

Developments in the credit market – new types of loans and the volume of fixed-rate loans in Norway

Gunnar Almklov and Espen Tørum, economists in the Statistics Department, and Marita Skjæveland, economist in the Financial Markets Department

This article describes developments in various types of loans from financial institutions¹ and the volume of loans with a fixed-rate period, i.e. fixed-rate loans. In recent years, the credit market has evolved rapidly. The number of loan products is increasing and growth in borrowing has been high. Furthermore, borrowers have more choice with regard to loan repayment profiles. For instance, interest-only loans have become more common. At the same time, the number of fixed-rate loans has fallen from the already low level of recent years. In Denmark and Sweden, the number of fixed-rate loans is significantly higher. However, the share of fixed-rate loans has recently been declining in these countries as well.

1 Introduction

In recent years, the credit market in Norway has been marked by high and rising lending growth, strong competition and rapid emergence of new loan products. This article takes a closer look at some characteristics of these developments, with special focus on growth in credit to households and non-financial enterprises (hereafter merely referred to as enterprises). In addition to looking at total growth in credit in these two sectors, their loans will be split up into various subcategories. We will also take a closer look at some new loan products which have been launched in recent years.

The number of fixed-rate loans affects how quickly and how strongly monetary policy changes (interest rate changes) feed through to the credit market and possibly further into the real economy, in other words how efficient the transmission mechanism is. The higher the share of floating-rate loans and the shorter the lock-in period for fixed-rate loans, the faster monetary policy will have an effect. However, fixing the interest rate may cause greater predictability in the public's debt-servicing expenses and may contribute to preventing payment problems for particularly vulnerable groups. Fixed-rate loans may thus have a positive effect on financial stability.

The high credit growth over several years has led to a higher debt burden for households. Corporate debt has also increased markedly over the past year, which implies that interest rate changes may have a larger impact on the public's debt-servicing capacity in the future. The number of fixed-rate loans may be of importance in the assessment of this picture. We will therefore provide an overview of the scope of and developments in fixed-rate loans for households and enterprises. This overview is partly based on Norges Bank's new statistics on *loans by fixed-rate period*, which go back to the first quarter of 2004.

The fixed-rate loan statistics and the other background information for this article have given us a broader basis for estimating the extent to which the public hedges

against interest rate increases through fixed-rate loans. However, we do not have sufficient information to comment on the degree to which the public as a whole is

Definition of sectors

In the statistics, participants are grouped by socio-economic function based on the UN's System of National Accounts (SNA) 1993. In this article we have focused on these main groups: financial enterprises, non-financial enterprises, local government and households. These groups may be defined as follows:

Financial corporations channel credit from participants with accumulated capital to participants with borrowing requirements. This main sector consists of banks, state lending institutions, mortgage companies, finance companies, insurance companies and pension funds, mutual funds, financial holding companies, financial auxiliaries, and development and investment companies etc. Measured by lending, banks are decidedly the largest group.

Non-financial enterprises produce goods and services. This main sector is often split into public and private non-financial enterprises, but that distinction has not been made in this article.

Households consume goods and services and consist of wage-earners, social security recipients etc. In addition, the self-employed, unincorporated enterprises, limited partnerships and housing cooperatives are also included in the household sector.

Local government consists of municipalities and counties.

The public is defined here as municipalities, non-financial enterprises and households and is the most commonly used sector aggregate in relation to credit indicators.

¹ See definition in Box

protected against interest rate increases. For example, we are lacking information on the scope of interest rate swaps and other derivatives. This is particularly important when estimating the extent of hedging by enterprises and municipalities.

2 The credit market

2.1 Credit to the public²

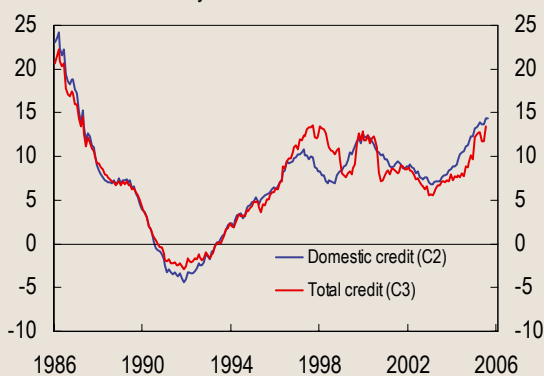
In the description of credit developments we will be looking at developments in the credit indicators C2 and C3. C2 measures credit from domestic lenders. C3 also includes credit from foreign lenders and is thus a measure of total credit to the public. The credit indicators describe developments in the public's gross debt and are well suited as indicators of developments in the real economy.³ In addition, the credit indicators

provide information about the various sectors' financial position and are thus also important contributors to the analysis of financial stability. An advantageous feature of the credit indicators is that they have good real-time properties,⁴ which means that there are few revisions, especially in C2.

Table 1 shows that the level of domestic credit to the public has more than doubled since 1995. Chart 1 shows that growth rose sharply in the 1990s, after having been low for a period, and has remained high since the end of that decade.

Credit from domestic lenders currently represents about 83 per cent of total credit to the public. The statistics do not include detailed information about credit from foreign lenders distributed by borrowing sectors. It is therefore not possible to quantify precisely the size of total borrowing in various sectors. Still, we know that it is primarily enterprises that raise loans from foreign lenders, while households and municipalities only take up loans abroad to a very limited degree. According to *Household financial accounts*, gross domestic loan debt accounts for more than 90 per cent of total household debt.⁵

Chart 1 Domestic credit (C2) and total credit (C3) to the public. 12-month growth. Per cent. Monthly figures. December 1986 – July 2006



Source: Norges Bank

2.2 Domestic lenders

Banks⁶ are the largest lenders and account for as much as 70 per cent of domestic credit to the public (see Table 1). The banks' share has increased by a good 14 percentage points over the past ten years.

State lending institutions currently include the Norwegian State Housing Bank (Husbanken), the Norwegian State Educational Loan Fund (NSELF) and Innovation Norway. These are specialised lending institutions that provide loans and financing for a limited range of purposes. In the past, such institutions were important public instruments for the allotment of subsidised credit, but their significance in this respect has been reduced in recent years. State lending institutions currently account for 8 per cent of domestic credit to the public. In 1990, by comparison, there were ten state lending institutions which together accounted for 18 per cent of domestic credit.

Mortgage companies extend loans secured on dwellings, commercial buildings and the like. They primarily finance their lending activities through funding or by issuing bonds, notes and short-term paper. Finance companies include various types of lending companies. They specialise in loan products such as factoring, leasing, overdraft facilities and credit card loans, mainly financed by funding.

The group insurance companies includes non-life and life insurance companies, private and municipal pension funds, as well as the contractual early retirement scheme (AFP) and the Pension Scheme Under Collective Wage Agreements (FTP). Insurance companies were previously major credit providers, but their share of domestic credit to the public was only one per

Table 1. Domestic lenders' share of domestic credit (C2). Per cent

| | 1990 | 1995 | 2000 | 2005 | 2006* |
|----------------------------|------------|------------|------------|------------|------------|
| <i>Domestic lenders</i> | | | | | |
| Banks | 48.9 | 55.7 | 64.2 | 67.9 | 69.7 |
| State lending institutions | 17.5 | 18.7 | 11.5 | 8.4 | 7.9 |
| Mortgage companies | 15.5 | 6.6 | 9.9 | 10.5 | 10.0 |
| Finance companies | 2.2 | 3.3 | 4.6 | 4.9 | 4.3 |
| Insurance companies | 7.5 | 6.6 | 2.0 | 1.0 | 1.0 |
| Bonds and short-term paper | 6.5 | 8.4 | 7.3 | 6.7 | 6.6 |
| Other credit | 1.9 | 0.7 | 0.5 | 0.6 | 0.5 |
| Total | 100 | 100 | 100 | 100 | 100 |
| <i>Memorandum:</i> | | | | | |
| C2 – NOK billion | 931 | 936 | 1 461 | 2 272 | 2 451 |
| C3 – NOK billion | 1 063 | 1 081 | 1 841 | 2 751 | 2 928 |

* Figures for 2006 were calculated at end-July. The C3 figure for 2006 was calculated at end-June.

² See definition of the sector called "public" in Box

³ See Gerdrup, Hammersland and Naug (2006).

⁴ See Bø, Rødstadsand and Tørum (2003).

⁵ Household financial accounts for the first quarter of 2006 (Norges Bank).

⁶ Banks include savings banks, Norwegian and foreign-owned commercial banks as well as branches of foreign banks.

cent in July 2006. The bulk of these loans are extended to households and municipalities.

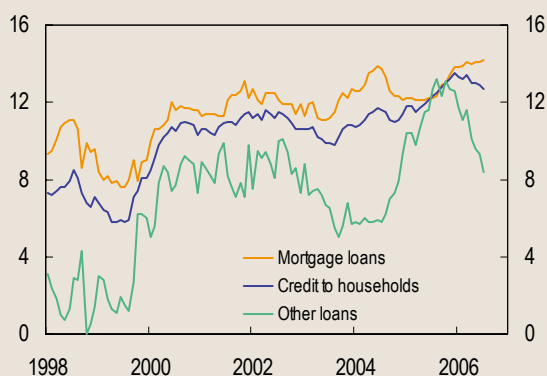
2.3 Credit to households and enterprises

Households

Households constitute the largest borrowing sector. Household credit accounts for more than 60 per cent of total domestic credit to the public (see Table 2). This implies that developments in household finances are important for financial undertakings' credit risk⁷. Historically, losses on household loans have been moderate compared with corporate loans. Weaker financial developments in the household sector and a deterioration of their financial position may still have a considerable impact on the economy in general. An increase in the interest rate will force households to use a larger share of their disposable income on debt servicing, and may also lead to increased saving. Due to these factors, there will be a reduction in household consumption. Lower demand from the household sector may affect enterprises' earnings and debt-servicing capacity. Subsequently, this may affect output and employment.

Household debt growth has been high in the last five-year period. Since mid-2000, annual growth in household credit has generally been more than 10 per cent (see Chart 2). Household loans may generally be divided into two groups: mortgage loans and other loans. A mortgage loan means that the loan is secured on the borrower's dwelling (or leisure property). Over the past ten years the share of mortgage loans has risen by approximately 10 percentage points to 77 per cent of total credit to households (see Table 3). The strong growth in mortgage loans is partly related to the sharp rise in house prices. The growth is partly a result of an increase in collateral values due to the strong rise in house prices coupled with the introduction of new types

Chart 2 Credit to households. 12-month growth. Per cent. Monthly figures. January 1998 – July 2006



Source: Norges Bank

Table 2. Various borrowing sectors' share of domestic credit (C2). Per cent

| Borrowing sector | 1990 | 1995 | 2000 | 2005 | 2006* |
|------------------|------|------|-------|-------|-------|
| Households | 54.5 | 59.6 | 55.4 | 61.4 | 60.5 |
| Enterprises | 38.2 | 31.9 | 36.6 | 31.0 | 32.2 |
| Local government | 7.3 | 8.5 | 8.0 | 7.7 | 7.3 |
| Total | 100 | 100 | 100 | 100 | 100 |
| C2 – NOK billion | 931 | 936 | 1 461 | 2 272 | 2 451 |

* Figures for 2006 were calculated at end-July.

Table 3. Credit to households. Mortgage loans and other loans. In billions of NOK

| Types of lending | 1996 | 2000 | 2005 | 2006* |
|---|------|------|-------|-------|
| Mortgage loans in C2 | 400 | 578 | 1 056 | 1 140 |
| Other loans in C2 | 188 | 231 | 339 | 343 |
| Mortgage loans as share of domestic credit to households (Per cent) | 68.1 | 71.4 | 75.7 | 76.8 |

* Figures for 2006 were calculated at end-July.

of loans designed to facilitate mortgage equity withdrawal (see section on new loan products below).

“Other loans” include various types of unsecured loans or loans secured on objects other than dwellings (and leisure property), such as cars, boats or financial instruments. “Other repayment loans” (excluding mortgage loans) is the largest subcategory of other loans. At the end of July 2006 the holdings of these loans amounted to more than NOK 280 billion. Student loans account for approximately 30 per cent of other repayment loans. Holdings of credit card loans⁸ have more than doubled in the course of the past ten years and now amount to just under NOK 40 billion.

In July 2006, banks accounted for more than 80 per cent of credit to households from domestic lenders.⁹ State lending institutions followed as the second largest lender with a share of 11 per cent, while mortgage companies and finance companies together accounted for approximately 6 per cent.

Enterprises

Total gross corporate debt can be divided into loans from domestic and foreign lenders. The credit indicator for domestic credit (C2) is specified by borrowing sector, while credit from foreign sources has not been broken down by sector in the statistics. This means that it is impossible to determine precisely the size of total gross corporate debt (C3). In order to estimate total gross corporate debt, we have assumed, for simplification, that all credit from foreign sources is raised by the corporate sector.

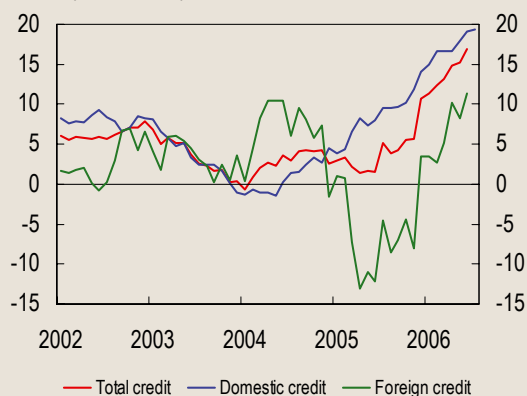
Enterprises' credit from domestic lenders amounted to approximately NOK 790 billion at end-July 2006.

⁷ Credit risk is the risk of losses due to the inability of a counterparty to meet his obligations, for example when a borrower does not pay interest and/or instalments.

⁸ The term credit card loan is used as a collective term for bank overdraft facilities, user credit and operating credit. In addition to credit card loans, this category includes overdraft facilities, drawing rights schemes, borrowing rights on wage and deposit accounts, and overdrafts of deposit accounts without drawing rights.

⁹ According to the credit indicator (C2) for July 2006.

Chart 3 Credit to mainland non-financial enterprises. 12-month growth. Per cent. Monthly figures. January 2002 – July 2006



Source: Norges Bank

This represented about 32 per cent of domestic credit to the public. Corporate debt fluctuates widely as developments in most industries to a large extent follow business cycles. As with the household sector, banks constitute the largest domestic lender to enterprises. Bank lending accounted for approximately 64 per cent of domestic credit to enterprises, while mortgage companies and finance companies accounted for 11 and 7 per cent respectively. The rest of the funding was accounted for by the short-term paper and bond markets.

Credit to the public from foreign lenders amounted to approximately NOK 497 billion at the end of June 2006. By assuming that the enterprise sector receives all the credit from foreign lenders, total credit to enterprises amounted to about NOK 1 278 billion in the same month. Credit to mainland enterprises from domestic and foreign lenders amounted to NOK 729 billion and NOK 274 billion respectively. The petroleum and shipping industry accounted for around 7 per cent¹⁰ of domestic credit to enterprises and approximately 45 per cent of credit from foreign lenders. Chart 3 shows developments in mainland enterprises' total credit distributed by domestic and foreign lenders.

2.4 New loan products for the household sector

In recent years, a number of new loan products have been introduced, making the household loan market more flexible. Credit lines secured on dwellings¹¹ is a new loan product that facilitates mortgage equity withdrawal. The number of banks that offer these loans has increased over the past year. These loans are flexible in the sense that the entire loan may either be disbursed as a lump sum or as monthly payments. The repayment schedule is largely determined by the individual customer, who only pays interest on the credit amount

drawn. Credit lines secured on dwellings amounted to nearly NOK 63 billion at the end of July 2006. The available data for these loans extend back to December 2005. During the first seven months of 2006, holdings of credit lines secured on dwellings have increased by 85 per cent. The increased flexibility provided by this product has probably contributed to maintaining high growth in household credit in recent months.

During the past year, a number of banks have also started offering mortgage loans with interest rate ceilings. These are floating-rate loans, but borrowers are protected against interest rates above a certain level. Some banks offer such loans to first-time home buyers without extra costs. Traditionally, this is a group of borrowers who are particularly vulnerable to interest rate increases. At present, there are no statistics on the volume of this product in Norway.

Another pronounced trend in the credit market is that debt-financing for the purchase of financial instruments has increased in recent years. This applies, for instance, to loans for the purchase of equities or so-called structured products, including equity-linked deposits and equity-linked bonds. For structured products, returns are linked to changes in the value of portfolios or indices that consist of financial or non-financial assets. A large number of structured products are guaranteed savings products. This means that investors are guaranteed the return of the entire amount or a predetermined portion of the nominal investment at maturity.

When banks provide loans for the purchase of financial instruments, those instruments are normally used as collateral. An annual survey, based on a selection of banks and conducted by Kredittilsynet (the Financial Supervisory Authority of Norway), shows that the selected banks' loans collateralised by financial instruments amounted to NOK 47 billion in the third quarter of 2005.¹² This was an increase of NOK 16 billion in the course of one year. A large portion of these loans were extended to the household sector. Norges Bank's financial statistics show that the share of investments in structured products that are financed by loans has increased from 57 per cent to 67 per cent during the first seven months of 2006. The statistics show that households account for over 90 per cent of investments and borrowing in connection with these products. In recent years, some market participants have also started offering loans collateralised by equities and other financial instruments, but statistics on this area are so far limited. Loans for the purchase of financial instruments seem to a large extent to be associated with favourable tax conditions.

Moreover, household borrowing terms have steadily become more flexible with regard to repayment profiles. Kredittilsynet's mortgage loan survey in autumn 2005 showed that interest-only loans are more common than registered in previous surveys. In 2005,

¹⁰ Gross lending at the end of July 2006.

¹¹ This type of loan is known under various names in Norway, for instance flexiloans.

¹² Surveys conducted by Kredittilsynet include financial instruments other than the structured products that are covered by Norges Bank's statistics. This applies to loans for the purchase of equities and units in securities funds, among other things.

one of every eight new loans covered by this survey featured an interest-only period. The average interest-only period is four to five years. In addition, the average maturity for new approved mortgage loans has increased by approximately two years during the past four years. This increased flexibility makes it easier to service higher loans than previously.

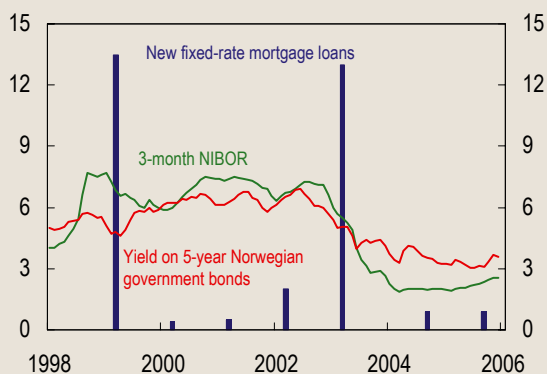
3 The volume of fixed-rate loans

When raising a loan, the borrower may choose between various types of interest rate terms (see the box in this section for an overview). As mentioned in the introduction, the share of loans with fixed interest rates will influence how quickly and how strongly monetary policy changes (interest rate changes) influence household and corporate behaviour and the real economy. Moreover, the volume of fixed-rate loans will have a bearing on borrowers' vulnerability to interest rate changes and thereby also affect financial enterprises' credit risk. This section takes a closer look at reasons behind the low number of fixed-rate loans in Norway, and provides some general observations on this topic.

3.1 Relevant factors when choosing between fixed and floating interest rates

Kredittilsynet's survey of mortgage loans for 1999 and 2003 showed that the share of fixed-rate loans was relatively high compared with other years. These two years were characterised by a decline in short-term interest rates, while long-term rates were lower than short rates (see Chart 4). Using this as a background, we have

Chart 4 New fixed-rate mortgage loans as a percentage of new mortgage loans¹ to households, 3-month NIBOR² and yield on 5-year Norwegian government bonds. Per cent.



¹ Information from a survey by Kredittilsynet in which a selected group of Norwegian banks have each categorised their first 100 loans to households from a certain date.

² Norwegian Interbank Offered Rate.

Sources: Kredittilsynet (The Financial Supervisory Authority of Norway) and Norges Bank

listed some factors which may contribute to explaining the low number of fixed-rate loans in Norway.

- Fixed-rate loans provide predictability with regard to debt-servicing expenses and may thus be perceived as an insurance against higher interest rates. Many borrowers probably believe that their financial position is solid enough and therefore do not need the predictability provided by fixed-interest rates.
- When interest rates declined in 2002–2004, many borrowers chose to fix their interest rates. These bor-

Various types of interest rate terms on loans from financial institutions

When raising a loan, borrowers may choose between various types of interest rate terms.

Floating interest rate means that the interest rate terms may be altered continuously, but if the borrower is a consumer he must be given at least six weeks written notice before the change enters into force, cf. the Financial Contracts Act §50 no 3. Changes in interest rates in the money market, changes in margins, changes in collateral value and the parties' bargaining power may contribute to changes in the interest rate on the loan.

Variable interest rate means that the interest rate is tied to a formal decision rule, which usually means that the interest rate is adjusted in pace with a benchmark rate in the money market, for instance "NIBOR plus 1 per cent". Loans with variable interest rates usually have a fixed margin agreed for the life of the loan.

Fixed interest rate means that the parties have agreed on a certain interest rate for a period ahead. In Norway, a typical fixed-rate mortgage has previously had a fixed interest rate for 3 or 5 years, while recently it has also become more common with a 10-year fixed interest rate. A fixed-rate agreement is usually binding both for borrower and lender during the agreed period and in the event of an early repayment of the loan, the borrower must normally pay a penalty if the market rate at the time of repayment is lower than the fixed interest rate in the loan agreement, or receive a discount if it is higher (cf. the Financial Contracts Act §54 no.1).

Interest rate ceiling is a combination of fixed and floating interest rates. This means that the interest rate is floating, but only up to a predetermined maximum level. This product is relatively new to the consumer market, while professional operators have had the possibility of constructing such ceilings for quite some time by using derivatives.

rowers did not benefit from the subsequent interest rate cuts and may therefore have reservations about fixing their interest rates again. This experience may also have made other borrowers reluctant to take up fixed-rate loans.

- Borrowers probably place more emphasis on lower regular payments now than on secure regular payments in the future. If the floating interest rate is lower than the fixed rate, then more people will choose floating-rate loans.
- The range of long fixed-rate agreements offered is very limited. Fixed-rate agreements would provide more security, if borrowers were given the option of a longer fixed-rate period, such as in Denmark.
- Norway does not have the same tradition of fixed-rate loans as, for instance, Denmark and Sweden.
- Fixed-rate loans reduce borrowers' flexibility. If the interest rate level is lower than in the fixed-rate agreement, borrowers will have to pay an early redemption penalty. This may contribute to making borrowers reluctant to take up fixed-rate loans. However, when fixed-rate loans are repaid early, borrowers will be granted a discount if the interest rate is higher at the time of repayment.

3.2 Profitability assessments in relation to the choice between fixed and floating interest rates

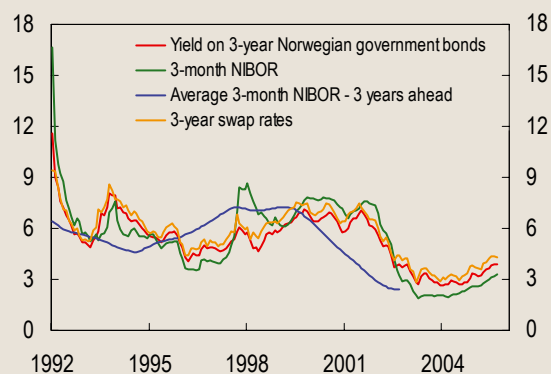
When choosing between fixed and floating interest rates, participants must base their decisions on expectations concerning the future interest rate path. This applies both when lenders are pricing their fixed-rate products and when borrowers are considering these offers. Whether fixing the interest rate has been profitable or not for the borrower is only possible to assess in retrospect. In order to make a complete empirical evaluation of the profitability of fixing the interest rate, it is essential to have data series that extend back over a lengthy period and preferably over several business cycles in order to identify systematic differences. We do not have such long data series, but we have still made some simple calculations.

When pricing loans, lenders base their prices on their funding rate¹³, adding a margin¹⁴ (premium) to cover administrative costs, risk premium etc. This applies to both fixed-rate and floating-rate loans. In order to finance fixed-interest rate lending, lenders may, for instance, issue a bond with the same maturity. In this case, a possible funding rate may be the bond yield¹⁵. It is common for lenders to finance fixed-rate loans by borrowing at a short-term NIBOR rate and then enter into an interest rate swap agreement in which they receive the NIBOR rate and pay a fixed swap rate. This implies that swap rates with

maturities of 3 years, 5 years and 10 years, respectively, may be used as funding rates when calculating prices for fixed-rate loans with similar maturities. Similarly, a three-month NIBOR funding rate may be used when calculating the price for floating-rate loans. The differences between swap rates and average three-month NIBOR¹⁶ may therefore shed light on price differences between fixed-rate and floating-rate loans respectively.

Charts 5 and 6 show a comparison of three and five year swap rates, respectively, against average future three-month NIBOR for the same time periods. The charts indicate that it has varied over time as to whether fixed- or floating-rate loans have been more profitable. For some periods, swap rates (yellow curves) have been higher than average money market rates (blue curves)

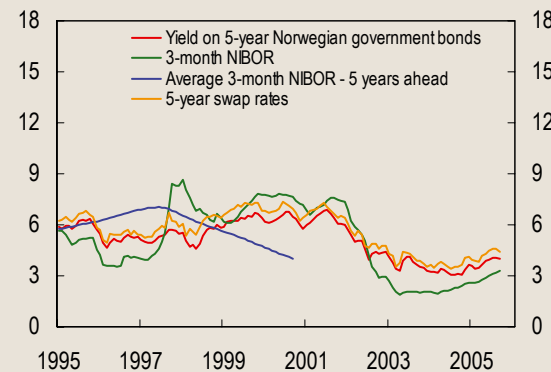
Chart 5 3-month NIBOR¹, 3-month NIBOR - average 3 years ahead, yield on 3-year Norwegian government bond and 3-year swap rates. Per cent. Monthly figures. December 1992 – July 2006



¹ Norwegian Interbank Offered Rate.

Source: Norges Bank

Chart 6 3-month NIBOR¹, average 3-month NIBOR – 5 years ahead, yield on 5-year Norwegian government bonds and 5-year swap rates. Effective interest rates. Per cent. Monthly figures. December 1995 – July 2006



¹ Norwegian Interbank Offered Rate.

Source: Norges Bank

¹³ i.e. an interest rate which relates directly to funding costs.

¹⁴ This margin is defined as the lending rate minus funding costs.

¹⁵ Among the lending sectors, banks' bond yields will naturally be close, although slightly above government bond yields with similar maturities in accordance with various risk premiums.

¹⁶ Calculated as an average of monthly observations for three-month NIBOR, 3 years, 5 years and 10 years ahead in time, respectively.

Table 4. Credit from domestic sources (C2) distributed by floating-rate loans, fixed-rate loans and bonds etc. Per second quarter 2006. Per cent

| | Floating-rate | Fixed-rate less than 1 year | Fixed-rate over 1 year | Bonds and short-term paper |
|------------------|---------------|-----------------------------|------------------------|----------------------------|
| Total C2 | 79.5 | 6.2 | 8.5 | 5.9 |
| Households | 86.4 | 3.9 | 9.6 | – |
| Enterprises | 72.4 | 8.0 | 4.7 | 14.9 |
| Local government | 53.1 | 16.2 | 14.1 | 16.6 |

during the period, thus making it profitable to have floating interest rates. In other periods, the opposite has been the case.

Since banks also add a margin (premium) to their funding rates, a comparison of swap rates with the average of three-month NIBOR rates is inadequate as a retrospective evaluation of whether fixed-rate loan prices have been lower than floating-rate loan prices in a given period. Data collected from the six largest banks in Norway may indicate that the margins on new fixed-rate loans have been somewhat higher than the margins on new loans with floating interest rates in the past three years. A possible explanation for this deviation may be that there is stronger competition for floating-rate loans than for fixed-rate loans. It may also be the case that banks' risk assessments associated with various types of loans imply that the margin on fixed-rate loans should be higher than on floating-rate loans. However, our assessments of variations in margins between fixed-rate and floating-rate loans are only based on some rough average calculations.

3.3 The volume of fixed-rate loans

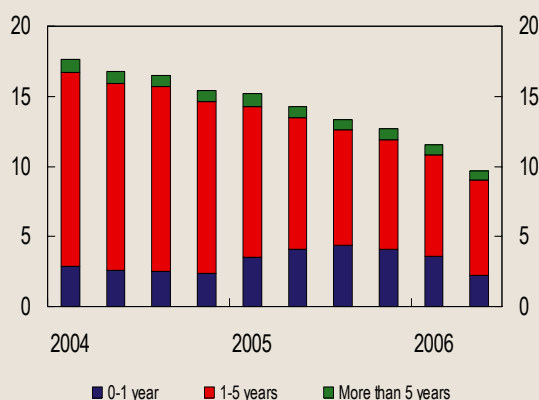
As of the first quarter of 2004, specifications for identifying the volume of fixed-rate loans distributed by borrowing sectors were introduced in the *Official accounts reporting for banks and financial undertakings* (ORBOF). On the basis of these statistics, we have calculated the share of domestic credit (C2) that consists of fixed-rate and floating-rate loans respectively.¹⁷ The estimates show that approximately 80 per cent of domestic credit is extended at floating interest rates (see Table 4). Nearly 90 per cent of domestic credit to households is extended at floating interest rates. Floating-rate loans account for approximately 70 per cent of domestic credit to enterprises, given that short-term paper and bonds are defined as fixed-rate loans and derivatives are excluded.

Households

Previous analyses of households have shown that the share of fixed-rate loans has been low in Norway.¹⁸ This is confirmed by fixed-rate statistics, which indicate that the share of fixed-rate loans to households has been declining throughout the period for which we have statistics (see Chart 7). The majority of fixed-rate loans to households have a remaining fixed-rate period of between one and five years. Developments indicate that a large share of households do not renew fixed-rate agreements when they mature and that the number of new fixed-rate agreements is low.

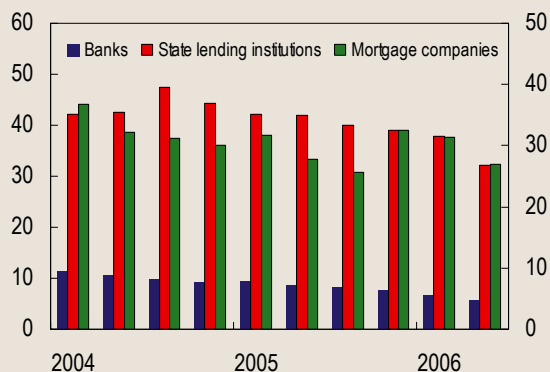
Distributed by lender sector, statistics show that fixed-rate loans as a share of total lending to households, is particularly low for banks (see Chart 8). In addition, this share has been declining in the past two years. The share of loans with a remaining fixed-rate period of more than one year has been particularly low. However, banks are responsible for a large share of gross fixed-rate lending

Chart 7 Fixed-rate loans to households as a percentage of total loans from banks, mortgage companies and state lending institutions, by fixed-rate period. Quarterly figures. 2004 Q1 – 2006 Q2



Source: Norges Bank

Chart 8 Fixed-rate loans to households as a percentage of total loans by lender sector. Quarterly figures. 2004 Q1 – 2006 Q2



Source: Norges Bank

¹⁷ The share of fixed-rate loans from sources which are included in the indicator of domestic credit to the public (C2), and which are not covered by the fixed-rate statistics, has been estimated.

¹⁸ See the Norwegian Savings Banks Association 2003.

to households. At end-June 2006, mortgage companies had outstanding loans to households amounting to NOK 44 billion, of which 32 per cent were fixed-rate loans. 17 per cent of loans from mortgage companies to households were loans with a remaining fixed-rate period of more than one year.

At the end of the second quarter of 2006, fixed-rate loans accounted for 32 per cent of total gross lending from state lending institutions to households. Most of these had remaining fixed-rate periods of more than one year. The share of fixed-rate loans from state lending institutions has been declining during the period for which we have statistics. The Norwegian State Housing Bank (Husbanken) and the Norwegian State Educational Loan Fund (NSELF) account for the bulk of household loans from state lending institutions. Both these institutions offer fixed-rate loans for three and five years.¹⁹ Just over 60 per cent of loans from Husbanken to households are fixed-rate loans (see Chart 9). Following an increase in the share of fixed-rate loans in Husbanken in the course of 2004, this share has remained relatively stable over the past year. Of the interest-bearing loans to households from NSELF, just over 25 per cent are extended at a fixed interest rate, mainly with remaining fixed-rate periods of between one and five years.

The procedures for interest rate setting in Husbanken and NSELF differ somewhat from those of private lenders. The lending rate in state lending institutions is largely set on the basis of the interest rate on Treasury bills and government bonds with a lag of 3 to 6 months.

Compared with Denmark and Sweden, the share of fixed-rate loans to Norwegian households is very low (see Chart 10). In Denmark, mortgage companies are the most important providers of household loans secured on dwellings. Mortgage companies rely on

funding in the bond market, which is more developed in Denmark than in Norway. Among other things, there is a larger market for bonds with long maturities. A precondition for enabling financial enterprises to offer fixed-rate loans with moderate margins and favourable terms is that there are smoothly functioning markets for long-term fixed-rate borrowing or derivatives which may reduce the interest rate risk.

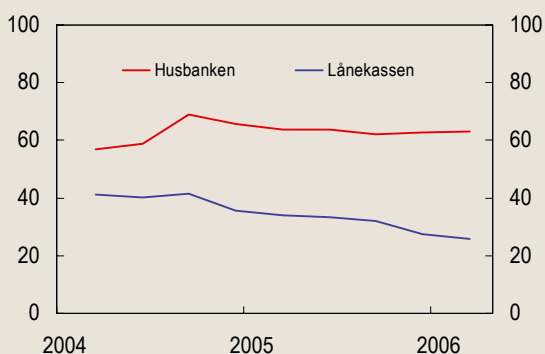
The well-developed bond market in Denmark makes it possible to transfer risk related to early repayment to investors. Thus, it is possible to borrow long-term (up to 30 years) at a fixed interest rate for the entire life of the loan, including a possibility of early repayment without an early redemption penalty (cf. Frankel et al. (2004)). Still, borrowers have to pay for this option through a higher margin on the fixed interest rate.

The share of fixed-rate loans has been declining both in Sweden and Denmark in the last two years. In Sweden, the share of new floating-rate loans has generally been in the interval 50–60 per cent in the year to June 2006. In Denmark, the option of taking up variable-rate loans was introduced for the first time in 1997. The sinking share of fixed-rate loans may therefore be related to increased availability of floating-rate mortgages. Mortgage loans with interest rate ceilings are popular products in Denmark, and these are recorded in the statistics as loans with variable interest rates as long as the interest rate does not exceed the agreed interest rate ceiling. This product has now also been introduced in Norway (see Section 2.4).

Enterprises

Enterprises fund their activities partly by borrowing from financial undertakings and partly by issuing bonds, notes and short-term paper. Whether bonds,

Chart 9 Husbanken and Lånekassen^{1,2}. Fixed-rate loans to households as a percentage of total loans. Quarterly figures. 2004 Q1 – 2006 Q1

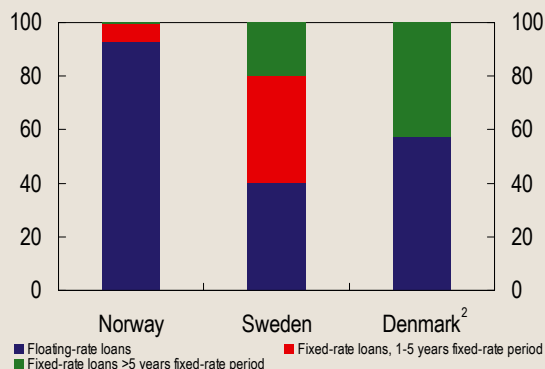


¹ Husbanken and Lånekassen are classified as state lending institutions and they are both atypical given their high degree of fixed-rate loans as a percentage of total loans.

² Lånekassen: Fixed-rate loans as percentage of total interest-bearing loans (excluding non-performing loans).

Sources: Husbanken (The Norwegian State Housing Bank) and Lånekassen (Norwegian State Educational Loan Fund)

Chart 10 Fixed-rate and floating-rate loans as a percentage of households' total mortgage loans in Sweden, Denmark and Norway¹. June 2006



¹ For Norway: fixed-rate and floating-rate loans as a percentage of total loans to households.

² For Denmark: Initial fixed-rate period is 20-30 years (the entire term of the loan). The distribution of fixed-rate loans by term to maturity is not known. Therefore, all fixed-rate loans are classified as loans with more than 5 years fixed-rate period.

Sources: Sveriges Riksbank, Danmarks Nationalbank and Norges Bank

¹⁹ As from October 2006, Husbanken also offers fixed-rate loans with a 10 year fixed-rate period.

notes and short-term paper should be classified as fixed-rate loans is debatable, but the majority of these loans are usually extended with a fixed coupon rate. Some bonds and short-term paper have various types of floating interest rates. There are no statistics that enable us to distribute bonds and short-term paper between fixed or floating interest rates. Thus, in Table 4, bonds and short-term paper have been presented as a separate group. When it comes to analysing the extent of fixed-rate loans among enterprises, a complicating element is that these are often professional participants that may use the swap and derivatives market in order to change their interest rate profile. This means, for instance, that an enterprise which issues bonds or raises fixed-rate loans from a lender can alter the interest rate stream on the loan through the derivatives market, so that, in reality, the enterprise is paying a floating interest rate without this being reflected in the statistics.

Chart 11 shows that just under 15 per cent of corporate loans from financial undertakings had fixed interest rates and only 4 per cent had a fixed rate for more than one year. These shares have been reduced during the period for which we have statistics.

Chart 12 shows that just over half of mortgage companies' loans to enterprises are fixed-rate loans. In the second quarter of 2006, this amounted to approximately NOK 40 billion. Around NOK 13 billion of these loans had remaining fixed-rate periods of one year or more. In the same period, banks had outstanding fixed-rate loans worth NOK 41 billion, but this only accounted for 8 per cent of banks' total lending to enterprises. By comparison, state lending institutions' fixed-rate loans to enterprises only amounted to approximately NOK 900 million at the same time. This represented around 12 per cent of their total lending to enterprises.

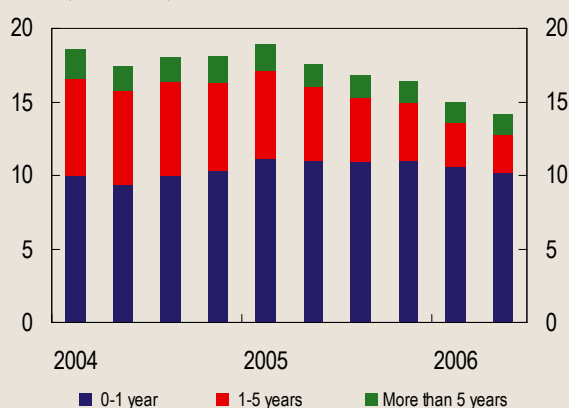
4 Summary

In this article we have given a brief description of the credit market in Norway and taken a closer look at various types of loans. We have also looked at the volume of fixed-rate loans from financial corporations. The new statistics on lending distributed by fixed-rate periods to a large extent confirm the picture indicated by previous surveys, which conclude that Norwegian households mainly raise floating-rate loans and thus, few households hedge against interest rate increases. In addition, these statistics have provided a better basis than previously for analysing the fixed-rate structure among borrowers. Kredittilsynet's survey of mortgage loans shows that the share of new fixed-rate mortgages is very low. The survey also indicates that a larger share of households appear to choose fixed-rate loans when short-term interest rates are declining and long-term rates are lower than short-term rates. Fixed-rate loans are much more common in Sweden and Denmark, although in recent years the trend has been falling in these countries as well.

Assessed on the basis of the fixed-rate statistics, monetary policy will have a considerable impact on the Norwegian public. Households account for the bulk of the public's gross loan debt, and they have only to a limited extent fixed their interest rates. However, within the corporate (and local government) sector, there are a number of large participants that have the opportunity and expertise to hedge against interest rate increases in ways other than by fixed-rate loans, for instance by using derivatives etc. This makes it somewhat more difficult to assess to what extent these sectors, and thereby the public as a whole, have hedged against interest rate increases.

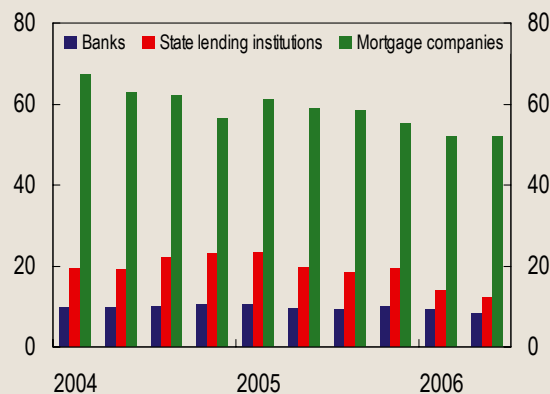
The credit market is marked by the frequent launching of new loan products and by increasing availability.

Chart 11 Non-financial enterprises. Fixed-rate loans as a percentage of total loans from banks, mortgage companies and state lending institutions, by fixed-rate period. Quarterly figures. 2004 Q1 – 2006 Q2



Source: Norges Bank

Chart 12 Non-financial enterprises. Fixed-rate loans as a percentage of total loans by lender sector. Quarterly figures. 2004 Q1 – 2006 Q2



Source: Norges Bank

In particular, credit lines secured on dwellings have shown a substantial increase recently. The sharp rise in house prices in recent years has contributed to increased housing wealth (increased collateral values), enabling many to increase their borrowing using their existing homes as collateral. Our analyses indicate that many have made use of this opportunity.

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