-05-1906	0,0
01-05-1985	-1,1	01-08-2012	-0,3	01-11-1992	-0,1	01-08-1872	-0,1	01-11-2010	0,0	01-11-1882	0,0	01-08-1906	0,0
01-02-1988	-1,0	01-08-2002	-0,3	01-02-1965	-0,1	01-11-1872	-0,1	01-02-2008	0,0	01-02-1883	0,0	01-05-1907	0,0
01-08-1980	-0,9	01-02-2004	-0,3	01-11-1957	-0,1	01-11-1873	-0,1	01-11-1979	0,0	01-05-1883	0,0	01-08-1907	0,0
01-11-1988	-0,9	01-05-1973	-0,3	01-11-2006	-0,1	01-11-1878	-0,1	01-05-1987	0,0	01-08-1883	0,0	01-02-1908	0,0
01-11-1981	-0,8	01-08-1997	-0,3	01-11-1997	-0,1	01-08-1880	-0,1	01-05-1852	0,0	01-11-1883	0,0	01-08-1908	0,0
01-02-1993	-0,8	01-08-1972	-0,2	01-08-1958	-0,1	01-08-1886	-0,1	01-05-1853	0,0	01-02-1884	0,0	01-11-1908	0,0
01-08-1993	-0,8	01-02-1981	-0,2	01-08-1971	-0,1	01-05-1892	-0,1	01-11-1854	0,0	01-05-1884	0,0	01-02-1909	0,0
01-08-1988	-0,8	01-02-1967	-0,2	01-08-2001	-0,1	01-11-1892	-0,1	01-08-1855	0,0	01-11-1884	0,0	01-05-1910	0,0
01-05-2009	-0,7	01-02-1997	-0,2	01-11-1971	-0,1	01-08-1894	-0,1	01-05-1856	0,0	01-05-1885	0,0	01-02-1911	0,0
01-08-1925	-0,7	01-05-1975	-0,2	01-02-1853	-0,1	01-11-1897	-0,1	01-11-1856	0,0	01-08-1885	0,0	01-05-1911	0,0
01-02-2005	-0,7	01-02-1953	-0,2	01-05-1855	-0,1	01-02-1903	-0,1	01-02-1857	0,0	01-02-1887	0,0	01-08-1911	0,0
01-02-1998	-0,7	01-02-1996	-0,2	01-08-1859	-0,1	01-11-1904	-0,1	01-02-1859	0,0	01-05-1887	0,0	01-11-1911	0,0
01-05-1968	-0,7	01-08-2009	-0,2	01-05-1862	-0,1	01-08-1909	-0,1	01-11-1859	0,0	01-08-1887	0,0	01-02-1912	0,0
01-02-1991	-0,7	01-02-1886	-0,2	01-08-1864	-0,1	01-02-1910	-0,1	01-05-1860	0,0	01-11-1887	0,0	01-05-1912	0,0
01-11-1976	-0,6	01-02-1902	-0,2	01-05-1868	-0,1	01-11-1910	-0,1	01-08-1860	0,0	01-02-1888	0,0	01-08-1912	0,0
01-11-1970	-0,6	01-08-1923	-0,2	01-05-1871	-0,1	01-02-1914	-0,1	01-11-1860	0,0	01-05-1888	0,0	01-05-1913	0,0
01-02-1986	-0,6	01-08-1926	-0,2	01-11-1871	-0,1	01-11-1921	-0,1	01-08-1861	0,0	01-08-1888	0,0	01-11-1913	0,0
01-11-2011	-0,6	01-11-1929	-0,2	01-02-1877	-0,1	01-02-1926	-0,1	01-11-1861	0,0	01-11-1888	0,0	01-05-1914	0,0
01-08-1963	-0,6	01-02-1933	-0,2	01-05-1878	-0,1	01-05-1927	-0,1	01-02-1862	0,0	01-02-1889	0,0	01-02-1915	0,0
01-02-2003	-0,6	01-08-1937	-0,2	01-02-1879	-0,1	01-11-1928	-0,1	01-11-1862	0,0	01-05-1889	0,0	01-05-1915	0,0
01-02-1958	-0,6	01-02-1941	-0,2	01-02-1880	-0,1	01-02-1930	-0,1	01-02-1863	0,0	01-08-1889	0,0	01-02-1916	0,0
01-05-2001	-0,5	01-05-1941	-0,2	01-05-1881	-0,1	01-02-1931	-0,1	01-05-1863	0,0	01-11-1889	0,0	01-05-1917	0,0
01-08-2010	-0,5	01-08-1941	-0,2	01-02-1885	-0,1	01-11-1934	-0,1	01-08-1863	0,0	01-02-1890	0,0	01-08-1917	0,0
01-02-1921	-0,5	01-08-1943	-0,2	01-05-1886	-0,1	01-11-1935	-0,1	01-08-1865	0,0	01-05-1890	0,0	01-11-1917	0,0
01-05-1940	-0,5	01-05-1945	-0,2	01-05-1904	-0,1	01-05-1938	-0,1	01-11-1865	0,0	01-08-1890	0,0	01-02-1918	0,0
01-11-1984	-0,5	01-02-1860	-0,2	01-05-1909	-0,1	01-11-1938	-0,1	01-08-1866	0,0	01-02-1891	0,0	01-05-1919	0,0
01-11-1996	-0,5	01-05-1861	-0,2	01-02-1919	-0,1	01-08-1940	-0,1	01-02-1867	0,0	01-05-1891	0,0	01-08-1920	0,0
01-11-1963	-0,5	01-05-1879	-0,2	01-05-1921	-0,1	01-05-1942	-0,1	01-11-1867	0,0	01-08-1891	0,0	01-11-1920	0,0
01-11-1995	-0,5	01-02-1901	-0,2	01-02-1927	-0,1	01-05-1943	-0,1	01-02-1868	0,0	01-11-1891	0,0	01-08-1921	0,0
01-05-1990	-0,5	01-05-1918	-0,2	01-05-1928	-0,1	01-08-1949	-0,1	01-11-1868	0,0	01-02-1893	0,0	01-05-1922	0,0
01-05-1991	-0,4	01-08-1922	-0,2	01-02-1939	-0,1	01-02-1950	-0,1	01-11-1869	0,0	01-05-1893	0,0	01-11-1922	0,0
01-08-2011	-0,4	01-02-1928	-0,2	01-02-1942	-0,1	01-02-2000	-0,1	01-05-1870	0,0	01-08-1893	0,0	01-02-1925	0,0
01-02-1968	-0,4	01-11-1972	-0,2	01-08-1942	-0,1	01-08-1996	-0,1	01-02-1871	0,0	01-05-1894	0,0	01-11-1927	0,0
01-02-1971	-0,4	01-05-1972	-0,2	01-11-1943	-0,1	01-08-2004	-0,1	01-02-1872	0,0	01-08-1895	0,0	01-08-1928	0,0
01-11-1980	-0,4	01-05-1979	-0,2	01-05-1949	-0,1	01-08-1982	-0,1	01-05-1872	0,0	01-11-1895	0,0	01-05-1929	0,0
01-05-1995	-0,4	01-05-2005	-0,2	01-11-1886	-0,1	01-08-1998	-0,1	01-02-1873	0,0	01-02-1896	0,0	01-08-1929	0,0
01-02-1922	-0,4	01-11-2004	-0,2	01-11-1893	-0,1	01-08-1957	-0,1	01-05-1873	0,0	01-05-1896	0,0	01-05-1930	0,0
01-08-1932	-0,4	01-11-2001	-0,2	01-02-1894	-0,1	01-11-1965	-0,1	01-02-1874	0,0	01-08-1896	0,0	01-08-1930	0,0
01-05-1854	-0,4	01-02-1994	-0,2	01-11-1894	-0,1	01-05-1953	-0,1	01-05-1874	0,0	01-02-1897	0,0	01-11-1930	0,0
01-11-1985	-0,4	01-11-2000	-0,2	01-02-1895	-0,1	01-05-2003	-0,1	01-08-1874	0,0	01-05-1897	0,0	01-02-1932	0,0
01-02-1962	-0,4	01-02-2012	-0,2	01-08-1945	-0,1	01-05-1967	-0,1	01-11-1874	0,0	01-02-1898	0,0	01-02-1934	0,0
01-05-1958	-0,4	01-05-1962	-0,2	01-02-1946	-0,1	01-02-1978	-0,1	01-02-1875	0,0	01-05-1898	0,0	01-05-1934	0,0
01-02-1989	-0,4	01-08-1978	-0,2	01-05-1947	-0,1	01-11-2007	-0,1	01-08-1875	0,0	01-02-1900	0,0	01-08-1934	0,0
01-02-2009	-0,3	01-08-1974	-0,2	01-11-1852	-0,1	01-05-1956	-0,1	01-02-1876	0,0	01-11-1900	0,0	01-08-1935	0,0
01-05-1977	-0,3	01-02-1952	-0,2	01-11-1853	-0,1	01-11-2012	-0,1	01-08-1876	0,0	01-05-1901	0,0	01-02-1936	0,0
01-08-1995	-0,3	01-05-1952	-0,2	01-02-1855	-0,1	01-02-1970	-0,1	01-05-1877	0,0	01-08-1901	0,0	01-08-1936	0,0
01-08-1968	-0,3	01-11-1959	-0,2	01-11-1855	-0,1	01-08-1962	0,0	01-11-1877	0,0	01-11-1901	0,0	01-11-1937	0,0
01-11-2002	-0,3	01-11-1991	-0,2	01-11-1857	-0,1	01-11-2009	0,0	01-02-1878	0,0	01-05-1902	0,0	01-02-1938	0,0
01-08-1858	-0,3	01-05-2010	-0,2	01-05-1858	-0,1	01-02-1951	0,0	01-08-1878	0,0	01-11-1902	0,0	01-08-1938	0,0

Quarter-on-quarter change in long-term nominal yield on Danish mortgage bonds 1852q2-2012q4, percentage points (based on quarterly average data) - part II												
01-11-1942	0,0	01-08-1913	0,1	01-08-1956	0,1	01-05-1980	0,3	01-02-1973	1,4
01-02-1944	0,0	01-11-1915	0,1	01-11-1969	0,1	01-11-1973	0,3	01-08-1986	1,5
01-05-1944	0,0	01-02-1917	0,1	01-05-2004	0,1	01-05-1963	0,3	01-02-1974	1,5
01-02-1945	0,0	01-08-1918	0,1	01-08-2003	0,2	01-11-1961	0,3	01-02-1980	1,8
01-05-1946	0,0	01-02-1923	0,1	01-11-1956	0,2	01-05-2008	0,3	01-05-1974	1,9
01-08-1946	0,0	01-05-1925	0,1	01-08-1967	0,2	01-02-1960	0,3		
01-02-1947	0,0	01-05-1926	0,1	01-11-2005	0,2	01-11-1987	0,3		
01-05-1948	0,0	01-08-1927	0,1	01-08-1951	0,2	01-11-1986	0,3		
01-02-1955	0,0	01-02-1929	0,1	01-11-1954	0,2	01-05-2011	0,4		
01-11-1993	0,0	01-05-1931	0,1	01-11-1958	0,2	01-11-1999	0,4		
01-05-2002	0,0	01-08-1931	0,1	01-02-1961	0,2	01-08-1954	0,4		
01-11-1952	0,0	01-08-1933	0,1	01-11-1966	0,2	01-02-1964	0,4		
01-02-1963	0,0	01-05-1935	0,1	01-02-1861	0,2	01-02-1854	0,4		
01-02-2007	0,0	01-05-1936	0,1	01-11-1863	0,2	01-11-1925	0,4		
01-08-1983	0,0	01-05-1937	0,1	01-11-1914	0,2	01-05-1923	0,4		
01-05-2000	0,0	01-11-1949	0,1	01-11-1950	0,2	01-02-1924	0,4		
01-11-1968	0,0	01-05-1950	0,1	01-08-1853	0,2	01-02-1943	0,4		
01-05-1999	0,0	01-08-1966	0,1	01-08-1857	0,2	01-08-1960	0,4		
01-11-1960	0,1	01-08-1975	0,1	01-05-1859	0,2	01-02-1987	0,4		
01-05-1971	0,1	01-11-1890	0,1	01-02-1864	0,2	01-11-1967	0,4		
01-11-2003	0,1	01-05-1895	0,1	01-05-1866	0,2	01-08-1992	0,4		
01-05-1986	0,1	01-11-1896	0,1	01-11-1876	0,2	01-05-1961	0,4		
01-11-1955	0,1	01-11-1898	0,1	01-08-1881	0,2	01-02-1977	0,4		
01-02-1969	0,1	01-11-1945	0,1	01-02-1899	0,2	01-02-2011	0,4		
01-11-2008	0,1	01-11-1946	0,1	01-02-1907	0,2	01-08-1984	0,5		
01-05-1966	0,1	01-08-1947	0,1	01-08-1914	0,2	01-11-1931	0,5		
01-08-1991	0,1	01-08-1856	0,1	01-11-1918	0,2	01-02-1935	0,5		
01-08-1987	0,1	01-08-1862	0,1	01-11-1947	0,2	01-08-1961	0,5		
01-08-2000	0,1	01-08-1868	0,1	01-02-1948	0,2	01-11-1964	0,5		
01-05-1996	0,1	01-05-1869	0,1	01-02-1949	0,2	01-08-1977	0,5		
01-05-1989	0,1	01-05-1876	0,1	01-08-1952	0,2	01-02-1995	0,6		
01-08-1852	0,1	01-08-1877	0,1	01-08-1955	0,2	01-02-1990	0,6		
01-08-1854	0,1	01-08-1884	0,1	01-02-1984	0,2	01-11-1989	0,6		
01-02-1856	0,1	01-11-1885	0,1	01-05-2007	0,2	01-05-1978	0,6		
01-05-1857	0,1	01-05-1899	0,1	01-02-1972	0,2	01-02-1858	0,6		
01-02-1865	0,1	01-11-1899	0,1	01-05-1992	0,2	01-11-1919	0,6		
01-02-1866	0,1	01-02-1904	0,1	01-11-1951	0,2	01-08-1979	0,6		
01-05-1867	0,1	01-05-1908	0,1	01-08-1959	0,2	01-05-1965	0,6		
01-02-1869	0,1	01-02-1913	0,1	01-05-1951	0,2	01-05-1969	0,6		
01-08-1869	0,1	01-08-1915	0,1	01-05-1959	0,2	01-08-2008	0,6		
01-08-1870	0,1	01-08-1919	0,1	01-08-1964	0,2	01-11-1975	0,7		
01-08-1873	0,1	01-02-1920	0,1	01-05-1982	0,3	01-08-1976	0,8		
01-05-1875	0,1	01-08-1924	0,1	01-05-1954	0,3	01-05-1970	0,8		
01-11-1875	0,1	01-11-1926	0,1	01-05-1960	0,3	01-08-1999	0,8		
01-02-1892	0,1	01-05-1932	0,1	01-08-1965	0,3	01-02-1976	0,8		
01-08-1892	0,1	01-02-1937	0,1	01-11-1977	0,3	01-05-1976	0,8		
01-08-1897	0,1	01-05-1939	0,1	01-11-1916	0,3	01-05-2006	0,8		
01-08-1898	0,1	01-11-1941	0,1	01-05-1920	0,3	01-11-1978	0,8		
01-08-1899	0,1	01-08-1944	0,1	01-11-1923	0,3	01-05-1984	0,9		
01-05-1900	0,1	01-08-1948	0,1	01-11-1924	0,3	01-05-1964	0,9		
01-08-1900	0,1	01-02-1954	0,1	01-11-1936	0,3	01-08-1969	0,9		
01-08-1902	0,1	01-08-1990	0,1	01-08-1939	0,3	01-08-1994	0,9		
01-05-1903	0,1	01-11-1994	0,1	01-11-1939	0,3	01-08-1981	1,1		
01-11-1906	0,1	01-11-1998	0,1	01-02-1940	0,3	01-02-1982	1,1		
01-11-1907	0,1	01-02-2006	0,1	01-11-1948	0,3	01-08-1970	1,1		
01-11-1909	0,1	01-05-1957	0,1	01-08-1950	0,3	01-05-1981	1,1		
01-08-1910	0,1	01-02-2002	0,1	01-11-1990	0,3	01-08-1973	1,1		
01-11-1912	0,1	01-08-2007	0,1	01-11-1962	0,3	01-05-1994	1,1		