# **%NB**<sup>⊗</sup> NORGES BANK



# Economic Bulletin



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Editor: *Svein Gjedrem* Editorial Officers: *Helle Snellingen and Janet Aagenæs* Coordinator: *Beverley Wahl* 

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Communications regarding the *Economic Bulletin* should be addressed to: Norges Bank Information Department P.O. Box 1179 Sentrum N-0107 Oslo, Norway Telex: 56 71 369 nbank n Fax: +47 22 31 64 10 Telephone: +47 22 31 60 00 E-mail: central.bank@norges-bank.no Internet: http://www.norges-bank.no

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# Economic Bulletin Volume LXXIII

### CONTENTS

Banks' costs and income in the payment system in 2001 Olaf Gresvik and Grete Øwre	125
The effects of trade liberalisation on clothing prices and on overall consumer price inflation Kristine Høegh-Omdal and Bjørn Roger Wilhelmsen	134
Statistical annex	141
Economic Bulletin contents 2002	Ι

12

# Banks' costs and income in the payment system in 2001

by Olaf Gresvik, economist, and Grete Øwre, assistant director, both in the Financial Infrastructure and Payment Systems Department

According to national accounts data, the financial sector showed a strong increase in productivity in the 1990s. This article explains that this was largely due to changes in the payment system. A larger number of payment transactions are now produced at lower cost than previously, while direct pricing of payment services enables customers to select services that meet their needs at the lowest possible cost. Both factors have had a positive impact on the efficiency of the payment system.

#### Introduction

Section 1 of the Norges Bank Act requires Norges Bank to "promote an efficient payment system domestically as well as vis-à-vis other countries." An efficient payment system ensures that payment transactions are executed quickly, safely and at a reasonable price. As part of the work to promote an efficient payment system, Norges Bank conducted - in 1988 and 1994, and most recently for 2001- surveys of banks' costs in connection with producing payment services. The purpose of the surveys has been to identify cost structure, cost developments over time and the relationship between payment system prices and costs.

Prices should reflect the value of the product or service and the cost of producing it. Prices that reflect the relative costs of producing various payment services provide an incentive to users to select services that meet their needs at the lowest possible cost. This promotes correct use of resources and increases the efficiency of the payment system.

Competition is an important means of achieving efficient resource use. One of the key assumptions for competition is readily available and correct information to market participants on the price, quantity and quality of products and/or services. Cost surveys, along with annual statistics of prices and transaction volumes in the payment system, which Norges Bank publishes in its Annual Report on Payment Systems, provides information that would otherwise be difficult to obtain.

This article presents results of Norges Bank's cost survey for 2001. The results together with statistics of prices and transactions in the payment system shed light on banks' costs and income in this area in 2001. Developments have been on the right track since 1994. In constant prices, banks' total costs have fallen since 1994, while transaction volumes have doubled. The share of costs covered by direct pricing has risen from 39 to 70 per cent, while customers now pay on average less per transaction than they did in 1994.

Seven banks participated in the survey, and we wish to express our appreciation for the valuable information which they provided. Without their assistance, inputs and detailed knowledge, this survey would not have been possible.<sup>1)</sup>

### Background

Norges Bank conducted surveys of banks' costs related to the payment system in 1988 and 1994. The contribution margin method was employed in both surveys which covered the three largest banks and Postgiro/Postbanken. The articles describing the survey results (see Fidjestøl, Flatraaker and Vogt (1989a,b) and Robinson and Flatraaker (1995a,b)) also focused on unit costs incurred in providing the various services and bank's cost coverage by means of direct pricing. Norges Bank encouraged banks to increase their cost coverage by means of direct pricing so as to reduce hidden pricing via float<sup>2</sup>) and the interest margin. Another important reason for recommending service pricing was that prices that reflect production costs would induce customers to opt for services that meet their needs at the lowest possible cost, thereby promoting an efficient payment system.

While there have only been minor changes in personyears and number of bank branches since 1994, major structural changes have taken place in the period. The most significant change in connection with the payment system was the merger of DnB with Postbanken which resulted in the relocation of all Postgiro production to the Banks' Payment and Central Clearing House (BBS). The banks sold Novit and Fellesdata to EDB Business Partner which merged the two organisations. Banks' range of products has also changed, and the introduction of banking services via the Internet is the most important of these changes. This has also led to the establishment of niche banks which focus in particular on payment services or savings. Increased use of electronic payment services and mergers between producers of payment services may have provided the basis for better exploitation of economies of scale in production.

Chart 1 shows that the use of various payment services has changed substantially since the first survey. In 1988, on-the-spot payments were usually made by cheque or in cash, whereas in 2001, payment cards were the norm. Bills are mainly paid by giro and the number of giro payments has increased slightly for the period as a whole. Today, about half of all cashless transactions are executed by means of cards.

<sup>&</sup>lt;sup>1)</sup> Special thanks go to financial controller Børre Grovan at Andebu Sparebank. His work on his Master of Management degree at the Norwegian School of Management gave us valuable insight into how ABC analysis can be applied by banks (see Grovan and Richardsen (2000) and Folkestadås and Grovan (1999)).

<sup>&</sup>lt;sup>2)</sup> Float income for banks is generated when funds are transferred from one account to another, for example via the giro system, and do not carry interest for either the payer or payee for a period. The Financial Contracts Act, which went into force on 1 July 2000, eliminates float income in the Norwegian payment system.



### Services covered by the survey

The survey charts banks' costs for providing payment services and it covers all main categories of payment services used by retail and business customers. It includes electronic and paper-based services as well as cash deposits and withdrawals. The survey does not cover foreign payments, purchase/sale of travel currency or interbank payments. The following services are included in the survey:

- Electronic payment instruments:
  - Giros paid by telephone
  - Giros paid via PC/Internet
  - Direct debits
  - Direct remittances and company terminal giros (with or without notification, with customer identification number (CID))
  - EFTPOS electronic funds transfer at point of sale
- Paper-based instruments:
  - Cheques
  - Mail giros
  - Giros paid at the counter (in cash or charged to account)
  - Direct remittances and company terminal giros with a payment order
  - Manual transfer between accounts
- Cash services:
  - ATM withdrawals
  - Deposits and withdrawals at branches
  - Night safe

The range of services covered in the 1994 survey was expanded to include night safe services and giro payment by telephone, which was introduced late in 1994, and giro payment via the Internet, which was introduced in 1996. The seven banks participating in the survey have a combined market share of 38 per cent in terms of number of transactions. Market share is highest for direct debit, direct remittance and company terminal giro. Thus, there is little uncertainty regarding our analysis of these services. There is greater uncertainty about the results for services such as giro payments charged to an account at the counter, giros paid by telephone or via PC/Internet, cheques and withdrawals from other banks' ATMs, since the surveyed banks' market share for these services is smaller.

Small businesses often use the same payment services as retail customers. However, banks have developed special payment solutions for businesses that have a large number of incoming and outgoing payments. These services are based on dedicated terminals that are used exclusively for banking services and communicate with banks using a closed network. The Banks' Pavment and Central Clearing House has developed a solution called direct remittance, while individual banks or groups of banks have developed solutions that go by the collective term company terminal giro. When estimating costs for these payment solutions we have merged the services provided by the Banks' Payment and Central Clearing House with the banks' own solutions. This contrasts with the earlier surveys which only covered services provided by the Banks' Payment and Central Clearing House.

The survey maps banks' costs in connection with payment services. Payment service costs to the customer comprise the direct prices charged by the bank. In addition, there are time and travel costs when the customer visits a branch, and costs for communication and various devices used when paying via telephone and the Internet. Time and travel costs etc. are all part of society's total costs for payment services, but they are not included in the survey. Payees' costs in connection with invoicing etc. are not included either.

### ABC analysis

Since banks' official accounts do not provide detailed information about the costs of providing payment services, the surveys are mainly based on banks' in-house data. This year's survey is based on official accounts, but adapts and compares information with in-house calculations and data from sources other than the accounts.

The cost survey for 2001 was based on a method known as activity-based costing analysis (ABC analysis)<sup>3</sup>). The surveys conducted by Norges Bank in 1988 and 1994 were based on a method known as contribution margin analysis. Apart from some figures, the most

<sup>3)</sup> This method will be described in more detail in a Working Paper from Norges Bank that will be published early in 2003.

important results are nevertheless comparable.

ABC analysis was developed some 10 to 15 years ago (see Cooper and Kaplan (1999), Bjørnenak (1993) and Sti (1993)). This method is particularly suited in cases where support functions' share of total costs is high and has risen over time and/or where there is wide variation in products, customers and production processes. Banks' production of payment services is characterised both by costly support functions and wide variation in how the services are produced, and hence also variations in costs between services.

*Direct* costs are costs related directly to each individual service provided by the bank and vary with the volume delivered, i.e. the number of transactions. In the 2001 survey, the banks' direct costs include deliveries from the Banks' Payment and Central Clearing House and EDB Fellesdata, purchase of notes and coins, purchase of card services and interbank charges. Development costs related to individual services are also defined as direct costs. The share of direct costs varies widely from service to service.

*Indirect* costs include all personnel costs, costs of operating the banks' computer systems, costs of premises, machines, fixtures and office supplies, marketing and so forth. In the 1994 survey, all branch costs were treated as direct (or variable) costs. In 2001, all personnel costs, including those arising at branches, are treated as indirect costs. As a result, indirect costs account for a higher share of total costs related to manual services than was the case in the 1994 survey. The indirect cost share in 2001 is about 60 per cent compared with 18 per cent in 1994.

Indirect costs are allocated among the individual services by means of an allocation key. In the contribution margin analysis, the company's departments are often employed as the allocation key for indirect costs. In ABC analysis, the allocation key is based on the company's activities. A company's or bank's activities are actions and processes that are necessary to provide a product or service (for example recording vouchers, receiving cash, opening an account and revising customer agreements). The indirect costs are allocated from activities to payment services via cost drivers. Three types of cost drivers are defined in our cost survey: transactions, accounts (agreements related to the product or service) and products (i.e. whether or not the bank provides the service). Costs incurred by each activity are allocated among the services based on the number of times the activity is performed. The difference between contribution margin analysis and ABC analysis is shown in Chart 2.

Accounts for 2001 provided the basis for the compiled data. Invoices and transaction data from the Banks' Payment and Central Clearing House, EDB Fellesdata and Norges Bank were an important part of the basis for calculation. Depreciation of buildings and installations

#### Chart 2: ABC analysis and contribution margin analysis



was replaced by opportunity costs based on market price. Development costs for new services and further development of old services were estimated and distributed in relation to expected "economic lifetime". The costs of tied-up capital (loss of interest) on cash holdings were calculated on the basis of Norges Bank's interest rate statistics and banks' cash holdings. Time studies were used to estimate how much time banks spent on various activities, and indirect costs were distributed in relation to the results of these studies.

Since information about surplus capacity for the various services is unavailable, historical transaction figures are assumed to reflect full capacity utilisation. This increases the calculated unit costs for services with surplus capacity. Development costs are partly estimates based on depreciation, partly actual figures. Therefore, actual figures diviate somewhat from our figures. We have defined 25 activities related to payment services and in addition one activity related to all other operations in banks. This may have led to an excessive focus on activities related to payment services, so that indirect costs may be overestimated.

#### Results from the survey

#### Productivity

Financial services are among the sectors of the Norwegian economy that have made the strongest contribution to the rise in productivity in the past decade. Revised national accounts figures show that productivity for mainland Norway (non-oil sector) rose by 2.4 per cent annually in the 1990s. Financial services represent one of the sectors showing strongest productivity growth, with an annual average of 6.3 per cent in the same period. Payment services - an important part of financial services - have contributed to the increase in productivity (see Lindquist (2002)). The rise in payment system productivity is attributable both to more rational production methods and increased use of the most costeffective services. Due to their pricing policy for payment services, banks have brought about a shift in demand from paper-based to electronic services (see Humphrey, Kim and Vale (2001)).

Table 1 contains key figures that shed light on productivity developments. Since 1994, the number of pay-

Table 1: Key figures			
	1988	1994	2001
No. of bank branches	2 200ª	1 600	1 390
No. of bank staff (FTEs)	33 000ª	23 200	23 400
No. of payment transactions (millions) Total costs (NOK billions,	381 <sup>b</sup> 5.4 <sup>b</sup>	481 6.3	968° 5.9
2001 NOK)			
Average unit cost per transaction (2001 NOK) - including cash withdrawals			
at the counter <sup>d</sup> - excluding cash withdrawals	n. a.	13.00	5.80
at the counter	14.10	10.70	5.30

<sup>a</sup> Approximate figure <sup>b</sup> Excl. withdrawals at the counter

<sup>C</sup> All transactions, ind. estimates for services not included in national statistics, viz. deposits, night safe and transfers

Source: Norges Bank

ment transactions has doubled to 968 million. The total number of employees in the banking industry has risen by 1 per cent, while the number of branches has been reduced by 13 per cent. The number of post offices was halved from 1994 to 2001.

Total costs connected with producing payment services fell from NOK 6.3 billion in 1994 to NOK 5.9 billion in 2001 (in 2001 NOK), a fall of 6 per cent. The reason for this is a shift from manual services to electronic payment instruments such as payment cards and electronic giros. The average cost of producing payment transactions<sup>4</sup>) was halved in the period. At the same time, prices charged to customers have increasingly reflected the actual costs of producing the services. As from 1 July 2000, banks were no longer allowed to earn float income.

The gain achieved by increased productivity accrues both to customers and the banks. Chart 3 shows that the customers paid less for the average transaction (weighted by actual use) in 2001 than in 1994 (in terms of 2001 NOK) both when the basis is all services and when we base the calculation on giro services only. Since 1994, more transactions have been produced by banks for less (measured in NOK). This frees up resources for other purposes, which can benefit society.

#### Total costs and income

Chart 4 breaks down banks' total costs related to the various payment services. Giro services generate 52 per cent of total costs, i.e. almost NOK 3 billion spread over a little more than 400 million transactions. Giro services at the counter (in cash and charged to account) are very expensive with costs of NOK 725 million (12 per cent of total costs) spread over 50 million transactions. Traditional, paper-based services are relatively more expensive to produce than modern, electronic services. Paper-based services including cheques account for 27 per cent of the costs, but only 14 per cent of the transactions. Electronic giro services account for 29 per cent of costs and 28 per cent of the transactions. EFTPOS card transactions and ATM withdrawals account for 34 per cent of the costs and 54 per cent of the transactions, while cash withdrawals at the counter account for 10 per cent of costs and 4 per cent of transactions.

Banks' income from direct prices (fees) has risen even though the average price per transaction has not



<sup>4)</sup> The average cost is calculated by weighting unit costs for the individual services by national transaction figures. The figures in Table 1 are adjusted by the general consumer price index and express costs in 2001 NOK.

d Excl. night safe

increased since 1994. Chart 5 shows how the banks absorbed the costs of payment services in 1988, 1994 and 2001. Prices charged directly to customers covered 70 per cent of the banks' costs<sup>5</sup>) related to payment services in 2001. There was a marked increase from 1988 to 1994. Cost coverage via float is not taken into account in 2001 because of the statutory amendments<sup>6</sup>). The residual item "other" refers to costs that are not covered by prices.



Chart 5: Banks' coverage of payment

The present survey focuses on the costs of supplying the various payment services. The results show that the income generated by prices fails to cover all of banks' costs connected with payment services. Banks frequently base their pricing decisions on customer profitability analyses. This combined with the fact that banks are dependent on providing payment services in order to be a satisfactory alternative for customers will influence the pricing of payment services.

#### Unit costs

Unit costs for various services vary widely. The night safe is the most expensive per unit, followed by terminal giro sent as a money order. Most paper-based services cost more than electronic equivalents. The exception is the mail giro, which costs less than the PC/Internet giro. EFTPOS transactions are produced at the lowest unit cost. Table 2 shows unit costs, transaction figures, total costs and prices for the services.

#### Giro

Paper-based giro services require far more resources than electronic services. Table 2 shows that the cost per

#### Payment services and life cycle

The costs of producing payment services vary to some extent with how long the services have been in use. The life cycle is illustrated in Chart 6, which is based on Porter (1987). Services in the introduction phase are marked by intensive marketing and high depreciation costs associated with developing such services. There is often surplus capacity and production has yet to find its final form. Competitors are few and risk is high. The PC/Internet giro is currently passing from this phase to the next one, i.e. the growth phase. In the growth phase there are more users, and fewer alternative solutions from which to choose. This is exemplified by the debate about electronic invoicing, which was introduced with two sets of standards in 2001. The growth phase is characterised by considerable marketing and the first signs of mass production. At times, capacity may be insufficient to accommodate the growth generated. Most payment service providers establish their operations in this phase, as was the case for PC/Internet giros and EFTPOS. Prices fall compared with the introduction phase. The most popular payment services were in the saturation phase in 2001. In this phase, services are used by "everyone", and use/technology is familiar. The quality of the service is stable and satisfactory and some services may have surplus capacity. Marketing is less intensive. Providers compete on price, and there is greater focus on costs. Services may remain in this phase for some time. The final phase is decline when the number of transactions falls, customers know the product well and demand good service, advertising costs are low and there is little risk of new competitors. Prices may rise towards the end of this phase due to diseconomies of small scale operation. Cheques may be a good example of this. Ultimately, fewer providers will offer the service.

#### Chart 6: Location of payment services in the life cycle



<sup>5)</sup> The income figure refers to accounting data from all banks and branches in Norway, taken from "Accounting Statistics for Banks and Other Financial Intermediaries" delivered by the banks to Norges Bank. Based on list prices per transaction (excl. discounts), annual card fees, income from OCR and transaction figures from Norges Bank (2001), income totals NOK 5 million. The difference between estimated and actual income is attributable to customer discounts. The income figure does not include VISA Norge's earnings on merchant commission.

#### Table 2: Costs, prices and transactions

	Transactions <sup>1</sup> (mi <b>ll</b> ion)	Total costs <sup>2</sup> (NOK mi <b>ll</b> ion)	Costs <sup>3</sup> (NOK)	Price <sup>4</sup> (NOK)
Mail giro	74	543	7.50	5.14
Giro, account debits	38	564	15.00	18.59
Giro, cash payments	12	161	13.00	27.37
Company terminal giro sent as money order	7	182	24.50	30.14
Phone giro	29	167	6.00	2.45
Internet	66	527	8.00	1.89
Direct debit	33	162	5.00	1.42
Company terminal giro - electronic	144	657	4.50	2.78
Cheques	3	65	22.50	21.06
Payment terminal (EFTPOS)	412	996	2.50	2.24
Own bank's ATMs	66	562	8.50	2.14
Other banks' ATMs	39	283	7.50	4.41
Withdrawals/deposits <sup>a</sup>	37	558	15.00	0.00
Transfers⁵	4	116	28.00	0.00
Night safe <sup>c</sup>	6	318	55.50	-
Total	968	5 867		
Average weighted by no. of transactions (except a,b and c)			5.30	
Average weighted by no. of transactions (all services except c)			5.80	

<sup>1</sup> Transactions taken from Annual Report on Payment Systems

<sup>2</sup> Transactions multiplied by unit costs

<sup>3</sup> Unit costs for the seven banks in the survey rounded to the nearest 50 øre

<sup>4</sup> Unit prices for all banks excl. discounts (Source: Annual Report on Payment Systems)

Source: Norges Bank

transaction ranges from NOK 7.50 to NOK 24.50. This is due to the manual operations required and the costly machinery needed to process the forms. Electronic giros pass more rapidly through the system, they share to some degree infrastructure (telephone lines etc.) with non-bank users, and as a rule require no manual processing. This is reflected in unit costs, which vary from NOK 4.50 to NOK 8. Electronic giro services are considered to be more efficient than paper-based services, not only due to the cost structure, but also because of short processing time and the low incidence of errors<sup>7</sup>.

Giro services at the counter are still among the most expensive to produce<sup>8)</sup>, even though costs have fallen since 1994. There are probably several reasons for the reduction in unit costs. Banks have undergone internal restructuring resulting in fewer cashiers at branches. At the same time, technological changes in cash transaction systems have improved processing speed. With a steady customer flow, bank staff is likely to make more efficient use of their time than when they must wait for customers. Moreover, costs incurred by the customer while waiting in a queue are not charged to the bank. Viewed in isolation, giro services performed at branches generate income for banks, but when non-priced services at the counter are taken into account, overall at-counter business is not profitable. Interviews with banks suggest that it is necessary to maintain at-counter services in order to provide the service level expected by the customer. Overall, individual customers who use expensive services may be profitable for banks, even though costs related to the use of individual services are high.

Giro payments via PC/Internet are banks' most expensive electronic service. There are several possible reasons for this. One is that the service is relatively new and introduction costs related to technical solutions, marketing, contracts, training and customer support are high. Moreover, the computer systems have substantial surplus capacity. There is reason to believe that unit costs will decline when transaction numbers rise and development and introduction costs are reduced. Since the PC/Internet giro solution is closely related (technologically and cost-wise) to the telephone giro, there are similarities in the cost structure of these services. Banks no longer focus on the telephone giro and transaction numbers are expected to fall. Telephone giro unit costs may therefore rise in the future.

Large companies pay giros via a terminal and this is the most frequently used giro service. This survey covers both direct remittances and company terminal giros. The 1994 survey was confined to direct remittance services, which have become slightly cheaper to produce in the intervening period. Company terminal giro services which banks produce are more expensive since they cater to a greater degree to the customer's information needs. Since the average figures include both direct remittance and company terminal giro services, costs are higher in 2001 than in previous surveys.

#### Branch services and cheques

Branch services include deposits, cash withdrawals at the counter and manual transfers between accounts as well as night safe and cheques. While the Annual Report on Payment Systems provides transaction statistics of cash withdrawals at the counter and cheque transactions, no national transaction statistics are available for the other services. We have therefore estimated national transaction figures for these services on the basis of their market share at seven surveyed banks. Therefore, there is greater uncertainty about the total figures than about the figures for the other services. Table 2 shows that it costs NOK 1 057 million to provide branch services that comprise about 50 million transactions. The night safe service has the highest unit costs in the survey, and showed very wide variation in cost structure and cost level from bank to bank. The night safe service allows companies to make cash deposits outside banks' business hours, and therefore has no close substitutes. Costs are high due to security requirements, manual processing and limited possibilities for centralisation.

Cheques are used infrequently. Costs per transaction rose from NOK 14 in 1994 to NOK 22.50 in 2001, but prices have concurrently risen, enabling banks to virtually cover the costs for providing this service. Cheques are usually processed manually by branch cashiers. One bank in the survey allows customers to mail cheques in the same way as mail-based giros. This is a flexible means of processing cheques, and appears to offer the possibility of cost and efficiency gains.

<sup>&</sup>lt;sup>7</sup>) Payment cards, direct debit and terminal giro services in particular are marked by a low incidence of error. There are more errors than are usual for electronic services in connection new electronic services such as PC/Internet since customers are still learning to use them.

<sup>&</sup>lt;sup>8)</sup> Giros processed by counter staff can be paid in two ways: either by charging to an account or by paying in cash. Giros paid in cash are usually paid by persons who do not have a customer relationship with the bank in question. Banks therefore choose to set a higher price for giros paid in cash.

#### Payment cards

Payment cards may be used at ATMs and to make payments and withdraw cash at EFTPOS terminals. Hence, the costs for issuing cards are spread over ATMs and EFTPOS.

EFTPOS is the most popular payment service in Norway, accounting for 412 million<sup>9)</sup> transactions in 2001. EFTPOS is a reasonably priced service with a unit cost of NOK 2.50 per transaction, down from the 1994 figure of NOK 4.50. Costs associated with establishing card agreements etc. are included in the survey and are spread over each individual transaction. Banks charge the card holder an annual fee which is meant to cover these costs. Banks' development of EFTPOS in the mid-1990s initially involved substantial costs for deployment of terminals at new merchants, at the same time as costs for training and marketing were high vis-à-vis merchants and card holders. The reduction in costs since 1994 is probably due to lower unit costs in the production of this service, triggered by steadily increasing transaction numbers (economies of scale). Banks will introduce payment cards with an EMV chip<sup>10)</sup> by 2005, which requires replacement of bank cards and terminals. This will entail additional costs which may raise unit costs for EFTPOS transactions slightly for a time.

Payment cards are increasingly used for cash withdrawals in shops. Cash withdrawals in conjunction with goods purchases in shops almost equal the total number of withdrawals at the counter and from ATMs in 2001. The number of days that cash circulates between shop and customer prior to returning to the banks is probably higher now than in 1994. Fewer ATM and at-counter withdrawals combined with longer circulation time reduce banks' cash handling costs.

Payment cards are also used to withdraw cash at ATMs. Withdrawals from their own ATMs cost banks NOK 1 more than withdrawals from other banks' ATMs. In the case of withdrawals from their own ATMs, banks have costs connected with cash replenishment, maintenance and security etc. When cash is withdrawn from another bank's ATM, costs are covered by an interbank charge that was NOK 4.50 in 2001.

#### Cost structure and unit prices

Our analysis draws a distinction between direct and indirect costs. Chart 7 shows unit costs broken down by direct costs (arising from external providers and/or other banks through interbank charges) and indirect costs (arising from bank's own operations). The chart also shows unit prices charged for the various services. This information has been taken from the Annual Report on Payment Systems.

Direct costs account for a large portion of total costs for automated services, while indirect costs account for a large share of total costs for manual services. This is because the analysis treats personnel costs as indirect costs. Indirect costs account for a relatively large share of total costs for PC/Internet services and several other automated services since these services require a considerable amount of manual work in connection with contracts, marketing and customer support etc. Cheques are manually processed, and therefore indirect costs account for a large share of total costs. Direct unit costs predominate in other banks' ATMs, due to interbank charges, while indirect costs predominate in own ATMs. Direct costs account for a high share of total night safe costs, since some banks purchase such services from Norsk Kontantservice AS and/or Securitas et al. When night safe services are handled in-house, the share of indirect costs is high.

Direct costs vary in the short term. Ordinary commercial principles state that variable unit costs must be covered by prices in order to secure operations in the short term. Chart 7 therefore compares unit costs with unit prices. Unit prices taken from the Annual Report on Payment Systems do not incorporate discounts, and therefore a number of services probably generate belowlist-price income per transaction for the banks.

Most services' direct costs are covered by list prices. Income on the services PC/Internet, mail giros, direct debits and other banks' ATMs as well as free-of-charge services does not cover direct costs. This is not a problem in the short term, but in the case of ATMs<sup>11</sup>) and mail-based giros the same applied in 1994 and 1998.



<sup>9)</sup> The survey covers transactions performed by Norwegian bank customers using bank cards and VISA, totalling 412 million transactions. Oil company cards and other international credit cards are not included in the survey.

<sup>&</sup>lt;sup>10</sup>) EMV chips are based on a standard established by Europay, Mastercard and VISA, the largest card companies in the world. Combined with use of PIN codes, these cards are expected to achieve a higher security threshold against misuse than magnetic-stripe cards. Replacement of terminals has started. Introduction of the EMV chip will also require upgrading of ATMs.

<sup>&</sup>lt;sup>11)</sup> ATM services probably generated net income for banks in 2001 since part of their income from annual card fees is additional to earnings generated by prices. Moreover, part of the deficit is due to the fact that withdrawals from the bank's own ATMs are free of charge during business hours. This service is cheaper for banks to provide than withdrawals at the counter, because net costs for one free-of-charge ATM withdrawal are lower than net costs for one at-counter withdrawal.

Direct costs are not fully reflected in prices, and this suggests that banks should consider taking steps to remedy the problem by lowering costs or increasing charges (or wait for a rapid increase in transaction numbers. which is not realistic for all services). The problem is more pronounced for the PC/Internet giro. The difference between price and direct costs is larger, and indirect costs are high. Price covers only a quarter of the unit cost. The service is relatively new in the market, and indirect costs are expected to fall since many such costs refer to marketing and other establishment costs. Better utilisation of economies of scale and repayment of development costs (treated as direct costs) will reduce direct costs. In the long term, the current price cost ratio for this service will probably not continue. As of 2001, this service generates losses for banks.

Unit prices on banks' own ATMs cover the direct but not the indirect costs, whereas the prices charged for using other banks' ATMs cover a higher share of the unit costs, but not the direct costs. The direct costs are higher in the case of withdrawals from other banks' ATMs due to the interbank charge. This price structure derives from the fact that banks do not charge for cash withdrawals from their own cashiers/ATMs during business hours, whereas they do charge for withdrawals outside business hours and in other banks. Thus, the share of costs covered by direct prices is highest for withdrawals from other banks' ATMs.

Direct prices charged for a number of services generate net earnings for banks. This is true of all giro services at the counter because unit costs are lower than list prices. Since the number of giro services at the counter is steadily falling, unit costs may rise in the years ahead due to diseconomies of small-scale operation. Unit costs are higher than list prices for EFTPOS transactions and ATM withdrawals, but earnings from annual card fees make up the deficit. Banks' therefore have a net income from card services totalling NOK 95 million. This figure is based on total reported earnings of NOK 1 936 million and the costs listed in Table 2, which shows that EFTPOS cost NOK 996 million to produce and ATM services cost NOK 845 million. Income generated by annual card fees makes up the shortfall. According to the Annual Report on Payment Systems, income from annual fees averaged NOK 205 per card in 2001. Earnings on cards are one of the most important reasons why cost coverage has risen since 1994. In 1994, the unit cost for EFTPOS was NOK 4.50, while the price was NOK 1.88, showing that the price cost ratio has moved in the right direction.

The survey provides no clear indication of whether large or small banks produce services at the lowest unit costs. Economies of scale appear to be spread over all banks as a result of the institutional structure involving the Banks' Payment and Central Clearing House and the EDB group. The marked efficiency improvement since 1994 is essentially due to a massive increase in the use of electronic services, especially cards. This is the result of a deliberate focus by the banks, the banking associations, the Banks' Payment and Central Clearing House and Norges Bank. The coordination of card systems in Norway has also allowed small banks to participate in this development. Moreover, interbank charges appear to smooth out many potential differences between large and small banks' costs for individual services.

Prices charged for services still do not cover all costs in connection with providing the majority of payment services. For recently introduced services, this may be due to the fact that the services are priced below unit cost in order to rapidly increase the service's popularity, with a view to exploiting economies of scale in the future. The price for EFTPOS was set low in order to achieve popularity, and due to a subsequent reduction in costs, full cost coverage has nearly been achieved for this service. Banks appear to be pursuing the same strategy with regard to pricing giro payments via the Internet/PC. The picture is unclear in relation to older services, although list prices still do not cover the costs of providing some of the largest services, such as company terminal giro and mail giro.

#### Summary

According to revised national accounts figures, financial services are among the sectors that have made the most substantial contribution to the general productivity growth seen in the 1990s. Part of this productivity increase derives from the payment system. The increase is due both to banks' increased use of automated solutions and the public's increased use of low-priced electronic payment solutions. To a large extent Norwegian banks have used pricing to shift customer use of payment services in the desired direction.

Banks' production of payment services has increased substantially since 1994. Electronic payment services are marked by falling unit costs and volume increases have led to lower unit costs. Where new services are concerned, a strategy of low initial prices appears to pay for itself after a few years. This is the case for EFTPOS, and the same may well prove to be the case for Internetbased banking services.

Income from direct pricing of services has risen since 1994. Banks continue to lose money on mediating many services. Even so, due to low unit costs banks' payment service income covers as much as 70 per cent of costs in 2001. More significant is the fact that relative price differences reflect the relative cost differences for various services better than was the case in 1994. In 2001, bank customers have a more realistic perception of the cost of producing the individual services than they did in 1994.

Customers make more payments via their accounts than ever before. This entails larger outlays for fees for most customers. However, since the use of various services has changed, average prices have fallen. Changed use combined with the banks' pricing policy and cost structure has resulted in a more efficient payment system in 2001 compared with earlier.

### References:

- Bjørnenak, T. (1993): "ABC hva er D? Grunnleggende prinsipper i aktivitetsbasert kalkulasjon", (ABC – what is D? Basic principles in activity-based calculation), *Praktisk økonomi og ledelse* no. 2/93.
- Cooper, R. and R. S. Kaplan, (1999): "The design of cost management systems – text and cases", Prentice-Hall, Inc, ISBN 0-13-570417-0.
- Fidjestøl, A., D. Flatraaker, and C. J. Vogt (1989a): "Inntekter, kostnader og prissetting i betalingsformidlingen" (Income, costs and pricing in the payment system), *Penger og Kreditt* no. 4/89, Norges Bank.
- Fidjestøl, A., D. Flatraaker, and C. J. Vogt (1989b): "Kostnader i betalingsformidlingen" (Costs in the payment system), *Penger og Kreditt* no. 3/89, Norges Bank.
- Folkestadås, E. and B. Grovan, (1999): "En ABC analyse av utvalgte produkter i dagligbankavdelingen i Andebu Sparebank" (An ABC analysis of selected products at Andebu Sparebank), *Project assignment at the Norwegian School of Management*.
- Grovan, B. and Richardsen, L. (2000): "En analyse av kundelønnsomhet i Andebu Sparebank" (An analysis of customer profitability at Andebu Sparebank), *Project assignment at the Norwegian School of Management*.

- Humphrey, D., K. Moshe, and B. Vale (2001): "Realizing the gains from electronic payments: costs, pricing and payment choice", *Journal of Money*, Credit and Banking, 33, pp. 216-234.
- Lindquist, K. (2002): "The effect of new technology in payment services on banks' intermediation", *Working Paper* 2002/06, Norges Bank.
- Norges Bank: "Accounting Statistics for Banks and Other Financial Intermediaries".
- Norges Bank (2001): Annual Report on Payment Systems, pp 52-60.
- Porter, M. (1987): *Competitive Strategy*, TANO AS, pp. 206-213 ISBN 82-518-2255-6.
- Robinson, P. E. and D. Flatraaker, (1995a): "Income, costs and pricing in the payment system", *Economic Bulletin* no. 3/95, Norges Bank.
- Robinson, P. E. and D. Flatraaker, (1995b): "Costs in the payment system", *Economic Bulletin* no. 2/95, Norges Bank.
- Sti, A.D. (1993): "ABC i servicevirksomhet tilfellet BI" (ABC in the service sector – the case of BI), *Praktisk økonomi og ledelse* no. 2/93.

Data obtained from seven banks formed the basis for the ABC analysis referred to in this article. The banks were: Andebu Sparebank, Bolig- og Næringsbanken ASA, Den norske Bank ASA, Harstad Sparebank, Larvikbankenes Brunlanes, Nordea Bank Norge ASA and Romsdals Fellesbank ASA.

# The effects of trade liberalisation on clothing prices and on overall consumer price inflation

by Kristine Høegh-Omdal and Bjørn Roger Wilhelmsen, economists in the Economics Department

Clothing prices, as measured in the consumer price index, are about 15 per cent lower today than they were in 1995. This fall in prices has contributed to curbing overall consumer price inflation. Developments in clothing prices must be viewed in the light of trade liberalisation. A gradual removal of quota restrictions and dismantling of tariff barriers have contributed to a marked increase in imports of clothing from low-cost countries at the expense of imports from the EEA. In addition, lower tariff rates have contributed directly to lower prices for clothing in Norway. A quantification of these relationships has made an important contribution to both explaining the low imported price inflation of recent years and improving the basis for estimating future price inflation.

#### 1 Background

In recent years the rise in prices for imported consumer goods has been low, and at times negative (see Chart 1). This is largely due to the fall in prices for clothing, which for the most part is imported. Since 1995, clothing prices have fallen by a total of 15 per cent<sup>1</sup>). This corresponds to an annual average fall in prices of over 2 per cent from 1995 to 2002. By way of comparison, the average rise in overall consumer prices was about  $2^{1/2}$  per cent in the 1990s.



Imported consumer goods account for just over 25 per cent of the overall consumer price index (CPI). In recent years clothing has had a weighting of from 5 to 7 per cent in the CPI. In 2000, lower clothing prices contributed to pushing down the rise in consumer prices by almost 1/2 percentage point (see Chart 2). The average

1) Clothing prices as measured in the consumer price index.

**Chart 2** Consumer prices. Total and excl. clothing. 12-month rise. Per cent



rise in consumer prices from 1995 to 2001 would have been about <sup>1</sup>/<sub>4</sub> percentage point higher without the fall in clothing prices.

The fall in clothing prices over the past 6-7 years cannot be explained by means of traditional explanatory factors. Neither cyclical developments nor developments in the krone exchange rate should imply a fall in the price of clothing. Growth in the Norwegian economy has been strong during this period. Unemployment has been low, and the rise in labour costs high. In the US and Europe, too, economic developments in the late 1990s and in 2000 were characterised by a period of economic expansion. International producer prices rose in the period as a whole, and the krone exchange rate remained relatively stable on average up to the beginning of 2002. There has been no similar fall in clothing prices in the EU or the US. Although the rise in clothing prices in these countries has also been relatively slow, it is far from the subdued level recorded in Norway.

The work on understanding and developing a reliable model of imported consumer goods has been discussed regularly in Norges Bank's inflation reports in recent years.<sup>2</sup>) This article is an extension of previous analyses. Other work in the area includes that of Moe (2002), who argues on the basis of foreign trade statistics data that international trade liberalisation has been an important factor behind the fall in clothing prices.

The background to these price developments is a resolution from the Uruguay Round of GATT committing members to a substantial reduction of trade barriers to imports of textiles. This in turn led to lower tariff rates and greater possibilities for importing goods from lowcost countries. This article endeavours to calculate the isolated effects of trade liberalisation on consumer price inflation.

With an inflation target for monetary policy, a knowledge of aspects of consumer price inflation such as this is particularly important. The analysis in this article may thus make an important contribution to the estimates on which Norges Bank's inflation projections are based.

In Section 2 we present a summary of textile trade policy.<sup>3</sup>) Section 3 deals with the effect of trade liberalisation on price inflation, and we present the results of a simple model of clothing prices. The welfare gains ensuing from trade liberalisation are discussed in conclusion.

### 2 Foreign trade policy

#### Developments in world trade

The World Trade Organisation (WTO) was established in 1995, succeeding the General Agreement on Tariffs and Trade (GATT), which was formed just after World War II. Throughout the 50 years of its existence, the main purpose of the institution has been to ensure that international trade flows as freely as possible. Since 1948, global merchandise exports have grown by an average of 6 per cent annually. Over 90 per cent of world trade today takes place among WTO countries.

The global trade regulations applying today have been developed over time through a series of rounds of negotiation. The first round was mainly concerned with the reduction of tariff rates. Subsequent rounds also included other areas, such as anti-dumping and subsidies. The last major round of negotiations, the Uruguay Round (1986-1994), led to the formation of the WTO.

#### Regulation of the textile industry

Up until the Uruguay Round, the textile industry was among the most strictly regulated manufacturing sectors. Textile trade was regulated by a separate agreement, the Multi-Fibre Agreement (MFA). The MFA allowed importing countries to negotiate bilateral export restraint agreements with "low-cost countries".

The Uruguay Round led to major changes in textile trade policy. It was decided to eliminate quota regulations and reduce tariff rates during the period 1995-2005. However it was decided that it should be largely up to the individual country to decide on the time to be spent in reducing tariffs. Norway, for example, has been relatively quick in liberalising trade compared with the US and the EU.

#### Norwegian clothing trade policy up to the Uruguay Round

Norway signed the MFA in 1974. In the period 1974-1977 Norway signed a number of bilateral agreements under the MFA with countries in Asia, and similar agreements with Portugal and some eastern European countries. Norway withdrew from the agreement in 1978 as a result of the breakdown in negotiations between Norway and Hong Kong, and introduced its own system of global import quotas under the GATT safeguard clause (Article 19). This was an even stricter system than the regulations under the MFA. The import quotas covered virtually all countries except those in the European Economic Community (EEC) and the European Free Trade Association (EFTA). The import quotas were distributed by the Norwegian authorities to various importers, who were then free to choose the countries from which they would import. Norway rejoined the MFA in 1984, and negotiated some 20 bilateral agreements.

The quota restrictions came on top of a protective tariff of 17-25 per cent which applied to the majority of low-cost countries and some western countries, such as the US. Norway's membership of EFTA since 1960 meant that the EFTA countries were exempt from tariffs. The EFTA Free Trade Agreement with the EEC from 1973 led to a reduction of tariff rates in relation to EEC countries. From 1984 trade with the EEC was no longer subject to tariffs. In the 1990s, EFTA entered into a number of new free trade agreements, as a result of which a number of other countries, including some eastern European countries,<sup>4</sup> were exempted from tariffs.

#### Results of the Uruguay Round for Norwegian textile trade

#### Dismantling of the quota system

Norway was one of the first to start dismantling the quota system. The last clothing quotas were abolished in 1998. By contrast, both the EU and the US chose to adhere on the whole to the more long-term schedule defined in the Uruguay Round.

<sup>4)</sup> Turkey, Estonia, Lithuania, Romania, Hungary and Poland secured free trade agreements with EFTA in the early 1990s. Tariff rates were reduced relatively rapidly once the various agreements entered into force. This group of countries has not been subject to tariffs or quotas since 1998.

<sup>&</sup>lt;sup>3)</sup> The significance of trade policy for developments in clothing imports has also been discussed by Melchior (1993)

#### Reduction of tariff rates

In 1993, the Storting passed a resolution to gradually reduce the general tariff rates on clothing in the period 1994 to 2004. The weighted average ordinary tariff rate was to be lowered from about 20 per cent in 1994 to 12 per cent in 2004.

 Table 1. Average tariff rate on clothing<sup>1</sup> from Norway's 25 most important trading partners. Per cent

	1993	1996	1999	2002
Eastern European countries				
that signed free trade agree-				
ments with EFTA in the early				
1990s.	20	2	0	0
EEA/EFTA countries	0	0	0	0
GSP-countries	20	19	16	7
Others (US)	20	19	16	14
Overall	8	7	6	3

<sup>1</sup> Calculations are based on about 300 product categories with different tariff rates. The rates in the table have been arrived at by import-weighting products and countries.

Different trade agreements have led to tariff burdens varying substantially from country to country. Of our most important trading partners for clothing, only the US is subject in full to the ordinary tariff rates. Table 1 shows developments in tariff burden by trading partner, classified according to the type of agreement under which they are regulated.

The estimates in the table are based on 25 countries which together account for about 95 per cent of clothing imports. The countries are grouped into four categories: eastern European countries, EEA/EFTA countries, GSP<sup>5</sup>) countries and other countries (only the US in this estimate)<sup>6</sup>.

The majority of developing countries have traditionally been subject to full textile tariffs. The countries come under the GSP scheme, which offers tariff exemption for most manufactured goods from developing countries, but textiles and agricultural goods have been among the exceptions. An important change took place in 2000, however, when the Storting passed a resolution to remove tariffs from a number of textile products imported from GSP countries. This led to a substantial reduction in tariff burdens on these countries (see Table 1). The textiles that are still subject to tariffs are goods that compete with Norwegian products, particularly children's clothing, underwear, some men's clothing and leisurewear.

# 3 The effects of trade liberalisation on prices

#### Direct effect of lower tariffs on prices

Chart 3 shows the weighted average tariff rate for all countries and products, as calculated in Section 2, and compares this with clothing prices in the CPI. From the chart we see that clothing prices fall most in the years in which the reduction in the overall tariff burden is greatest. In 2000, the tariff burden was reduced by about 3 percentage points as a result of changes in the GSP scheme. The chart shows clearly that these changes immediately fed through to prices<sup>7</sup>).





The consumer price index adjusted for tax changes and excluding energy products, CPI-ATE, is affected to approximately the same extent as the CPI, because it is not adjusted for changes in tariff rates.

The shift in trade from high to low-cost countries has led to lower purchase prices for Norwegian clothing retailers.

The removal of quotas and reduction in tariff rates have contributed to a shift in trade from western highcost countries to low-cost countries such as China and countries in eastern Europe. Chart 4 shows developments in clothing imports from the four groups of countries described in Section 2, as a share of total clothing imports. From 1980 to 1986, almost all clothing imports came from the present EEA. Norway had a free trade agreement with the EEC through EFTA. At the same time, Norway limited imports from GSP and eastern European countries through import and export quotas.

5) GSP stands for "Generalised System of Preferences". The system was established in 1971 with the aim of improving market access for developing countries. The preferential tariff treatment varies from one industrial country to another.

6) The EU: Austria, Denmark, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Sweden and the UK. Eastern European countries (countries with free trade agreements via EFTA): Estonia, Hungary, Lithuania, Poland, Romania and Turkey. GSP countries: China, Hong Kong, India, Indonesia, Korea and Thailand. Other: the US

7) The rise in the overall consumer price index from 1999 to 2000 was reduced by an estimated 1/4 percentage point as a result of this effect.

**Chart 4** Import shares by country for Norway's 25 largest trading partners, clothing.



After the resolution to gradually dismantle the system of import quotas in 1986, the share of imports from GSP countries rose rapidly at the expense of imports from EEA countries. The share of imports from eastern Europe rose sharply from the mid-1990s, after the free trade agreements with EFTA took effect.

This increase in imports from low-cost countries at the expense of imports from high-cost countries means that the purchase prices for Norwegian clothing retailers have fallen. We have attempted to calculate an index of producer prices for clothing (the purchase prices for Norwegian importers) which takes account of this gradual shift in trade to countries with lower price levels. In order to construct such an index, current trade weights and data on price level differences between countries are required.

Using estimated purchasing power parities from the World Bank as a basis, we have calculated a measure of the price level differences between the countries from which we import clothing<sup>8</sup>). Table 2 illustrates the price level in a selection of these countries as a share of the Norwegian price level.

Chart 5 provides an illustration of the calculated producer price index compared with a traditional producer price index. Normally, a weighted average of the rise in producer prices for different trading partners is used as a measure of an overall producer price index. Trade weights are also updated annually in this index. The method captures differences in trading partners' price inflation, but fails to capture the effects on prices of a shift in trade to countries with different price levels.

Both indices are calculated using a weighted average of price developments among Norway's 25 most important trading partners in clothing trade<sup>9</sup>), the same countries as in Table 1. The blue curve represents the traditional producer price index. The red curve is our calculated index, which in addition to price inflation in the **Table 2.** Price levels in selected countries as a share of theNorwegian price level, 2001

Country	Price level
Denmark	1.04
Sweden	1.00
Norway	1.00
UK	0.92
Germany	0.89
Finland	0.89
US	0.88
France	0.86
Italy	0.76
Poland	0.41
Lithuania	0.37
Estonia	0.33
Romania	0.23
China	0.19
Indonesia	0.18
India	0.17

Sources: World Bank and Norges Bank

various countries also takes account of differences in price levels. The latter provides a better indication of the actual rise in prices faced by Norwegian clothing retailers, given the change in import pattern.

The substantial difference in the paths of the indices illustrates the impact the trade shift has had on price developments.

# The results from a simple model of clothing prices

With the aid of an econometric model of clothing prices we have calculated the isolated effects of trade liberalisation. In the model, clothing prices in the CPI are

**Chart 5** Foreign producer prices for clothing, 25 countries. Indices. 1980 Q1 = 100



<sup>&</sup>lt;sup>8)</sup> See Melchior (1993) for an example of how price levels can be calculated.

<sup>&</sup>lt;sup>9)</sup> The series in the chart are consumer prices. It has proved difficult to find reliable producer price indices for a number of countries, particularly developing countries and countries in eastern Europe.

explained in terms of exchange rate movements, developments in the import-weighted producer price index, which takes account of price level differences, and the average tariff rate. The estimates from the model are presented in an annex to this article. Chart 6 illustrates how the model has explained the rise in clothing prices since 1981.





According to the model, reduced tariff rates are reflected immediately in lower clothing prices. In the short term, a one percentage point reduction in the tariff rate results in a one per cent lower rise in clothing prices. The average tariff rate was reduced by 5 percentage points in the period 1994-2001, and thus explains one third of the 15 per cent fall in clothing prices during the same period.

The import shift, which is the indirect effect of trade liberalisation, contributes to a gradual reduction in clothing prices over time. This is expressed in the model through a condition that the law of one price applies. This means that over time Norwegian clothing prices are expected to be on a par with international clothing prices adjusted for exchange rate changes and price level effects. However, this long-term relationship will not hold at all times, because of factors such as transport costs, the continued existence of trade barriers and domestic competition. Over time, competition in the market and the possibility of arbitrage will nevertheless push down clothing prices in Norway for a given increasing share of low price imports and a given exchange rate.

Exchange rate movements also influence prices in the

short term. Norges Bank's calculations indicate that an exchange rate change has its strongest effect on consumer price inflation after about one year, but that it takes several years before the effect is exhausted. The time lag may be due to the fact that importers hedge to some extent against exchange rate fluctuations. Another explanation is that contracts for purchase of a clothing collection are often signed well before the clothing is made available for sale in shops.

#### 4 Concluding remarks

On average, overall consumer price inflation<sup>10)</sup> has been pushed down by about <sup>1</sup>/<sub>4</sub> percentage point annually since 1995 as a result of the fall in clothing prices. As shown in this article, this is to a large extent an effect of trade liberalisation, both directly in the form of lower tariffs and indirectly as a result of the shift in imports to low cost countries.

The Storting has adopted a schedule for reducing tariff rates on clothing by 2004<sup>11</sup>). We are therefore expecting lower tariff rates in both 2003 and 2004. Moreover, the krone exchange rate has appreciated this year. If the exchange rate remains unchanged from the level in the third quarter of 2002, the import pattern continues changing in the way it has been observed to do for the past few years, and the Storting follows up its resolution on lower tariff rates, clothing prices may continue to fall for the next couple of years.

The developments in clothing prices that we have seen in the past few years, and which according to our model will continue for the next couple of years, result in considerable welfare gains. Figures from Statistics Norway's consumer expenditure survey indicate clothing consumption for almost NOK 30 billion in 2000. By comparison with a scenario in which clothing prices remained unchanged at the 1995 level, Norwegian consumers are estimated to have saved roughly NOK 4 billion annually<sup>12)</sup>. The amount is substantially larger than the reduction in tariff revenues, and illustrates the significant welfare gains inherent in removing selfimposed import restrictions.

<sup>11)</sup> In the Revised National Budget for 2002, the Government proposed a phasing out of tariff rates that went further than the Government was committed to. The proposal called for the removal of 630 tariff rates on manufactured goods, including goods such as perfume, cosmetics, plastic goods, leather goods, sewing thread, knitting wool, fibre cloth, twine, laces, lines and ropes, fishing nets and carpets. In all, tariff revenues were reduced by about NOK 100 million in the 2002 budget.

12) See Melchior (1993) for a more detailed analysis of the welfare gains resulting from trade liberalisation.

<sup>&</sup>lt;sup>10)</sup> Both the CPI and the CPI-ATE.

#### References:

Bache, Ida Wolden (2002): "Empirical Modelling of Norwegian Import Prices", Working Paper no. 1/2002. Norges Bank

Inflation Report 1/1999. Norges Bank

Inflation Report 3/2001, pp. 9-10. Norges Bank

Inflation Report 2/2002, pp. 28-29. Norges Bank

- Melchior, A. (1992) "Handelspolitikken for teko-varer en kostbar form for industristøtte" (Trade policy for textiles and clothing: a costly form of manufacturing support). *Working paper* no. 486, Norwegian Institute of International Affairs (NUPI)
- Melchior, A. (1993) "Helping your industry at the greatest cost. The story of Norwegian textile quotas". *NUPI report* no. 171, Norwegian Institute of International Affairs
- Melchior, A. (1994) "Uruguay-runden: Konsekvenser for tekstilhandelen" (The Uruguay Round: consequences for the textile trade), Norwegian Institute of International Affairs

- Moe, M.V. (2002): "Faktorer bak prisutviklingen på importerte klær" (Factors behind developments in prices for imported clothing). Økonomiske analyser no. 2, pp. 48-55. Statistics Norway
- Naug, B.E. (1996): "Hva bestemmer utviklingen i importprisene?" (What determines developments in import prices?), *Sosialøkonomen* 50 no.1., pp. 32-40.
- Storting Prop. no. 1 (1999-2000): "Skatte-, avgifts- og tollvedtak" (Decisions on direct and indirect taxes and customs duties). The Norwegian Ministry of Finance
- *Stortingsforhandlinger* (1996-1997): St.prop. no.3: "Om endringer i tolltariffen som følge av GATT/WTOavtalen" (Changes in customs tariffs as a result of the GATT/WTO Agreement). The Storting

The World Trade Organisation's website, www.wto.org

14

# Statistical annex

### Financial institution balance sheets

- 1. Norges Bank. Balance sheet
- 2. Norges Bank. Specification of international reserves
- 3. State lending institutions. Balance sheet
- 4. Commercial and savings banks. Balance sheet
- 5. Commercial and savings banks. Loans and deposits by sector
- 6. Mortgage companies. Balance sheet
- 7. Finance companies. Balance sheet
- 8. Life insurance companies. Main assets
- 9. Non-life insurance companies. Main assets
- 10a. Securities funds' assets. Market value
- 10b. Securities funds' assets under management by holding sector. Market value

### Securities statistics

- Shareholdings registered with the Norwegian Central Securities Depository (VPS) by holding sector. Estimated market value
- 12. Share capital and primary capital certificates registered with the Norwegian Central Securities Depository by issuing sector. Nominal value
- Net purchases and net sales (-) in the primary and secondary markets of shares registered with the Norwegian Central Securities Depository by purchasing, selling and issuing sector. Estimated market value
- Bondholdings in NOK registered with the Norwegian Central Securities Depository by holding sector. Market value
- Bondholdings in NOK registered with the Norwegian. Central Securities Depository by issuing sector. Nominal value
- 16. Net purchases and net sales (-) in the primary and secondary markets for NOK-denominated bonds registered with the Norwegian Central Securities Depository by purchasing, selling and issuing sector. Estimated market value
- NOK-denominated short-term paper registered with the Norwegian Central Securities Depository by holding sector. Market value
- Outstanding short-term paper by issuing sector. Nominal value

### Credit and liquidity trends

- 19. Credit indicator and money supply
- 20. Domestic credit supply to the general public, by source
- 21. Composition of money supply
- 22. Household financial balance. Financial investments and holdings, by financial instrument
- 23. Money market liquidity

### Interest rate statistics

- 24. Nominal interest rates for NOK
- 25. Short-term interest rates for key currencies in the Euro-market
- 26. Yields on Norwegian bonds
- 27. Yields on government bonds in key currencies
- 28. Commercial and savings banks. Average interest rates and commissions on utilised loans in NOK to the general public at end of quarter
- 29. Commercial and savings banks. Average interest rates on deposits in NOK from the general public at end of quarter
- 30. Life insurance companies. Average interest rates by type of loan at end of quarter
- 31. Mortgage companies. Average interest rates, incl. commissions on loans to private sector at end of quarter

#### Profit/loss and capital adequacy data

- 32. Profit/loss and capital adequacy: commercial banks
- 33. Profit/loss and capital adequacy: savings banks
- 34. Profit/loss and capital adequacy: finance companies
- 35. Profit/loss and capital adequacy: mortgage companies

#### Exchange rates

- 36. The international value of the krone and exchange rates against selected currencies. Monthly average of representative market rates
- 37. Exchange cross rates. Monthly average of representative exchange rates

### Balance of payments

- 38. Balance of payments.
- 39. Norway's foreign assets and debt.

#### International capital markets

- 40. Changes in banks' international assets
- 41. Banks' international claims by currency.

#### Foreign currency trading

- 42. Foreign exchange banks. Foreign exchange purchased/sold forward with settlement in NOK.
- 43. Foreign exchange banks. Overall foreign currency position
- 44. Norges Bank's foreign currency transactions with banks

Norges Bank publishes more detailed statistics on its website, www.norges-bank.no. The Bank's statistics calendar, which shows future publication dates, is only published on this website.

### Financial institution balance sheets

#### Table 1. Norges Bank. Balance sheet. In millions of NOK

	31.12.2000	31.12.2001	31.08.2002	30.09.2002	31.10.2002
FINANCIAL ASSETS					
Foreign assets	646 120	837 262	821 177	808 900	854 146
International reserves <sup>1) 2)</sup>	245 863	211 537	188 972	196 165	225 813
Investment of Government Petroleum Fund	386 126	613 317	622 050	603 203	618 604
Other foreign assets	14 131	12 408	10 155	9 532	9 729
Claims on Norwegian financial institutions	22 194	15 242	286	999	1 102
Loans to private banks	21 158	15 140	0	11	35
Other assets in the form of deposits,					
securities, loans and overdrafts	1 036	102	286	988	1 067
Claims on central government	13 909	11 813	14 522	13 713	12 129
Bearer bonds	10 743	9 073	10 520	10 594	8 909
Other securities	2 776	2 451	3 618	2 680	2 871
Other claims	390	289	384	439	349
Claims on other Norwegian sectors	1 306	1 327	1 241	1 320	1 405
Securities and loans	576	603	628	644	651
Other claims	730	724	613	676	754
Stock, production units	26	27	19	27	26
Fixed assets	1 939	1 832	1 624	1 607	1 608
Valuation adjustments 3)	0	0	131 989	164 750	150 589
Expenses	0	0	10 314	11 668	13 491
Total assets	685 494	867 503	981 172	1 002 984	1 034 496
LIABILITIES AND CAPITAL					
Foreign liabilities	74 998	56 211	49 672	56 222	73 238
IMF debt in NOK	14 107	12 383	10 139	9 508	9 704
Other foreign liabilities	60 891	43 828	39 533	46 714	63 534
Notes and coins in circulation	46 952	46 633	40 649	40 188	40 024
Domestic deposits	505 837	719 980	720 352	703 335	730 162
Treasury	96 083	83 503	44 682	44 440	45 536
Government Petroleum Fund	386 126	613 317	622 050	603 203	618 604
Other public administration (excl.municipalities)	293	45	77	46	43
Private banks	21 647	21 614	52 233	54 421	64 793
Other financial institutions	1 591	1 406	1 225	1 135	1 115
Other Norwegian sectors	97	95	85	90	71
Accured interest to the Treasury	0	0	355	481	761
Other domestic debt	10 955	2 697	3 674	4 360	3 724
Calculated value of SDRs in the IMF	1 934	1 898	1 672	1 652	1 656
Capital	44 818	40 084	40 084	40 084	40 084
Valuation adjustments	0	0	0	0	0
Revenues <sup>4)</sup>	0	0	124 714	156 662	144 847
Total liabilities and capital	685 494	867 503	981 172	1 002 984	1 034 496
Off balance-sheet items:					
Foreign currency sold forward	32 595	11 541	25 255	8 249	5 683
Foreign currency purchased forward	25 699	13 311	26 253	9 473	7 698
Derivatives sold	77 743	121 116	116 781	166 765	156 187
Derivatives purchased	83 094	145 597	129 459	176 547	160 990
Alloted, unpaid shares in the BIS	314	324	324	324	324

<sup>1)</sup> International reserves include bonds subject to repurchase agreements
 <sup>2)</sup> Securities and gold are valued at fair value

<sup>3)</sup> Valuation adjustments consist mainly of unrealised loss on securities

<sup>4)</sup> Part of the unrealised loss on securities mentioned in footnote 3 is offset by a reduction in the NOK deposits for the Government Petroleum Fund This appears in the accounts as income for Norges Bank

Table 2. Norges Bank. Specification of international reserves <sup>1</sup> .	In millions of NOK
--	--------------------

	31.12.2000	31.12.2001	31.08.2002	30.09.2002	31.10.2002
Gold	2 275	2 346	2 228	2 268	2 228
Special drawing rigths in the IMF	2 713	3 192	2 475	2 446	2 450
Reserve position in the IMF	5 166	6 533	6 529	6 956	6 793
Loans to the IMF	1 269	1 165	945	919	908
Bank deposits abroad	73 397	55 447	45 076	63 990	92 986
Foreign Treasury bills	-	-	218	345	425
Foreign certificates	-	-	120	-	-
Foreign bearer bonds <sup>2)</sup>	157 893	117 275	113 378	103 173	102 612
Foreign shares	-	22 952	15 915	13 937	14 955
Accrued interest	3 190	2 628	2 088	2 131	2 456
Short-term assets	-40	-	-	-	-
Total	245 863	211 538	188 972	196 165	225 813

<sup>1)</sup> Securities are valued at fair value as from December 1999
 <sup>2)</sup> Includes bonds subject to repurchase agreements

Source: Norges Bank

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Cash holdings and bank deposits	2 817	2 890	2 457	2 255	2 440
Total loans	176 942	178 665	182 931	183 194	186 121
Of which:					
To the general public <sup>1)</sup>	174 919	176 538	180 654	180 934	183 852
Claims on the central government and					
social security administration	-	-	-	-	-
Other assets	8 778	8 364	10 131	8 999	7 913
Total assets	188 537	189 919	195 519	194 448	196 474
Bearer bond issues	49	45	44	39	38
Of which:					
In Norwegian kroner	49	45	44	39	38
In foreign currency	-	-	-	-	-
Other loans	176 604	177 806	182 622	182 964	185 776
Of which:					
From the central government and					
social security administration	176 604	177 806	182 622	182 964	185 776
Other liabilities, etc.	6 129	5 213	5 968	4 549	6 165
Share capital, reserves	5 755	6 855	6 885	6 896	4 495
Total liabilities and capital	188 537	189 919	195 519	194 448	196 474

<sup>1)</sup> Includes local government administration, non-financial enterprises and households

Sources: Statistics Norway and Norges Bank

Table 4. Commercial and savings banks	s <sup>1)</sup> . Balance sheet. In millions of NOK
---------------------------------------	---

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Cash	4 735	5 290	4 599	4 644	4 393
Deposits with Norges Bank	32 773	23 953	50 756	39 084	54 048
Deposits with commercial and savings banks	18 262	16 633	16 750	19 366	14 807
Deposits with foreign banks	54 652	42 099	48 820	43 561	21 194
Treasury bills	5 040	4 679	3 834	3 440	5 898
Other short-term paper	20 493	16 643	13 099	14 206	15 104
Government bonds etc. <sup>1)</sup>	5 179	4 701	5 742	5 192	8 646
Other bearer bonds	85 937	84 029	84 731	85 982	89 695
Loans to foreign countries	54 502	51 632	51 208	49 960	49 303
Loans to the general public	1 007 913	1 030 467	1 046 090	1 073 189	1 089 540
Of which:					
In foreign currency	85 183	87 459	88 531	84 160	85 118
Loans to mortgage and finance companies, insurance etc. <sup>2)</sup>	76 531	79 554	84 110	87 059	94 208
Loans to central government and social security admin.	311	241	134	369	434
Other assets <sup>3</sup> )	95 182	95 400	98 603	100 496	94 391
Total assets	1 461 510	1 455 321	1 508 476	1 526 548	1 541 661
Deposits from the general public	679 494	703 385	714 090	734 771	723 985
Of which:					
In foreign currency	25 764	25 887	22 759	21 553	21 387
Deposits from commercial and savings banks	27 143	22 565	25 938	22 498	18 503
Deposits from mortgage and finance companies, and insurance etc. <sup>2)</sup>	37 634	39 012	40 509	52 998	39 453
Deposits from central government, social security					
admin. and state lending institutions	5 443	8 511	8 204	8 696	7 729
Funds from CDs	87 612	78 651	67 251	72 744	75 165
Loans and deposits from Norges Bank	2	15 618	487	705	596
Loans and deposits from abroad	10 990	15 780	17 029	16 291	15 302
Other liabilities	507 755	463 241	531 053	511 700	553 761
Share capital/primary capital	25 182	25 322	25 328	25 839	28 106
Allocations, reserves etc.	71 390	72 363	75 719	75 688	73 242
Net income	8 865	10 873	2 868	4 618	5 819
Total liabilities and capital	1 461 510	1 455 321	1 508 476	1 526 548	1 541 661
Specifications:					
Foreign assets	155 570	137 217	146 581	151 662	118 426
Foreign debt	380 364	358 295	394 688	360 357	377 881

<sup>1)</sup> Includes government bonds and bonds issued by lending institutions.

<sup>2)</sup> Includes mortgage companies, finance companies, life and non-life insurance companies and other financial institutions.

<sup>3)</sup> Includes unspecified loss provisions (negative figures) and loans and other claims not specified above.

Sources: Statistics Norway and Norges Bank

### Table 5. Commercial and savings banks. Loans and deposits by sector<sup>1)</sup>. In millions of NOK

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Loans to:					
Local government (incl. municipal enterprises)	12 533	11 945	10 632	10 224	10 267
Non-financial enterprises <sup>2)</sup>	355 565	358 706	365 993	369 751	366 685
Households <sup>3)</sup>	639 815	659 817	669 465	693 213	712 588
Total loans to the general public	1 007 913	1 030 467	1 046 090	1 073 189	1 089 540
Deposits from:					
Local government (incl.municipal enterprises)	42 455	45 941	47 519	46 315	42 381
Non-financial enterprises <sup>2)</sup>	209 155	219 475	207 452	207 857	212 912
Households <sup>3)</sup>	427 883	437 969	459 119	480 599	468 691
Total deposits from the private sector and municipalities	679 494	703 385	714 090	734 771	723 985

<sup>1)</sup> Includes local government administration, non-financial enterprises and households.

<sup>2)</sup> Includes private enterprises with limited liability etc., and state enterprises.

<sup>3)</sup> Includes sole proprietorships, unincorporated enterprises and wage earners, etc.

Sources: Statistics Norway and Norges Bank

#### Table 6. Mortgage companies. Balance sheet. In millions of NOK

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Cash and bank deposits	6 573	4 686	5 011	4 405	5 735
Notes and certificates	13 730	809	1 683	1 359	289
Government bonds <sup>1)</sup>	904	1 238	908	915	1 097
Other bearer bonds	43 032	41 337	51 023	58 931	54 788
Loans to:					
Financial enterprises	21 369	24 981	23 874	24 473	24 842
The general public <sup>2)</sup>	154 006	167 547	163 948	165 692	168 550
Other sectors	12 775	11 656	11 106	11 796	10 230
Others assets <sup>3)</sup>	-803	-1 961	-1 980	-1 041	2 361
Total assets	251 586	250 293	255 573	266 530	267 892
Notes and certificates	37 006	23 489	31 607	34 145	33 295
Bearer bonds issues in NOK <sup>4)</sup>	60 173	61 067	59 446	60 651	62 151
Bearer bond issues in foreign currency <sup>4)</sup>	79 946	84 857	81 688	85 404	83 090
Other funding	58 448	65 527	67 331	70 832	73 542
Equity capital	12 199	11 436	11 705	11 881	12 134
Other liabilities	3 814	3 917	3 796	3 617	3 680
Total liabilities and capital	251 586	250 293	255 573	266 530	267 892

<sup>1)</sup> Includes government bonds and bonds issued by state lending institutions.

<sup>2)</sup> Includes local government administration, non-financial enterprises and households.
 <sup>3)</sup> Foreign exchange differences in connection with swaps are entered net in this item. This may result in negative figures for some periods.

<sup>4)</sup> Purchase of own bearer bonds deducted.

Sources: Statistics Norway and Norges Bank

#### Table 7. Finance companies. Balance sheet. In millions of NOK

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Cash and bank deposits	1 524	2 176	1 998	1 844	1 477
Notes and certificates	99	109	105	104	114
Bearer bonds	40	20	20	0	0
Loans <sup>1)</sup> (gross) to:	82 425	83 792	85 636	86 746	87 086
The general public <sup><math>2</math></sup> (net)	78 092	79 618	81 517	83 101	83 684
Other sectors (net)	4 091	3 960	3 905	3 455	3 196
Other assets <sup>3</sup> )	2 393	2 778	2 330	2 216	2 484
Total assets	86 481	88 875	90 089	90 910	91 161
Notes and certificates	500	575	550	675	600
Bearer bonds	115	115	115	115	65
Loans from non-banks	9 875	10 530	10 010	10 108	10 287
Loans from banks	63 180	61 246	65 320	63 721	63 537
Other liabilities	5 311	9 197	6 649	8 300	8 541
Capital, reserves	7 500	7 212	7 445	7 991	8 131
Total liabilities and capital	86 481	88 875	90 089	90 910	91 161

<sup>1)</sup> Includes subordinated loan capital and leasing finance.

<sup>2)</sup> Includes local government administration, non-financial enterprises and households.

<sup>3)</sup> Includes specified and unspecified loan loss provisions (negative figures)

Source: Norges Bank

#### Table 8. Life insurance companies. Main assets. In millions of NOK

	30.06.2001	30.09.2001	31.12.2001	31.03.2002	30.06.2002
Cash and bank deposits	11 425	11 167	13 467	16 315	28 127
Norwegian notes and certificates	19 780	27 871	29 699	31 834	33 710
Foreign Treasury bills and notes	2 168	933	1 189	3 002	2 327
Norwegian bearer bonds	99 000	100 305	101 819	106 898	110 790
Foreign bearer bonds	81 680	83 383	83 147	79 495	82 924
Norwegian shares, units, primary capital certificates and interests	48 309	44 639	47 506	44 841	35 957
Foreign shares, units, primary capital certificates and interests	73 152	49 349	57 243	62 451	47 614
Loans to the general public <sup>1)</sup>	24 405	24 360	24 482	23 013	23 173
Loans to other sectors	1 038	1 012	935	739	697
Other specified assets	44 484	53 959	53 214	54 071	53 956
Total assets	405 441	396 978	412 701	422 659	419 275

<sup>1)</sup> Includes local government administration, non-financial enterprises and households Source: Statistics Norway

#### Table 9. Non-life insurance companies. Main assets. In millions of NOK

	30.06.2001	30.09.2001	31.12.2001	31.03.2002	30.06.2002
Cash and bank deposits	6 1 2 6	5 767	6 454	7 454	7 539
Norwegian notes and certificates	3 945	4 492	3 631	5 057	5 647
Foreign notes and certificates	131	92	249	372	405
Norwegian bearer bonds	12 471	12 854	13 111	13 470	16 308
Foreign bearer bonds	12 411	12 851	13 005	13 228	13 706
Norwegian shares, units, primary capital certificates, interests	11 354	10 269	10 807	9 933	8 152
Foreign shares, units, primary capital certificates, interests	12 666	10 428	11 677	11 148	7 632
Loans to the general public <sup>1)</sup>	1 644	1 243	934	854	826
Loans to other sectors	114	89	148	144	141
Other specified sectors	39 186	35 997	40 452	45 485	42 209
Total assets	100 048	94 082	100 468	107 145	102 565

<sup>1)</sup> Includes local government administration, non-financial enterprises and households. Source: Statistics Norway

#### Table 10a. Securities funds' assets. Market value. In millions of NOK

	30.06.2001	30.09.2001	31.12.2001	31.03.2002	30.06.2002
Bank deposits	4 950	4 4 1 2	3 734	4 171	4 769
Treasury bills, etc. <sup>1)</sup>	1 576	1 661	717	957	1 184
Other Norwegian short-term paper	18 525	19 768	20 104	19 014	19 440
Foreign short-term paper	227	194	242	0	0
Government bonds, etc. <sup>2)</sup>	2 919	3 077	4 163	4 322	3 949
Other Norwegian bonds	22 030	24 920	25 093	24 679	25 014
Foreign bonds	2 175	1 807	2 193	0	0
Norwegian equities	36 270	28 087	31 106	32 948	26 795
Foreign equities	50 848	38 200	43 401	47 943	38 969
Other assets	2 126	2 159	2 320	2 313	2 130
Total assets	141 646	124 284	133 073	136 346	122 250

<sup>1)</sup>Comprises Treasury bills and other certificates issued by state lending institutions.

 $^{2)}\mbox{Comprises}$  government bonds and bonds issued by state lending institutions.

Sources: Norwegian Central Securities Depository and Norges Bank

# Table 10b. Securities funds' assets under management by holding sector. Market value. In millions of NOK

	30.06.2001	30.09.2001	31.12.2001	31.03.2002	30.06.2002
Central government and social security administration	344	342	275	354	379
Commercial and savings banks	3566	3650	3918	3358	3442
Other financial corporations	17484	15529	19184	15770	12762
Local government admin. and municipal enterprises	6609	6953	7893	7860	8106
Other enterprises	25493	22431	25240	23859	21840
Households	83466	71368	72605	80392	71165
Rest of the world	3324	2723	2741	3536	3340
Total assets under management	140 286	122 996	131 856	135 129	121 034

Sources: Norges Bank and the Norwegian Central Securities Depository

### Securities statistics

# Table 11. Shareholdings registered with the Norwegian Central Securities Depository (VPS), by holding sector. Market value. In millions of NOK

Holding sector	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Central government and social security administration	223 630	249 604	271 787	238 711	198 032
Norges Bank	0	0	0	0	0
State lending institutions	10	4	4	4	3
Savings banks	3 152	3 232	3 393	3 065	2 930
Commercial banks	8 979	9 283	13 983	10 852	6 976
Insurance companies	32 562	36 556	37 338	26 253	21 378
Mortgage companies	162	174	201	81	67
Finance companies	4	4	5	4	3
Mutual funds	30 713	34 477	36 460	29 221	20 820
Other financial enterprises	30 210	32 059	31 512	30 829	38 781
Local government administration and municipal enterprises	2 452	2 755	5 528	5 252	3 746
State enterprises	7 371	9 412	10 226	8 608	7 705
Other private enterprises	172 690	143 658	163 783	141 432	128 089
Wage-earning households	52 235	50 497	54 208	45 330	39 778
Other households	3 412	2 678	2 765	2 354	1 862
Rest of the world	248 369	242 456	278 695	247 474	198 284
Unspecified sector	1 762	1 925	1 865	949	1 011
Total	817 716	818 774	911 755	790 420	669 464

Sources: Norwegian Central Securities Depository and Norges Bank

# Table 12. Share capital and primary capital certificates registered with the Norwegian Central Securities Depository, by issuing sector. Nominal value. In millions of NOK

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Savings banks	8 991	9 126	9 126	9 126	11 280
Commercial banks	15 702	15 712	15 712	15 724	15 725
Insurance companies	1 123	1 124	1 124	1 124	2 758
Mortgage companies	2 194	2 194	2 194	2 194	2 194
Finance companies	64	5	5	5	5
Other financial enterprises	12 156	11 389	11 411	11 097	19 806
Local government administration and municipal enterprises	2	2	2	2	2
State enterprises	18 421	18 425	18 425	18 508	18 463
Other private enterprises	47 019	46 027	45 105	45 265	45 019
Rest of the world	7 023	7 194	6 884	5 571	5 677
Unspecified sector	0	0	0	0	0
Total	112 695	111 198	109 987	108 618	120 929

Sources: Norwegian Central Securities Depository and Norges Bank

Table 13. Net purchases and net sales (-) in the primary and secondary markets of shares registered with the Norwegian Central Securities Depository, by purchasing, selling and issuing sector<sup>1)</sup> . Estimated market value. In millions of NOK

2002 Q3								Purcha	sing/ se	lling secto	or							
	Cent.gov't and social	Norges	State Iendin <i>o</i>	Sav	Comm	Insur. com-	Mort. com-	Fin.	Secure	Other financ	Local govt &	State	Other	Wage- earning house-	Other house-	Rest of	Unsp	
Issuing sector	security	Bank	inst.	banks	banks	panies	panies	panies	funds	enterpr.	enterpr.	enterpr.	enterpr.	holds	holds	world	sector	Total <sup>2)</sup>
Comm. banks	1	0	0	-142	63	-36	1	0	-52	-84	59	19	-17	62	3	141	1	19
Insurance companies	0	0	0	0	4	6	0	0	6	-15	0	0	15	16	0	-1	4	43
Mortage companies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finance companies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other financial enterpr. Local gov't. admin. and	294	0	0	276	503	2 915	L-	-	895	162	64	-160	6 061	2 188	182	7 626	66	21 098
municipal enterpr.	0	0	0	0	0	0	0	0	0	0	1	0	0	-	0	0	0	0
State enterprises	263	0	0	L-	435	-817	-2	0	-705	-2	-1	-52	-40	113	17	869	13	85
Other private enterpr.	1 247	0	9-	1364	6 649	-6 155	19	0	-487	-3 136	2 662	15	6 464	-1 222	-10	4 797	153	12 354
Rest of the world	159	0	0	15	6 882	-1 390	ς	0	-454	-1 312	%	-22	-1 791	-36	15	-2 133	12	-65
Unspecified sector	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1 964	0	-9	1 506	14 537	-5 475	6	-	-794	-4 387	2 778	-201	10 692	1 121	207	11 299	281	33 534

<sup>1)</sup> Issues at issue price + purchases at market value - sales at market value - redemption value.

<sup>2)</sup> Total shows net issues in the primary market. Purchases and sales in the secondary market result in redistribution between owner sectors, but add up to 0.

Sources: Norwegian Central Securities Depository and Norges Bank

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Central government and social security administration	28 004	27 682	26 484	26 865	26 175
Norges Bank	6 986	6 531	5 610	7 030	6 710
State lending institutions	232	219	209	193	183
Savings banks	25 114	26 733	28 357	30 617	35 112
Commercial banks	39 768	35 598	38 549	39 727	42 225
Insurance companies	154 734	160 077	163 016	168 546	170 384
Mortgage companies	13 415	12 880	13 159	13 671	15 575
Finance companies	33	23	27	30	27
Mutual funds	28 517	29 428	29 602	29 653	29 554
Other financial enterprises	1 685	3 353	3 534	4 198	3 706
Local government administration and municipal enterprises	10 642	10 694	14 215	15 819	18 640
State enterprises	3 457	3 166	4 105	2 317	2 600
Other private enterprises	21 966	24 049	23 329	23 191	22 624
Wage-earning households	13 286	14 972	15 841	16 390	16 470
Other households	4 651	4 882	4 814	5 082	5 154
Rest of the world	60 872	61 131	57 974	59 773	66 338
Unspecified sector	825	948	973	689	708
Total	414 185	422 367	429 799	443 790	462 187

# Table 14. Bondholdings in NOK registered with the Norwegian Central Securities Depository,<br/>by holding sector. Market value. In millions of NOK

Sources: Norwegian Central Securities Depository and Norges Bank

# Table 15. Bondholdings in NOK registered with the Norwegian Central Securities Depository,<br/>by issuing sector. Nominal value. In millions of NOK

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Central government and social security administration	127 776	129 762	132 785	139 771	141 793
State lending institutions	284	263	252	231	220
Savings banks	58 484	60 263	64 969	71 795	75 289
Commercial banks	61 675	58 601	63 694	64 116	67 557
Insurance companies	994	994	990	915	915
Mortgage companies	66 510	66 988	66 187	67 012	69 988
Finance companies	50	50	550	550	500
Other financial enterprises	2 300	2 300	2 300	2 300	2 300
Local government administration and municipal enterprises	47 198	46 466	44 411	43 590	44 402
State enterprises	12 685	14 854	14 398	14 688	15 621
Other private enterprises	32 908	35 488	36 716	38 186	37 020
Households	27	23	23	23	23
Rest of the world	8 086	9 698	10 191	10 001	11 721
Unspecified sector	0	0	0	0	0
Total	418 977	425 750	437 466	453 178	467 349

Sources: Norwegian Central Securities Depository and Norges Bank

denominated bonds registered with the Norwegian Central Securities Depository, by purchasing, selling and issuing sector.<sup>1)</sup> Estimated market value. In millions of NOK Table 16. Net purchases and net sales (-) in the primary and secondary markets for NOK-

Total<sup>2)</sup> 15 747 2 023 C 12 054 -43 8 953 -72 2 999 450 0 -1 077 766 1 635 0 43 434 З 68 sector 13 Unsp. 0 0 0 --12 0 0 0 62 2 0 -Rest of the world  $4\,660$ C 0 C 5 446 0 1 2 2 9 868 45 -1 205 -10 -675 .114 -431 079 Other households 0 170 170 -14 -59 ŝ 10 34 290 C 4 C 299 34 earning households 0 2 035 Wage-С 10 ÷ 4 0 0 19 0 322 702 88 -101 161 private Other -245 C 0 0 430 C 404 -10 -1 094 ŝ -38 -32 994 -33 720 enterpr. 207 31 State 0 0 139 0 0 579 -81 0 0 C -528 320 83 4 -91 enterpr. govt & munic. 0 C 7 962 Local 0 C 725 326 720 302 978 26 -14 480 2401× enterpr. Purchasing/ selling sector Other 0 0 437 financ. 99 0 82 С .16 0 -24 -38 391 Ŷ C enterpr. Ξ Secur. funds 30 955 C 66 C 4 32 210 C 699 -16 -146 66-409 -33 34 -25 181 0 com-0 0 Ģ 0 0 10 С 2 0 0 0 0 C Fin. panies com--19 3 005 Mort. 1 047 C 2 308 0 0 0 15 panies -148 0 -293 91 2 panies Insur. com-3 057 3 231 047 -910 134 -458 0 1 030 C 6 218 11 261 4 180 -65 85 69 7 banks 20502 234 680 206 C 104 898 246 268 0 140 C Comm. 2 banks 3 033 3410 -10 9715 Sav. 320 1 802 C -89 C 4 704 C -15 269 295 lending 0 0 -36 0 0 36 0 C 0 0 0 0 0 0 0 State inst. Norges 0 0 0 0 0 C 0 0 0 0 0 0 C 95 Bank 95 social -2 020 0 С 0 0 204 392 0 0 0 -1 037 Cent.gov't and 158 security 141 454 4 Central government Mortage companies Local gov't. admin. Finance companies and social security private enterprises Unspecified sector State lending inst. Rest of the world Insur. companies State enterprises Other financial Savings banks and municipal Issuing sector Commercial Households enterprises enterprises 2002 Q3 admin. banks Other Total

<sup>1)</sup> Issues at issue price + purchases at market value - sales at market value - redemption value.

Sources: Norwegian Central Securities Depository and Norges Bank

<sup>2)</sup> Total shows net issues in the primary market. Purchases and sales in the secondary market result in redistribution between owner sectors, but add up to 0.

15

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Central government and social security administration	7 889	5 680	6 444	5 845	6 635
Norges Bank	2 478	2 451	3 053	2 219	2 590
State lending institutions	0	0	0	0	0
Savings banks	6 847	4 088	3 529	3 435	3 846
Commercial banks	21 024	17 629	13 633	13 546	16 610
Insurance companies	36 746	38 829	42 046	44 160	45 333
Mortgage companies	1 128	454	173	2 569	1 682
Finance companies	73	61	58	48	61
Mutual funds	22 169	20 690	21 180	22 577	25 183
Other financial enterprises	1 214	2 025	2 656	1 900	2 196
Local government administration					
and municipal enterprises	4 360	3 244	4 022	8 918	7 352
State enterprises	6 381	4 006	10 944	4 784	6 078
Other private enterprises	10 734	7 225	6 762	6 442	6 877
Wage-earning households	363	180	121	191	232
Other households	521	1 354	1 245	1 331	1 137
Rest of the world	10 947	9 995	13 394	11 846	12 457
Unspecified sector	429	488	48	8	7
Total	133 303	118 398	129 308	129 819	138 277

# Table 17. NOK-denominated short-term papir registered with the Norwegian Central Securities Depository by holding sector. Market value. In millions of NOK

Sources: Norwegian Central Securities Depository and Norges Bank

### Table 18. Outstanding short-term paper, by issuing sector.<sup>1)</sup>Nominal value. In millions of NOK

Issuing sector	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Central government and social security administration	35 500	36 000	36 500	33 000	52 500
Counties	2 389	2 172	1 163	1 076	536
Municipalities	3 267	3 208	3 280	3 722	3 384
State lending institutions	0	0	0	0	0
Commercial banks	19 724	13 466	21 937	21 744	17 014
Savings banks	38 240	37 965	34 421	36 311	39 541
Mortgage companies	9 177	5 525	4 380	3 572	3 242
Finance companies	500	575	550	625	700
Other financial enterprises	0	0	0	0	0
State enterprises	3 900	2 780	4 530	8 205	10 587
Municipal enterprises	11 693	9 974	11 194	10 439	8 868
Private enterprises	11 530	7 538	11 690	13 723	11 375
Rest of the world	2 040	1 885	2 400	1 225	2 200
Total	137 960	121 088	132 045	133 642	149 947

<sup>1)</sup>Comprises short-term paper issued in Norway in NOK by domestic sectors and foreigners and paper in foreign currency issued by domestic sectors. Source: Norges Bank

### Credit and liquidity trends Table 19. Credit indicator and money supply

				Percentage growth					
	Volume	figures at end of NOKbn	f period	Over p	ast 12 months		Over past 3 m Annualised r	onths ate <sup>4)</sup>	
	C2 <sup>1)</sup>	C3 <sup>2)</sup>	M2 <sup>3)</sup>	C2 <sup>1)</sup>	C3 <sup>2)</sup>	M2 <sup>3)</sup>	C2	M2	
December 1993	877.7	1 074.1	476.0	-1.8	-1.7	-0.7	0.1	1.6	
December 1994	893.5	1 075.8	501.3	2.3	1.3	5.3	2.8	2.4	
December 1995	936.0	1 123.6	530.3	4.9	5.2	5.8	5.4	2.2	
December 1996	992.7	1 213.6	564.4	6.0	5.3	6.4	7.8	5.2	
December 1997	1 099.4	1 361.1	578.5	10.2	10.2	2.5	10.0	3.6	
December 1998	1 193.3	1 519.7	605.3	8.3	12.3	4.6	6.5	6.0	
December 1999	1 295.3	1 695.0	670.1	8.3	8.0	10.7	9.7	9.2	
December 2000	1 461.7	1 917.0	731.8	12.4	10.8	9.2	12.2	8.3	
July 2001	1 549.0	2 012.1	773.5	10.7	9.4	8.6	9.4	7.4	
August 2001	1 558.2	2 002.1	772.1	10.6	6.8	8.1	9.9	7.1	
September 2001	1 573.6	2 012.6	775.8	10.2	5.9	6.5	10.2	5.8	
October 2001	1 584.2	2 038.8	781.7	10.3	6.3	8.4	9.8	6.9	
November 2001	1 602.2	2 068.6	773.9	9.8	7.2	7.7	9.4	8.4	
December 2001	1 610.1	2 071.8	795.1	9.8	8.0	8.6	9.2	12.0	
January 2002	1 616.4	2 079.9	821.0	9.4	8.2	9.5	8.4	12.6	
February 2002	1 623.3	2 083.2	812.4	8.9	8.0	7.5	7.7	12.0	
March 2002	1 633.6	2 097.0	812.9	8.8	8.3	8.1	7.6	5.2	
April 2002	1 649.1	2 115.0	800.1	9.0	8.2	8.0	8.5	3.2	
May 2002	1 657.9	2 107.3	805.7	9.3	7.7	6.5	10.1	3.8	
June 2002	1 671.5	2 108.4	844.5	9.6	7.9	8.9	10.8	8.7	
July 2002	1 678.0	2 117.5	837.1	9.4	8.0	8.2	10.8	9.9	
August 2002	1 685.3	2 119.4	826.4	9.1	8.3	7.0	9.1	4.2	
September 2002	1 694.3	2 121.7	820.7	8.7	8.2	5.8	7.8	2.3	
October 2002	1 704.7		844.7	8.7		8.1			

1) C2 = Credit indicator. Credit from domestic sources; actual figures.

2) C3 = Total credit from domestic and foreign courses; actual figures.

3) M2 = Money supply; seasonally adjusted figures.

4) Seasonally adjusted figures

Source: Norges Bank

# Table 20. Domestic credit supply to the general public<sup>1)</sup>, by source. In millions of NOK. 12-month growth as a percentage

	31.12.1	999	31.12.2	000	31.12.2	001	31.10.2	002
	Amount	%	Amount	%	Amount	%	Amount	%
Private banks	819 535	9.5	938 076	13.8	1 030 694	9.6	1 095 941	9.1
State lending institutions	189 651	5.3	167 921	3.9	176 494	5.1	184 733	4.9
Norges Bank	566	6.4	575	1.6	603	4.9	651	8.0
Mortgage companies	93 270	-2.5	144 846	20.4	167 698	15.6	171 178	12.0
Finance companies	58 806	28.4	66 809	12.1	79 474	14.6	83 942	8.6
Life insurance companies	25 062	-11.3	23 047	-8.0	24 482	0.2	23 170	-5.0
Pension funds	4 993	6.6	4 796	-3.9	3 742	7.1	3 742	1.4
Non-life insurance companies	1 321	-59.6	1 649	24.8	934	-43.4	899	-21.1
Bond debt <sup>2)</sup>	75 538	2.8	82 838	9.7	89 671	8.2	92 221	5.2
Notes and short-term paper	19 335	82.8	25 059	29.6	25 672	2.4	34 750	11.4
Other sources	7 175	51.7	6 038	27.4	10 624	76.0	13 438	35.9
Total domestic credit (C2) <sup>3)</sup>	1 295 252	8.3	1 461 654	12.4	1 610 088	9.8	1 704 665	8.7

1) Comprises local government administration, non-financial enterprises and households.

<sup>2)</sup> Adjusted for non-residents' holdings of Norwegian private and municipal bonds in Norway.

<sup>3)</sup> Corresponds to Norges Bank's credit indicator (C2).

	Table 21.	Composition	of money supply.	In millions	of NOK
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Actual figures	Notes	Transaction					Change
at end of	and	account		Other			last 12
period	coins	deposits	M1 <sup>1)</sup>	deposits <sup>2)</sup>	CDs	M2 <sup>3)</sup>	months
December 1993	38 003	149 615	185 359	288 396	2 260	476 015	-3 205
December 1994	40 454	172 154	210 108	286 081	5 1 1 6	501 305	25 290
December 1995	42 069	178 653	217 727	296 799	15 731	530 257	28 952
December 1996	43 324	208 072	247 937	294 741	21 686	564 364	34 107
December 1997	46 014	227 382	269 597	278 741	30 200	578 538	14 174
December 1998	46 070	237 046	279 188	292 820	33 321	605 329	26 791
December 1999	48 020	300 131	343 496	295 822	30 803	670 121	64 792
December 2000	46 952	328 816	371 340	326 351	34 152	731 843	61 722
July 2001	42 839	325 299	363 721	375 651	34 095	773 467	61 093
August 2001	42 026	311 390	349 126	386 447	36 510	772 083	58 018
September 2001	41 591	333 317	370 697	363 275	41 868	775 840	47 616
October 2001	40 969	331 294	368 173	376 933	36 572	781 678	60 430
November 2001	42 084	327 191	365 086	374 039	34 819	773 944	55 292
December 2001	46 633	344 109	386 147	370 071	38 899	795 117	63 274
January 2002	42 613	350 854	389 293	393 988	37 746	821 027	71 321
February 2002	41 510	346 813	384 287	390 769	37 342	812 398	56 458
March 2002	42 002	346 918	384 789	384 961	43 124	812 874	60 599
April 2002	40 746	337 329	374 096	381 891	44 146	800 133	59 463
May 2002	40 785	342 667	379 393	379 315	47 000	805 708	49 073
June 2002	41 900	378 726	416 494	381 452	46 540	844 486	68 794
July 2002	40 945	365 142	401 902	389 106	46 078	837 086	63 619
August 2002	40 649	349 274	385 825	394 607	45 931	826 363	54 280
September 2002	40 188	350 270	386 502	388 380	45 822	820 704	44 864
October 2002	40 024	358 113	394 198	404 464	45 998	844 660	62 982

<sup>1)</sup> The narrow money concept M1 constitutes the money-holding sector's stock of Norwegian notes and coins plus the sector's

transaction account deposits in Norges Bank, commercial banks and savings banks (in NOK and foreign currency).

<sup>2)</sup> Excluding restricted bank deposits (BSU, IPA, withholding tax accounts, etc).

<sup>3</sup>) The broad money concept M2 constitutes the sum of M1 and the money-holding sector's other bank deposits and CDs

(in NOK and foreign currency) excluding restricted bank deposits (BSU, IPA, withholding tax accounts, etc).

#### Source: Norges Bank

# Table 22. Household financial balance. Financial investments and holdings, by financial instrument. In billions of NOK

		Financial investments					Holdings				
		Year			2	Year			30 J	30 June	
	1999	2000	2001	2001	2002	1999	2000	2001	2001	2002	
Bank deposits, etc. <sup>1)</sup>	33.4	33.0	39.0	22.9	21.5	407.5	440.6	479.7	473.8	517.7	
Bonds, etc. <sup>2)</sup>	2.2	7.8	6.7	2.0	1.3	10.9	18.2	21.5	18.3	23.1	
Shares, etc. <sup>3)</sup>	2.9	4.2	6.8	3.5	1.1	166.9	174.7	173.0	176.0	171.4	
Units in securities funds	7.0	11.7	2.3	0.7	1.2	77.9	85.7	78.1	89.3	77.6	
Insurance claims	20.6	22.5	32.4	6.9	0.7	428.0	455.1	470.6	464.3	479.2	
Loans and other assets <sup>4)</sup>	5.4	7.0	3.8	-8.3	-7.6	100.9	107.8	111.6	110.2	115.8	
Total assets	71.4	86.2	91.1	27.7	18.3	1192.1	1282.0	1334.5	1332.0	1384.7	
Loans from commercial and savings banks	49.9	66.5	67.9	19.8	23.9	525.3	591.9	659.8	623.5	693.2	
Loans from state lending inst. and Norges Bank	6.0	7.7	8.5	1.7	0.2	134.3	141.4	149.1	146.9	153.0	
Loans from private mortgage and finance											
companies	0.4	6.2	13.9	3.3	2.2	47.1	53.5	67.5	60.0	73.4	
Loans from insurance companies	-3.9	-2.5	-0.8	-0.2	0.0	19.2	16.7	16.0	16.3	15.9	
Other liabilities <sup>5)</sup>	4.7	-1.6	4.5	9.1	9.2	81.1	79.0	83.1	82.0	83.9	
Total liabilities	57.3	76.3	94.0	33.6	35.5	807.0	882.7	975.4	928.7	1019.5	
Net	14.1	9.9	-2.9	-5.8	-17.2	385.1	399.3	359.1	403.3	365.1	

<sup>1)</sup> Notes and coins and bank deposits.

<sup>2)</sup> Bearer bonds, savings bonds, premium bonds, notes and short-term Treasury notes.

<sup>3)</sup> VPS-registered (registered with the Norwegian Central Securities Depository), non - registered shares and primary capital certificates.

<sup>4)</sup> Loans, accrued interest, holiday pay claims and tax claims.

<sup>5)</sup> Other loans, bonds and notes, tax liabilities, and accrued interest.

Sources: Norges Bank and Statistics Norway

#### Table 23. Money market liquidity. Liquidity effect from 1 January to end period. In millions of NOK

	1.1	- 31.12	1.1 - 30.11		
Supply+/withdrawal-	2000	2001	2001	2002	
Central gov't. and other public accounts					
(excl. paper issued by state lending inst. and gov't.)	-50 855	-115 094	-115 042	-18 562	
Paper issued by state lending inst. and govt.	-11 103	8 514	12 673	-8 033	
Purchase of foreign exchange for Gov't Petroleum Fund	53 010	120 300	115 720	53 185	
Other foreign exchange transactions	368	91	91	421	
Holdings of banknotes and coins <sup>1)</sup> (estimate)	775	424	4 801	5 849	
Overnight loans	245	-126	155	0	
Fixed-rate loans	-4 425	-6 011	-21 151	-15 140	
Other central bank financing	340	-8 135	-8 135	-24 974	
Total reserves	-11 645	-37	-10 888	-7 254	
Of which:					
Sight deposits with Norges Bank	-11 645	-37	-10 888	-7 254	
Treasury bills	0	0	0	0	
Other reserves (estimate)	0	0	0	0	

<sup>1)</sup> The figures are based mainly on Norges Bank's accounts. Discrepancies may arise between the bank's own statements and banking statistics due to different accruals.

Source: Norges Bank

### Interest rate statistics

#### Table 24. Nominal interest rates for NOK. Averages. Per cent per annum

							Interest rate on banks' overnight	Interest rate on banks' sight	
	1-mo	onth	3-mo	nth	12-mo	onth	loans in	deposits with	
	NIDR	NIBOR	NIDR	NIBOR	NIDR	NIBOR	Norges Bank	Norges Bank	
July 2001	7.4	7.3	7.5	7.4	7.6	7.5	9.0	7.0	
August 2001	7.4	7.2	7.5	7.3	7.5	7.3	9.0	7.0	
September 2001	7.3	7.1	7.3	7.1	7.2	7.0	9.0	7.0	
October 2001	7.2	7.1	7.1	6.9	6.8	6.6	9.0	7.0	
November 2001	7.2	7.1	7.1	6.9	6.6	6.4	9.0	7.0	
December 2001	7.0	6.9	6.8	6.6	6.4	6.2	8.7	6.7	
January 2002	6.7	6.5	6.5	6.3	6.4	6.2	8.5	6.5	
February 2002	6.7	6.6	6.7	6.6	6.8	6.7	8.5	6.5	
March 2002	6.8	6.7	6.9	6.7	7.0	6.9	8.5	6.5	
April 2002	6.9	6.7	6.9	6.8	7.2	7.0	8.5	6.5	
May 2002	6.9	6.7	7.1	6.9	7.5	7.3	8.5	6.5	
June 2002	7.0	6.9	7.3	7.1	7.7	7.5	8.5	6.5	
July 2002	7.3	7.2	7.4	7.3	7.6	7.4	8.9	6.9	
August 2002	7.3	7.1	7.4	7.3	7.5	7.3	9.0	7.0	
September 2002	7.3	7.1	7.3	7.1	7.2	7.0	9.0	7.0	
October 2002	7.3	7.1	7.3	7.1	7.0	6.8	9.0	7.0	
November 2002	7.3	7.1	7.3	7.1	6.9	6.7	9.0	7.0	

Note: NIDR = Norwegian Interbank Deposit Rate, a pure krone interest rate

NIBOR = Norwegian Interbank Offered Rate, constructed on the basis of currency swaps Source: Norges Bank

Table 25. Short-term interest rates	<sup>1)</sup> for ke	y currencies i	n the E	uro-market.	Per cent	per annum
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							Interest rate differential	
	DKK	GBP	JPY	SEK	USD	EUR	NOK/EUR	
July 2001	4.8	5.2	0.1	4.4	3.7	4.5	2.8	
August 2001	4.7	4.9	0.1	4.3	3.5	4.3	2.9	
September 2001	4.3	4.6	0.1	4.1	3.0	4.0	3.1	
October 2001	3.9	4.4	0.1	3.8	2.4	3.6	3.3	
November 2001	3.6	3.9	0.1	3.8	2.1	3.4	3.4	
December 2001	3.5	4.0	0.1	3.8	1.9	3.3	3.2	
January 2002	3.6	4.0	0.1	3.8	1.8	3.3	2.9	
February 2002	3.5	4.0	0.1	3.9	1.9	3.3	3.1	
March 2002	3.6	4.1	0.1	4.1	2.0	3.4	3.2	
April 2002	3.6	4.1	0.1	4.3	1.9	3.4	3.3	
May 2002	3.7	4.1	0.0	4.4	1.9	3.4	3.3	
June 2002	3.7	4.1	0.0	4.4	1.8	3.4	3.6	
July 2002	3.6	4.0	0.0	4.4	1.8	3.4	3.8	
August 2002	3.5	3.9	0.0	4.3	1.8	3.3	3.8	
September 2002	3.4	3.9	0.0	4.3	1.8	3.3	3.8	
October 2002	3.4	3.9	0.0	4.3	1.7	3.2	3.8	
November 2002	3.2	3.9	0.0	4.1	1.4	3.1	3.9	

<sup>1)</sup> Three-month rates, monthly average of daily quotations.

Sources: OECD and Norges Bank

### Table 26. Yields on Norwegian bonds<sup>1)</sup>. Per cent per annum

	3-yea	ar	5-yea	r	10-уе	ar
	Gov't	Private	Gov't	Private	Gov't	Private
July 2001	6.9	7.4	6.7	7.4	6.6	7.4
August 2001	6.7	7.2	6.5	7.1	6.5	7.2
September 2001	6.4	7.0	6.4	7.0	6.4	7.1
October 2001	6.0	6.6	6.0	6.7	6.1	6.8
November 2001	5.8	6.5	5.8	6.5	5.9	6.6
December 2001	5.8	6.5	6.0	6.6	6.2	6.8
January 2002	6.0	6.6	6.1	6.7	6.2	6.9
February 2002	6.3	6.9	6.4	6.9	6.4	7.0
March 2002	6.6	7.0	6.5	7.1	6.6	7.1
April 2002	6.6	7.2	6.6	7.1	6.7	7.2
May 2002	6.9	7.3	6.8	7.3	6.8	7.3
June 2002	7.1	7.5	6.9	7.4	6.8	7.4
July 2002	6.8	7.2	6.7	7.1	6.6	7.1
August 2002	6.5	7.0	6.4	6.9	6.3	6.9
September 2002	6.2	6.7	6.1	6.6	6.1	6.6
October 2002	6.1	6.7	6.1	6.6	6.2	6.7
November 2002	6.0	6.6	6.0	6.5	6.1	6.6

<sup>1)</sup> Whole-year interest rate paid in arrears. Monthly average. As of 1 January 1993 based on interest rate on representative bonds weighted by residual maturity.

#### Table 27. Yields on government bonds<sup>1)</sup> in key currencies. Per cent per annum

									Interest rate differential
	DEM	DKK	FIM	FFR	GBP	JPY	SEK	USD	NOK/DEM <sup>2)</sup>
July 2001	5.1	5.4	5.3	5.1	5.1	1.3	5.5	5.2	1.6
August 2001	4.9	5.2	5.1	5.0	4.9	1.4	5.2	5.1	1.5
September 2001	4.9	5.2	5.1	4.9	4.9	1.4	5.3	4.9	1.5
October 2001	4.7	4.9	4.9	4.7	4.8	1.4	5.2	4.6	1.4
November 2001	4.5	4.7	4.8	4.6	4.6	1.3	5.0	4.7	1.3
December 2001	4.8	5.0	5.0	4.8	4.8	1.4	5.3	5.1	1.4
January 2002	4.9	5.2	5.1	5.0	4.9	1.4	5.3	5.2	1.3
February 2002	5.0	5.2	5.2	5.0	4.9	1.5	5.4	5.0	1.4
March 2002	5.2	5.5	5.4	5.2	5.2	1.5		5.4	1.4
April 2002	5.2	5.5	5.4	5.3	5.2	1.4		5.3	1.5
May 2002	5.2	5.5	5.5	5.3	5.3	1.4		5.2	1.5
June 2002	5.1	5.4	5.3	5.1	5.1	1.4		4.9	1.7
July 2002	4.9	5.2	5.2	5.0	5.0	1.3		4.6	1.6
August 2002	4.7	4.9	4.9	4.7	4.7	1.3		4.2	1.7
September 2002	4.5	4.8	4.7	4.5	4.5	1.2		3.9	1.6
October 2002	4.6	4.9	4.7	4.6	4.6	1.1		3.9	1.6
November 2002	4.6	4.9	4.7	4.6	4.6	1.0		4.1	1.6

<sup>1)</sup> Government bonds with 10 years to maturity. Monthly average of daily quotations.

<sup>2)</sup> Differential between yields on Norwegian and German government bonds with 10 years to maturity.

Sources: OECD and Norges Bank

# Table 28. Commercial and savings banks. Average interest rates and commissions on utilised loans in NOK to the general public at end of quarter. Per cent per annum

	Loans, excl. non-accrual loans								
_		Non- financial fina				Credit lines	Repayment loans		
	Total loans	govern- ment	enter- prises	enter- prises	enter- House- prises holds	Overdrafts and building loans	Housing loans	Other loans	
2001 Q3									
Commercial banks	8.72					10.77	8.40	8.49	
Savings banks	9.06					11.75	8.59	9.34	
All banks	8.90					11.18	8.51	8.87	
2001 Q4									
Commercial banks	8.46	7.85	7.90	8.59	8.40	10.31	8.27	8.20	
Savings banks	8.91	7.23	9.13	9.13	8.85	11.18	8.56	9.06	
All banks	8.69	7.54	8.23	8.80	8.66	10.69	8.43	8.58	
2002 Q1									
Commercial banks	8.11	7.50	7.99	8.28	8.01	9.83	7.88	7.89	
Savings banks	8.51	7.13	7.76	8.89	8.41	10.88	8.12	8.75	
All banks	8.31	7.30	7.93	8.52	8.24	10.28	8.01	8.27	
2002 Q2									
Commercial banks	8.15	7.90	7.97	8.40	7.99	9.73	7.86	8.06	
Savings banks	8.51	7.34	7.72	8.97	8.38	10.80	8.11	8.80	
All banks	8.33	7.63	7.91	8.62	8.21	10.18	8.01	8.39	
2002 Q3									
Commercial banks	8.59	7.79	8.03	8.82	8.47	10.53	8.32	8.38	
Savings banks	8.98	7.60	8.12	9.33	8.89	11.34	8.60	9.22	
All banks	8.79	7.70	8.05	9.02	8.71	10.88	8.48	8.75	

	Total deposits	Local govern- ment	Non-financial public enterprises	Non-financial private enterprises	House- holds	Deposits on transaction accounts	Other deposits
2001 Q3							
Commercial banks	5.89					5.25	6.54
Savings banks	5.79					4.63	6.47
All banks	5.84					4.99	6.50
2001 Q4							
Commercial banks	5.76	6.36	6.37	5.80	5.66	5.10	6.45
Savings banks	5.72	6.47	6.65	5.74	5.62	4.51	6.42
All banks	5.74	6.43	6.46	5.78	5.64	4.85	6.43
2002 Q1							
Commercial banks	5.38	6.06	5.96	5.52	5.22	4.72	6.07
Savings banks	5.41	6.47	6.41	5.62	5.22	4.26	6.09
All banks	5.40	6.33	6.12	5.55	5.22	4.53	6.08
2002 Q2							
Commercial banks	5.27	6.07	6.25	5.43	5.05	4.62	6.05
Savings banks	5.32	6.70	6.78	5.70	5.06	4.09	6.09
All banks	5.29	6.45	6.42	5.53	5.06	4.40	6.08
2002 Q3							
Commercial banks	5.67	6.00	6.51	5.78	5.53	5.00	6.41
Savings banks	5.83	6.91	6.78	6.06	5.66	4.57	6.54
All banks	5.75	6.56	6.60	5.88	5.60	4.83	6.49

# Table 29. Commercial and savings banks. Average interest rates on deposits in NOK from the general public at end of quarter. Per cent per annum

Source: Norges Bank

# Table 30. Life insurance companies. Average interest rates by type of loan at end of quarter.Per cent per annum

	Housing loans	Other loans	Total loans
2001 Q3	8.1	7.2	7.6
Q4	7.8	6.9	7.4
2002 Q1	7.7	6.8	7.3
Q2	7.9	7.1	7.5
Q3	8.0	7.1	7.5

Source: Norges Bank

# Table 31. Mortgage companies. Average interest rates, incl. commissions on loans to private sector at end of quarter. Per cent per annum

	Housing	Loans to	Total
	loans	private enterprises	loans
2001 Q3	7.6	7.7	7.4
Q4	7.4	7.5	7.3
2002 Q1	7.4	7.5	7.1
Q2	7.5	7.6	7.2
Q3	7.8	7.8	7.4

# Profit/loss and capital adequacy data

Table 32. Profit/loss and capital adequacy: commercial banks	<sup>)</sup> . Percentage of average total assets
--	---

			(	23
	2000	2001	2001	2002
Interest income	7.4	7.5	7.8	7.2
Interest expenses	5.5	5.8	6.0	5.4
Net interest income	1.8	1.8	1.8	1.8
Total other operating income	1.3	1.2	1.1	0.7
Other operating expenses	1.9	1.9	1.8	1.7
Operating profit before losses	1.2	1.1	1.1	0.9
Recorded losses on loans and guarantees	0.1	0.3	0.2	0.2
Ordinary operating profit before taxes	1.1	0.8	0.9	0.6
Capital adequacy ratio <sup>2)</sup>	11.0	11.7	11.6	11.4
Core capital	7.8	8.7	8.6	8.9

<sup>1)</sup> Parent banks (excluding branches abroad) including Postbanken and foreign-owned branches.

<sup>2)</sup> As a percentage of the basis of measurement for capital adequacy.

Source: Norges Bank

#### Table 33. Profit/loss and capital adequacy: savings banks. Percentage of average total assets

				Q3
	2000	2001	2001	2002
Interest income	7.6	8.1	8.2	7.7
Interest expenses	4.9	5.6	5.7	5.2
Net interest income	2.7	2.5	2.5	2.5
Total other operating income	0.8	0.7	0.6	0.4
Other operating expenses	2.0	1.8	1.8	1.7
Operating profit before losses	1.6	1.4	1.3	1.1
Recorded losses on loans and guarantees	0.2	0.3	0.2	0.3
Ordinary operating profit before taxes	1.8	1.2	1.2	0.9
Capital adequacy ratio <sup>1)</sup>	13.7	13.8	13.1	12.9
Of which:				
Core capital	10.9	11.0	10.3	10.4

<sup>1)</sup> As a percentage of the basis of measurement for capital adequacy.

Source: Norges Bank

### Table 34. Profit/loss and capital adequacy: finance companies<sup>1)</sup>. Percentage of average total assets

			Q	3
	2000	2001	2001	2002
Interest income	10.6	10.3	10.4	9.5
Interest expenses	5.6	6.0	6.1	5.5
Net interest income	5.0	4.3	4.3	4.0
Total other operating income	2.3	2.8	2.6	2.5
Other operating expenses	4.7	4.5	4.4	4.0
Operating profit before losses	2.5	2.6	2.5	2.4
Recorded losses on loans and guarantees	0.5	0.5	0.5	0.5
Ordinary operating profit before taxes	2.1	2.1	2.1	1.9
Capital adequacy ratio <sup>2)</sup>	12.4	11.3	11.5	10.5
Of which:				
Core capital	11.1	9.8	10.1	9.0

<sup>1)</sup>Norwegian parents (excl. OBOS) and foreign-owned branches.

<sup>2)</sup> As a percentage of the basis of measurement for capital adequacy.

### Table 35. Profit/loss and capital adequacy: mortgage companies<sup>1)</sup>. Percentage of average total assets

	2000 <sup>3)</sup>		Q	3
		2001	2001	2002
Interest income	6.9	6.5	6.6	5.3
Interest expenses	6.2	5.7	5.9	4.6
Net interest income	0.7	0.8	0.7	0.7
Total other operating income	0.0	0.0	0.0	0.0
Other operating expenses	0.2	0.2	0.2	0.1
Operating profit before losses	0.6	0.6	0.5	0.5
Recorded losses on loans and guarantees	0.0	0.0	0.0	0.0
Ordinary operating profit before taxes	0.6	0.6	0.5	0.5
Capital adequacy <sup>2)</sup>	16.6	14.6	15.1	13.2
Of which:				
Core capital	13.0	11.2	11.9	10.7

<sup>1)</sup>All Norwegian parent companies.

<sup>2)</sup> As a percentage of the basis of measurement for capital adequacy.

<sup>3)</sup> Kommunalbanken reports as a mortgage company with effect from the first quarter of 2000.

Source: Norges Bank

### Exchange rates

# Table 36. The international value of the krone and exchange rates against selected currencies. Monthly average of representative market rates

	Trade-weighted									
	krone	1	100	100	100	100	1	100	100	1
	exchange rate <sup>1)</sup>	EUR	DEM	DKK	FIM	FRF	GBP	JPY	SEK	USD
July 2001	104.15	7.9714	407.57	107.08	134.07	121.52	13.10	7.44	86.05	9.26
August 2001	104.16	8.0552	411.86	108.20	135.48	122.80	12.85	7.37	86.52	8.95
September 2001	102.63	7.9985	408.96	107.49	134.53	121.94	12.84	7.39	82.70	8.78
October 2001	102.80	7.9970	408.88	107.54	134.50	121.91	12.82	7.28	83.50	8.83
November 2001	102.63	7.9224	405.07	106.41	133.24	120.78	12.81	7.29	84.14	8.92
December 2001	103.22	7.9920	408.63	107.38	134.42	121.84	12.90	7.04	84.77	8.96
January 2002	102.72	7.9208	404.98	106.56	133.22	120.75	12.85	6.76	85.84	8.97
February 2002	101.34	7.7853	398.06	104.78	130.94	118.69	12.73	6.70	84.78	8.95
March 2002	100.67	7.7191		103.86			12.53	6.73	85.19	8.81
April 2002	99.16	7.6221		102.53			12.42	6.58	83.44	8.61
May 2002	97.06	7.5147		101.07			11.96	6.49	81.53	8.19
June 2002	95.13	7.4048		99.62			11.50	6.29	81.25	7.75
July 2002	94.58	7.4015		99.62			11.59	6.32	79.94	7.47
August 2002	95.09	7.4284		100.02			11.67	6.39	80.32	7.60
September 2002	94.38	7.3619		99.12			11.67	6.22	80.30	7.51
October 2002	94.06	7.3405		98.80			11.65	6.04	80.62	7.48
November 2002	93.58	7.3190		98.53			11.49	6.02	80.59	7.31

<sup>1)</sup>The nominal effective krone exchange rate is calculated on the basis of the NOK exchange rate against the currencies of Norway's 25 main trading partners, calculated as a chained index and trade-weighted using the OECD's weights. The weights, which are updated annually, are calculated on the basis of each country's competitive position in relation to Norwegian manufacturing. The index is set at 100 in 1990. A rising index value denotes a depreciating krone.

Further information can be found on Norges Bank's web site (www.norges-bank.no). Source: Norges Bank

	Table 37. Exchange cross	s rates. Monthly	average of re	presentative	exchange rates
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	DEM/USD <sup>1)</sup>	DEM/GBP <sup>1)</sup>	USD/EUR	JPY/DEM <sup>1)</sup>	JPY/USD
× 1. 0004	2 2720	2 21 40	0.071	54.010	104.57
July 2001	2.2729	3.2140	0.861	54.810	124.57
August 2001	2.1723	3.1209	0.900	55.904	121.44
September 2001	2.1470	3.1401	0.911	55.321	118.78
October 2001	2.1592	3.1348	0.906	56.168	121.28
November 2001	2.2019	3.1629	0.888	55.563	122.35
December 2001	2.1916	3.1558	0.892	58.047	127.21
January 2002	2.2145	3.1720	0.883	59.876	132.60
February 2002	2.2480	3.1979	0.870	59.426	133.59
March 2002			0.876		130.93
April 2002			0.886		130.75
May 2002			0.917		126.29
June 2002			0.955		123.34
July 2002			0.991		118.11
August 2002			0.978		118.95
September 2002			0.981		120.68
October 2002			0.981		123.91
November 2002			1.001		121.49

<sup>1)</sup> Converted via the euro on the basis of the rate at 31.12.1998. This conversion was discontinued as at 28.02.2002.

Source: Norges Bank

### Balance of payments

#### Table 38. Balance of payments. In millions of NOK

			January -	September
	2000	2001	2001	2002
Goods balance	229 595	231 532	179 710	153 645
Service balance	16 917	25 475	20 359	11 719
Net interest and transfers	-26 864	-23 621	-16 942	-7 101
A. Current account balance	219 648	233 386	183 127	158 263
Of which:				
Petroleum activities <sup>1)</sup>	303 153	304 574	234 619	200 363
Shipping <sup>1)</sup>	25 609	44 885	33 448	23 854
Other sectors	-109 114	-116 073	-84 940	-65 954
B. Net capital transfers	-1 683	-840	-752	150
C. Capital outflow excl. Norges Bank	52 273	-23 694	-16 719	52 657
Distributed among:				
Central government sector	-19 294	14 502	10 961	-624
Local government sector	341	237	292	459
Commercial and savings banks	-43 033	-33 132	-40 477	-82 980
Insurance	19 744	9 540	9 748	34 673
Other financial institutions	-12 261	-13 263	543	-12 357
Shipping	-8 592	-768	-2 563	4 060
Petroleum activities	24 018	-42 379	-20 326	-26 841
Other private and state enterprises	22 447	5 000	1 154	31 816
Unallocated (incl. errors and omissions)	68 903	36 569	23 949	104 451
D. Norges Bank's net capital outflow (A + B - C)	165 692	256 240	199 094	105 756
E. Valuation changes in Norges Bank's net foreign assets	17 030	-41 057	-55 600	-136 208
Change in Norges Bank's net foreign assets (D + E)	182 722	215 183	143 494	-30 452

<sup>1)</sup> Specified by Norges Bank on the basis of items from the balance of payments.

Sources: Statistics Norway and Norges Bank

#### Table 39. Norway's foreign assets and debt. In billions of NOK

	31	.12.2000		3	31.12.2001		3	0.09.2002	
	Assets	Debt	Net	Assets	Debt	Net	Assets	Debt	Net
Central government admin.	16.0	76.4	-60.4	16.0	62.8	-46.8	17.4	64.2	-46.8
Norges Bank incl. Petroleum Fund	767.6	199.7	567.9	959.5	176.8	782.7	969.1	216.8	752.3
State lending institutions	1.6	0.0	1.6	1.7	0.0	1.7	1.7	0.0	1.7
Commercial and savings banks	131.1	339.5	-208.4	134.6	373.4	-238.8	114.2	398.5	-284.3
Mortgage companies	29.9	94.3	-64.4	39.3	119.0	-79.7	54.1	130.3	-76.2
Finance companies	3.1	18.9	-15.8	3.7	27.4	-23.7	3.6	27.7	-24.1
Insurance companies	193.7	17.0	176.7	187.2	20.2	167.0	222.6	20.2	202.4
Local government	0.0	0.5	-0.5	0.2	0.4	-0.2	0.4	0.2	0.2
Municipal enterprises	0.1	7.6	-7.5	0.3	7.7	-7.4	0.2	6.5	-6.3
State enterprises	157.9	171.9	-14.0	106.3	117.1	-10.8	111.1	104.3	6.8
Other Norwegian sectors	396.0	344.7	51.3	475.9	432.0	43.9	483.8	413.7	70.1
Undistributed and errors and omissions	0.0	0.0	0.0	0.0	0.0	0.0	104.5	0.0	104.5
All sectors	1 697.0	1 270.5	426.5	1 924.7	1 336.8	587.9	2 082.7	1 382.4	700.3

Norges Bank calculates the holdings figures on the basis of Statistics Norway's annual census of foreign assets and liabilities and sectoral statistics for financial industries. These are combined with the figures on changes in the form of transactions and valuation changes from the balance of payments and sectoral statistics for insurance and mortgage companies.

Sources: Statistics Norway and Norges Bank

### International capital markets

#### Table 40. Changes in banks' international assets.<sup>1)</sup> In billions of USD

					Q2	Outstanding
	1999	2000	2001	2001	2002	30 June 2002
Total Of which vis-à-vis:	276.1	1 221.9	858.9	-95.7	242.8	12 539.8
Non-banks Banks (and undistributed)	298.2 -22.0	288.8 932.7	442.1 410.8	60.4 -156.1	79.0 163.8	4 275.1 8 264.7

1) International assets (external positions) comprise

- cross-border claims in all currencies

- foreign currency loans to residents

- equivalent assets, excluding lending

Source: Bank for International Settlements

#### Table 41. Banks' international claims by currency. Percentage of total international assets

		December	ſ	(	22
	1999	2000	2001	2001	2002
US dollar (USD)	41.5	43.3	45.2	44.9	43.7
Deutsche mark (DEM)					
Swiss franc (CHF)	2.4	2.2	2.1	2.0	2.2
Japanese yen (JPY)	9.0	8.2	6.2	7.3	5.6
Pound sterling (GBP)	4.3	4.4	4.3	4.3	4.3
French franc (FRF)					
Italian lira (ITL)					
ECU/EURO <sup>1)</sup>	27.8	27.8	28.6	28.3	31.2
Undistributed <sup>2)</sup>	15.0	14.2	13.6	13.2	13.0
Total in billions of USD	9 939.5	10 778.6	11 585.9	10 912.0	12 539.8

<sup>1)</sup> From January 1999.

<sup>2)</sup> Including other currencies not shown in the table, and assets in banks in countries other than the

home countries of the seven currencies specified.

Source: Bank for International Settlements

## Foreign currency trading

# Table 42. Foreign exchange banks. Foreign exchange purchased/sold forward with settlement in NOK.<sup>1)</sup> In billions of NOK at end of month

		Purch	ased net from	:		Purchased g	ross from:	Sold gro	ss to:
		Other	Non-			Non-		Non-	
	Central	financial	financial	Foreign		financial	Foreign	financial	Foreign
	gov't <sup>2)</sup>	inst. <sup>3)</sup>	sector	sector	Total	sector	sector	sector	sector
October 2001	0.0	31.0	64.5	-22.8	72.7	107.7	644.6	43.2	667.4
November 2001	-0.2	39.4	60.5	-37.4	62.3	105.9	679.3	45.4	716.7
December 2001	0.4	43.6	66.8	-57.0	53.8	107.8	725.7	41.0	782.7
January 2002	0.4	59.4	55.8	-36.3	79.3	107.0	744.0	51.2	780.3
February 2002	0.3	47.7	63.5	-18.4	93.1	106.3	733.7	42.8	752.0
March 2002	0.2	45.9	56.6	7.0	109.7	99.0	725.3	42.4	718.3
April 2002	0.1	56.5	64.1	-24.2	96.5	105.4	650.2	41.3	674.4
May 2002	0.1	51.1	60.5	-21.3	90.4	108.1	636.6	47.6	657.9
June 2002	-0.2	44.9	56.3	-6.9	94.1	106.8	647.1	50.4	654.0
July 2002	-0.1	49.6	56.4	-22.5	83.4	110.6	642.8	54.2	665.3
August 2002	-0.1	49.7	53.6	-2.2	101.0	107.2	646.7	53.6	648.9
September 2002	-0.1	33.4	46.0	31.4	110.7	102.9	622.2	56.9	590.8
October 2002	0.0	20.7	46.0	28.2	94.9	99.7	606.6	53.8	578.4

<sup>1)</sup> Excl. exchange rate adjustments.

<sup>2)</sup>Central government administration, social security administration and Norges Bank.

<sup>3)</sup> Incl. possible discrepancies between forward assets and forward liabilities within the category of foreign exchange banks.

Source: Statements from commercial and savings banks (registered foreign exchange banks) to Norges Bank

#### Table 43. Foreign exchange banks. Overall foreign currency position. In millions of NOK

	30.09.2001	31.12.2001	31.03.2002	30.06.2002	30.09.2002
Foreign assets, spot	221 490	219 915	217 232	203 986	194 813
Foreign liabilities, spot	358 713	335 924	366 240	317 645	351 361
1. Spot balance, net	-137 223	-116 009	-149 008	-113 659	-156 548
2. Forward balance, net	81 370	44 192	76 692	121 215	122 975

•	2000	2001						v	Veek in	2002						
	1-52	1-52	36	37	38	39	40	41	42	43	44	45	46	47	48	1-48
A. Norges Bank's net sales of foreign exchange to banks 1 Snot	<b>-53</b> -48	<b>-111</b>	<b>-1.15</b>	<b>-1.20</b>	-1.25	-1.15 -1.15	- <b>1.15</b>	- <b>0.85</b> -0.85	-0.95 -0.95	0 <b>6.0</b>	-0 <b>.00</b>	<b>-0.90</b>	-0.85 -0.85	-0.90	-0.95	<b>-50.24</b> -50.24
2. Forward	-5	0	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00
Used by banks to cover:																
B. Foreign sector <sup>1)</sup>	-37	-15	-17.68	<del>.</del> 3.14	-8.55	-5.41	16.80	-9.73	<del>.</del> 3.00	-0.09	1.00	-1.38	-2.83	<u>-9.38</u>	-0.84	-81.62
1. Spot	-64	4	-8.78	6.26	-3.46	-6.83	15.06	-9.15	9.04	-8.60	-0.75	-3.43	-3.02	-4.35	7.65	-6.86
2. Forward	27	-20	-8.90	-9.40	-5.09	1.42	1.74	-0.58	12.04	8.51	1.75	2.05	0.19	-5.03	-8.49	-74.76
C. Norwegian sectors, non- bank <sup>1)</sup>	<u>-22</u>	96-	14.55	-2.08	8.43	6.25	-22.92	10.72	4.61	-3.59	1.56	2.94	4.14	2.78	1.63	38.63
1. Spot	20	-102	15.61	3.86	-0.28	-2.13	-30.03	5.37	8.69	-8.50	6.76	3.99	6.67	5.87	-9.56	13.92
2. Forward	-33	L	0.33	-7.26	6.80	5.54	10.35	1.50	2.36	3.49	-3.52	-3.14	0.71	-1.22	3.55	37.14
3. Increase in customers' net																
currency claims on banks	-10	-1	-1.39	1.32	1.91	2.84	-3.24	3.85	-6.44	1.42	-1.68	2.09	-3.24	-1.87	7.64	-12.43
D. Other	9	0	1.97	4.03	-1.13	-1.99	4.96	-1.84	-2.56	2.78	-3.47	-2.45	<u>-2.16</u>	5.69	-1.74	-7.37
1. Banks' income deficit in foreign exchange, foreign sector	9	6	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	5.28
2. Losses on spot transactions, foreign sector	9	ς	-2.16	2.17	0.54	-0.61	-0.34	-0.33	4.97	-1.73	-3.51	-3.24	0.58	0.17	1.20	-38.19
3. Other losses, including adjustments	9-	4	4.22	-0.19	-1.42	-1.95	4.82	-0.46	-7.63	4.48	-1.02	2.68	-0.91	2.72	-3.03	22.32
4. Increase in banks' total position	-1	-2	-0.20	1.94	-0.36	0.46	0.37	-1.16	-0.01	-0.08	0.95	-2.00	-1.94	2.69	-0.02	3.22
Specification:																
Non-resident net sale of NOK- denominated assets related to:																
Net NOK claims on banks	ċ	0	-7.79	8.10	-0.57	-3.65	15.54	-7.67	8.05	-7.43	-1.83	-3.49	-3.02	-4.49	9.40	1.52
VPS- registrered shares	-40	ς	0.55	-0.41	-1.41	-0.58	0.21	-0.57	0.50	0.20	0.03	0.03	0.03	0.01	0.09	-1.47
VPS- registrered bonds	-16	10	-0.71	-1.18	-1.54	-1.88	0.37	-0.87	0.27	-0.86	1.05	0.03	-0.03	0.14	-1.84	-5.72
VPS- registrered notes and certificates	έ	-2	-0.83	-0.25	0.06	-0.73	-1.06	-0.03	0.22	-0.51	0.00	0.00	-0.01	0.00	0.00	-1.18
Total (equal to NOK equivalent of B1 above)	-64	4	-8.78	6.26	-3.46	-6.84	15.06	-9.14	9.04	-8.60	-0.75	<del>-</del> 3.43	<del>-</del> 3.03	4.34	7.65	-6.85
Memorandum:																
Increase in banks' foreign spot position (net) (Corresponds to A1- B1- C1- D1- D2)	-29	-20	-5.93	-13.60	1.84	8.31	14.05	3.15 -	23.76 1	7.82	-3.51	1.67	-5.19	-2.70	-0.35	24.39

Table 44. Norges Bank's foreign currency transactions with banks. In billions of NOK

<sup>1)</sup> Positive figures denote foreign exchange sales from banks to the sectors mentioned. Negative figures denote purchases. Source: Norges Bank 

# Economic Bulletin 2002 (Volume LXXIII)

CONTENTS (issue number in parentheses)

Article index (alphabetical, by author)	
Bergo, Jarle: Monetary policy, cyclical fluctuations and competitiveness	85 (3)
Bernhardsen, Tom and Arne Kloster: Transparency and predictability in monetary policy	45 (2)
Eklund, Trond and Leif Veggum: Change in the organisation of the supply of notes and coins –	
establishment of the limited company Norsk Kontantservice AS (NOKAS)	58 (2)
Frøyland, Espen and Kai Larsen: How vulnerable are financial institutions to macroeconomic change	s?
An analysis based on stress testing	92 (3)
Gjedrem, Svein: Economic perspectives (Annual address)	1 (1)
Gresvik, Olaf and Grete Øwre: Banks' costs and income in the payment system in 2001	125 (4)
Høegh-Omdal, Kristine and Bjørn Roger Wilhelmsen: The effects of trade liberalisation on clothing pr	rices
and on overall consumer price inflation	134 (4)
<i>Kloster, Arne and Tom Bernhardsen:</i> Transparency and predictability in monetary policy	45 (2)
Larsen, Kai and Espen Frøyland: How vulnerable are financial institutions to macroeconomic change	s?
An analysis based on stress testing	92 (3)
Strand, Henning: Norges Bank's oversight and supervision of the payment system	10 (1)
Sturød, Marianne: Evaluation of Norges Bank's projections for 2000	13 (1)
Veggum, Leif and Trond Eklund: Change in the organisation of the supply of notes and coins –	( )
establishment of the limited company Norsk Kontantservice AS (NOKAS)	58 (2)
Wilhelmsen, Biørn Roger og KristineHøegh-Omdal: The effects of trade liberalisation on clothing pric	es
and on overall consumer price inflation	134 (4)
Øwre, Grete og Olaf Gresvik: Banks' costs and income in the payment system in 2001	125 (4)
Tables, announcements, etc.	
Statistical annex 24 (1), 63 (2	2), 99 (3) 165 (4)
20-krone coin to commemorate the 200th anniversary of Niels Henrik Abel's birth	22 (1)
Articles index (alphabetical, by title)	
Banks' costs and income in the payment system in 2001. Gresvik, Olaf and Grete Øwre	125 (4)
Change in the organisation of the supply of notes and coins – establishment of the limited company	
Norsk Kontantservice AS (NOKAS). Eklund, Trond and Leif Veggum	58 (2)
Economic perspectives (Annual address). Gjedrem, Svein	1 (1)
Evaluation of Norges Bank's projections for 2000. Sturød, Marianne	13 (1)
How vulnerable are financial institutions to macroeconomic changes?	
An analysis based on stress testing. Frøyland, Espen and Kai Larsen	92 (3)
Monetary policy, cyclical fluctuations and competitiveness. Bergo, Jarle	85 (3)
Norges Bank's oversight and supervision of the payment system. Strand, Henning	10(1)
Transparency and predictability in monetary policy. Bernhardsen, Tom and Arne Kloster	45 (2)
The effects of trade liberalisation on clothing prices and on overall consumer price inflation.	
Høegh-Omdal, Kristine and Bjørn Roger Wilhelmsen	134 (4)



Economic Bulletin No. 4 - December - 2002