Economic Survey

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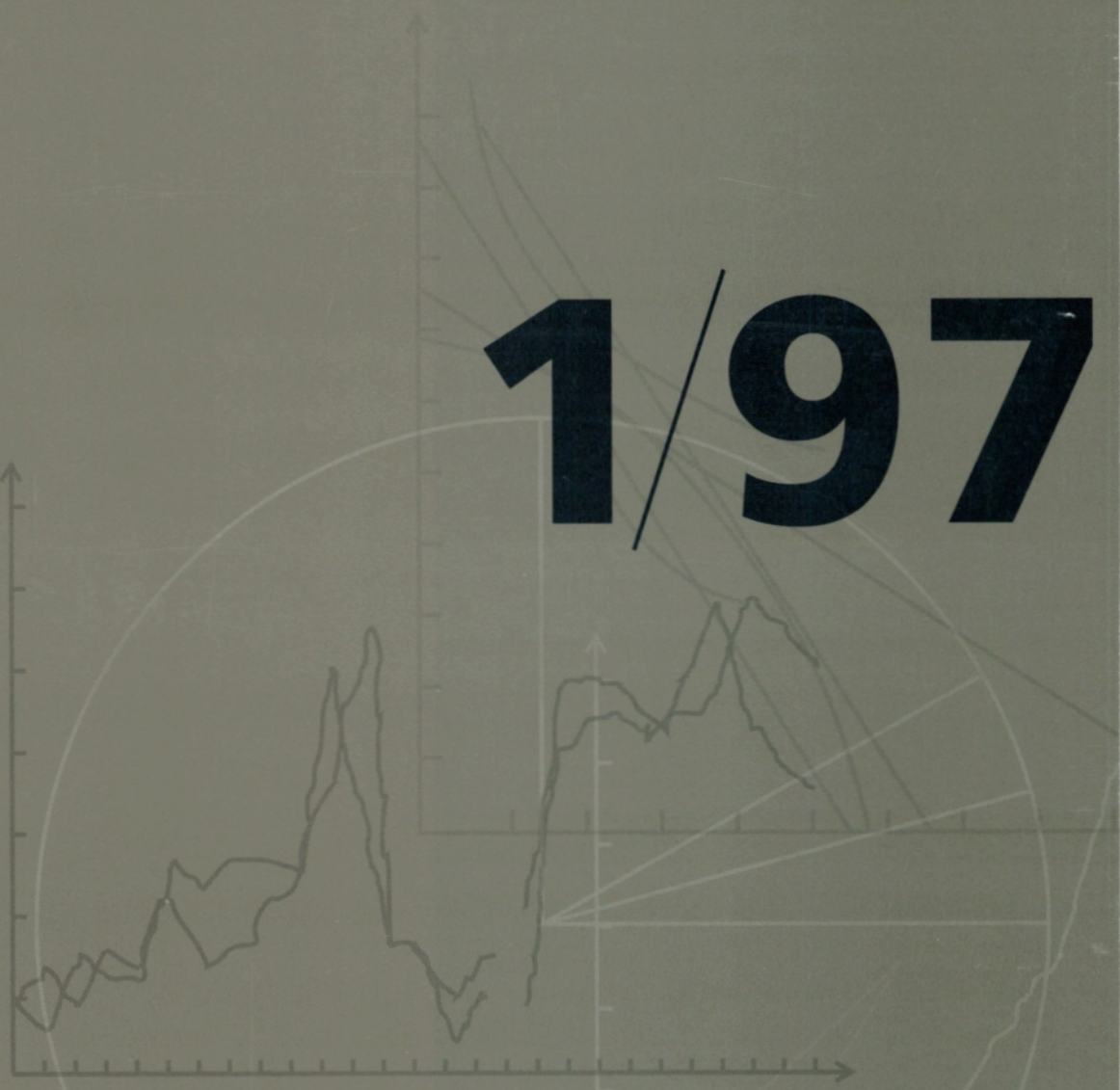

Economic survey 1996

- Preliminary National Accounts for Norway 1996
- Overview of international and Norwegian economic development in 1996 and outlook for 1997 and 1998

Articles

- Revision of the balance of payments
- Military expenditure in some developing countries

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Economic Survey

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Economic Survey

is published four times a year by the Research Department of Statistics Norway. The Research Department was established in 1950. The Department has about 90-100 employees (January 1997). The Research Department is today organized in four divisions. Head of Department is *Øystein Olsen.*

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Economic survey

Prospects

1996 was a golden year for the Norwegian economy. A continued economic upturn and robust growth in the petroleum sector resulted in the sharpest rise in Norway's gross real disposable income since the mid-1980s, as much as 7.5 per cent. The balance of payments and general government finances improved considerably and Norway is now a creditor nation for the first time in 50 years. When we add the very high growth figures for employment and household income and the fact that consumer price inflation was the lowest since 1960, the picture of a vigorous economy is complete. We are now reaping the benefits of the protracted adaptation of the Norwegian economy following the recession in the second half of the 1980s, of the enormous investments in the North Sea and of a favourable oil price, from Norway's perspective.

There is little doubt that we are experiencing a stronger cyclical upswing than we envisaged one year ago. The growth projection for household consumption was revised upwards several times through 1996 and is now as high as 4.7 per cent. For 1997, the growth impetus from the general government sector appears to be stronger than assumed earlier, and the estimates for petroleum investment have once again been revised upwards. Oil and gas production will also rise this year. Following several years of brisk economic growth in the mainland economy and a gradually tighter labour market, there are now some signs of capacity problems and bottlenecks. The net effect of the fall in interest rates and krone appreciation is small for output and employment in the mainland economy if the changes we have witnessed so far will prevail throughout 1997. Price inflation, however, will be curbed considerably, and profits in exposed industries will deteriorate if the krone exchange rate remains at the current level.

In the evaluation of the management problems in the Norwegian economy, it is important to take into account that the large current-account surpluses and solid government finances are largely ascribable to the depletion and sale of our oil and gas resources. Petroleum activities normally provide an additional return beyond that achieved in other industries, often referred to as the oil rent. Petroleum wealth thus has a value equivalent to the present value of this additional return. Part of the current-account surplus therefore reflects the conversion of petroleum wealth to financial assets abroad. The return on petroleum wealth can be considered permanent additional income for Norway, income which is not based on contributions from Norwegian labour and real capital.

The extra income from oil activities has given Norway as a nation the possibility of maintaining a higher level of consumption and welfare than would otherwise have been the case. Furthermore, the substantial revenues from the sale of oil and gas have given the government considerable leeway for conducting an active countercyclical policy and maintaining employment in periods when international downturns have resulted in a sharp rise in unemployment in many other countries. In addition, the direct spillover effects from activities in the petroleum sector to Norwegian suppliers have over time generated a substantial impetus to value added in mainland Norway. Calculations indicate that the increased scope for manoeuvre in economic policy as a result of petroleum revenues has provided us with advantages which exceed the significance of the oil rent itself.

At the same time, this indicates that many of the gains derived from oil activities can be lost if we place ourselves in a position in which economic policy leeway is limited. Here, there may be pitfalls in both the short and long run. If the revenues are used too swiftly and on too great a scale, this may result in pressures in the economy and escalating price and wage inflation. This will weaken manufacturing industry and other exposed sectors beyond that implied by a long-term perspective on the use of oil revenues. If we have first become accustomed to an excessive level of consumption, we will experience difficulties when oil revenues decline. This is an important lesson from the 1970s and 1980s.

One of the main objectives of the fiscal policy tightening that has taken place the last few years has precisely been to avoid a new period of high price and wage inflation with the phasing out of exposed industries as a result. The risk of an overheating of the economy is also the most important reason why the authorities have advocated investing the capital in the Petroleum Fund abroad. At the same time, monetary and exchange rate policy has been oriented towards stabilizing the value of the Norwegian krone against European currencies. Recent weeks' events in the foreign exchange market illustrate, however, the dilemma confronting us. Through much of 1996 Norwegian interest rates were kept at a higher level than corresponding foreign rates in order to curb domestic demand. With constant upward revisions in the estimates for Norwegian petroleum reserves and the current-account balance, we may in hindsight conclude that this interest rate policy over time was incompatible with a stable exchange rate.

At the time of writing, it may appear that a pronounced deterioration in competitiveness in some business sectors in Norway has taken place "overnight". In isolation and viewed over some time, a once-only appreciation of the nominal exchange rate will only have marginal effects on the real exchange rate, and thereby also on the real economy, because the effects are offset by lower price and wage inflation. The appreciation of the krone will, however, for a period result in a reduced level of activity and higher unemployment. Whether this will have lasting effects is primarily a question of how flexible the Norwegian economy is and whether the inco-

mes policy can be continued. Previous experience may indicate that it is easier to expand sheltered industries at the expense of exposed sectors than the reverse, and that unemployment rises more easily than it falls.

One lesson from recent weeks' events in the foreign exchange market is that there are limited possibilities for conducting a successful monetary policy which shall both engage in cyclical management and ensure a stable operating environment for exposed industries. Such a strategy can also contribute to speculative conditions in foreign exchange markets. In economic policy, the authorities have assigned the main responsibility for smoothing fluctuations in the economy to fiscal policy. From a stabilization point of view, this must be characterized as successful so far. One problem, however, is that fiscal policy is thereby given many responsibilities. The desire to stabilize growth can easily come into conflict with other tasks, for example the desire to influence the distribution of income. A continuation of a tight fiscal policy over several years also raises important questions concerning the relationship between privately financed and government financed consumption. In recent years there has been noticeably faster growth in privately financed than in government financed personal consumption, such as health, care and education. These are services where there is probably a strong underlying demand. If imbalances arise here between demand and supply, they can only be remedied through higher taxation or through a greater use of user fees.

The question concerning the long-term exchange rate level for the Norwegian krone is closely related to which level of domestic demand that over time results in balance in the external account. It is not possible to arrive at any clear-cut answer to this problem. As a first approximation, it may be natural to say that Norway can have annual oil-based consumption on a par with the permanent income from petroleum wealth. The consumption possibilities for future generations are thereby not reduced. An assessment of the use of oil revenues in the Norwegian economy in recent years, primarily through the government budget, does not indicate that there is any obvious imbalance between oil-financed consumption and permanent income, particularly when taking into account the uncertainty linked to petroleum revenues. The substantial trade surpluses created by oil and gas exports will be reversed to deficits that are covered by the return on foreign wealth when oil and gas production ultimately declines. The current large balance of payment surpluses cannot therefore automatically be cited as evidence that Norway must experience a real appreciation of its currency to achieve balance in the external account in the long run. On the other hand, the current use of oil revenues is probably not at such a high level that in the future we must for this reason expand exposed industries at the expense of sheltered sectors.

This assessment of Norway's external account and government finances appears to contrast with the recent appreciation pressures on the Norwegian krone. The real economic corollary to a stronger real exchange rate is that expected oil revenues provide a basis for increasing domestic consumption - now or later. This entails that we will gradually have a smaller exposed sector and a correspondingly larger sheltered sector. The question then is whether this shall take place through higher domestic inflation or an appreciation of the krone. In a situation where the risk of rising wage growth appears limited and with solid surpluses on both the current account and government budgets, it is natural that market participants see a potential for an appreciation of the krone.

This perspective is amplified by the sharp increase in the number of pensioners which we will experience in a few years. In view of the rising number of elderly persons and the obligations inherent in the National Insurance Scheme, it is difficult to see how we can avoid a substantial growth in service-based consumption in the future. This would then require changes in the structure of industry at a later stage. By accumulating financial reserves abroad, we will be in a better position to address these challenges. By drawing on the wealth, it will be possible to maintain or increase imports at the same time that the production of services is expanded.

Financial reserves abroad will consequently be a benefit when the population ages. This does not mean, however, that we should prepare ourselves for a future existence where we live as rentiers on income from the Petroleum Fund. Experience thus far has shown that the decisive factor for our future welfare is that we manage to use the economic scope for manoeuvre to secure stable economic developments, with a well-educated labour force, which combines holding a job with the capacity to adjust. In a situation where demographic conditions point to a reduced labour force, it will be particularly important to create conditions for stimulating higher labour force participation. Channelling oil revenues beyond that which we use on a current basis into a pension fund, as has been proposed, is in this connection no solution. Such an earmarking of resources may instead reduce the scope for manoeuvre and exacerbate the adjustment problems by further obligating us to increase the use of oil revenues considerably when the ageing of the population takes place in 10-15 years. If we draw on the fund to finance the peak of a pension wave, we will leave behind a onesided service-oriented and sheltered economy for future generations.

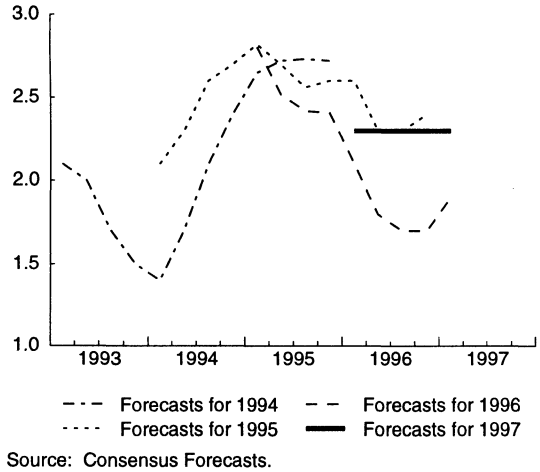
Through our access to abundant natural resources, Norway as a nation has had greater and better opportunities than most other countries. High and growing oil revenues the next few years will give us considerable leeway in economic policy, both in the short term and in a longer time horizon. The challenge consists of managing the wealth in a sound manner. The key problems are when the money shall be used, what it shall be used for and who shall benefit from it.

International economy

1996 was a cyclically sluggish year for Norway's trading partners, particularly as a result of the slowdown in activity in continental Europe. After the stage was set at the beginning of 1995 for a pronounced rise in production, national accounts figures through 1995 showed that economic trends in Europe were considerably weaker than expected. This trend persisted into 1996, and the large EU countries recorded a low level of economic activity, particularly in the first half of the year. Later in the autumn, however, there were some signs of a rising growth rate, and it now appears that a moderate recovery will be established in 1997 and further into 1998. During this period Anglo-Saxon industrial countries have been in a more favourable cyclical phase, with growth rates around 2-2 1/2 per cent. The US is likely to record continued moderate growth, while it appears that the UK will see a marked rise in GDP this year. Following a slump in Japan which persisted for several years, preliminary national accounts figures for 1996 show a vigorous rise in production. However, the growth rate will probably slow markedly this year as a result of fiscal retrenchment.

GDP in *Germany* expanded by 1.4 per cent from 1995 to 1996, according to preliminary national accounts figures. Growth was primarily fuelled by higher net exports, particularly to the US, Asia and eastern Europe. In the first half of the year higher private consumption, stimulated by tax reliefs, also contributed to boosting GDP, but household consumption was sluggish towards the end of last year. Some short-term indicators suggest that a German recovery is now under way. Manufacturing output has moved on an upward trend since last spring, which particularly reflects the favourable effect of a weaker exchange rate on exports. New orders in manufacturing industry in the fourth quarter of 1996 appear to be about 1 per cent higher than in the previous quarter. All in all, however, GDP growth is expected to be moderate, at slightly more than 2 per cent this year. The rise in production is not ex-

GDP-growth forecasts for Norway's main trading partners for 1994 - 1997 given on different dates



Source: Consensus Forecasts.

Economic forecasts for Norway's main trading partners
Annual per cent change

	1995	1996	1997	1998
USA				
GDP	2.0	2.5	2.7	2.5
Private consumption deflator	2.3	2.4	2.5	2.7
Short term interest rate (level)	5.9	5.4	5.6	5.7
General government budget deficit[1)]	-1.9	-1.4	-1.5	-1.7
Japan				
GDP	0.9	3.6	1.7	2.9
Private consumption deflator	-0.4	0.0	0.5	1.0
Short term interest rate (level)	1.2	0.5	0.7	1.0
General government budget deficit[1)]	-4.3	-7.4	-6.3	-5.2
Germany				
GDP	1.9	1.4	2.1	2.5
Private consumption deflator	1.9	1.7	1.8	1.8
Short term interest rate (level)	4.5	3.2	3.1	3.5
General government budget deficit[1)]	-3.6	-3.9	-3.3	-2.7
France				
GDP	2.2	1.3	2.3	2.6
Private consumption deflator	1.6	1.8	1.5	1.4
Short term interest rate (level)	6.5	3.9	3.3	3.6
General government budget deficit[1)]	-5.3	-4.2	-3.2	-2.9
United Kingdom				
GDP	2.4	2.3	3.0	2.7
Private consumption deflator	3.4	2.8	2.5	2.5
Short term interest rate (level)	6.7	6.0	6.0	6.1
General government budget deficit[1)]	-5.5	-4.4	-3.5	-3.0
Italy				
GDP	3.0	0.7	1.5	2.1
Private consumption deflator	5.4	4.6	3.0	2.8
Short term interest rate (level)	10.3	8.7	6.7	6.4
General government budget deficit[1)]	-7.9	-7.5	-4.4	-3.5
Sweden				
GDP	3.6	1.1	2.4	2.2
Private consumption deflator	2.4	1.3	1.8	2.2
Short term interest rate (level)	8.7	5.9	4.7	4.9
General government budget deficit[1)]	-8.1	-4.9	-2.7	-0.5
Denmark				
GDP	2.8	2.0	3.0	3.1
Private consumption deflator	2.1	2.1	2.3	2.6
Short term interest rate (level)	6.1	3.9	3.5	4.0
General government budget deficit[1)]	-1.7	-1.5	-0.3	0.2
The Netherlands				
GDP	2.1	2.6	2.6	2.9
Private consumption deflator	2.0	1.9	2.2	2.3
Short term interest rate (level)	4.4	3.0	3.0	3.4
General government budget deficit[1)]	-3.5	-2.9	-2.2	-2.0
Memo				
GDP trading partners	2.4	1.9	2.4	2.7
Consumer prices trading partners	2.1	1.9	1.9	2.1
Ecu interest rate	5.9	4.4	4.0	4.2

1) Per cent of GDP.
Source: NIESR and calculations by Statistics Norway. National sources for Sweden and Denmark.

pected to result in an increase in employment, and unemployment is likely to reach nearly 11 per cent in 1997. Economic developments in *France* were also weak last year; preliminary estimates show a rise in GDP of about 1 1/4 per cent. Growth was primarily fuelled by household consumption, which must be viewed in connection with the authorities' temporary policy stimulus for higher car purchases. The measures were discontinued at the end of the third quarter, and preliminary fourth-quarter figures indicate a sluggish trend in private consumption towards the end of the year. Higher net exports have also resulted in a rise in production, and order statistics for the export sector indicate that this trend continues. Improved corporate earnings in recent months will probably result in a rise in private investment this year. The consumer sentiment indicator also points to greater optimism among French consumers, and the fall in interest rates through 1996 is expected to stimulate housing investment. Against this background, GDP growth is therefore set to be higher in 1997 and 1998 than in 1996.

In *Italy*, preliminary national accounts figures show that GDP expanded by 0.6 per cent between the second and third quarter of 1996, after falling in the first half of the year. For the year as a whole, output is likely to show an increase of about 3/4 per cent. Available short-term statis-

The EU's road to monetary union

According to the Maastricht treaty, the EU will decide at the beginning of 1998 which member states are eligible for participation in economic and monetary union (EMU) from 1 January 1999. The decision will be based on whether the countries satisfy the convergence criteria set out in the Maastricht treaty. The criteria entail that the general government budget deficit shall not exceed 3 per cent of GDP and that general government gross debt must not exceed 60 per cent of GDP. Moreover, inflation must be no more than 1.5 percentage points above the average of the three lowest inflation rates in member states, and long-term interest rates must be no more than 2 percentage points higher than the average of the low-inflation countries. It is unclear how strictly the criteria will be interpreted, but countries with an excessive debt will probably be accepted if the other criteria are satisfied.

According to the EU Commission's forecasts from December last year, most countries will satisfy the budget deficit criterion. The Commission estimates that only Greece, Italy and the UK will fail to reach the target of 3 per cent, and the deficit is projected at 2.9 or 3 per cent for as many as seven countries. According to the OECD's forecasts, also from December 1996, important countries such as Germany, France and Spain will also have deficits of a little more than 3 per cent at the end of this year. If economic growth in 1997 proves to be lower than assumed, general government finances will deteriorate and an even greater number of countries will experience problems with the deficit ceiling of 3 per cent.

Among countries that are likely to satisfy the budget deficit criterion, only Luxembourg will also satisfy the debt criterion. According to the forecasts, France and possibly the UK are also likely to reduce their gross debt to a level below 60 per cent of GDP, while Germany will probably be just above the limit. Otherwise, it appears that a number of countries will end up with a general government debt of between 60 and 80 per cent of GDP. Belgium, Greece and Italy stand out with estimated debt ratios of more than 100 per cent. Even though Belgium has the highest debt ratio of all the countries, it seems unlikely that the country would be denied membership in EMU. In such an event the criterion would have to be relaxed for other countries as well.

The forecasts also show that the inflation criterion appears to be met by all countries except Greece. Countries with the lowest inflation will be France, Germany and Finland or the Netherlands, and the maximum level of permitted inflation will probably be around 3 per cent. Consumer price inflation has slowed considerably in several countries in southern Europe the past year, entailing that countries like Italy, Portugal and Spain will also satisfy this criterion. The interest rate criterion will also be met by all countries, according to estimates from the OECD, albeit these do not cover Portugal, Greece and Luxembourg. Long-term interest rates have converged during the past few years, indicating that financial markets expect the formation of EMU.

If the criteria (to a greater or lesser extent) are satisfied, each country must decide whether it wishes to join EMU, which entails among other things a transition to a single currency, the "euro". Even when the Maastricht treaty was being drawn up, the UK and Denmark added a protocol allowing them to opt out of Stage 3. Greece, the UK and Sweden are not members of ERM today, whereas e.g. Finland and Italy signalled their interest in EMU by joining ERM last autumn. It thus appears that some countries will choose not to participate in EMU from the start in 1999.

General government budget deficit and general government gross dept. Forecasts for 1997

	Budget deficit[1]		Government gross dept[1]	
	OECD	EU-Comm.	OECD	EU-Comm.
Austria	3.0	3.0	73.3	72.2
Belgium	3,0	2.9	127.2	127.0
Denmark	0.4	0.3	70.4	61.9
Finland	1.7	2.2	60.2	61.5
France	3.2	3.0	56.6	58.1
Germany	3.2	2.9	63.2	61.9
Greece	5.7	6.5	104.5	109.3
Ireland	1.1	0.9	76.0	70.0
Italy	3.7	3.3	122.9	122.3
Luxembourg	..	-0.5	..	8.8
Netherlands	2.3	2.5	76.0	76.8
Portugal	2.9	2.9	67.6	69.0
Spain	3.4	3.0	68.9	67.1
Sweden	2.5	2.9	78.5	77.6
United Kingdom	3.7	3.5	62.0	57.0

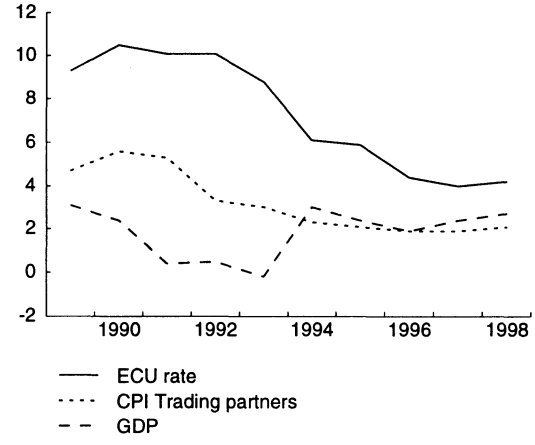
1) Per cent of GDP.
Source: EU-Commision. European Economy, December 1996 and OECD Economic Outlook 60, December 1996, table 30 and 61.

tics indicate the emergence of a moderate economic recovery. Domestic demand is expected to be boosted by stimulative measures, among other things a favourable trade-in scheme for cars that are older than ten years as well as tax cuts for building materials and food. The announced tax reliefs for the business sector are also expected to contribute to higher economic activity in the period ahead. A very tight fiscal policy for 1997, however, might have a dampening effect. The forecasts therefore indicate weak GDP growth at around 1 1/2 per cent this year, whereas growth may reach a little more than 2 per cent next year. Among the large EU countries, the *UK* has experienced an atypical cyclical trend in recent years compared with continental Europe. Preliminary national accounts figures show that GDP expanded by 2.3 per cent from 1995 to 1996, primarily underpinned by household consumption, although private investment also made a positive contribution. The brisk rise in consumption is expected to continue, partly based on stronger real wage growth and improved household wealth. GDP growth is projected at around 3 per cent in 1997. Unemployment is declining, and is estimated to fall below 7 per cent this year. A cyclical peak is expected to be passed in 1997, and the forecasts for 1998 point to a slowdown in the growth rate to about 2 3/4 per cent.

In *Sweden*, preliminary national accounts figures show that GDP grew by 1 per cent from the first three quarters of 1995 to the same period in 1996. For 1996 as a whole, economic activity is thus likely to show a rise of a little more than 1 per cent, which entails a pronounced decline in the growth rate on the previous year. In the first half of 1996 public and private consumption exhibited a sluggish trend, whereas net exports and private investment made a positive contribution. Later in the autumn, however, household consumption picked up slightly, stimulated by a considerable fall in interest rates through last year. A stronger krona and sharp rise in manufacturing industry's costs point to weaker export growth in the period ahead, whereas an expansion in economic activity in the EU will have the opposite effect. High nominal pay increases combined with subdued inflation are expected to stimulate domestic demand and generate a stronger growth impetus this year. The forecasts indicate a growth in GDP of about 2 1/2 per cent in 1997. In *Denmark*, preliminary national accounts figures show that GDP expanded by 2 per cent in the first three quarters of 1996 compared with the same period one year earlier, and the growth rate for 1996 as a whole is expected to be at about the same level. The greatest growth impetus was generated by domestic demand, whereas net exports had a dampening effect on economic activity. As a result of sharp real wage growth and falling unemployment, consumption is expected to continue to advance this year. Increasing capacity utilization and low interest rates are also expected to stimulate investment. With higher activity in the oil and gas sector, GDP growth may reach about 3 per cent in both 1997 and 1998.

Preliminary national accounts figures show that GDP in the *US* rose by 2.5 per cent last year. Growth was relatively weak in the first and third quarters, while output grew sharply in the second and fourth quarters. For the year as a whole, household consumption and private investment, particularly in information technology equipment, were the main driving forces for the expansion in economic activity. In the fourth quarter, however, net exports made the greatest contribution to growth. The figures show that the US is now in its sixth year of moderate to high growth with price inflation still at a subdued level. The GDP deflator rose by 1.4 per cent in the fourth quarter of 1996, the lowest increase recorded for more than thirty years. The situation in the labour market was also favourable last year and unemployment stood at 5.3 per cent of the labour force in December. The main driving force in the US economy in the period ahead will be private consumption, and the consumer sentiment indicator shows that households are very optimistic about the future. GDP may expand by nearly 2 3/4 per cent this year, while the growth rate is expected to slow in 1998.

GDP and consumer price growth for Norway's main trading partners, and 3 month ECU rate
Per cent



Source: Statistics Norway.

Following GDP growth of 12.2 per cent (s.a.a.r.) in the first quarter and a decline of 1.1 per cent in the second quarter, preliminary national accounts figures for *Japan* show that output expanded by 0.4 per cent in the third quarter. Private consumption was sluggish, while private investment made a positive contribution to growth. Total GDP growth in 1996 is set to be around 3 1/2 per cent. It is unlikely that private domestic demand will be able to compensate for the absence of stimulus from the public sector when the large economic stimulus packages introduced by the Government during the recession are scaled back. In addition, the Government plans to raise taxes next year, which will curb growth in household consumption. The forecasts point to GDP growth of a good 1 1/2 per cent in 1997.

The forecasts indicate *price inflation* among Norway's main trading partners of nearly 2 per cent in 1997, approximately on a par with the rate recorded last year. In European countries, the projections for consumer price inflation range between 1.5 and 2.5 per cent for most countries. Price inflation in Italy has been high for a long time. The year-on-year inflation rate in Italy, however, fell by about

2 1/2 percentage points during 1996, down to 2.6 per cent in December. The average rise in prices in Italy was thus 3.9 per cent in 1996, with a further decline expected for 1997. One uncertain factor is wage growth, which may pick up slightly following two years of declining real wages. In Sweden, the VAT rate on food was reduced from 21 to 12 per cent from 1 January 1996. Lower interest rates and falling import prices as a result of a stronger krona have contributed to a further drop in consumer prices, with the consumer price index showing a year-on-year decline of 0.2 per cent in December. The consumer price index rose by an average 0.7 per cent in 1996. An increase in indirect taxes, including a higher property tax, may push up the inflation rate to nearly 2 per cent this year. Inflation in the US still shows few signs of quickening. As a result of historically low unemployment (5.3 per cent in December), many analysts feared higher wage growth. Available statistics for 1996 indicate, however, that total hourly labour costs only rose by a little less than 3 per cent from 1995. The average rise in consumer prices in 1996 was 3.3 per cent, with higher food and energy prices the main factors behind the increase. Price inflation is expected to edge up next year as a result of the continued expansion in economic activity. Japan has recorded a period of falling prices, and the average rise in consumer prices last year was zero. The planned increase in the consumption tax in April 1997 will probably result in a higher rate of inflation this year.

As a result of lower economic activity in continental Europe, *monetary policy* gradually became more expansionary during 1996. In Germany, the central bank lowered its discount and Lombard rates by half a percentage point in April 1996, to 2.5 and 4.5 per cent respectively. The repo rate, however, was not reduced until August, from 3.3 to 3.0 per cent. The latest interest rate cut was implemented even though money supply growth exceeded the target range. However, money supply growth was slowing, inflation was low and the economic recovery was hesitant. In France, the central bank quickly followed suit, lowering its intervention rate by 0.2 percentage point to 3.35 per cent. France has continued its strategy of gradually lowering its official rates, most recently in January this year, to 3.1 per cent. Long-term rates have also fallen and are now below German rates. In Italy, the central bank's interest rate was unchanged from April 1995 until August 1996 when favourable inflation figures resulted in a reduction of 0.75 percentage point in the discount rate, to 8.25 per cent. Further reductions were made through 1996, and the discount rate was most recently lowered to 6.75 per cent in January 1997. Short-term market rates in Italy have declined by 3.8 percentage points over the past eighteen months. The central bank in Sweden has cut its repo rate a number of times since the beginning of 1996, most recently to 4.1 per cent on 14 January 1997. The interest-rate cuts must be viewed in connection with the central bank's inflation target (of 1-3 per cent) and the substantial decline in the inflation rate since the autumn of 1995. Money market rates in Sweden fell by about 4 1/4 percentage points last year. In the UK, base rates were reduced on four occasions (each by 0.25 percentage point) between December 1995 and June 1996, when the rate stood at 5.75 per cent. In conjunction with the rise in the inflation rate in the autumn of 1996, however, the base rate was raised to 6 per cent at the end of October. Even though nominal interest rates are now low in Europe, real interest rates (particularly long-term) are still at an historically high level as a result of low inflation.

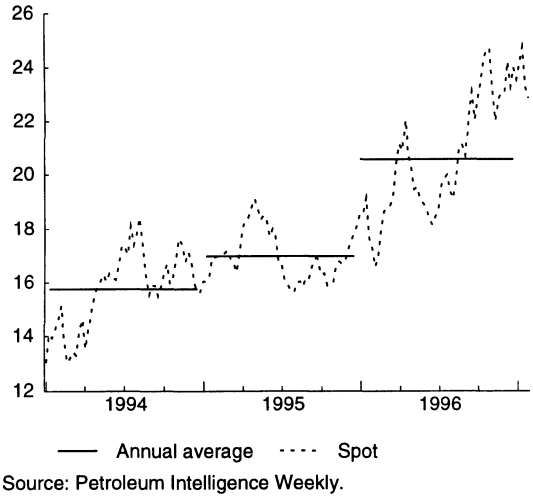
The US Federal funds rate has been reduced three times since July 1995, most recently to 5.25 per cent in January 1996. With the prospect of a further expansion in economic activity, the Federal Reserve will probably conduct a tighter monetary policy in the period ahead, and the Federal funds rate is likely to be increased moderately during 1997. In Japan, the economic slump over the last few years has been met with gradual reductions in the discount rate, most recently to a record-low of 0.5 per cent in September 1995. The recovery last year was primarily fuelled by the authorities' economic stimulus measures, and the central bank is not expected to raise interest rates until the upturn in the private sector is firmly entrenched.

Fiscal policy in EU countries is largely focused on satisfying the convergence criteria in the Maastricht treaty, thereby paving the way for economic and monetary union. Sluggish economic trends the past year have made it more difficult than expected to satisfy the budget deficit requirement by the deadline and several countries have therefore tightened fiscal policy. In Germany, preliminary figures show that the general government budget deficit in 1996 was equivalent to 3.9 per cent of GDP. Government finances thus deteriorated from 1995, reflecting lower tax revenues and higher social security payments as a result of rising unemployment. The Government's budget for 1997 contained a number of proposals to curb public spending, with a total reduction in expenditure of DM 66.5 billion. Altogether, the tightening is equivalent to 1.8 per cent of GDP. The measures have been approved by the Bundestag, but there is some uncertainty as to whether the cuts will be implemented at the länder level. In France, the budget deficit in 1995 was equivalent to 5 per cent of GDP, whereas it is likely to show a decline to about 4 per cent in 1996. Fiscal policy has been tightened since the summer of 1995, both in the form of tax hikes and spending cuts. Further austerity measures are proposed in the budget for 1997, including higher social security taxes and an increase in petrol, tobacco and alcohol taxes. Pension funds have also been transferred from state enterprises that are to be privatized to the central government in order to increase budget revenues. These one-off transfers are estimated to amount to about 0.5 per cent of GDP. The forecasts indicate that France will record a general government deficit of a little more than 3 per cent of GDP in 1997. Preliminary estimates indicate that the budget deficit in the UK was also reduced substantially in 1996 even though tax revenues were lower than expected. The recently presented budget for 1997 calls for government spending cuts of about NKr 70 billion. The budget deficit is expected to be reduced to 3 per cent of GDP next year. The UK, how-

ever, has an opt-out protocol regarding EMU participation. In Italy, preliminary figures show that the general government budget deficit in 1996 will be nearly 7.5 per cent of GDP, considerably higher than budgeted. The administration has proposed an ambitious budget for 1997 with tighter fiscal measures amounting to L 62.5 trillion. If all the measures are introduced, the budget deficit is estimated at about 3 per cent of GDP. About two thirds of the tightening is expected to be reflected in lower spending, partly through cuts in transfers to the local authorities. The strengthening of the budget otherwise consists of higher government revenues in the form of a temporary "euro tax" and "accounting measures". Doubt has been raised, however, as to whether it will be possible to implement this since the plans for the "euro tax" have created internal dissension in the coalition government. In Sweden, the authorities have been tightening policy for several years, and this has contributed to a considerable improvement in government finances. The budget deficit is expected to shrink from about 4 per cent of GDP in 1996 to less than 2 per cent in 1997. Even though the general government gross debt is still high (about 85 per cent of GDP this year), this means that Sweden will probably be eligible to participate in the planned monetary union if it so desires.

As a result of higher-than-expected tax revenues, partly reflecting a pronounced growth in capital gains taxes, the federal budget deficit for the 1996 fiscal year came to $ 107 billion, or about 1.4 per cent of GDP. The forecasts for this year indicate a slightly higher deficit, entailing that further cuts are necessary if the goal of a balanced budget in the year 2002 is to be achieved. Japan's budget balance has deteriorated substantially as a result of the many economic stimulus packages launched by the authorities during the protracted recession. The authorities are expected to tighten fiscal policy and have announced that the consumption tax will be increased from 3 to 5 per cent in April 1997 and the special income tax deduction (introduced in 1994) will be removed. Further measures other than those already planned are probably necessary to prevent Japan's general government net debt (of about 10 per cent of GDP) from rising in the long run.

Spot price, Brent Blend 1994-1996
Dollar per barrel



Source: Petroleum Intelligence Weekly.

The oil market

Oil prices fluctuated considerably during 1996. In early winter the spot price of Brent Blend fell to less than $ 17 p/b following mild weather and expectations of limited oil sales from Iraq. Oil prices then rose markedly from February to mid-April, with prices above $ 23 p/b. The increase was primarily spurred by low stocks combined with cold weather. When Iraq and the UN signed an agreement at the beginning of May on limited exports of oil from Iraq, the spot price of Brent Blend again dropped to about $ 18 p/b. As unrest in the Middle East mounted, however, it became evident that the agreement would not be put into effect immediately and oil prices began to rise, increasing markedly following the US bombing of Iraq. Brent Blend reached a level just below $ 25 p/b at the end of October, the highest level registered since the Gulf War. Higher production from OPEC countries and the former Soviet Union brought oil prices down following the peak quotation, but prices remained at a high level through the year. The average spot price of Brent Blend for 1996 was $ 20.6 p/b, $ 3.6 higher than in 1995.

Global demand for oil rose by 1.7 million b/d from 1995 to 1996. Demand increased in the OECD area by 0.8 million b/d, with the sharpest growth in North America. The sharp increase in the demand for oil continued in Asia, while demand from the former Soviet Union continued to edge down. The IEA's forecast for 1997 indicates the same growth for OECD countries as in 1996, whereas demand is expected to increase substantially in countries outside the OECD.

OPEC countries produced an average of about 28.4 million b/d in 1996, representing an increase of 0.9 million b/d from the previous year. Output rose in spite of unchanged quotas through the year. Venezuela, Saudi Arabia, Kuwait and Nigeria accounted for most of this growth, while other OPEC members generally recorded a very weak production trend in 1996. At the end of November it was announced that Iraq would be permitted to resume limited oil exports from December after having accepted the UN's terms. The agreement allows Iraq to export oil for about $ 2 billion over a period of six months, entailing daily exports of 0.6-0.8 million barrels. The announcement was made just before the OPEC Ministers' 101st ordinary meeting in Vienna. At the meeting it was decided that OPEC would maintain its self-imposed quotas of a little more than 25 million b/d. It is assumed that oil exports from Iraq may increase the willingness on the part of other member countries to keep production within the quotas.

Since 1993 the North Sea region has accounted for the largest increase in oil production. This trend continued though 1996, according to figures from the IEA. The former Soviet Union has recorded a fall in both domestic demand and supply for several years, although the downward trend levelled off through 1996. In its forecasts for 1997, the IEA assumes that domestic demand will stabilize at the 1996 level, while an increase in supply is expected for the first time in ten years.

The IEA estimates that the world's total demand for oil will grow by 1.9 million b/d from 1996 to 1997, to 73.7 million b/d. At the same time, production outside OPEC is expected to expand by 2.0 million b/d in the same period. Europe and Latin America will account for much of this increase. If OPEC maintains production at the 1996 level, the total supply will come to 74.0 million b/d in 1997, i.e. an accumulation of stocks averaging 0.3 million b/d. If the market situation develops in accordance with the IEA's estimate for 1997, oil prices may edge down through the year. Current oil stocks are low, entailing that there may be a need to rebuild stocks.

Other commodity markets

After peaking in the summer of 1995, prices of commodities, excluding energy, have moved on a downward trend, a development which must be viewed in connection with cyclical weakness in Europe. According to the German HWWA institute, commodity prices (excluding energy) fell by 8.6 per cent from 1995 to 1996. Prices levelled off in the last few months of 1996, and metal prices rose markedly. The AIECE projects relatively stable prices for most commodities in 1997, but with a rise in prices of iron and steel and a fall for food and beverages.

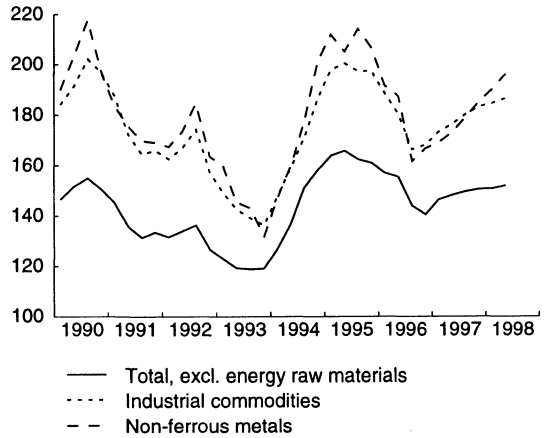
Irregularities uncovered in the Japanese firm Sumitomo resulted in substantial sales of copper around mid-1996, which triggered a sharp fall in prices. The sizeable decline in copper prices was, however, followed by a relatively stable period and prices showed signs of rebounding towards the end of 1996. The aluminium market was also influenced by the Sumitomo scandal, and the price of aluminium dropped considerably from May to June last year. The decline continued up to October before the trend was reversed. The market balance now seems to be relatively positive for aluminium, with the prospect of higher demand in Europe. Against this background, the AIECE expects prices to climb moderately in 1997. Weaker demand for steel products, both in Japan and western Europe, contributed to lower nickel prices through most of 1996. Expectations of higher consumption this year, however, may boost prices. Lead prices rose considerably at the beginning of last year as a result of high demand for batteries, but fell again towards the end of 1996. The cold winter this year will probably increase the demand for batteries again and stimulate a renewed rise in lead prices. Tin and particularly zinc prices remained stable through 1996. Partly as a result of sluggish output trends in China, the market balance for both metals is favourable, and the AIECE expects prices to rise through 1997.

A sharp increase in steel production in 1995, without a corresponding growth in demand, resulted in a fairly sluggish price trend for steel. At the beginning of 1996 prices edged up, but fell again in the third quarter. Output fell slightly from 1995 to 1996, and there are signs of rising demand in both Europe and China. A slight increase in prices this year thus seems possible. The price of scrap iron rose substantially in 1996, reflecting persistent excess demand for this commodity. Based on expectations of higher steel production, the AIECE projects a moderate rise in prices for both iron ore and magnesium this year.

Prices of farm-based industrial commodities fell throughout 1996, posting a decline of 17.8 per cent between December 1995 and December 1996. After peaking at $ 1000 per tonne in the autumn of 1995, pulp prices plummeted by 50 per cent in the course of just a few months. The decline must be viewed in conjunction with sizeable stocks and strong competition in the sector. In the second half of 1996, however, prices were stable. European producers are now attempting to gain acceptance among customers for raising prices slightly, stimulated by the rising demand for paper in Europe. Prices of wood products have also fallen substantially the last two years, primarily as a result of low building activity in Germany, the UK and France. The UK market now seems to be picking up, whereas demand from continental Europe will probably remain weak this year. The AIECE projects a moderate rise in prices of wood products in 1997.

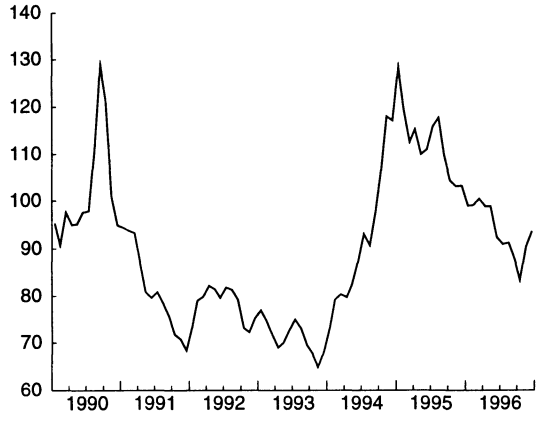
After rising in the period to May last year, prices of food and beverages fell by nearly 18 per cent through the

Commodity prices on the world market
Dollar based indices. 1975 = 100



Source: HWWA-Institut fur Wirtschaftsforschung.

Aluminium price
Dollar based indices. 1979=100



Source: World Metal Statistics.

remainder of the year. This particularly reflects movements in grain prices, which rose sharply in the first half of the year as a result of difficult weather conditions, including a drought in the US. After the weather situation improved, the prices of barley, maize and wheat resumed a downward trend. The AIECE estimates that higher production, particularly in Europe and the US will push down prices even further through 1997. Coffee prices dropped sharply last year as a result of higher supplies. The uncertainty surrounding this year's production in Brazil and the harbour strike in Colombia have contributed to a substantial increase in coffee prices since the beginning of the year. Prices rose further after the international organization for coffee-producing countries recently agreed to reduce export quotas. Sugar prices edged down during the latter part of 1996, and this trend is expected to continue this year as a result of excess supplies and substantial stocks.

Norwegian economy

Developments in 1996

Preliminary figures from the quarterly national accounts (QNA) show that GDP expanded by 4.8 per cent last year, approximately on a par with the growth recorded in 1994 and appreciably higher than in 1995. Petroleum activities, however, made a considerably greater contribution to growth in 1996 than in the previous two years. Output and demand from the mainland economy thus increased only moderately faster in 1996 than in 1995, when growth was approximately equivalent to the average of the last 25 years. Employment, however, grew at a more rapid pace in 1996 than in the previous two years, and since the early 1960s it was only in 1976 and 1986 that employment growth was noticeably stronger than in 1996. The labour force, however, also expanded sharply, and unemployment only fell by half a percentage point on an annual basis. Wage growth was higher last year than in the previous four years, 4.4 per cent measured per normal man-year. With price inflation at 1.3 per cent, this resulted in the strongest rise in real wages for ten years. Buoyant growth in petroleum production and high oil prices contributed to a current-account surplus of NKr 75.4 billion in 1996, equivalent to 7.5 per cent of GDP. In 1995, the surplus came to NKr 28.4 billion.

According to preliminary estimates, household consumption grew by 4.7 per cent last year, the steepest growth recorded since 1985/1986. The rise in consumption last year must be seen in connection with the growth in real disposable income, which was considerably stronger than in the previous two years, primarily as a result of the brisk rise in real wages and pronounced increase in employment. The decline in car taxes from the beginning of 1996 and the temporary rise in the deposit refund for scrapped cars contributed to a vigorous growth in car purchases. Partly as a result of this, the saving ratio fell, according to preliminary estimates, by 1.3 percentage points, to 5.7 per cent. It appears, however, that household net financial wealth continued to increase in 1996.

Mainland fixed investment imparted a substantially weaker impetus to growth in the Norwegian economy in 1996 than in the previous two years. Following two-digit growth rates in both 1994 and 1995, this investment rose by only a good 4 per cent last year. Manufacturing investment and investment in private service industries, excluding dwellings, boosted the average, whereas investment in goods-producing industries, excluding manufacturing, declined. General government investment showed a more moderate rise than estimated in official budget documents; among other things, it may appear that some local government investment in connection with the primary school reform has been shifted from 1996 to 1997. Housing investment declined last year following very brisk growth in 1994 and 1995. Housing starts, however, moved on a weak upward trend through 1996, and changes in prices of existing dwellings indicate that this trend may continue in the period ahead. According to Statistics Norway's price statistics, prices of existing dwellings were on average about 7 per cent higher in real terms in the period from the first to third quarter of 1996 than in the same period one year earlier. The square metre price of dwellings sold through estate agents showed a slightly sharper rise on an annual basis. By way of comparison, prices in the resale home market rose in real terms by about 5 per cent in 1995 and a good 11 per cent in 1994.

Petroleum investment edged down from 1995 to 1996 after declining considerably in the previous two years. Estimates from Statistics Norway's investment intentions survey for the fourth quarter point to resumed growth in petroleum investment this year.

Total demand from the general government sector rose by about 2 per cent last year, i.e. noticeably less than mainland GDP. A tight fiscal policy, a broadly-based upswing in the economy and a substantial increase in central government revenues from petroleum activities contributed to an estimated general government surplus equivalent to about 5.9 per cent of GDP in 1996, against 3.5 per cent in 1995.

Traditional merchandise exports expanded in volume by nearly 9.5 per cent last year, after growing vigorously in the first quarter. Exports of engineering products rose by more than 10 per cent for the third consecutive year, and - along with exports of fish and fish products - contributed to boosting the average. Metal exports also posted high growth, while chemical raw materials and pulp and paper products exhibited a relatively sluggish trend. Prices of traditional export goods edged down from 1995 to 1996 following a sharp rise in the previous year. Prices of metals, pulp and paper products, chemical raw materials and fish contributed to reducing the average.

According to preliminary figures from external trade statistics, exports of traditional goods to Norway's 12 main trading partners grew by a good 4 per cent last year. There was a clear correlation between Norway's export performance and economic growth in importing countries. Exports to Germany and Italy fell by more than 5 per cent in value, and exports to Sweden and France also exhibited a weak trend. On the other hand, there was a pronounced upswing in exports to some countries in Asia and eastern Europe as well as to the UK, the US and Japan, all of which recorded growth that was higher than the average for Norway's main trading partners last year.

The volume of imports rose by a modest 2.5 per cent last year, notably lower than in the previous three years. Service imports and imports of ships and platforms contributed to reducing the level, while imports of traditional

Macroeconomic indicators[1)]
Growth from previous period unless otherwise noted. Per cent

			Sesasonally adjusted			
	1995	1996	96.1	96.2	96.3	96.4
Demand and output						
Consumption in housheholds and non-profit organizations	2.6	4.7	2.5	0.1	1.7	1.1
General government consumption	0.2	1.6	0.6	0.5	-0.3	0.2
Gross fixed investment	4.5	3.1	-5.0	1.5	2.3	5.2
- mainland Norway	13.5	4.4	1.1	-0.1	1.6	3.5
- petroleum activities	-13.1	-1.2	-19.4	7.4	-0.4	17.4
Final domestic demand from mainland Norway[2)]	3.8	3.9	1.8	0.2	1.2	1.3
Exports	3.8	8.2	4.2	-0.2	1.6	2.0
- crude oil and natural gas	8.4	15.8	2.1	2.5	3.2	1.5
- traditional goods	4.1	9.4	10.0	-2.6	1.6	-0.2
Imports	5.1	2.5	-1.3	-1.2	4.5	-0.9
- traditional goods	9.1	6.5	2.7	-0.1	3.3	1.2
Gross domestic product	3.3	4.8	1.6	0.5	1.8	-0.3
- mainland Norway	2.7	3.2	1.1	0.3	1.3	0.2
Labour market						
Man-hours worked	1.2	2.1	..	..	..	..
Employed persons	2.1	2.6	..	..	..	..
Labour force	1.6	2.2	..	..	..	..
Unemployment rate, level[3)]	5.4	4.9	..	..	..	..
Prices						
Consumer price index[4)]	2.4	1.3	0.9	1.0	1.4	1.8
Export prices, traditional goods	7.1	-1.3	-0.9	0.5	-1.0	2.3
Import prices, traditional goods	0.7	0.4	0.1	0.3	-0.2	0.7
Balance of payment						
Current balance, bill. NKr	28.4	75.4	19.5	17.8	18.2	20.0
Memorandum items (unadjusted, level)						
Eurokrone rate (3 month NIBOR)	5.4	4.8	5.1	4.7	4.9	4.4
Average lending rate[5)]	7.5	6.9	7.2	7.0	6.8	6.7
Crude oil price, NKr[6)]	107.5	133.1	119.1	127.1	134.1	151.6
Importweighted krone exchange rate[7)]	101.0	101.2	101.3	101.5	101.4	100.7
Norges Bank's Ecu-index[7)]	103.6	102.5	103.3	102.6	102.6	101.6

1) The figures for 1995 may differ somewhat from previously issued forecasts, due to the incorporation of new information.
2) Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in mainland Norway.
3) According to Statistics Norway's labour force survey (LFS). The 1995-figure is adjusted in accordance with the alteration of the LFS from the beginning of 1996, and is raised by 0.5 percentage points compared to forecasts published earlier.
4) Percentage change from previous year.
5) Households' borrowing rate in private financial institutions.
6) Average spot price, Brent Blend.
7) Increasing index implies depreciation.
Source: Statistics Norway and Norges Bank.

goods expanded by 6.5 per cent. Imports of engineering products, which account for about 38 per cent of total traditional merchandise imports, rose at a noticeably slower pace in 1996 than in the previous two years, when such imports contributed 40 and 70 per cent respectively to the total growth in imports of traditional goods. Prices of traditional imported goods drifted up by 0.4 per cent last year after rising by 0.7 per cent the previous year. Industrial raw materials posted a considerable decline in prices from 1995 to 1996, while prices of cars and energy rose markedly.

Manufacturing output expanded by 2.8 per cent last year, approximately the same as one year earlier. It appears that manufacturing industry's deliveries to the domestic market exhibited a noticeably weaker trend than in the previous year, and that it was the sharp rise in exports which made the greatest contribution to the growth in manufacturing production in 1996. The engineering industry continued to record higher output growth than manufacturing industry as a whole in 1996, while production in the pulp and paper sector showed a considerable decline. Private service industries also posted sharp gains in output last year, whereas activity appears to have been weaker in the construction industry than the average for mainland industries. A steep decline in electricity production as a result of reduced inflow to reservoirs also made a negative contribution to mainland GDP growth last year, estimated at half a percentage point.

Inventory investment showed a decline from 1995 to 1996. In the national accounts, this investment is measured as the difference between supply and use, i.e. the difference between production and imports on the one hand and deliveri-

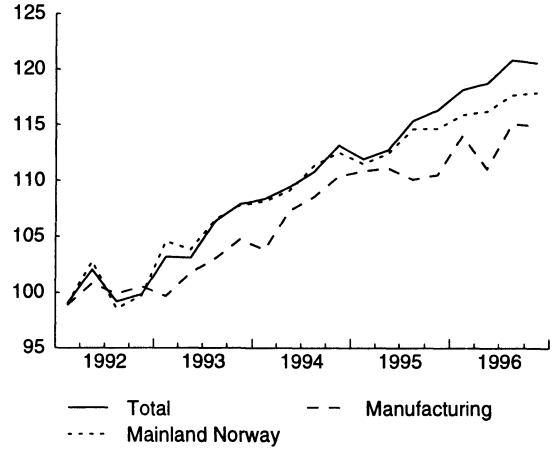
es to product inputs, exports, consumption and investment on the other. Inventory investment showed a sharp rise in the period 1993-1995. Even though it is reasonable to expect some increase in inventory investment following the recession of the previous years, the magnitude of the figures may indicate that the national accounts figures in this period have to some extent overestimated the growth in supply and/or underestimated the growth in demand. Movements in inventory investment from 1995 to 1996 do not indicate that this was the case last year.

According to preliminary figures from manpower accounts, the number of persons employed advanced by 55 000, or 2.6 per cent, in 1996 after increasing by 1.2 and 2.1 per cent, respectively, in the previous two years. For the third consecutive year the growth in public sector employment was slightly lower than the average for the mainland economy. As a result of increased absenteeism and an increase in the number of people working part-time, the number of man-hours worked rose at a slightly slower pace than employment, estimated at 2.1 per cent for mainland Norway.

The labour force grew by an estimated 49 000 last year, substantially more than the growth in the working-age population would indicate. This is partly related to a shift in the age composition of the population with relatively sharp growth in age groups that have the highest labour force participation, while the youngest and oldest age groups showed a decline. According to Statistics Norway's labour force survey (LFS), unemployment thus fell by a good half a percentage point last year, approximately on a par with the previous two years. As an average for the year, this results in an unemployment rate of 4.9 per cent. The LFS was revised at the beginning of 1996, entailing that the results of the survey are now considerably more comparable to corresponding results in other countries. In order to be able to compare unemployment figures for Norway published in earlier years, it is necessary to adjust for breaks in the LFS as a result of the revision of the survey. Adjusted for such breaks, unemployment can be estimated at 5.4 per cent in 1995, 0.5 percentage point higher than the previously published level. Both the LFS figures and the Directorate of Labour's figure for the sum of registered unemployed and persons participating in labour market measures, excluding rehabilitation, showed a decline through 1996.

The consumer price index rose by 1.3 per cent last year, a little less than the average for our main trading partners. The year-on-year rise moved up through 1996, partly as a result of the elimination of VAT compensation on milk, cheese and meat from 1 July and higher electricity prices in the second half of the year. Prices of imported consumer goods contributed to reducing average price inflation. Part of the explanation for this is the reduction in car taxes from 1 January 1996 inasmuch as cars have a high weight in this consumption group. Through 1995 and most of 1996 the Norwegian krone depreciated slightly against an import-weighted basket of currencies of our main trading

Gross domestic product
Seasonally adjusted volume indices, 1992=100

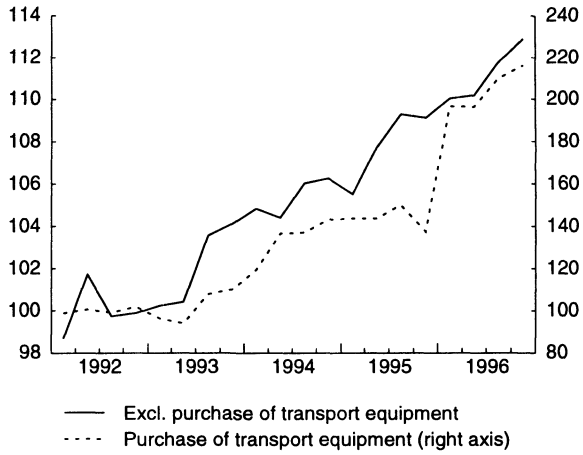


Source: Statistics Norway.

Exports
Seasonally adjusted volume indices, 1992=100

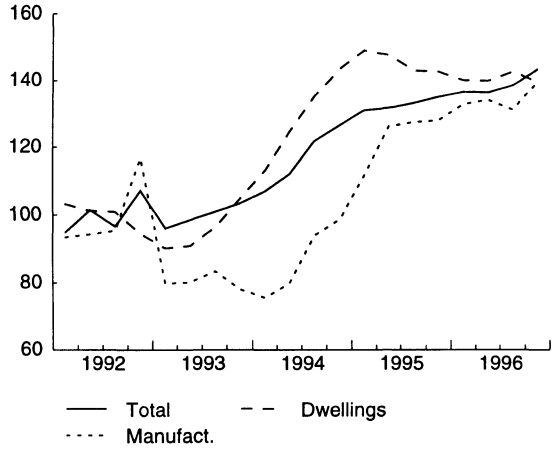
Source: Statistics Norway.

Consumption in households
Seasonally adjusted volume indices, 1992=100



Source: Statistics Norway.

Gross fixed capital formation, mainland Norway
Seasonally adjusted volume indices, 1992=100



Source: Statistics Norway.

Imports
Seasonally adjusted volume indices, 1992=100

Source: Statistics Norway.

partners. In isolation this may have contributed to pushing up the rise in prices in Norway. The appreciation of the krone over the last few months will - if it is not reversed - gradually have the opposite effect.

According to preliminary estimates, wages per normal man-year rose by 4.4 per cent last year, noticeably higher than in the previous three years. Wage growth in manufacturing industry as a whole was close to the average for the entire economy, but the level in commodity-producing manufacturing sectors was appreciably higher. It is natural to view this in connection with the favourable trend in profitability over the past few years, partly as a result of the sharp rise in manufacturing industry's export prices from 1994 to 1995. Wage growth in the public sector was also equivalent to the average for the economy as a whole. Some of the pay increases awarded in the settlement in 1996 did not become effective until relatively late in the year, and the Technical Reporting Committee on Income Settlements has estimated the average carry-over into 1997 at around 2 per cent.

From the start of 1996 and up to the beginning of November the Norwegian krone appreciated against the ECU, and Norges Bank purchased considerable amounts of foreign exchange. The pressure on the krone persisted even after Norges Bank, on two occasions, lowered its overnight lending and deposit rates by half a percentage point, first on 5 November 1996 and then again on 9 January this year. On 10 January Norges Bank again lowered its key rates, this time by a quarter of a percentage point, and announced that for a period it would not undertake extensive interventions in the foreign exchange market. In practice, this means that the krone is floating for the time being. Since then the krone has appreciated markedly against the ECU, and at the beginning of February was about 5.5 per cent lower than the average for last year (lower rate denotes stronger krone). The import-weighted krone exchange rate has exhibited a similar trend during this last period after showing tendencies of depreciating through 1995 and 1996. In the wake of Norges Bank's interest rate cuts, the 3-month Norwegian Euro-rate fell by about 1.5 percentage points from October 1996 to January this year, to a level around 0.6 percentage point below the corresponding ECU rate. The fall in money market rates indicates that financial institutions' interest rates - which at the end of the third quarter last year were about half a percentage point lower than one year earlier - can be estimated to have declined by an additional half a percentage point from the third to fourth quarter last year.

The surplus on the current account is provisionally estimated at NKr 75.4 billion in 1996, equivalent to 7.5 per cent of GDP, and NKr 47 billion higher than in 1995. The value of oil and gas exports rose by NKr 42 billion, while exports excluding oil and gas increased in value by a good NKr 10 billion. Total imports climbed by NKr 11 billion, with higher electricity imports accounting for a good NKr 3 billion. The deficit on the interest and transfers balance was reduced by NKr 5.5 billion in the same period. Norway's real disposable income expanded by an estimated 7.5 per cent last year, with more than half of this income growth ascribable to higher petroleum production and the rise in oil and gas prices.

Outlook for 1997 and 1998

The cyclical upturn in the Norwegian economy continued in 1996 and there are no signs of a significant slowdown during 1997. The strong economic expansion will thus continue this year, and the estimate for GDP growth in 1997 has been revised upwards. Fiscal policy appears to be slightly more expansionary this year than assumed earlier. In addition, the estimates for oil investment have been subject to a further upward revision for both 1997 and 1998. Oil and gas production also appears to be growing at a stronger pace than projected earlier.

Perhaps the most important change in the assumptions underlying our projections since the last Economic Survey in December is the reduction in interest rates and the fact that the krone exchange rate has now (4 February) appre-

ciated by a good 5 per cent compared with the level at the beginning of January. In our main scenario for developments in the Norwegian economy, it is assumed that the import-weighted krone exchange rate will be 5 per cent lower (stronger) in 1997 and 1998 than the average for 1996. The approximately 1 percentage point decline in interest rates compared with 1996 will have a stimulating effect on economic activity in 1997 and 1998, while the appreciation of the krone will have a dampening effect on activity. The net effect of the reduction in interest rates and appreciation is small for GDP in the mainland economy if the changes witnessed to date generally prevail throughout 1997. The upward revisions in our projections for economic growth in 1997 are therefore primarily related to the effects of a more expansionary petroleum sector and fiscal policy.

Even though the revised growth projections will, in isolation, increase the pressures in the Norwegian economy in the period ahead, the effects on price and wage inflation as a result of this will be far less than the price and wage dampening effects of the fall in interest rates and krone appreciation. In spite of the indirect tax increases resulting from the final deliberations on the 1997 budget, our projections for consumer price inflation in 1997 have therefore been lowered in relation to our December estimates. The same applies to the estimate for price inflation in 1998. In line with this, the estimates for wage growth in 1998 have also been revised down. Only moderate nominal adjustments in wages are likely through 1997 due to the considerable carry-over from 1996.

Brisk growth in oil and gas production and relatively high oil prices have translated into substantial surpluses on the current account and government budgets. The vigorous growth in the Norwegian economy along with some tightening of fiscal policy have also contributed to strengthening the budget balance. With continued high growth in the economy, the budget balance is set to improve further in 1997 and 1998. The current-account surplus this year is projected to decline slightly from the record level in 1996, partly as a result of the krone appreciation, but primarily due to the assumption that oil prices will fall from the current level of about $ 23 p/b to $ 18 p/b later this winter.

Main economic indicators
Percentage change from previous year unless otherwise noted

	Accounts	Forecasts	
	1996	1997	1998
Demand and output			
Consumption in households and non-profit organizations	4.7	3.1	2.7
General government consumption	1.6	2.6	1.7
Gross fixed investment	3.1	5.4	3.7
-mainland Norway	4.4	2.7	3.8
-petroleum activities	-1.2	15.2	3.8
Demand from mainland Norway[1]	3.9	2.9	2.6
Change in stocks[2]	-0.9	0.0	0.0
Exports	8.2	5.0	4.0
- crude oil and natural gas	15.8	5.6	4.8
- traditional goods	9.4	5.5	5.0
Imports	2.5	6.5	3.4
- traditional goods	6.5	4.5	3.1
Gross Domestic Product	4.8	3.1	3.0
-mainland Norway	3.2	2.7	2.7
Labour market			
Persons employed	2.6	1.9	1.4
Unemployment rate (level)	4.9	4.5	4.3
Prices an wages			
Wages per standard man-year	4.4	3.6	2.7
Consumer price index	1.3	1.8	1.2
Export prices, traditional goods	-1.3	-0.3	0.4
Import prices, traditional goods	0.4	-2.3	-1.2
Real price, dwellings	6.9	10.9	9.9
Balance of payments			
Current balance (bill. NKr)	75.4	73.9	76.5
Current balance (per cent of GDP)	7.5	7.1	7.0
Memorandum items:			
Household saving rate (level)	5.8	6.1	6.4
Money market rate (level)	4.8	3.6	4.0
Average borrowing rate (level)[3]	6.9	6.0	5.7
Crude oil price NKr (level)[4]	131	118	115
International market growth	2.4	6.3	5.3
Importweighted krone exchange rate[5]	0.2	-5.0	0.0

1) Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in mainland Norway.
2) Change in stock, per cent of GDP.
3) Households' borrowing rate in private financial institutions.
4) Average Norwegian oil production.
5) Positive sign indicates depreciation.

Higher growth among our trading partners in the years ahead

There are signs of slightly higher economic growth in EU countries in 1997 following sluggish growth in 1996. Interest rates in the EU, however, are not expected to increase in 1997. If growth gathers further momentum through 1998, interest rates may be raised. A continued tight fiscal policy in most EU countries indicates that monetary policy will remain expansionary into part of 1998. Growth in the US continues at a steady pace. In line with earlier assumptions, a moderate rise in US rates from 1997 to 1998 cannot be ruled out. On the other hand, this will depend on the degree of fiscal tightening in the US in the coming fiscal year. In line with a projected tightening of fiscal policy at the beginning of a presidential period, and in view of the high growth recorded for a number of years without visible signs of quickening inflation, it is not inconceivable that interest rates in the US will also remain approximately unchanged in the period ahead.

Internationally, inflation is subdued and in some cases declining. In the EU, the inflation rate is drifting down in most countries. Higher inflation is expected in the Nordic countries, but from a level which is lower than on the continent. The inflation rate in EU countries is thus expected to converge, which is also a prerequisite for the implementation of EMU. Moderate price inflation also increases the probability that money market rates will not rise to any ex-

tent in the period ahead. However, one should not underestimate the possibility of increasing turbulence in international and particularly European financial markets over the next two years in connection with the determination of exchange rates that shall apply in the transition to monetary union.

Strong and increasing growth impetus from petroleum activities

As noted in the last Economic Survey, the situation for petroleum investment has changed slightly in recent months. Investment in 1996 was lower than assumed earlier, while the estimates for 1997 were raised and have been increased even further in the projections now being presented. The level of investment in 1998 has also been revised upwards compared with earlier projections.

From 1993 and up to 1996 fixed investment in the petroleum sector declined even though the change between 1995 and 1996 was very modest. In a period with substantial growth impulses for the mainland economy, this decline in petroleum investment has contributed to curbing the cyclical upturn in the Norwegian economy. According to the estimates, however, we are now entering a period where the upturn in the mainland economy will again be stimulated by higher petroleum investment. The projected start-up of the construction of a gas-generated power station in both 1997 and 1998 will amplify the demand impetus from petroleum-related activities.

Oil and gas production has risen sharply the last few years and growth continued in 1996. Until recently it was assumed that oil production would peak in the year 2000. New estimates from the Norwegian Petroleum Directorate now indicate that oil production will increase sharply the next few years and also remain at a higher level for a longer period than assumed earlier. This is primarily related to assumptions concerning higher recovery rates from existing oil fields. The immediate effects of these higher estimates on the Norwegian economy are moderate. This will probably not result in a substantial increase in intermediate consumption and employment in the oil production sector. Any effects on the economy will therefore primarily stem from effects via the external account and government budgets. The Norwegian Petroleum Directorate has indicated, however, that petroleum investment may also remain at a high level for a longer period than assumed earlier. So far the estimates have pointed to a substantial decline in this investment as early as three years from now. It now appears that the decline may be far smaller than envisaged earlier.

Weaker contribution to growth from fiscal policy

The final deliberations on the government budget in the Storting indicate that government expenditure on goods and services will increase faster in 1997 than assumed earlier. This particularly applies to the local government sector which is now expected to record higher revenue growth than envisaged earlier. The local government sector, which in contrast to the central government has financial liabilities which exceed financial assets, will also benefit from the fall in interest rates which has taken place in January 1997. Some shift in general government investment from 1996 to 1997 will also influence developments.

In order to counteract the expansionary effects of higher local government demand, central government expenditure was reduced slightly and the plans called for a real growth in some special excise duties. In addition, the budget was strengthened by increasing capital income through transfers from state enterprises and funds. The real economic effects of the latter measures, however, are limited.

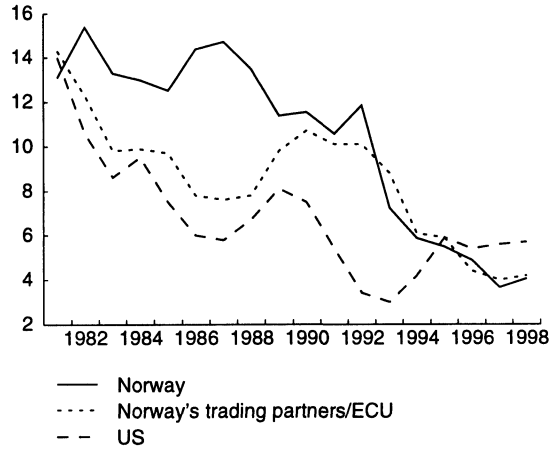
The appreciation of the krone will reduce the rise in prices for goods and services purchased by the public sector and, with unchanged nominal budget limits, may result in higher real growth in government expenditure on goods and services. We have assumed, however, that the Government will - in connection with the Revised National Budget - withdraw this purchasing power, entailing that real growth will remain unchanged.

Even though the budget balance deteriorated slightly compared with the Government's original proposal, fiscal policy will still be tightened compared with a cyclically-neutral budget programme. The tightening of fiscal policy, which started in 1994, will thus continue in 1997. We assume that the tight fiscal policy will also be maintained in 1998, and the growth in government expenditure on goods and services is expected to be about one per cent lower than the growth in mainland GDP. No changes have been assumed for the tax and excise duty programme in 1998, with the exception of an inflation adjustment of nominal rates.

Assumptions concerning interest and exchange rates

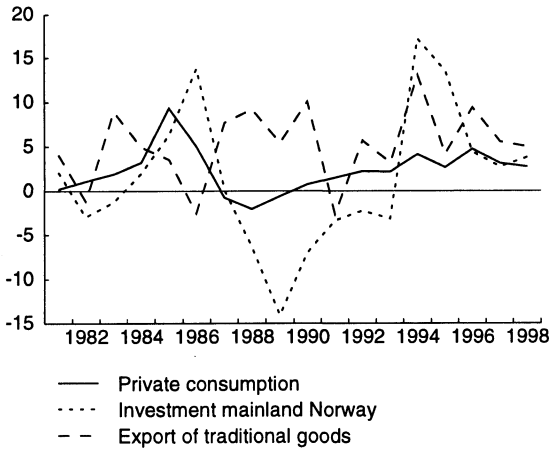
There is now considerable uncertainty concerning exchange rate movements for the Norwegian krone in the period ahead, and we therefore present two sets of calculations. In scenario A it is assumed that the import-weighted krone exchange rate appreciates by 5 per cent from 1996 to 1997 and remains unchanged in 1998. This approximately corresponds to the appreciation from 1996 to the end of January this year. In scenario B it is assumed that the krone exchange rate in the second quarter of 1997 returns to a level corresponding to the average for 1996. Nominal interest rate levels, however, are assumed to be the same in the two scenarios. One possible interpretation of scenario B is that when consumer price inflation in Norway clearly exceeds the inflation rate in the EU at the beginning of 1997, and oil prices fall to $ 18 p/b in the course of a few weeks, as we have assumed in both scenarios, confidence in the krone will wane and the exchange rate will fairly quickly return to the 1996 level. In this process it is assumed that the authorities will place greatest emphasis on bolstering

3 months euro rates 1981 - 1998
Per cent. Forecasts for 1997 and 1998



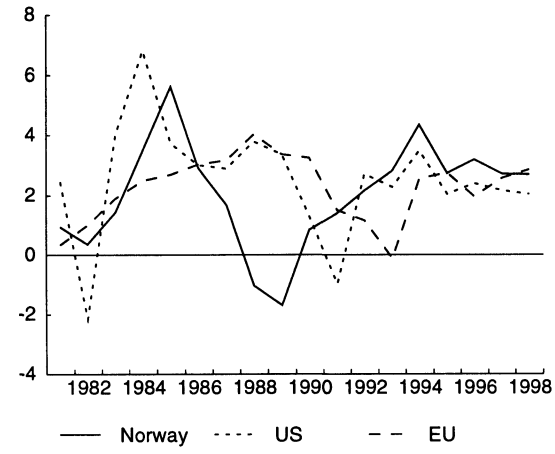
Sources: Statistics Norway, OECD and European Commission.

Consumption, capital formation and exports 1981-98
Percentage growth. Forecasts for 1997 and 1998



Source: Statistics Norway .

GDP for mainland Norway, US and EU 1981-98
Per cent change. Forecasts 1997 and 1998



Sources: Statistics Norway, OECD and European Commission.

the exchange rate rather than increasing interest rates. Consequently, interest rates in scenario B will remain at the current low level. Irrespective of how much faith one might have in this "narrative", the difference between scenarios A and B illustrates some of the effects of an appreciation on the Norwegian economy.

Continued buoyant growth in output and demand in 1997

Whereas the high output growth in 1996 was fuelled by high private consumption growth and export gains combined with a surprisingly low rise in imports, the contributions to growth in 1997 will largely come from petroleum investment and general government consumption. Mainland fixed investment is expected to grow at about the same pace in 1997 as in 1996, but with a higher contribution to growth from housing investment and a weaker impetus from manufacturing investment. The latter must be viewed in connection with the decline in housing investment in 1996. Brisk income growth, lower interest rates and a sharp rise in prices in the resale home market are expected to boost housing starts in the period ahead and result in substantially stronger investment growth in 1998 than assumed earlier. The weaker investment trend in manufacturing industry must be viewed in connection with the sharp growth the previous years. All in all, mainland fixed investment will be shifted towards building investment with a lower import content than total investment. The exception is higher aircraft purchases in 1998 which are exclusively based on imports.

The growth in household consumption, which is now estimated at 4.7 per cent in 1996, is expected to slow to about 3 per cent in 1997. This entails that the saving ratio will remain approximately unchanged between 1996 and 1997 after having fallen by more than one percentage point from 1995 to 1996. The corollary to the fall in the saving ratio in 1996, however, was a sharp rise in household purchases of cars. Car purchases are expected to edge down in 1997 compared with the previous year. The assumption that the saving ratio will not increase to any extent is ascribable to both the fall in interest rates from 1996 to 1997 and the sharp growth in household real wealth, both of which have a stimulating effect on consumption.

As noted, petroleum investment is expected to rise sharply in 1997, with the composition shifting towards a higher import content. Moreover, investment in the shipping sector is projected to show an appreciable increase, contributing to a sharp rise in imports of ships. These two factors are an important explanation for the relatively sharp rise in imports from 1996 to 1997 compared with domestic demand. Investment in oil and shipping in 1998 is expected to grow at a considerably lower pace, thereby resulting in far lower import growth. Imports of electricity will also revert to a more normal level in 1998 compared with the figures in 1996 and 1997, which are marked by high demand and low hydropower production in Norway.

Output growth in the mainland economy is now expected to be almost as high in 1997 and 1998 as in 1996. Here, however, it is important to be aware that the decline in gross output in the electricity sector from 1995 to 1996 reduced growth in 1996 by about half a percentage point. With unchanged electricity production, mainland GDP growth in 1996 would thus have been 3.7 per cent and not 3.2 per cent as the actual figures show. During 1997 and 1998 production in the electricity sector is expected to be normalized, which will make an additional growth contribution in these two years. Adjusted for these special supply-side factors, "underlying" growth will fall from 3.7 per cent in 1996 to about 2.5 per cent in 1997 and 1998, according to our calculations in scenario A (with a krone appreciation).

Production growth is expected to be rather evenly distributed among industries in the period ahead. Total GDP will expand at only a slightly faster pace than the mainland economy because total oil and gas production is not expected to increase as strongly as has been the case in recent years. Renewed growth in traditional exports along with high petroleum investment will generate a noticeable growth impetus to manufacturing industry, which is projected to expand by about 2.5 per cent in both 1997 and 1998.

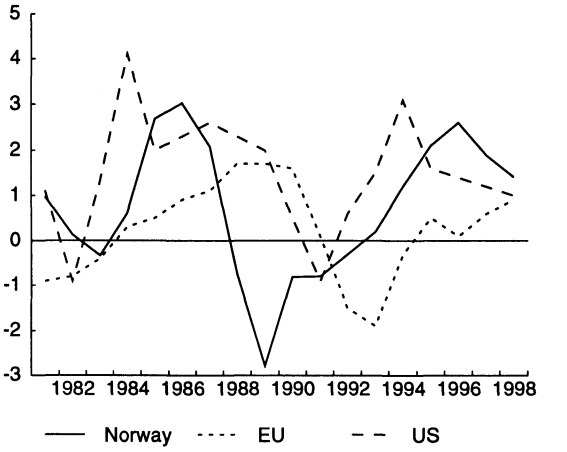
Continued lower unemployment

Employment growth will be curbed slightly in the years ahead, according to the calculations, but growth will remain at a high level and be sufficient to reduce unemployment further in spite of a brisk growth in the labour force. Labour force participation is expected to continue to increase in the period ahead. Somewhat stronger growth in employment in the public sector, and particularly in the local government sector, in 1997 compared with 1996 will contribute to a tighter labour market. In line with earlier estimates, unemployment is expected to decline by a smaller margin from 1997 to 1998 than has been customary in recent years. Unemployment has fallen by about half a percentage point each year since 1993. So far, however, there are no signs that the decline in unemployment will come to a halt.

Slightly higher price inflation in 1997

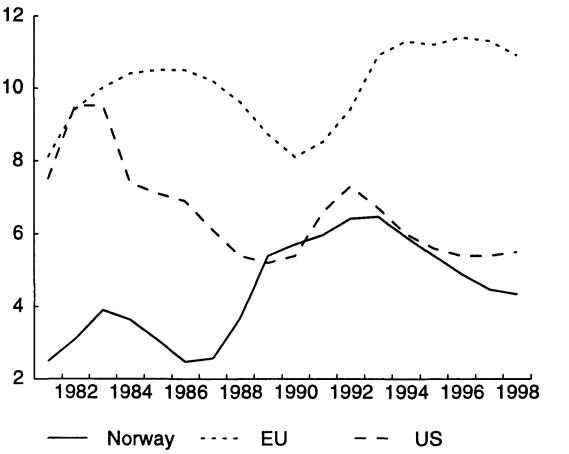
Price inflation, measured by the consumer price index, moved up through 1996, with a year-on-year rise of 1.8 per cent in December. In 1997, higher indirect taxes - in contrast to indirect tax reductions from 1995 to 1996 - will contribute to pushing up price inflation by 3/4 percentage point in the first half of the year. In the second half of the year the effect on the year-on-year rate of the elimination of VAT compensation on some food product from 1 July 1996 will be eliminated and price inflation will fall. In addition, price changes are influenced by the increase in electricity prices through 1996, which is expected to be reversed during 1997. The first notices of price reductions this spring have already been distributed by power stations.

Employment 1981 - 1998
Percentage growth. Forecasts for 1997 and 1998



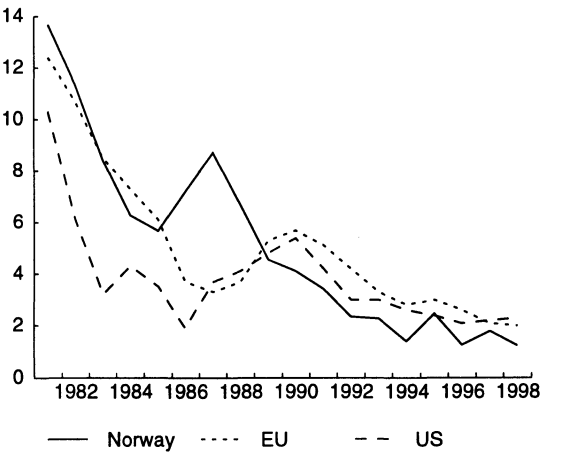
Sources: Statistics Norway, OECD and European Commission.

Unemployment 1981 - 1998
Per cent. Forecasts for 1997 and 1998



Sources: Statistics Norway, OECD and European Commission.

Consumer prices 1981 - 1998
Percentage growth. Forecasts for 1997 and 1998



Sources: Statistics Norway, OECD and European Commission.

Price inflation in the period ahead will depend on assumptions concerning the krone exchange rate. Moreover, the speed at which exchange rate changes feed through to Norwegian import prices is of significance. For a more detailed analysis of the assumptions underlying the calculations on this point, reference is made to a separate box on price inflation.

With a 5 per cent appreciation of the krone exchange rate, price inflation is now estimated at 1.8 per cent in 1997 (scenario A). If the krone exchange rate returns to the 1996 level during the first quarter of 1997 (scenario B), price inflation in 1997 will be 2.4 per cent, according to our calculations.

Continued high real wage growth in 1997

1996 was a year with high real wage growth for a broad range of employee groups, and the wage carry-over into 1997 is unusually high. Even without any nominal pay increases through 1997, real wages will remain unchanged or increase for most groups of employees. Wage growth is expected to be slightly weaker in 1997 than was the case in 1996. A tighter labour market in the period ahead would point to higher real wage growth in 1997 than in the previous year, whereas weaker profitability in manufacturing industry would indicate the opposite. Sizeable bonuses linked to the high profits in the previous year were paid out in a number of manufacturing sectors in 1996. This is not likely to occur to the same extent in 1997.

In scenario A, where the krone appreciates, manufacturing industry's profitability will deteriorate considerably in 1997 as a result of increased competition from imports and lower product prices, whereas Norwegian cost levels are not adjusted correspondingly. Moreover, compared with earlier estimates, consumer price inflation will be noticeably lower in 1997 than assumed earlier, if the appreciation persists. As will be seen in the main table and figures, we do not assume that wage growth in 1997 will be affected by the krone appreciation to any extent. As a result, our projections for real wage growth in 1997 are therefore higher than earlier. On the other hand, wage growth will be substantially lower in 1998 if the krone appreciation is not reversed. The difference in the wage growth estimate in the two scenarios is as much as 1 percentage point in 1998. However, since consumer price inflation next year will also be lower as a result of the appreciation, real wages will show a clear rise also in 1998, according to scenario A.

It is worth noting, however, that the adaptation of nominal costs in Norway to the krone appreciation will not be implemented in 1998. According to calculations derived from our models, nominal changes will be lower for several years after 1998 as a result of a once-only appreciation. Our models are based on a full adaptation of domestic price and cost levels, entailing that the business sector does not experience a deterioration in competitiveness in the long term as a result of an isolated (once-only) krone appreciation. Consequently, if manufacturing industry's competitive position is not to deteriorate in the long term, changes other than a krone appreciation must occur in the economy, e.g. permanently lower interest rates, a permanently more expansionary fiscal policy, permanently higher petroleum investment, or a lower supply of labour, just to mention a few possibilities.

Effects of a return to the original exchange rate level (scenario B) on growth rates in percentage points

	1997	1998
Private consumption	-0.2	0.4
Mainland fixed investment	0.0	0.7
Traditional exports	0.2	-0.1
Imports	-0.4	0.1
Mainland GDP	0.1	0.3
-manufacturing output	0.7	0.5
Unemployment (per cent, level)	-0.1	-0.1
Import prices	2.4	1.7
Export prices, traditional goods	1.5	2.0
Consumer prices	0.6	0.6
Wages	0.2	1.0
Current-account balance (bill. NKr)	3.2	4.2
Money market rate	0	0

Substantial current-account surplus in spite of appreciation and fall in oil prices

In spite of a projected fall in oil prices of almost 10 per cent from 1996 to 1997 and a further marginal decline to 1998 (oil prices are then assumed to be a good $ 18 p/b), the surplus on the current account is projected at about the same level in 1997 and 1998 as in 1996, i.e. about NKr 75 billion. The balance of trade will deteriorate slightly from 1996 to 1997 due to the expected fall in oil prices, but this will be offset by an improvement in the interest and transfers balance as a result of the increase in net foreign assets through 1996. Norway's net foreign assets at the end of 1996 are estimated at about NKr 80 billion, or close to 8 per cent of GDP. The current-account surpluses estimated in scenario A entail that net foreign assets will be equivalent to about 20 per cent of GDP at the end of 1998. In isolation, the current-account surpluses will be reduced as a result of the appreciation, when measured in Norwegian kroner. The volume of exports will fall and the volume of imports will rise as a result of the appreciation. Net exports are NKr 3 billion lower at constant prices in 1998 in scenario A compared with scenario B. The moderate reduction must be viewed in connection with the assumption that the volume of important export goods such as oil and gas will not be influenced by the appreciation.

The appreciation of the krone has a contractionary effect

As noted above, the appreciation contributes to lower price inflation in both 1997 and 1998. For a more detailed analysis of the effect of the krone appreciation on changes in the

consumer price index in 1997 and 1998, reference is made to a separate box. In the following we shall focus on how our growth projections for 1997 and 1998 will be influenced if the appreciation of the krone in scenario A is reversed so that the import-weighted krone exchange rate is back at the average level of 1996 in the second quarter of 1997 (scenario B). It is then worth noting that we have assumed the same nominal interest rate levels in the two scenarios. This entails that the real interest rate is higher in scenario A in both 1997 and 1998 than in scenario B. This would in isolation point to higher consumption and investment in scenario B. With regard to household consumption, however, this effect is offset by lower real wage growth in 1997 in scenario B because wages (and thus transfers to households) are assumed to adjust more slowly than prices to a change in exchange rates. As will be seen in the table, consumption growth will therefore be slightly lower in 1997 if the krone appreciation is not permanent. In 1998, however, there is an adaptation of the level of real wages, and a lower real interest rate is the factor which explains the slightly higher level of consumption in the scenario where the krone exchange rate returns to its original level.

The krone appreciation influences manufacturing industry to a greater extent than other industries. The table shows that if the exchange rate returns to its original level, the growth in gross output in manufacturing will be 0.7 per cent higher in 1997 and 0.5 per cent higher in 1998 so that the level of manufacturing production is 1.2 per cent higher in 1998. For production in the mainland economy as a whole, the effects are quantitatively the same, but the effects are smaller. The level of production in 1998 would have been about half a per cent higher without a permanent appreciation of the krone. The krone appreciation also has a negative impact on investment, and both housing and manufacturing investment would have been higher without an appreciation. The effects of the appreciation on the level of activity result in somewhat higher unemployment than would otherwise have been the case.

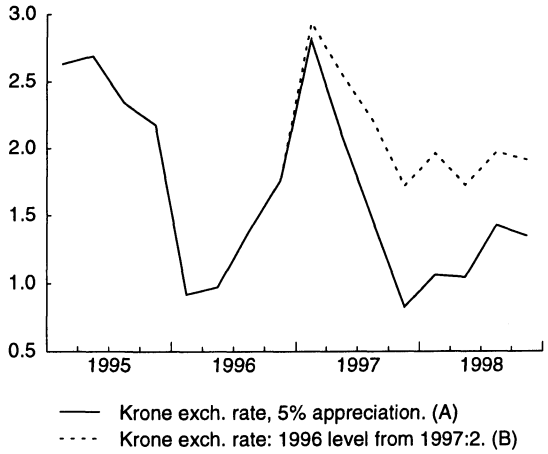
All in all, the appreciation of the krone results in lower growth in the Norwegian economy in both 1997 and particularly in 1998. From this perspective the appreciation has a contractionary effect. It is, however, worth noting that we have assumed the same nominal interest rate levels in scenarios A and B and consequently higher real interest rates in scenario A. This is an important explanation as to why growth is lower in A. If, instead, nominal interest rates were assumed to be higher in scenario B than in scenario A, the differences in the effect on the real economy would have been less than that indicated by the table, while the effect on the nominal path would have been approximately the same.

Consumer price inflation in 1997 and 1998

Changes in the rate of price inflation through 1996 can basically be ascribed to special conditions in 1996; In January the year-on-year rise was 1.2 per cent, but due in part to abnormally protracted and strong seasonal sales of clothing the 12-month rate was reduced to 0.7 per cent in March. The elimination of VAT compensation on food from 1 July pushed up the rate that month by 0.3 percentage point and the year-on-year rise then stood at 1.3 per cent. Higher electricity prices through the second half of 1996 entailed that the 12-month rise reached 1.8 per cent towards the end of last year. All these special factors will influence the 12-month rise in 1997, but with the opposite sign.

The increase in electricity prices appears to have continued in January because some power stations did not raise the prices charged to households through 1996 in step with the sharp rise in prices in the spot market for electricity. At the beginning of February, however, the spot price and forward prices for the rest of the year were far below the electricity price being charged by many large power stations in January. A number of them have now announced reductions in electricity prices in March and April, with indications of a further decline later in the year. Due to a substantial, positive carry-over into 1997 and an increase at the turn of the year, we project that the annual average rise in electricity prices will be 7 per cent from 1996 to 1997. In isolation, electricity prices will then contribute 0.3 percentage point to consumer price inflation in 1997.

Consumer price index
Percentage growth from same quarter previous year



Source: Statistics Norway.

Reduced lending rates in the Norwegian State Housing Bank and in private banks through 1996 and into 1997 point to lower growth in house rents. It is estimated that this decline in interest rates will contribute to reducing consumer price inflation by 0.1 percentage point in 1997 and 1998.

As a starting point for the model-based calculations, we have assumed that the value of the Norwegian krone, measured with imports as weights, will remain relatively stable through 1997 and through 1998 at a level about 5 per cent below the average in 1996 (scenario A). Based on empirical studies, we have estimated a feedthrough of the exchange rate change to changes in import prices of 0.3 in the current quarter, 0.65 in the second quarter, rising by 0.05 in subsequent quarters to a full impact after two years. Based on this and assumptions of relatively stable inflation among our trading partners, we have estimated that the price of traditional imported goods will be reduced by 2.3 per cent in 1997 and 1.2 per cent in 1998. Along with the prospect of lower electricity prices later in the year and the special conditions prevailing in 1996, this points to a sharp decline in the 12-month rise in the consumer price index through 1997.

Indirect tax changes in 1996 and 1997 are estimated to contribute 0.5 percentage point to consumer price inflation. In 1998, it is assumed that indirect taxes will generally be adjusted in line with inflation.

Assuming a 5 per cent appreciation of the import-weighted krone exchange rate, the model-based calculations show a rise in the consumer price index of 1.8 per cent in 1997 and 1.2 per cent in 1998. The rise from the same quarter one year earlier is gradually reduced through 1997 from 2.8 per cent in the first quarter to 0.8 per cent in the fourth quarter.

In order to illustrate the sensitivity to changes in exchange rates, we have made a calculation where a gradual depreciation of the Norwegian krone through the second half of the first quarter of this year brings the import-weighted value of the krone back to the average for 1996 beginning in the second quarter of 1997 (scenario B). In this calculation, the value of the krone falls by 2 per cent in the first quarter of 1997 and 5 per cent thereafter compared with scenario A. Based on these assumptions, consumer price inflation will be 2.4 per cent in 1997 and 1.9 per cent in 1998. Measured against the same quarter one year earlier, the rise in the consumer price index through 1997 also declines in this calculation, from 2.9 per cent in the first quarter to 1.7 per cent in the fourth quarter.

How accurate were Statistics Norway's forecasts for 1996?

The Economic Surveys published by Statistics Norway over the past two years have presented forecasts for macroeconomic developments in 1996 eight times. The first forecasts were presented in Economic Survey 1/95, and this was followed by forecasts in each quarterly survey. The table below shows how Statistics Norway's forecasts have changed over time as new information and new assumptions have been incorporated.

The accuracy of the forecasts for 1996 is to some extent influenced by the main revision of the national accounts inasmuch as accounts figures based on the new international standard for national accounts were published for the first time in the summer of 1995. Statistics Norway's models were not adapted to the new standard until the autumn of 1995, entailing that the first estimates for 1996 were drawn up on the basis of the old national accounts system and models based on this system. However, even after the models were adapted to the new national accounts figures our forecasts were influenced by the main revision since the econometric relationships are still largely based on the old national accounts figures. Another data revision which hampered the forecasting work in 1996 was the change and improvement in the LFS from January 1996. This has resulted in breaks in the series for employment, the labour force and unemployment. In the figures showing actual growth in 1996, presented in the table below, attempts were made to adjust for these breaks. The actual LFS unemployment rate in 1996 was 4.9 per cent and not 4.4 per cent as the adjusted figures show.

As can be seen in the table, the forecasts for various components of GDP vary considerably through the projection period. Particularly noticeable is the upward revision in the estimate for household consumption, etc. in the spring of 1996. This was partly related to the incorporation of reduced car taxes and higher deposit refunds for scrapped cars, which also resulted in a downward revision in the estimate for consumer price inflation. Other substantial upward revisions during the period include the change in the estimate for growth in traditional merchandise exports in the spring of 1996 as a result of the brisk growth in observed figures for the first quarter, a development which can still not be explained by the models.

The estimate for production, on the other hand, has been fairly close to the outturn throughout the projection period. The forecast for total GDP growth was revised up due to higher oil and gas production than originally assumed. For mainland GDP, the forecast started out by being perfect, but with growth projections being lowered through most of 1995 in line with the downward revision in estimates for gross fixed investment in the mainland economy. The GDP forecasts, however, were also reduced due to the upward revision in import growth which subsequently turned out to be incorrect. The estimate for unemployment was gradually reduced in 1995 and has generally been accurate since autumn 1995.

Price inflation was originally overestimated and, along with wage growth, was revised down through both 1995 and at the beginning of 1996, and has generally been accurate since Economic Survey 1/96. The projections for wage growth in 1996 were underestimated in 1995 and up until the results of the wage settlement in 1996 were generally known.

The estimates for nominal interest rates have been too high until about one year ago when the projections were reduced in step with lower price inflation estimates. Real interest rates have therefore generally been estimated accurately. The underestimation of consumption growth was therefore due not so much to incorrect interest rate estimates as underestimated real wage and employment growth as well as the sharp rise in car purchases which followed in the wake of the reduction in car taxes at the beginning of last year.

The surplus on the current account was clearly underestimated. An important reason is that oil prices were higher than assumed. Moreover, export growth was somewhat stronger than originally estimated. The downward revision in the current-account surplus through 1995 was also due to the incorrect upward revision in import growth.

Statistics Norway's forecasts for 1996. Growth rates in per cent

	ES2/95[1]	ES2/95	ES3/95	ES4/95	ES1/96	ES2/96	ES3/96	ES4/96	ES1/97[2]
Consumption in households and non-profit organizations	2.1	1.9	1.9	2.3	2.5	3.3	2.5	4.3	4.7
General government consumption	2.0	2.0	1.6	1.5	1.3	1.7	1.7	2.3	1.6
Gross fixed investment, mainland Norway	11.2	10.0	2.8	6.8	3.6	5.3	5.6	3.9	4.4
Exports	6.8	6.5	6.3	6.7	7.1	8.0	7.2	8.7	8.2
-traditional goods	4.1	3.8	4.5	1.2	3.4	6.3	7.4	8.8	9.4
Imports	2.6	0.9	4.5	4.0	3.9	6.6	5.8	4.8	2.5
-traditional goods	5.4	2.9	2.2	3.8	3.5	5.9	6.4	5.3	6.5
GDP	4.1	3.7	3.7	3.8	3.7	4.3	4.3	4.8	4.8
Mainland GDP	3.2	2.7	2.7	2.3	2.2	3.0	3.0	3.1	3.2
Employed persons	1.5	1.1	1.3	1.5	1.5	1.4	1.5	2.7	2.6
Unemployment rate (level)[3]	4.6	4.8	4.8	4.5	4.5	4.5	4.5	4.4	4.4
Wages per man-hour	4.3	3.5	3.5	3.1	3.4	4.0	4.3	4.2	4.4
Consumer prices	2.7	2.4	2.2	1.8	1.6	1.4	1.4	1.3	1.3
Export price, traditional goods	2.6	0.9	0.3	-1.5	1.8	-1.7	-1.7	-1.8	-1.3
Eurokrone rate (3 month)	6.3	5.5	5.5	5.0	4.7	4.5	5.0	4.7	4.8
Average lending rate (level)	8.1	8.0	8.0	7.4	7.2	7.2	7.4	6.9	6.9
Current balance (bill. NKr)	48.8	53.4	41.3	38.8	39.7	44.0	52.0	64.6	75.4
Memo:									
Market growth	5.1	5.2	5.8	5.0	3.4	4.3	4.0	4.0	2.4
Crude oil price, NKr	113.4	116.6	110.0	106.0	107.3	120.0	126.0	132.0	131.0

1) Economic Survey no 1/96.
2) Peliminary national accounts figures for 1996.
3) Based on the former LFS procedures.

Norway: Trends in selected macroeconomic variables
At fixed 1993 prices. Billion Nkr

	Unadjusted		Seasonally adjusted							
	1995	1996	95.1	95.2	95.3	95.4	96.1	96.2	96.3	96.4
Consumption in households and non-profit organizations	439735	460362	107590	109771	111473	110901	113679	113821	115792	117069
Direct purchases abroad by resident households	17298	18447	3960	4374	4589	4375	4345	4563	4741	4798
- Direct purchases in Norway by non-resident households	-14700	-14969	-3990	-3532	-3548	-3630	-3753	-3754	-3669	-3793
General government consumption	181182	184075	44880	45177	45501	45625	45916	46124	45978	46057
Gross fixed capital formation	187837	193656	46657	47050	44965	49165	46699	47421	48518	51018
Oil	46014	45473	10803	11081	11311	12819	10338	11101	11056	12979
Shipping	3373	3665	1681	1595	-1067	1164	793	795	1372	704
Mainland Norway	138449	144518	34173	34374	34720	35182	35568	35525	36089	37336
Manufacturing and mining	15158	16519	3426	3881	3915	3935	4083	4118	4031	4287
Production of other goods	11731	11641	3046	2948	2831	2859	3024	2808	2787	2977
General government	27562	28920	6983	6847	7077	6654	7305	7253	7293	7069
Dwellings	26510	25605	6787	6722	6507	6493	6384	6375	6491	6355
Other services	57488	61834	13930	13976	14389	15239	14773	14971	15487	16648
Stocks	23997	15722	3493	6320	7689	6497	4670	4039	7024	-11
Gross capital formation	211834	209378	50150	53369	52654	55662	51368	51460	55542	51008
Final domestic use of goods and services	832751	853815	202619	208317	209627	212188	210964	211405	217312	214134
Demand from mainland Norway	759366	788956	186643	189321	191694	191708	195164	195470	197860	200463
Exports	354689	383863	87768	86248	89646	91000	94852	94644	96202	98113
Traditional goods	132372	144872	33803	31973	33424	33346	36694	35754	36334	36253
Crude oil and natural gas	125818	145655	30232	30098	31165	34324	35042	35917	37077	37618
Ships and oil platforms	10954	6842	2042	3030	3721	2135	1928	1658	898	2306
Services	85544	86495	21691	21147	21337	21195	21187	21316	21892	21937
Total use of goods and services	1187439	1237679	290387	294565	299274	303188	305816	306050	313514	312247
Imports	294127	301372	71241	73924	73444	75518	74524	73616	76951	76280
Traditional goods	200845	213922	48745	50234	50932	51135	52510	52478	54214	54876
Crude oil	1244	1124	349	382	328	185	214	219	226	465
Ships and oil platforms	13250	9600	3198	2566	2425	5061	3083	2112	2792	1614
Services	78787	76726	18949	20742	19759	19137	18718	18807	19719	19325
Gross domestic product (GDP)	893312	936307	219147	220641	225830	227670	231291	232434	236563	235967
Mainland Norway	745023	768900	183269	184802	188456	188471	190562	191048	193472	193766
Oil activities and shipping	148290	167406	35878	35839	37374	39199	40729	41386	43091	42201
Mainland industries	666373	683621	164035	165670	168444	168226	169731	170329	171976	171586
Manufacturing and mining	104322	107253	26133	26189	25948	26053	26873	26177	27130	27073
Production of other goods	75588	73022	18423	18709	18869	19533	19218	18211	17585	17954
General government	135321	138155	33370	33659	34008	34285	34313	34470	34628	34745
Private services	351141	365191	86109	87113	89619	88355	89327	91470	92634	91814
Correction items	78649	85280	19234	19132	20013	20245	20832	20719	21496	22181

Norway: Trends in selected macroeconomic variables
Percentage volume change in 1993-prices

	Unadjusted		Seasonally adjusted							
	1995	1996	95.1	95.2	95.3	95.4	96.1	96.2	96.3	96.4
Consumption in households and non-profit organizations	2.6	4.7	-0.6	2.0	1.5	-0.5	2.5	0.1	1.7	1.1
Direct purchases abroad by resident households	0.1	6.6	-8.3	10.5	4.9	-4.7	-0.7	5.0	3.9	1.2
- Direct purchases in Norway by non-resident households	-5.8	1.8	13.6	-11.5	0.5	2.3	3.4	0.0	-2.3	3.4
General government consumption	0.2	1.6	-0.5	0.7	0.7	0.3	0.6	0.5	-0.3	0.2
Gross fixed capital formation	4.5	3.1	5.9	0.8	-4.4	9.3	-5.0	1.5	2.3	5.2
Oil	-13.1	-1.2	-4.5	2.6	2.1	13.3	-19.4	7.4	-0.4	17.4
Shipping	-30.1	8.6	..	..	..	..	..	..	..	..
Mainland Norway	13.5	4.4	3.5	0.6	1.0	1.3	1.1	-0.1	1.6	3.5
Manufacturing and mining	41.7	9.0	12.9	13.3	0.9	0.5	3.7	0.9	-2.1	6.4
Production of other goods	4.3	-0.8	9.7	-3.2	-3.9	1.0	5.8	-7.2	-0.7	6.8
General government	-0.5	4.9	-3.0	-1.9	3.4	-6.0	9.8	-0.7	0.6	-3.1
Dwellings	12.7	-3.4	3.9	-1.0	-3.2	-0.2	-1.7	-0.1	1.8	-2.1
Other services	17.8	7.6	3.3	0.3	3.0	5.9	-3.1	1.3	3.4	7.5
Stocks	77.7	-34.5	..	..	..	..	..	..	..	..
Gross capital formation	9.6	-1.2	4.9	6.4	-1.3	5.7	-7.7	0.2	7.9	-8.2
Final domestic use of goods and services	3.7	2.5	0.7	2.8	0.6	1.2	-0.6	0.2	2.8	-1.5
Demand from mainland Norway	3.8	3.9	0.1	1.4	1.3	0.0	1.8	0.2	1.2	1.3
Exports	3.8	8.2	-2.9	-1.7	3.9	1.5	4.2	-0.2	1.6	2.0
Traditional goods	4.1	9.4	0.0	-5.4	4.5	-0.2	10.0	-2.6	1.6	-0.2
Crude oil	8.4	15.8	-3.0	-0.4	3.5	10.1	2.1	2.5	3.2	1.5
Ships and oil platforms	5.2	-37.5	..	..	..	..	..	..	..	..
Services	-3.0	1.1	2.1	-2.5	0.9	-0.7	-0.0	0.6	2.7	0.2
Total use of goods and services	3.7	4.2	-0.4	1.4	1.6	1.3	0.9	0.1	2.4	-0.4
Imports	5.1	2.5	1.7	3.8	-0.6	2.8	-1.3	-1.2	4.5	-0.9
Traditional goods	9.1	6.5	2.8	3.1	1.4	0.4	2.7	-0.1	3.3	1.2
Crude oil and natural gas	32.0	-9.7	53.1	9.5	-14.1	-43.7	15.6	2.2	3.6	105.4
Ships and oil platforms	6.5	-27.5	36.0	-19.8	-5.5	108.7	-39.1	-31.5	32.2	-42.2
Services	-4.3	-2.6	-5.5	9.5	-4.7	-3.1	-2.2	0.5	4.8	-2.0
Gross domestic product (GDP)	3.3	4.8	-1.1	0.7	2.4	0.8	1.6	0.5	1.8	-0.3
Mainland Norway	2.7	3.2	-0.9	0.8	2.0	0.0	1.1	0.3	1.3	0.2
Oil activities and shipping	6.3	12.9	-1.7	-0.1	4.3	4.9	3.9	1.6	4.1	-2.1
Mainland industries	2.4	2.6	-1.0	1.0	1.7	-0.1	0.9	0.4	1.0	-0.2
Manufacturing and mining	2.9	2.8	0.4	0.2	-0.9	0.4	3.1	-2.6	3.6	-0.2
Production of other goods	8.8	-3.4	2.4	1.6	0.9	3.5	-1.6	-5.2	-3.4	2.1
General government	0.6	2.1	-1.3	0.9	1.0	0.8	0.1	0.5	0.5	0.3
Private services	1.6	4.0	-1.9	1.2	2.9	-1.4	1.1	2.4	1.3	-0.9
Correction items	6.0	8.4	-0.7	-0.5	4.6	1.2	2.9	-0.5	3.8	3.2

Norway: Price indices for selected macroeconomic variables

	Percentage change from the same periode the previous year				Growth from previous quarter. Seasonally adjusted. Per cent*				
	1996	96.1	96.2	96.3	96.4	96.1	96.2	96.3	96.4
Consumption in households and non-profit organizations	1.5	0.6	1.4	1.7	2.2	-0.3	0.9	0.6	0.9
General government consumption	3.9	2.8	3.4	4.0	5.5	1.6	0.8	1.2	1.8
Gross fixed capital formation	2.8	3.3	2.5	2.1	3.1	0.7	0.4	0.8	1.1
- mainland Norway	2.8	3.1	1.9	3.2	2.9	0.6	0.3	1.2	0.7
Final domestic use of goods and services	2.4	1.8	2.3	2.1	3.2	1.0	0.7	1.0	0.4
-demand from mainland Norway	2.3	1.6	2.0	2.5	3.0	0.3	0.7	0.9	1.1
Exports	6.1	1.4	3.8	7.1	11.8	3.3	2.4	0.6	5.1
- traditional merchandise exports	-1.3	-3.0	-1.0	-2.6	1.2	-0.9	0.5	-1.0	2.3
Total use of goods and services	3.4	1.7	2.7	3.5	5.7	1.6	1.2	0.9	1.9
Imports	1.2	0.3	1.3	0.9	2.2	0.1	0.6	-0.2	1.7
- traditional merchandise imports	0.4	0.4	-0.1	0.2	0.9	0.1	0.3	-0.2	0.7
Gross domestic product (GDP)	4.2	2.1	3.1	4.4	6.8	2.1	1.4	1.3	1.9
- mainland Norway	1.9	1.1	2.0	1.6	3.0	0.0	1.1	0.5	1.2

*See "Technical comments".

Technical comments on the quarterly accounts figures

Statistics Norway is currently undertaking an extensive revision of the national accounts. Revised figures for the years 1988-1995 were published in Statistics Weekly no.18 1996 and in Economic Survey no. 4/96. Figures back to 1980 are published in Statistics Weekly no. 5 1997.

Quarterly calculations: The calculations are made on a less detailed level than the calculations for the annual national accounts, and are based on more simplified procedures.

Base year and linking the data: In the quarterly national accounts all volume measures are currently calculated at constant 1993 prices using weights from that year. The choice of base year influences the constant-price figures and thus the annual rates of change in volume (growth rates). For the sake of comparison, all tables present growth rates with 1993 as the base year (common year of recalculation). The recalculation of prices is carried out at the sectoral level of the quarterly national accounts.

At the moment the figures from the new quarterly national accounts (QNA) only go back to the first quarter of 1993, which is too short a period for seasonal adjustment. Based on the new annual figures for the period 1988-1993, provisional quarterly figures on an aggregated level have been prepared for Statistics Norway's macroeconometric model MODAG. These figures are linked backwards in time to the quarterly figures from the old national accounts, and forward in time to the new quarterly accounts from the QNA for seasonal adjustment. The new seasonally adjusted series are more aggregated than the figures in the quarterly national accounts. In this issue of Economic Survey it has therefore not been possible to provide seasonally adjusted estimates for all variables which previously were presented in this way. This applies, for example, to the old classification of competition within manufacturing industry and the old distribution of private consumption on goods and services.

Economic policy and financial developments

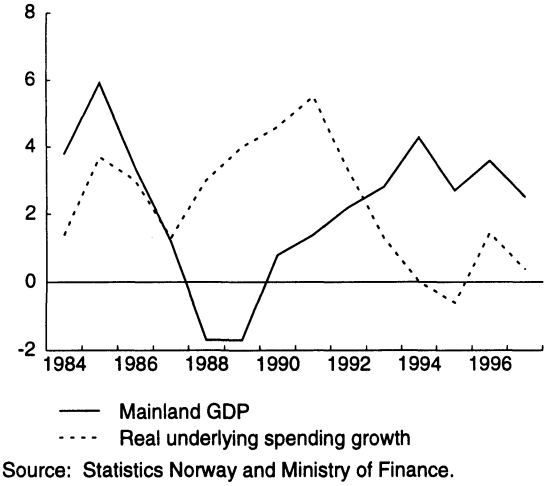
Fiscal policy

In the period 1989-1993 fiscal policy was used actively to counteract the decline in domestic demand. Underlying spending growth in the government budget (spending adjusted for central government expenditure in connection with oil activities, interest expenditure, unemployment benefits and accounting factors) was during these years appreciably higher than the growth in mainland GDP, see figure below. Based on the strong upswing in the Norwegian economy, which started in the autumn of 1993, fiscal policy was tightened in 1994, and this policy was continued in 1995 and 1996. Underlying real spending growth in the government budget in these years can be estimated at an average 1/4 per cent. By way of comparison, the average growth in mainland GDP in the period 1993-1996 was 3.4 per cent.

A tight spending policy, the vigorous upturn in the economy and substantial increase in central government revenues from petroleum activities resulted in a considerable strengthening of the budget balance, from a budget deficit of about NKr 44 billion in 1993 to an estimated surplus of NKr 45.6 billion in 1996, when the government budget and Government Petroleum Fund are viewed together.

In accordance with the guidelines for the Petroleum Fund (see separate box), the state's net revenues from petroleum activities shall be transferred from the government budget to the Fund. Transfers from the Fund to the government budget require a resolution in the Storting. Pursuant to the rules for the Fund, the transfer shall cover the non-oil deficit. On this basis, the government budgets for 1996 and 1997 showed an exact balance. In order to compare the government budget position with earlier years, it is therefore necessary to consider the balance on the government budget and the Government Petroleum Fund as a whole.

Government budget's real underlying spending growth and growth in mainland GDP
Percentage change from previous year



Source: Statistics Norway and Ministry of Finance.

Government budget for 1996
Estimates for the accounts now show a surplus on the government budget before allocations to the Government Petroleum Fund of NKr 45.5 billion in 1996. This entire surplus will be allocated to the Petroleum Fund. Most of the improvement in the budget balance from 1995 to 1996 is ascribable to an increase of nearly NKr 33 billion in the state's net cash flow from petroleum activities. Excluding the state's net petroleum revenues, a government budget deficit of NKr 25.7 billion is now estimated for 1996, i.e. NKr 8.7 billion lower than in the previous year.

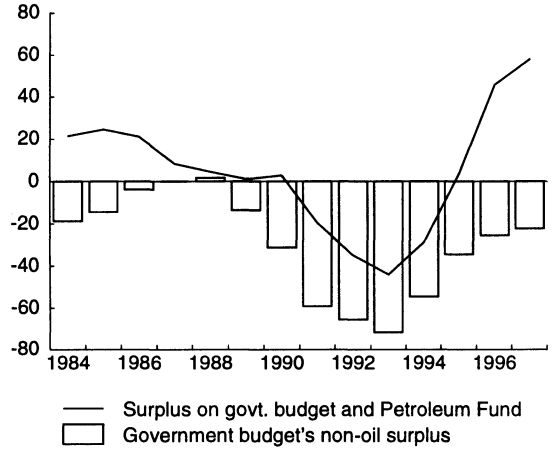
The reduction in the non-oil deficit from 1995 to 1996 is partly due to the following factors:

- The cyclical upturn in the Norwegian economy resulted in an increase of over NKr 16 billion in tax receipts from mainland Norway. Combined with low real spending growth, this contributed to reducing the deficit.
- As a result of a higher rate for tax equalization contributions in both 1995 and 1996, transfers from the Tax Equalization Fund to the government budget rose by a good NKr 7 billion.
- Extraordinary allocations in the budget for 1995 to cover accumulated losses in the State Educational Loan Fund of about NKr 2 billion were not continued in 1996.

Lower interest income and reduced transfers from Norges Bank had the opposite effect. Transfers from Norges Bank to the government budget are linked to earlier years' recorded surpluses in the central bank, and partly reflect the return on foreign exchange reserves.

Government budget for 1997
In the National Budget for 1997, the Government emphasized the need to maintain a tight fiscal policy. The plans called for underlying budget spending growth of 1/4 per cent from 1996 to 1997, while it was proposed that the level of taxes remain approximately unchanged. Measured by the Ministry of Finance's budget indicator (the non-oil, cyclically-adjusted surplus net of interest payments), the budget for 1997 entailed a tightening of about 1 per cent of GDP for mainland Norway, approximately on a par with the tightening the previous year. In the Final Budget Bill for 1997, the Government proposed a slight increase in the level of taxes. Spending growth from 1996 to 1997 was estimated at about the same level as in the original budget document, with the result that the fiscal policy programme in the Final Budget Bill was on the whole somewhat tighter than in the National Budget.

Surplus on government budget and Government Petroleum Fund
NKr billion



Source: Ministry of Finance.

Main figures for government budget and Government Petroleum Fund. NKr billion

	1995	1996	1997[1]
Total revenues	372.4	402.0	430.0
Petroleum revenues	50.2	60.4	69.1
Revenues excl. petroleum rev.	322.2	341.6	360.9
Taxes from mainland Norway[2]	263.7	287.3	319.2
Other revenues	58.4	54.3	41.7
Total expenditure	368.3	356.5	375.4
Expenditure on petroleum activities[3]	11.7	-10.8	-8.6
Expenditure excl. petroleum activites[2]	356.6	367.3	384.0
Surplus before transfer to Government Petroleum Fund	4.1	45.5	54.6
- Cash flow from petroleum activities	38.5	71.2	77.7
= Non-oil surplus	-34.4	-25.7	-23.1
+ Transferred from Government Petroleum Fund	36.5	25.7	23.1
= Surplus on government budget	2.1	0.0	0.0
+ Net allocation to Government Petroleum Fund	2.0	45.5	54.6
+ Interest income in Government Petroleum Fund	0.0	0.1	2.8
= Total surplus on government budget and Government Petroleum Fund	4.1	45.6	57.3

1) Approved budget.
2) Technical change relating to the Tax Equalization Fund increases the government budget's tax revenues and the government budget's transfers by NKr 12.5 billion in 1997.
3) Less the operating profit in state petroleum activities.
Source: Ministry of Finance.

The final deliberations on the 1997 budget in the Storting resulted in an increase in the government budget's total expenditure of about NKr 1.8 billion and a slight deterioration in the budget balance. The Government did not gain a majority for a reduction in the municipal tax rate for personal taxpayers accompanied by an increase in tax equalization contributions, as it had proposed. Compared with the programme in the Final Budget Bill, this entails higher local government revenues of about NKr 2 1/4 billion and a corresponding reduction in tax equalization contributions on the revenue side of the government budget. In addition, the Storting voted to increase block grant transfers to the municipalities by a good NKr 1 billion. Part of the deterioration in the budget balance will be covered inasmuch as the Storting voted to increase transfers from the Government Bank Insurance Fund and the Municipal Bank by altogether NKr 1.5 billion. In addition, there was a majority for increasing share dividends from companies with state ownership interests, including Statkorn and Telenor. Higher transfers of capital to the government budget do not have the same effect on curbing total demand as higher taxes. The approved budget for 1997 is thus slightly less tight than the Government's fiscal policy programme as higher this was presented in the National Budget and Final Budget Bill.

The approved budget for 1997 shows an estimated government budget surplus before transfers to the Government Petroleum Fund of NKr 54.6 billion, an increase of about NKr 9 billion from the previous year. The state's net cash flow from petroleum activities is estimated at NKr 77.7 billion. This estimate is based on an average oil price of NKr 125 p/b this year. The average price of crude oil in 1996 was NKr 133 p/b. The non-oil deficit in 1997 is estimated at NKr 23.1 billion, which shall be covered by a transfer from the Government Petroleum Fund to the government budget, entailing that the entire surplus of NKr 54.6 billion is allocated to the Government Petroleum Fund. Moreover, the Government Petroleum Fund is expected to earn interest income (return on capital in the Fund) of NKr 2.8 billion in 1997. Based on these assumptions, the total accumulation of wealth in the Petroleum Fund this year will be NKr 57.3 billion.

The changes in taxes approved in connection with the final budget deliberations, along with continued growth in the Norwegian economy, will result in a substantial rise in tax receipts from mainland Norway also from 1996 to 1997. The high estimate for the growth in tax revenues in 1997 shown in the table must, however, be adjusted for the phasing out of the Tax Equalization Fund as from 1997. All revenues from tax equalization contributions will now be entered as income in the government budget. At the same time, revenue equalization grants to the local government sector, which were previously financed through the Tax Equalization Fund, will be allocated directly over the government budget. In the accounts, this increases both central government revenues and expenditure by about NKr 12.5 billion in 1997.

Combined with a more moderate rise in expenditure, tax receipts in 1997 will contribute to the decline in the non-oil deficit. Lower transfers from Norges Bank, the Municipal Bank and the Government Bank Insurance Fund will have the opposite effect. Moreover, the fall in interest rates from 1996 to 1997 will result in lower net interest income.

Government Petroleum Fund

The purpose of the Government Petroleum Fund is to make transparent the use of petroleum revenues through the government budget. The Petroleum Fund is entirely integrated in the ordinary budgetary process. One key element is that capital shall not be allocated to the Fund as long as the government budget shows a deficit. In the central government accounts for 1995, a net allocation was made to the Government Petroleum Fund for the first time.

The Fund's revenues are the state's net cash flow from petroleum activities. In the accounts, these revenues are transferred in their entirety to the Petroleum Fund after first having been recorded as income in the government budget. The return on the Fund's capital is recorded as income directly in the Petroleum Fund. This means that interest income for this part of the central government's wealth is separated from the government budget. The estimates for the Petroleum Fund's income are revised continuously up until the final central government accounts are available for the year in question.

The Fund's expenditure consists of a transfer from the Fund to the government budget. This requires a special resolution in the Storting, but the Act and guidelines for the Petroleum Fund set out clear criteria as to how the size of the transfer is to be determined. In accordance with these rules, the transfer shall cover the non-oil deficit. In addition, up to half of the central government's increase in lending to state banks may be covered by drawing on the Fund. So far, however, the authorities have chosen not to make use of this possibility. Provided that there is sufficient capital in the Fund to cover the non-oil deficit, the government budget will following this transfer be exactly in balance. In practice, the Fund's mechanism therefore functions in such a way that a surplus on the government budget, including petroleum revenues, is transferred to the Government Petroleum Fund. Revisions and changes in estimates during the fiscal year will result in revisions in the estimates for the non-oil deficit and thus in the amount that can be drawn on the Fund. Changes in transfers from the Fund, however, require new resolutions in the Storting. This can take place until the budget is finalized towards the end of the year, but then a final line is drawn as to the amount that shall be transferred from the Petroleum Fund to the government budget. The actual transfer from the central government's sight deposit account in Norges Bank to the Petroleum Fund takes place at the end of the year.

Central government revenues and expenditure "excluding oil" can change after the Storting has approved a final transfer from the Petroleum Fund in connection with the last deliberations on the budget. This will affect the non-oil deficit and thus entail that the central government accounts will ultimately show a surplus or a deficit. This explains why the central government accounts for 1995 show a surplus, whereas the government budget is in balance in the estimates for the accounts for 1996 and 1997.

Norges Bank is responsible for the operational management of the Petroleum Fund, based on guidelines issued by the Ministry of Finance. The authorities have advocated that the Fund's capital shall be invested in financial assets abroad. In this sense the Petroleum Fund can in reality be considered part of the foreign exchange reserves. Changes in the Fund's capital shall be reported in Norwegian kroner, and in purely practical terms the Petroleum fund consists of a separate "krone account" in Norges Bank. The return on the Petroleum Fund's capital will be influenced by changes in exchange rates, in addition to the return on foreign securities. In the Final Budget Bill for 1997, the Government stated that it plans to present the Petroleum Fund's results in a separate section of the central government accounts. So far it has not been permitted to invest in foreign shares, but the Government has indicated that it will revert to this question when the Fund has reached a certain size.

General government

According to provisional estimates, the total general government surplus came to about NKr 60 billion in 1996, measured as *accrued* net lending. *Recorded* net lending for central government is estimated at NKr 53.3 billion in 1996, a rise of nearly NKr 24 billion from the previous year. The local government sector's recorded net lending in 1996 is provisionally estimated at a negative NKr 2.3 billion, which is a reduction of NKr 1.7 billion from one year earlier.

According to preliminary estimates, general government consumption, measured at constant prices, rose by 1.6 per cent from 1995 to 1996, which is noticeably less than the growth in mainland GDP. Total general government expenditure, including expenditure on investment, increased in nominal terms by 4.4 per cent. General government expenditure thereby came to 45.8 per cent of GDP in 1996. General government expenditure as a share of GDP has moved on a pronounced downward trend since 1992, when expenditure amounted to 52.1 per cent. The sharp decline in the share for expenditure is related to the vigorous growth in oil production, the rise in oil prices (from 1995 to 1996) as well as lower unemployment benefit payments and lower interest expenditure in the general government sector.

The number of man-hours worked in general government rose in 1996 by 1.9 per cent. The public sector's share of total man-hours worked was 26.7 per cent in 1996, approximately the same as the previous year. Over the period 1980-1996 the number of employees in the public sector has risen by 201 300, equivalent to 157 800 new man-years.

General government gross fixed investment increased in volume by 4.9 per cent last year. In the central government sector, the construction of a new National Hospital boosted the investment figure. Local government investment rose as much as 6.9 per cent, partly as a result of expansions related to the new primary school reform.

Some key concepts

General government revenues primarily comprise taxes, including social security and pension premiums, interest, share dividends, fines and transfers from Norges Bank and state enterprises.

General government expenditure primarily comprises wages and salaries, product inputs, product purchases for households, fees (negative), interest, subsidies, transfers to households, transfers to non-profit organizations, public enterprises and the foreign sector, capital transfers, acquisitions (minus sales) of fixed assets and net purchases of land.

Net lending expresses changes in general government claims on and indebtedness to households, enterprises and the foreign sector, and in the national accounts is defined as follows, starting with saving:

Gross saving
- Gross fixed investment
- Net purchases of land
- Net capital transfers
= Net lending

For general government, this corresponds to the difference between revenues and expenditure, and expresses the budgetary surplus or deficit in total general government activities.

Net lending in general government in accrued values is the sum of net lending in central and local government in accrued values. If net lending in central and local government is specified in book values, an adjustment must be made for the difference between recorded and accrued taxes. Recorded taxes are taxes that have been paid in a specific period, while accrued taxes are taxes that have been assessed, but have not necessarily been paid in the same period.

Central government

Central government consumption showed, according to preliminary estimates, a rise in volume of 1.7 per cent from 1995 to 1996. Military consumption expanded by 0.6 per cent, while civilian consumption increased by 2.2 per cent. Health care, social security and welfare services recorded the sharpest rise in consumption of 4.1 per cent. Consumption in the education sector and civilian, collective consumption grew by 1.2 per cent and 1.5 per cent, respectively.

Production and demand in general government
Percentage change from 1995 to 1996

	Man-hours worked	Product inputs	Gross fixed information	Consumption
General government	1.9	-1.4	4.9	1.6
Central government	1.7	-2.6	2.7	1.7
Civilian	4.4	-4.0	2.9	2.2
Defence	-3.1	0.5	1.9	0.6
Local government	1.9	-0.6	6.9	1.5

The number of man-hours worked in central government increased by 1.7 per cent from 1995 to 1996. There was a 3.1 per cent decline in man-hours worked in the defence sector, whereas health services, social security and welfare services showed fairly brisk growth. The education sector and other central government services also recorded a rise in man-hours worked.

Central government gross fixed investment expanded by 2.7 per cent from 1995 to 1996. Investment in the health and care sector showed the sharpest growth in volume of 56.1 per cent, which must be seen in connection with the construction of a new National Hospital. The education sector recorded a reduction in investment of 9.5 per cent. Gross investment in defence showed moderate growth in 1996 following a steep decline in 1995.

Local government

Preliminary accounts figures for a selection of municipalities and counties indicate a slightly stronger growth in activity in the local government sector in 1996 than in 1995.

Measured at current prices, wages and salaries in the local government sector rose by 6.9 per cent from 1995 to 1996. This sharp growth reflects a rise of 1.9 per cent in man-hours worked and a strong growth in wages and salaries per man-hour. The number of persons employed in local government increased by 2.3 per cent last year. According to figures from the Directorate of Labour, the number of

Key figures for general government

	1992	1993	1994	1995	1996
Net lending					
General government, accrued values, NKr bn.	-13.6	-12.6	3.3	27.3	60.0
General government, book values, NKr bn.	-19.4	-20.0	-5.8	23.1	53.3
Local government, book values, NKr bn.	-0.4	-0.1	4.0	-0.6	-2.3
General government, accrued values, per cent of GDP	-1.7	-1.5	0.4	2.9	5.9
The size of general government					
General government expenditure, per cent of GDP	52.1	51.1	49.9	47.9	45.8
General government consumption, per cent of GDP	22.1	21.8	21.1	20.7	20.1
Man-hours worked, per cent of total employment	26.7	27.4	27.4	26.8	26.7
Taxes, recorded, per cent of GDP	40.9	40.1	41.1	41.6	41.6

Local government revenues and expenditure 1992-1996
NKr billion. Book values

	1992	1993	1994	1995	1996[1)]
Total revenues	136.3	139.7	148.2	151.3	157.7
Property income	3.1	3.0	2.5	2.9	2.8
Taxes	65.3	68.3	75.0	75.9	80.6
Production taxes	2.9	3.0	3.2	3.3	3.5
Taxes on income and wealth	62.4	65.3	71.8	72.6	77.2
Current transfers	65.6	66.0	68.0	69.6	71.3
Transfers from central government	63.5	63.9	65.8	67.3	69.0
Transfers from others	2.1	2.1	2.2	2.3	2.3
Operating surplus	2.2	2.4	2.6	2.9	3.0
Total expenditure	136.7	139.8	144.1	151.8	160.0
Property expenditure	7.7	7.5	6.0	5.6	5.2
Current transfers	18.9	19.5	19.7	20.3	20.8
Production subsidies	3.7	4.3	4.2	4.5	4.8
Transfers to households	5.6	5.9	6.4	6.7	6.8
Transfers to non-profit organizations	7.6	7.4	7.3	7.2	7.6
Transfers to central government	1.6	1.4	1.4	1.5	1.3
Transfers to government enterprises	0.3	0.5	0.4	0.4	0.3
Consumption expenditure	102.0	105.5	110.3	116.4	123.0
Wage and salaries	80.9	84.1	88.2	93.3	99.7
Product inputs	31.0	31.7	33.0	34.8	35.9
Capital consumption	6.1	6.2	6.4	6.6	6.7
Fees (negative)	20.6	21.5	22.8	24.0	25.4
Operating surplus	2.2	2.4	2.6	2.9	3.0
Product purchases for households	2.4	2.6	2.8	2.9	3.1
Capital expenditure	8.2	7.4	8.2	9.5	10.9
Net lending	-0.4	-0.1	4.0	-0.6	-2.3

1) Preliminary figures.

persons participating in municipal employment measures fell from about 8 200 in 1995 to about 6 200 in 1996. Adjusted for the change in labour market measures, the growth in persons employed in the local government sector was 2.8 per cent.

The sharpest employment growth took place in the education sector, where the number of man-hours worked advanced by 2.4 per cent. The growth was related to the increase in the number of municipalities that have introduced the programme for children to start school at the age of 6 as well as an increase in the number of children starting school in 1996 compared with earlier. Employment in the health and care sector grew by 1.8 per cent, while other local government services showed a growth of 1.4 per cent.

Local government gross investment rose in volume by 6.9 per cent last year. Investment linked to the health and care sector and to water supply and refuse collection increased in volume by 8.8 and 8.6 per cent, respectively. The growth in investment for the education sector appears to have been slightly lower than in 1995, 6.3 and 10.6 per cent respectively. Investment growth in the education sector is related to the expansion of schools in connection with the primary school reform, and the level of investment is expected to remain high in 1997.

As an indication of total activity in the local government sector, the growth in employment (measured by number of man-hours worked), product inputs (measured at constant prices) and gross investment (measured at constant prices) can be weighted with the cost shares for the three components as weights. Measured in this way, the provisional figures for local government show a growth in activity of 1.9 per cent last year, against 1.1 per cent in 1995.

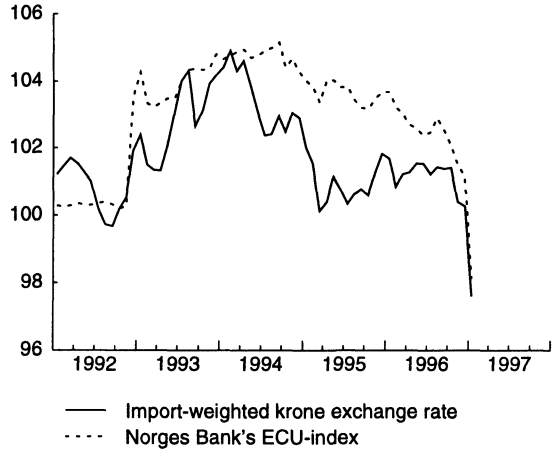
Local government net lending was reduced from a negative NKr 0.6 billion in 1995 to a negative NKr 2.3 billion in 1996. Local government expenditure rose in nominal terms by 5.4 per cent, whereas revenues increased by 4.3 per cent.

Local government fees and charges showed a nominal growth of 5.7 per cent in 1996. The growth in fees linked to water, sewerage and refuse collection services was 5.2 per cent.

Monetary policy and financial developments

Monetary and exchange rate policy
The Government's regulation on the exchange rate system for the Norwegian krone of 6 May 1994 states that the monetary policy to be conducted by Norges Bank shall be aimed at maintaining a stable krone exchange rate against European currencies, based on the range of the exchange rate maintained since the krone was floated on 10 December 1992. In the event of significant changes in the exchan-

Development in import-weighted krone exchange rate and Norges Bank's ECU-index
Indices, October 1990 = 100



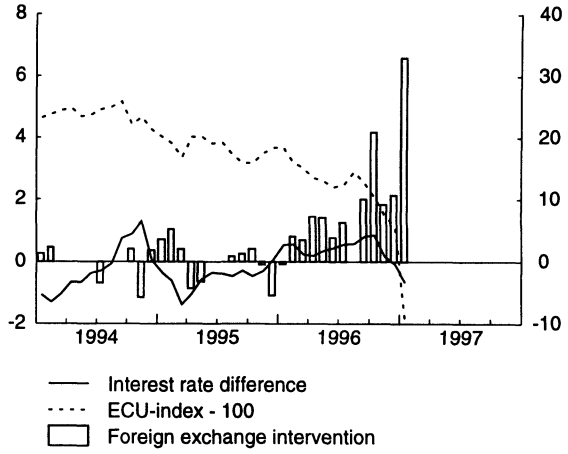
Source: Norges Bank.

The weights in the European Currency Unit, the ECU, are not representative of the geographical dimension of Norway's external trade. In order to illustrate the importance of exchange rate changes for the Norwegian economy, it is therefore necessary to construct an alternative exchange rate indicator. Such an indicator is manufacturing industry's effective krone exchange rate (trade-weighted index), which shall capture the effect of exchange rate changes on cost competitiveness. The weights in this indicator are estimated in such a way that changes in individual exchange rates will not affect manufacturing industry's competitive position as long as the effective krone exchange rate remains constant. In order to estimate the price impetus for Norway as a result of exchange rate changes, however, it is more informative to look at an exchange rate indicator where the weights are calculated on the basis of the composition of imports of traditional goods.

Because the exchange rate between the ECU and other currencies that are important to Norway's economy (particularly the US dollar and Swedish krona) has fluctuated considerably the last few years, both manufacturing industry's effective exchange rate and the import-weighted exchange rate have exhibited slightly different movements than Norges Bank's ECU index. Whereas the krone appreciated by a good 1 per cent against the ECU last year, it depreciated by 0.2 per cent against an import-weighted basket of our trading partners' currencies and by 0.3 per cent against an export-weighted basket.

ge rate, monetary policy instruments shall be oriented with a view to returning the exchange rate over time to its initial range. The regulation, however, does not specify an exact central rate or fluctuation margins for monetary management; nor does it specify the European currencies against which the krone shall remain stable. A common assumption is that the instruction refers to the EU's currency unit, the ECU, to which the Norwegian krone was pegged until December 1992. Between 10 December 1992 and up to the beginning of May 1994, which can be considered the regulation's reference period, the krone fluctuated within the interval 103.2 - 105.2 against Norges Bank's ECU index,

Interest rate difference and exchange rate against ECU and Norges Bank's foreign exchange intervention (bill.NKr)



Source: Norges Bank.

with an average over the period of about 104.2. In this index, 100 is the central rate under the former fixed exchange rate regime, and a lower index value denotes a stronger krone.

If Norway is to maintain a stable exchange rate against the ECU, krone demand and supply in the foreign exchange market as a whole must be in balance at this level. The authorities can achieve this balance through a combination of exchange-market interventions and an adjustment of domestic interest rates. Through 1994 and 1995 Norges Bank's krone purchases and sales were approximately equal. With the exception of a few months prior to the EU referendum, Norwegian money market rates were a little below corresponding ECU rates, and the krone appreciated during this period by about 1 per cent against the ECU. At the beginning of 1996 the ECU index was down to 103.7, which is clearly within the fluctuation range through the exchange rate regulation's reference period.

In the National Budget for 1996, it was pointed out that the build-up of the Government Petroleum Fund would, in isolation, contribute to annual net purchases of foreign exchange by Norges Bank equivalent to the net allocations to the Fund. The Government also stated that in a situation with a strong krone and pronounced cyclical upturn it might be appropriate for Norges Bank to purchase foreign exchange, net, in excess of the allocation to the Petroleum Fund in order to counteract downward pressures on interest rates. Such net purchases can reasonably be looked upon as interventions in a monetary policy sense. In the Final Budget Bill for 1996, the signals in the National Budget were formulated more precisely by stating that monetary policy for a period would be oriented towards curbing the growth in domestic demand, albeit within the limits established by the operational goal of exchange rate stability.

In line with these signals, Norwegian money market rates, starting with the end of 1995 and through most of 1996,

were kept at a level considerably higher than corresponding ECU rates, while during the previous three years they had generally been lower, with the exception of a few months prior to the EU referendum in 1994. In October and November last year the interest-rate differential was more than 0.8 percentage point. Between 1 January 1996 and up to 5 November the krone appreciated by a good 1 per cent against the ECU even though Norges Bank purchased foreign exchange equivalent to nearly NKr 68 billion in this same period, i.e. about NKr 20 billion more than the estimated allocation to the Government Petroleum Fund. On 6 November Norges Bank reduced its key rates for banks by half a percentage point and Norwegian money market rates then edged down towards corresponding ECU rates. The demand for kroner, however, remained high. Up through 10 January Norges Bank purchased foreign exchange for an additional NKr 51 billion in spite of the fact that key rates were again reduced by half a percentage point on the morning of 9 January. On 10 January Norges Bank announced that for a period it would not undertake substantial interventions in the foreign exchange market, and key rates were lowered by a further quarter of a percentage point. The task of finding an exchange rate level for the Norwegian krone was thus, for the time being, left to participants in the foreign exchange market.

Between 9 January until the end of the month the krone appreciated by about 3.5 per cent against the ECU, to a level about 5.5 per cent below the average value for 1996, and 7 per cent below the index's average value in the exchange rate regulation's reference period.

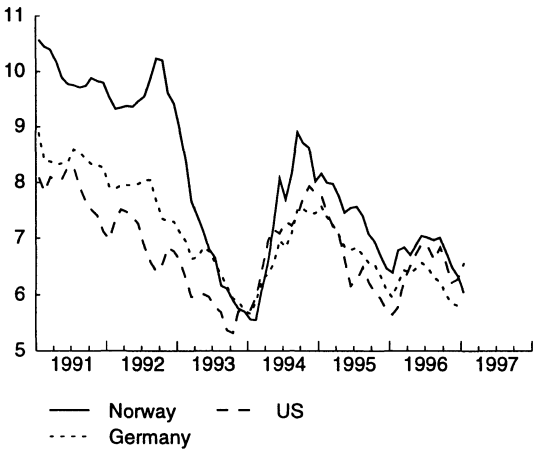
Following the reduction in interest rates on 10 January this year the 3-month Norwegian Euro-rate has remained in the interval 3.2-3.5 per cent, 0.6-0.8 percentage point below corresponding ECU rates and 0.1-0.4 percentage point above the 3-month German Euro-rate. Compared with the level in November/December 1996, Norwegian money market rates have so far this year fallen by about 0.7 percentage point, whereas the decline from the third quarter of last year has been twice as great.

Financial developments

The yield on Norwegian government bonds during the past five years has generally shadowed changes in corresponding German and US yields. Through 1995 the yield on Norwegian government bonds with a 10-year residual maturity declined by nearly 1.8 percentage points, to a level just below 6.4 per cent in January last year. Up to the summer the yield rose to a good 7 percent followed by a decline to about 6.3 per cent in December. Between December 1996 and January 1997 the yield fell by a further quarter of a percentage point, while German yields rose marginally in this period.

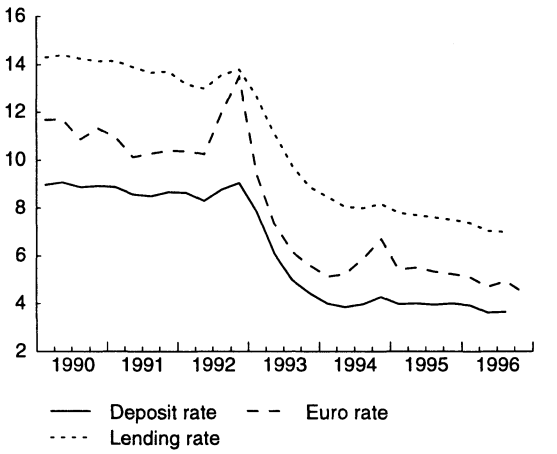
Financial institutions' average lending rates were reduced by a good half a percentage point from the third quarter of 1995 to the third quarter of 1996, whereas banks' deposit rates fell by a slightly smaller margin. Movements in market rates towards the end of last year indicate that the

Yield on government bonds with a 10-year residual maturity



Source: Norges Bank.

Average deposit and lending rate in private financial institutions and 3 month NKr euro rate



Source: Norges Bank.

Money supply and private debt 1983-1996
Per cent of mainland GDP
Seasonally adjusted. Index 1983=100

Source: Statistics Norway and Central Bank of Norway.

Exchange rate changes and the current-account balance over a longer time horizon

Between the time Norges Bank lowered its key rates at the beginning of November last year and up to the end of January this year the Norwegian krone appreciated by about 5 per cent against the ECU and by nearly the same margin against a trade-weighted basket of other countries' currencies. Compared with the average exchange rate level in 1993 and 1994, the appreciation has been even stronger, 7.3 and 6.3 per cent respectively. In view of this development, the question may be raised as to whether the Norwegian krone has been undervalued the last few years.

It is natural to consider the later exchange rate movements for the Norwegian krone in connection with low price inflation, strong government finances, the substantial rise in the current-account surplus from 1995 to 1996 and the comfortable balance of payments position which is expected in the years ahead. For some years it has been known that a growth in petroleum production would make a positive contribution to the external account and central government revenues in the second half of the 1990s. The estimates for current production and remaining reserves, however, have been revised upwards several times. In addition, unexpectedly high oil prices through 1996 gradually translated into higher estimates for both the current-account surplus and the transfer to the Government Petroleum Fund. In this situation a depreciation of the krone must have seemed rather improbable to foreign exchange market participants. When monetary policy in addition was oriented towards maintaining Norwegian interest rates at a higher level than corresponding ECU rates, the Norwegian krone became a favourable investment alternative for financial investors. By (for example) borrowing abroad, exchanging the amount into kroner and investing in Norway, an investor was assured of interest gains, at the same time that the chance of exchange losses must have seemed very limited and the prospect for exchange gains considerably greater. The market's actual perception of the Norwegian krone as an attractive investment alternative is confirmed by Norges Bank's large net sales of kroner through 1996 and up through 9 January this year.

In an international context an exchange rate change of 6-7 per cent is not particularly unusual. In the course of three months during the autumn of 1992 pound sterling fell by 14 per cent against a trade-weighted currency basket, while the Japanese yen appreciated by 19 per cent in the same period. Through the period 1975-1995 the Deutsche Mark, the Swiss franc and Japanese yen appreciated on a trade-weighted basis by an average 3.4, 3.9 and 6.5 per cent, respectively, per year. Over such a long period there appears to be positive covariance between exchange rate appreciation and the current-account surplus.

In the years 1989-1995 Norway's current-account surpluses averaged around 2 per cent of GDP, approximately on a par with Japan's level through the period 1975-1995. Beginning in 1996 and for some years in the future Norway's current-account surplus is expected to be considerably higher than this. If this trend, in line with the international historical pattern, should coincide with an (effective) appreciation of the krone from the level in 1996, domestic producers in the years ahead will have to accept lower prices in Norwegian kroner than would otherwise have been the case, and/or lose market shares. Normally, an appreciation of the currency for a period will result in a lower rise in both export and import prices measured in Norwegian kroner, higher imports and reduced exports. In isolation, this would weaken the current-account balance and profitability in exposed industries. A slower rise in import prices will also result in lower domestic price inflation which, combined with lower profitability, will contribute to more moderate wage growth. This will curb the rise in domestic costs and counteract the negative impact of a krone appreciation on competitiveness.

According to Statistics Norway's macroeconomic models, a change in the exchange rate completely pass through to domestic prices and costs over time (5-10 years). Through the adjustment period production in manufacturing industry and other exposed industries will be lower than would have been the case with a stable exchange rate. In the long term, however, an appreciation of the nominal exchange rate in itself has small effects on the real exchange rate, i.e. the relationship between Norwegian and foreign prices measured in a common currency, and thus also on the real economy and the current-account balance. If imports are to rise substantially and/or exports decline on a lasting basis, it is necessary to have a real appreciation also in the long term. According to Statistics Norway's analytical tools, this requires a permanently higher level of domestic demand than would otherwise have been the case, for example as a result of a change in fiscal policy, and thereby a lower level of unemployment. An accommodating domestic demand policy may entail that a change in the exchange rate is not fully passed through to domestic prices and wages. In this situation a nominal appreciation can anticipate a deterioration in competitiveness on a permanent basis.

Against the background of the recent appreciation pressures on the Norwegian krone, it may appear that participants in the foreign exchange market are of the view that the large current-account surpluses provide scope for such a permanent deterioration in competitiveness. As a result of the sizeable scale of oil and gas production, however, Norway's situation differs from that of other countries which over time have recorded substantial current-account surpluses. Petroleum activities normally provide an additional return beyond that which is achieved in other industries. Petroleum reserves may thereby be considered as an asset with a value equal to the present value of the additional return. The return on this wealth can be looked upon as permanent additional income for Norway beyond the contribution from ordinary value added. Based on current knowledge concerning the size of the petroleum reserves, the net cash flow from petroleum activities last year was noticeably higher than the permanent income. Some of the surplus on the current account must therefore be looked upon an a conversion of petroleum wealth to foreign financial assets. When revenues from the sale of oil and gas gradually decline, the return on this foreign wealth may take over as the source for financing current imports.

A key question for evaluating the long-term balance of the Norwegian economy is thus whether we by maintaining the current economic policy will continue to accumulate foreign financial assets forever or whether we gradually will move towards a balance in the external account. Somewhat simplified, this can be considered a question of whether, adjusted

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for cyclical conditions and uncertainty, we have an oil-financed consumption which is greater or smaller than the permanent income from the petroleum wealth. One general problem in this connection is that it is not possible to provide an unequivocal definition of how much of current petroleum revenues are "used" in any one year. A basis for comparison or reference is needed to show what the situation would have been without oil. This is also true if we focus on the use of revenues from the central government's share of the petroleum wealth, which can be estimated at about 80 per cent.

A first approximation of an estimate for the use of the central government's share of oil revenues can however be obtained by looking at the non-oil deficit on the government budget over a business cycle. In the ten-year period 1987-1996 this deficit corresponded to an average of about 39 billion 1997-NKr. By way of comparison, using the National Budget for 1997 we can find four estimates for the permanent income from petroleum wealth varying between 48 and 66 billion 1997-NKr, depending on the level of oil prices and the discount rate. Given the considerable uncertainty surrounding these figures, there does not appear to be any striking imbalance between oil-financed consumption and the permanent income from petroleum wealth. Moreover, previous experience may indicate that it is easier to expand sheltered industries at the expense of exposed industries than the reverse. This is a good indication that any doubt as to what is the right real exchange rate for the Norwegian krone should benefit exposed industries. The substantial current-account surpluses in the 1990s can in such a perspective not automatically be cited as support for the view that Norway must experience a real appreciation of its currency in order to create balance in the external account in the long run.

figures for financial institutions' deposit and lending rates for the fourth quarter of 1996 will show a further decline of about half a percentage point, to a level about 1 percentage point below the level at the end of 1995. If market rates remain at the current level during the next two months, we will probably see a corresponding decline in financial institutions' interest rates also in the first quarter of this year. With moderately higher price inflation this year than in 1996, it is in any case likely that real after-tax borrowing costs in private financial institutions in 1997 will reach the lowest level recorded since 1987/1988. State banks' lending rates have generally shadowed movements in private financial institutions' lending rates during the past two years, and stood at 5.2 per cent at the end of the third quarter last year.

Following a decline through 1991 and 1992, the credit supply has picked up in recent years. Private and municipal domestic debt, as an average for the first 11 months of 1996, was 5.7 per cent above the average level for 1995 after growing by 4.2 per cent the previous year. Credit growth, however, is still not substantially stronger than the growth in nominal mainland GDP, which was 5.2 per cent in 1996 and 7 per cent in 1995.

Economic policy calendar 1996

January

9. Dyno is awarded a contract, worth NKr 116 million, by Saga Petroleum. The contract relates to supplies of production chemicals for the Snorre and Vigdis fields.

17. Kværner pulping wins a contract, worth NKr 440 million, for modernizing a chemical pulp plant in Monte Alegre.

22. Allocations in the 15th round of licences on the Norwegian continental shelf are announced by the Ministry of Industry and Energy. The Norwegian operator companies Statoil, Norsk Hydro and Saga Petroleum receive an offer for operator responsibility of 8 out of a total 18. The French company Elf and the US company Conoco, whose cost overruns have previously entailed that the state has lost NKr 5 billion, were not allotted operator responsibility and are thus without new assignments in Norway. The oil companies have a one-week deadline to accept the offers.

22. The Board of the Post Office considers a report which concludes that the post office network must be substantially reduced. The reorganization will require a reduction of 3 500 man-years and a closure of 900 post offices by 1999.

23. The Government authorizes both Den norske Bank and the Dutch company Aegon to buy the insurance company Vital. In practice, this means the DnB will buy Vital since 99 per cent of the shareholders in Vital want DnB as owners. DnB, which already has a 10 per cent stake in Vital, will have to pay NKr 2.8 billion for the remainder of the company.

25. The Storting gives the Norwegian State Railways (NSB) permission to sell its shares in Narvesen. NSB today owns 41 per cent of the shares in Narvesen.

26. Raufoss AS invests NKr 250 million in a production plant for plastic moulding, lacquering and assembling bumper systems in Gothenburgh (see 22 December 1995). Volvo stipulated as a condition that Raufoss had to move its production to a location close to Volvo's plant in Gothenburgh when the long-term supply contract was igned. Between 170 and 200 jobs at Raufoss will be affected by the move.

26. The licensees on the Varg field, Saga Petroleum and Statoil, decide that the field will be developed, pending the authorities' approval. Three main contracts are awarded in this connection. Far East Livingston Shipbuilding will supply production ships (contract worth about NKr 1.5 billion), Aker Verdal, in cooperation with Saipem UK, will supply the installed wellhead platform (contract worth about NKr 250 million) and Coflexip Stena Offshore Norge will supply field cables and risers (contract worth about NKr 130 million).

29. All oil companies that were offered operator responsibility in the 15th round of licences accept the offer.

February

1. Statnett decides that it will invest NKr 120 million in new power lines and transformer stations in Hadeland and in Ringerike.

5. The Government approves Esso Norge's plan for developing and operating the Balder field 180 kilometres west of Stavanger. Development costs are estimated at a little less than NKr 5 billion. Balder is identical to the first licence that was awarded in Norway in 1965, but it is only recently that sufficiently advanced technology has been developed to make it profitable to develop the Balder field. Recoverable reserves in the field are estimated at 170 million barrels of oil.

5. The Ministry of Industry and Energy rejects an application by Akershus Energiverk to acquire Oppegård Energiverk for NKr 120 million. The decision is of fundamental importance and will shape the development of the energy industry in the years ahead. The authorities decided against the acquisition by Akershus Energiverk, which is a large producer of electricity, of Oppegård Energiverk, which is a pure distribution company, in order to prevent a situation in which one company gains control over the entire distribution chain from producer to consumer.

9. Sparebanken NOR presents its annual accounts for 1995 showing a profit of NKr 1.4 billion. This is an increase of about NKr 600 million from the previous year.

13. Simek in Flekkefjord signs a contract with the Danish company A.P. Møller/Maersk Supply Service which, combined with options on two additional vessels, is valued at about NKr 900 million. The company shall first supply two anchoring vessels each valued at NKr 225 million.

14. Posten (the national postal service) records a profit of NKr 343 million for 1995, in spite of the loss of NKr 1.2 billion on the operation of post offices and rural postal service routes.

14. Den norske Bank presents its annual accounts showing an operating profit after taxes of NKr 2.66 billion, approximately unchanged from the previous year.

14. Schibsted Trygg buys a new printing press from Rockwell Goss. The contract is worth NKr 525 million.

16. Acting Central Bank Governor Kjell Storvik gives his annual address. The main emphasis is placed on the importance of giving priority to saving rather than increasing public consumption in order to safeguard the future of the welfare state.

17. Telenor presents its annual accounts showing after-tax profits in 1995 of NKr 2.1 billion, approximately unchanged from the previous year.

17. Kværner Kimek signs a letter of intent to equip Russian trawlers for an amount equivalent to NKr 0.5 billion. The agreement covers 20 trawlers to be built in Arkhangelsk and fitted by Kimek in Kirkenes.

20. The National Insurance Scheme presents figures showing that sick pay disbursements rose by 6.4 per cent between 1994 and 1995. The total cost of sick leave comes to NKr 11.4 billion, or 9 per cent of the National Insurance Scheme's expenditure.

20. Fosen Mekaniske Verksted AS wins a contract worth NKr 747 million for delivery of a passenger ferry to the Greek shipping company Minoan.

20. Norsk Hydro posts an after-tax operating profit of NKr 10.7 billion, representing nearly a 50 per cent increase from the previous year.

21. SAS records an operating profit of NKr 3 billion, which is the company's best result ever.

22. Postbanken presents its annual accounts for the first time after the merger of Norges Postbank and Postgiro, with a reduction in profits from NKr 454.5 million in 1994 to NKr 131.5 million in 1995.

23. The drilling rig "Byfjord Dolphin" wins a contract worth NKr 350 million with Amarada Hess Norge AS and a consortium of Norwegian operators.

23. Naturgass AS applies for a licence to construct two gas-generated power plants in the western part of Norway, one in Kårstø in Rogaland and one in Kollsnes in Hordaland.

23. Council of State appoints Kjell Storvik to the post of central bank governor and chairman of Norges Bank's Executive Board for a six-year term. Mr Storvik had been serving as acting central bank governor.

March

1. The paper and pulp group Norske Skog posts a pre-tax profit of NKr 2.34 billion for 1995, representing a sixfold increase from the previous year.

4. Kværner Engineering acquires the British group Trafalgar House. At a price of NKr 8.9 billion, the acquisition is the largest made by a Norwegian company.

5. Resource Group International (RGI) buys shares in Aker for NKr 500 million. The company now owns shares in Aker for NKr 1.3 billion, or about 30 per cent of total shares.

7. With effect from 8 March, Norges Bank lowers its deposit rate from 4.75 to 4.50 per cent and the overnight lending rate from 6.75 to 6.5 per cent.

12. Leirvik Sveis signs a letter of intent with Haugesund Mekaniske Verksted for NKr 225 million for the construction of the combined accommodation and equipment module for the Visund platform. Kværner Energy wins a contract for two gas turbine generators for the platform, worth NKr 130 million.

13. Norway and the EU agree on the tariff rates to be applied to processed agricultural products which were previously covered by the free trade agreement from 1973.

14. Smedvig AS signs a drilling contract with Norsk Hydro for drilling operations in the North Sea using the vessels "West Vanguard" and "West Delta". The value of the contract comes to NKr 1.56 billion for a period of seven years, with the possibility of extending the contract for another seven years.

16. The Directorate of Public Construction and Property is awarded the contract to build the regional college in Agder outside of Kristiansand. The project is to be completed by the end of 2000 and will cost NKr 500 million in 1996- kroner.

22. The Central Unit for Investigation of Environmental and Economic Crime drops the case against former Central Bank Governor Torstein Moland in connection with his ownership interests in the limited partnership KS Airbus. The case resulted in his resignation as central bank governor.

26. Russia's President Boris Jeltsin visits Norway. In talks with Prime Minister Gro Harlem Brundtland, he informs that the modernization of the nickel plant in Petsjenganikel will commence. The plant shall be exempt from duties on equipment that has to be imported in connection with the modernization. Kværner Engineering and Elkem Technology have together with the Swedish company Boliden won the bid to rebuild the plant.

27. Kværner leads a group that is awarded a contract worth NKr 900 million to build Europe's first paper pulp plant based exclusively on recycled paper. Kværner's share of the contract comes to about NKr 500 million.

April

1. The central government accounts for 1995, budgeted with a deficit of NKr 17.3 billion in autumn 1994, show a surplus of NKr 4.1 billion. This means that an additional NKr 2.1 billion can be allocated to the Government Petroleum Fund in 1995. The improvement primarily reflects an increase in revenues from taxation of wealth and income in addition to social security payments. Higher consumption has also resulted in increased VAT revenues.

2. Kværner Rosenberg in Stavanger wins a contract to build a new rig for Odfjel Drilling. The hull of the rig shall be completed first, for a total cost of NKr 330-340 million. If the rig is to be fitted for deep-water drilling, total costs could amount to over NKr 1.3 billion.

10. The Ulstein Group signs a contract to build two new offshore vessels for the shipping company Swire Pacific Offshore in Singapore. The contract, including an option on the construction of four new vessels, is worth NKr 300 million.

10. Kværner's oil and gas division wins a contract to deliver subsea production equipment for the Visund field. The contract is worth NKr 435 million.

11. Statkraft buys 5.1 per cent of the shares (8.1 per cent of voting rights) in the Swedish company Sydkraft for about NKr 1.3 billion, giving Statkraft a stake in five Swedish nuclear power plants.

17. The Ugland Group in Grimstad wins a contract to transport oil from the Balder field, generating revenues of about NKr 1.5 billion.

17. Employees in the hotel and restaurant industry strike following a breakdown in negotiations between employees and management.

19. The Ministry of Defence approves a contract between the Norwegian Defence and Raufoss Technology AS to deliver training missiles for M72 tank weapons and ammunition for lighter arms. The contract is worth NKr 311 million.

19. Jotun decides to build new plants for paint and lacquer in Thailand, involving a total investment of NKr 260 million.

19. SAS announces investment plans involving NKr 400 million to reduce noise levels in all DC-9 aircraft for environmental reasons.

22. Statoil orders a new MST vessel from Samsung Heavy Industries in South Korea. The contract is worth NKr 100 million.

25. Schibsted buys 49.9 per cent of the Swedish newspaper Aftonbladet for NKr 370 million from the Swedish Federation of Trade Unions. Schibsted accepts that the Swedish Federation of Trade Unions shall retain control over the appointment of the newspaper's chief editor.

May

2. The 600 000 employees in the public sector are granted an annual pay increase of about 4 per cent. The various public sector unions accept the offer of a general pay increase of NKr 6 000. For municipalities, an additional pot of 1.8 per cent has been set aside for central adjustment purposes from 1 August. The local municipal negotiations result in an increase of 0.5 per cent from 1 October. For the central government sector, 1.3 per cent has been set aside for central adjustments from 1 August and 0.45 per cent for local adjustments from 1 September.

4. The outcome of the wage settlement in the textiles and wearing apparel industries gives employees a pay increase of NKr 3 per hour.

4. The Federation of Offshore Workers Trade Union (OFS) launches a sympathy strike. The industrial action comes in response to the refusal on the part of the Confederation of Norwegian Business and Industry to give OFS a separate agreement for four maintenance firms. Half of total oil production and one third of gas production are affected.

7. Kværner Warnow Werft Gmbh wins a contract to build four container ships for the German shipping company Peter Döhle Schiffahrts-KG. The contract is worth about NKr 1.2 billion.

8. Kværner Oil & Gas wins a contract with the Brazilian oil company Petrobras for a value of $ 43 million. The contract is for subsea installations at a depth of 1000 metres.

9. Aukra Industrier wins two new contracts for a total value of almost NKr 300 million, for the construction of one trawler and one offshore vessel.

9. Farmers refuse to supply products for three days after the collapse in agricultural negotiations with the central government. The farmers' organizations demand NKr 975 million, whereas the central government has offered NKr 120 million as an increase in income plus a one-off payment of NKr 150 million through increased land support.

9. The Federation of Offshore Workers Trade Union (OFS) calls off its sympathy strike without achieving a separate agreement for maintenance firms. The action resulted in a loss of income of between NKr 750 and 800 million.

9. The Revised National Budget is presented. The budget is less tight than previously estimated and public expenditure, which showed zero growth in the Final Budget Bill, is increased by 1 per cent. The expenditure is to be covered by a reduction in transfers to local government and the removal of VAT compensation for food, which combined result in savings of about NKr 1.2 billion.

9. The governor of the central bank expresses concern about some features of the economy, pointing to the sharp growth in real wages and the reduced tightening in fiscal policy. His statements prompt a marked rise in Norwegian interest rates in spite of the fall in interest rates in much of Europe and the US.

10. Biomar, which is owned by Norsk Hydro, signs the world's largest fishmeal contract with Norsildmel in

Bergen. Norsildmel will deliver fishmeal to Biomar for NKr 700 million over a three-year period.

10. Workers in the engineering industry reject the outcome of negotiations between the employers' association and the employees' union and 36 600 industrial workers go on strike. Shipbuilding, offshore installations and the engineering industry are affected. The strike may have serious consequences for the German and Swedish car industry.

10. The Government will permit a tax relief for pension savings in banks, unit trusts or life insurance companies. The saver can decide how the capital is to be invested, but loses the return guarantee provided for under the current pension insurance scheme.

14. As a result of the industrial conflict in the engineering industry (see 10 May), a number of companies affected by the strike announce layoffs. The companies include Raufoss Automotive and Raufoss Technology, where about 600 workers are laid off, and Hydro Aluminium which lays off about 200 workers.

14. Norsk Hydro and Elf Atochem sign a letter of intent with The Qatar General Petroleum Corporation to build a petrochemical plant for between $ 400 and 600 million. The government of Qatar will have a 57 per cent stake in the project, Hydro 30 per cent and Elf 13 per cent. The plant is expected to be operational from 1999.

20. The Minister of Industry and Energy, Jens Stoltenberg, opens the pipeline Europipe in Dornum, Germany. The Europipe line, which is to transport gas from the Troll field to the continent, makes Norway Europe's second largest gas supplier. Europipe has a capacity of 13 billion cubic metres per year.

23. The strike in the engineering industry comes to an end (see 10 May). The new agreement proposed, which is to be put to the vote on 14 June, provides for a reduction in the retirement age to 62, whereas the pay increase is stipulated at NKr 1.50 per hour as was proposed in the first negotiating result.

23. Alcatel Telecom Norway wins a long-term contract with Telenor for the maintenance of 1000 exchanges delivered by Alcatel. The contract is worth between NKr 400 and 600 million.

23. Orkla Media signs an agreement to acquire a majority stake in the Polish newspaper Rzeczpospolita and their printing company for NKr 298 million. The newspaper, which is one of Poland's leading dailies, had a circulation of 233 000 in 1995.

23. Scandinavian Fittings and Flanges AS signs a contract with Statoil to deliver pipes and flanges for a value of about NKr 500 million.

23. Transocean signs one of the largest rig contracts with Amerada Hess. The contract, including options, amounts to NKr 2.5 billion.

24. Umoe Sterkoder in Kristiansand is awarded a contract for building a Swath ship for Smedvik. The ship will be leased to Statoil for a five-year period for the installation and maintenance of wells on the Åsgård field. Of the total contract value, NKr 760-770 million will be used for the construction and fitting of the ship.

25. Simek in Flekkefjord wins a new contract with A.P. Møller/Maersk Supply Service. The Danish shipping company has exercised options on two supply vessels in addition to the two sister ships which were ordered in February (see 13 February). The new contract is worth about NKr 450 million, bringing the total value of the contract to NKr 900 million.

25. The Odfjell Group in Bergen orders a new chemical tanker from Kvaerner Govan in Glasgow. The contract is worth £ 50 million, and Kværner has a stake of 49 per cent.

30. Kværner wins a contract with Statoil worth NKr 215 million for the development, procurement and manufacture of a separation package for the development of the Åsgård field. The project will provide employment for 200 workers at most.

31. Minister of Health Gudmund Hernes presents a proposal to the Storting on a new financing system for hospitals. The proposal entails that 40 per cent of hospital revenues shall be linked directly to actual treatment, whereas the remaining 60 per cent shall be financed by cash limits.

June

1. The Norwegian Oil and Petrochemical Trade Union (Nopef) designates 225 members to go on strike after a breakdown in mediation between Nopef and the Oil Service Companies' National Federation. All exploration activity and production drilling using floating rigs on the Norwegian shelf are affected. It is announced that an additional 525 members will join the strike if an escalation is decided.

6. Kværner's subsidiary Trafalgar House signs a letter of intent with Saudi Iron Steel Company for the construction of a metallurgical factory. The contract is worth $ 165 million. Another company owned by Kværner, Tampella Power, will supply two boilers for a pulp factory in Sumatra, Indonesia. This contract is worth Nkr 450 million.

6. Grønn skattekommisjon (The Green Tax Commission) presents its report. The majority in the Commission advocate that the CO_2 tax be differentiated according to carbon content of the various fuels. The Commission also recommends equal treatment of the petrol and autodiesel tax, the introduction of an autodiesel tax on buses and the introduction of taxes on gas used in vehicles.

8. Kongsberg Gruppen ASA signs a provisional contract, worth Nkr 145 million, to develop sea missiles for the Norwegian Navy. The contract for the entire development phase is expected to be concluded in 1996 and is worth Nkr 1.2 billion for the Kongsberg Group.

9. Iceland, Russia and Norway break off negotiations on uncontrolled fishing in the "loophole" area without setting a date for a new meeting. Norway and Russia are of the view that the Icelanders are not flexible enough and blame them for the collapse of negotiations.

10. The National Union of Electricians and Power Station Workers (NEKF) designates 1 300 of its members to go on strike because the employer's organization, the Norwegian Federation of Electrical Contractors (NELFO) will not accept the demand for paid further education.

11. Veidekke AS is awarded a contract by the Norwegian State Railways to build a new 7-kilometre double track between Såstad and Haug in the eastern part of Norway. The contract is worth Nkr 145 million.

15. Kværner Fjellstrand will supply six fast catamarans to the Turkish shipping company IDO in Istanbul. The contract is worth Nkr 170 million.

15. 286 lift fitters are designated to go on strike. The lift fitters demand that the so-called lift agreement shall continue to apply for lift instalment and maintenance in companies that are members of the Confederation of Norwegian Business and Industry.

19. Kværner Energy will deliver six water power turbines to the Bakun project in Malaysia for altogether Nkr 850 million.

19. Raufoss Automotive is awarded a contract from the BMW car factory. The contract is for six years and is worth Nkr 300 million.

21. Spars International Inc., which is owned 50-50 by Aker and the US company McDermott, is awarded a contract by Chevron, worth Nkr 2 billion, for supplying a platform to an oil field in the Gulf of Mexico.

24. NELFO, the employer's organization, responds to the striking electricians in the National Union of Electricians and Power Station Workers with a lockout in the entire industry, except for those working offshore (see 10 June). More than 8 000 electricians are affected by the conflict.

25. Ulstein Verft signs a contract to build an anchor handling vessel for Solstad Shipping. The contract has a net value of Nkr 220 million.

27. Statoil and its partners that are exploring for oil and gas in the Kazakhstan sector of the Caspian Sea announce discoveries of oil reserves of at least 10 billion tons and gas reserves of 2 000 billion cu.m. The figures are considerably higher than assumed earlier.

28. ABB Offshore Technology wins contracts, including options, with Statoil for Nkr 720 million for Troll Gas and the Sleipner field. The contracts relate to maintenance and minor modifications.

29. Orkla invests between Nkr 150 and 200 million in a new pizza factory in Stranda. The factory will provide 50 new jobs in addition to those working in the existing pizza factory.

July

3. Statoil signs contracts with the drilling service companies Service Dowell Schlumberger and Baker Huges for Nkr 1.3 billion. The contracts relate to field information and exploration activity.

3. Kværner Masa Yards in Finland will build two fast-moving passenger and cargo vessels for the Greek shipping company Attica Enterprise. The contract is worth Nkr 1.3 billion.

4. Kværner Pulping signs a contract with Advanced Agro Public Company in Thailand worth SKr 1 billion. The contract relates to the delivery of a complete fibre line and recovery plant for a paper mill.

5. Norges Bank decides to introduce a repo arrangement for government bonds and Treasury bills to supply liquidity to the money market. The transactions will be in the form of a sales and repurchase agreement and entail that Norges Bank will enter into an agreement to repurchase the securities sold at the end of the agreement period.

5. The Gas Negotiations Committee and Ruhrgas sign an agreement on deliveries of an additional 60 billion cu.m. of natural gas for between Nkr 35 and 40 billion. The deliveries will take place from 2000 to 2025. This entails that half of Norway's total gas deliveries will go to Germany in 2010.

12. Coflexip Stena Offshore is awarded a contract by the operator Norsk Hydro for supplies to the Visund platform. The contract is worth Nkr 500 million.

13. Kværner Oilfield Products is awarded a contract, worth Nkr 200 million, for supplying subsea production equipment to the Troll project.

20. Kværner wins a contract worth Nkr 130 million for engineering work, procurement and construction management for Western Route Pipeline Project in Azerbaijan.

25. Umoe Sterkoder in Kristiansand misses out on orders worth Nkr 750 million when Statoil shelves its plans to build the Swath ship which was to be leased by Smedvig for drilling services. Experiments in the model tank show

that Swath as a design is not suitable for installation and maintenance of wells. As a result, the development of the Åsgard field will be Nkr 200 million more expensive than first assumed.

August

1. Kværner Davy wins a contract, worth $ 160 million, for delivering a steel mill to Saudi Arabia. The contract relates to the delivery of a steel mill for direct production from molten to semi-manufactured steel.

2. The employer's organization, NELFO, and the National Union of Electricians and Power Station Workers, which have been in conflict since 10 June, reach a negotiated solution. The conflict is called off with immediate effect, but the proposal will be voted on later.

7. The newspapers Adresseavisen and Verdens Gang (VG) sign a contract entailing that a large number of copies of VG will continue to be printed in Trondheim. The agreement will extend to 2014 and has a value of Nkr 700 million.

15. The Government decides to reject UNI Storebrand's application for dispensation allowing the company to own 40 per cent of Røde Kors Klinikk AS. UNI wanted to use the clinic as a facility for injured policy-holders with the aim of swifter rehabilitation.

20. Kværner Kleven Leirvik is awarded a contract to build a platform supply ship for Nkr 135 million. The ship was ordered by Remøy Sea Group.

21. At a meeting with the EU Commission, representatives of the Ministry of Fisheries and Ministry of Foreign Affairs repudiate assertions that the Norwegian salmon industry is subsidized. Scottish salmon farmers have accused their Norwegian colleagues of having sold salmon at less than the production price and that the Norwegian authorities subsidize the industry.

23. The strike among 286 lift fitters (see 15 June) is called off when the lift fitters gain acceptance for their demands.

24. Norges Gruppen AS and Astor Grossistene AS sign a large purchasing agreement with the Norwegian Hotel and Restaurant Association and the Association for Hotels and Service Industries. The agreement is for three years and is worth between Nkr 900 million and Nkr 1.2 billion.

27. The Norwegian Industrial and Regional Development Fund turns down an application for financing from Rena Karton. The operating company for the factory, which was wound up in March this year, applied for an investment grant and loan of Nkr 18 and 22 billion, respectively.

28. Aker Olje- og Gassteknologi ASA buys 70 per cent of the British company McNulty Offshore Services in order to strengthen its position for floating production facilities in the British market.

28. Kværner Oilfield Product signs a contract with Kongsberg Offshore, worth Nkr 320 million, for supplying a subsea steel pipe cable. The contract is the world's largest in terms of value in this area and also contains options for future deliveries to the Gullfaks and Midgard field.

28. Just two working days after the last strike was called off, lift fitters are on strike again. The disagreement relates to whether the agreement text shall be included in the main agreement on lift installation and maintenance or whether it will be a local agreement alongside the main agreement.

28. The 130 employees at Rena Karton are given dismissal notices (see 27 August).

29. Statkraft buys shares for an additional Nkr 2.8 billion in the Swedish Sydkraft and becomes the second largest owner. The purchase will strengthen Statkraft's position in the North European energy market, but is controversial because Sydkraft uses nuclear power to generate electricity.

29. The Ministry of Industry and Energy decides to allow Rena Kartonfabrikk to send a new application to the Norwegian Industrial and Regional Development Fund for loans and grants (see 27 August). The Ministry demands detailed information concerning who will own and operate the factory.

30. Statoil signs a framework agreement with Kongsberg Offshore for deliveries of measurement systems for oil and gas production and transport. The agreement is initially for three years, but can be extended by an additional two years. In such an event the contract will be worth Nkr 300 million.

31. Ulstein Verft signs a contract with Swire Pacific Offshore in Singapore to build an anchor handling vessel. The contract is worth Nkr 150 million.

31. Kværner Mandal wins a large contract to build new MTBs for the Defence. The company will first produce a prototype for Nkr 235 million, and then seven more of the same type. There are possibilities that Kværner will produce additional MTBs at a later stage.

September

3. Selmer will build a new printing works for Schibsted Trykk in Oslo. The principal contract has a total value of NKr 330 million. The contracts cover, among other things, the construction of a printing hall, packing room and administrative wing.

4. The price of crude oil is quoted at $ 23.50 p/b, its highest level for almost five years. The rise in prices is partly triggered by US bombings of Iraq as well as low oil reserves in the US. The high price boosts Norway's gross revenues by about NKr 110 million per day compared with the National Budget.

5. The accounts for the development of the Sleipner West field are presented, showing that the project has cost NKr 2.6 billion less than budgeted. The field came on stream on 30 August, seven months earlier than planned.

10. Rena Karton is ensured continued operations after Orkla Finans has obtained the necessary NKr 100 million from 25 new investors.

12. Kværner presents plans for building Europe's highest building in London. The building, which will be called "London's Millennium Tower", will be 385 metres high and is expected to cost NKr 4 billion.

12. Novit AS in Trondheim wins the IT contract with Sparebanken Nord-Norge, Sparebanken Midt-Norge, Sparebanken Rogaland and Sparebanken Vest. The contract is worth NKr 150 million annually.

18. Saga Petroleum makes a moderate oil discovery close to the Tordis field. The find is financially interesting because it is located close to existing infrastructure.

18. Assessed taxes and National Insurance premiums amount to NKr 143 billion for 1995, compared with NKr 133 billion for 1994.

19. 52 per cent of the electricians in the National Union of Electricians and Power Station Workers (NEKF) vote yes to the wage settlement. NELFO, the employer's organization, also gives its approval to the agreement. NEKF gained acceptance for its main demand concerning the right to post-qualifying training and further education.

21. Sweden's Minister of Finance Erik Åsbrink presents the government budget for 1997. For the first time in some years the budget contains no major austerity packages. The budget adjustments proceed faster than assumed earlier and government finances are expected to balance during 1998.

24. Preliminary estimates for the value of the contracts awarded in connection with the construction of Gardermoen airport up to June show that 95 per cent has been awarded to Norwegian enterprises. 90 per cent of the value, or NKr 8.6 billion, has been awarded to enterprises in Oslo, Akershus, Hedmark and Oppland.

25. Figures from the Directorate of Labour show that the number of unemployed fell by 11 500, or 10.8 per cent, in the first half of 1996, compared with the first half of 1995. Long-term unemployment declined faster than other unemployment.

25. Lift fitters are back at work after striking for more than three months. The agreement, which is signed by both the Norwegian Federation of Trade Unions and the Confederation of Norwegian Business and Industry, confirms that the lift fitters' agreement and the electricians' agreement are independent wage agreements, a subject on which there was considerable disagreement during the conflict. The agreement also gives lift fitters a general pay increase of NKr 1.50 an hour.

27. The lawsuit against Aker after the sinking of the Sleipner platform in 1991 is settled out of court. The original demand was NKr 2.3 billion, but the case now ends with Aker paying NKr 320 million. The demand of NKr 211 million from operators of Sleipner comes in addition, where the parties agree on an out-of-court settlement amounting to NKr 45 million.

30. The boards of Aker and RGI agree to merge the two companies. The new company, to be called Aker RGI, will concentrate on fisheries, cement/building materials, oil and gas. The company will have 17 900 employees and turnover of about NKr 20 billion. Shareholders will later decide whether the merger is to materialize.

October

1. For the first time Norwegian gas is supplied to the former eastern bloc when the German (previously east German) gas distribution company Verbundnetzgas (VNG) receives delivery of four million cubic metres of gas. The agreement, which was signed in 1993, will run for twenty years and the gas is worth NKr 4 billion at current prices.

2. Norsk Hydro awards Saipem UL Limited a contract for the transport and installation of the jacket and deck for Oseberg East. The contract is worth NKr 270 million.

2. Aukra Industrier signs a contract with Simon Møkster Shipping from Stavanger for building an anchor handling ship. The price is between NKr 150-200 million.

4. Kværner Construction, in cooperation with Gammon Construction, is awarded a contract for the expansion of the sewerage network in parts of Hong Kong. The contract is worth NKr 430 million.

8. The Nobel Prize in Economics is awarded to James A. Mirrlees of the UK and William Vicrey of Canada for their contributions to economic literature in the area of incentives under asymmetric information.

10. Kværner Boving in the UK wins a contract worth NKr 220 million for supplying hatches and valves to a power station in India. Kværner Energy in Oslo will supply six turbines to the same power station.

10. Kværner Tamturbin in Finland will supply turbines to power stations in China and Finland for a total value of NKr 170 million.

10. Alcatel is awarded a contract from Telenor worth more than NKr 250 million.

16. Westamarin shipyard in Kristiansand is declared bankrupt. The company is building two ferries for Stena Line and budget overruns of more than NKr 100 million for the construction of these ferries force the board to declare the

company bankrupt. 500 permanent employees and 250 temporary employees lose their job immediately, and creditors lose several hundred millions. The administrators will probably recommend that the first of the two ferries be completed.

17. The shipping company Belships of Oslo buys the British shipping company Gibson Gas Tankers which owns five gas tankers. The ships are valued at a little more than NKr 400 million.

22. Smedvig wins a contract, worth about NKr 190 million, with Esso Malaysia for the extension of a drilling contract.

23. Prime Minister Gro Harlem Brundtland announces from the Storting's rostrum that she will submit her resignation to the Council of State on 25 October. Torbjørn Jagland will take over as Prime Minister.

25. Prime Minister Torbjørn Jagland presents his new Government. Jens Stoltenberg is the new Minister of Finance, while Grete Faremo is Minister of Petroleum and Energy. The Ministry of Industry, which was previously part of the Ministry of Petroleum and Energy, is merged with the Ministry of Trade and Grete Knudsen continues as Minister. A Ministry of Planning is also established, to be headed by Terje Rød-Larsen.

25. The parties to the centre reach a budget compromise which reallocates about NKr 7 billion without resulting in a deterioration in the budget balance. The parties want higher appropriations for family allowances, hospitals and the care of the elderly. The increases shall partly be covered by higher taxes on alcohol, tobacco and petrol. The parties also agree to reject higher expenditure for sick pay for employers and more expensive multi-purpose vehicles.

25. Norsk Gjenvinning Oslo wins a court case against Nes Municipality after having accused the municipality of breaking EEA rules on public procurement. The municipality broke the rules by awarding the contract to a local enterprise and not to Norsk Gjenvinning Oslo AS, which had the lowest bid.

28. The Storting's Standing Committee on Finance and Economic Affairs completes its report and proposes net additions of about NKr 6 billion compared with the Government's government budget proposal. Of this amount, NKr 4.5 billion will go to the municipalities.

29. Through its Dutch subsidiary, Norsk Hydro acquires the Italian company Terni Industrie Chimiche. The acquisition gives Hydro three new fertilizer plants, 700 employees and NKr 2.5 billion in turnover.

30. Umoe Sterkoder is awarded a contract, worth NKr 260 million, for building a specialized ship for transporting paper for the Finnish shipping company AB Engship.

31. Consorcio Noruego, which consists of the three Norwegian companies Eeg-Henriksen Anlegg, Kværner Energy and ABB Kraft, is awarded a contract worth $ 42 million to build a hydropower station in Costa Rica.

November

4. Kværner wins a contract to build one of the world's largest suspension bridges over the Yangtze River in China. The contract is worth more than NKr 1 billion.

5. Norsk Hydro submits an application to further develop the Troll oil field with a floating platform that will be given the name Troll C. Total development costs are estimated at NKr 15.9 billion. The estimates for recoverable oil reserves from the field are increased to altogether 1.17 billion barrels of oil.

6. Norges Bank lowers its deposit rate and overnight lending rate for banks by half a percentage point to 4 and 6 per cent, respectively. The aim of the interest rate reductions is to reduce appreciation pressures on the Norwegian krone.

13. Stolt Comex Seaways is awarded a contract worth $ 68 million from the Brazilian oil company Petrobras.

14. The Storting votes in favour of converting the Post Office and the Norwegian State Railways from public corporations to wholly-owned state companies.

21. Shareholders in Aker and RGI approve the proposal to merge the two companies (see 30 September).

22. The Kongsberg Group is awarded a contract worth NKr 100 million from the US aircraft manufacturer Boeing. The contract relates to upgrading software for workstations on board 17 of NATO's AWACS aircraft.

27. Minister of Planning Terje Rød-Larsen submits his resignation as a result of waning confidence in him and the Government following the decision by the Central Unit for Investigation and Prosecution of Economic and Environmental Crime to investigate the claim that the option agreement he concluded with the fish processing company Fideco was antedated.

27. Langsten Slip & Båtbyggeri is awarded a contract to build an anchor handling vessel for more than NKr 200 million for Farstad Shipping.

28. The Norwegian Fishermen's Union and the state reach agreement on a fisheries agreement for next year. The agreement, which includes transfers from this year, amounts to about NKr 100 million.

28. Ulstein Verft signs a contract worth NKr 150 million with Solstad Shipping to build a supply ship.

29. OPEC decides to maintain the current production quotas for oil for the first quarter of 1997. The quotas,

which amount to 25.03 million b/d, include 800 000 barrels reserved for Iraq when the country is permitted to resume sales of oil.

29. The Government presents the final budget bill. In spite of substantial additional budget revenues, it is proposed that taxes be increased to curb the growth in private consumption. Main points include NKr 750 million in a higher wealth tax and NKr 750 million in indirect tax increases. Excise duties will be raised for alcohol, tobacco, petrol and cars. The Government will use about NKr 1 billion more than proposed earlier for health care and care of the elderly, while expenditure will be reduced by postponing government building projects.

29. National Librarian Bendik Rugaas takes over as Minister of Planning after Terje Rød-Larsen.

30. Kværner Masa yards in Finland signs a letter of intent for building one ship with an option for an additional ship for North American-based Royal Caribbean Cruise Lines. The ships will be the world's two largest cruise ships. The contract is worth about $ 1 billion.

December

3. Saga Petroleum buys the oil company Santa Fe Exploration for $ 1.2 billion. The company, which is owned by Kuwait Petroleum Corporation, has several exploration licences in the British and Irish sector of the North Sea. The company has stakes in altogether 40 blocks, and reserves are estimated at 200 million barrels of oil equivalents.

4. Østfoldbanen's double track between Ski and Moss opens after a construction period of nine years and investments of NKr 1.6 billion.

5. Ulstein Verft signs a contract worth NKr 150 million for building an anchor-handling vessel for Swire Pacific Offshore in Singapore. This is the fourth ship Ulstein is supplying to the company in a short time, and Ulstein now has an order backlog of 8 vessels worth nearly NKr 1.5 billion.

6. Kværner Eureka signs a framework agreement with Statoil for deliveries of pumping systems, as well as maintenance and servicing of these, for future development projects. The agreement is worth about NKr 100 million.

7. Kværner is awarded a contract, worth Nkr 2.7 billion, to build the world's largest production ship for the Australian oil company Woodside Petroleum.

9. Denmark's Minister of Environment and Energy and the chairman of Greenland's Landsting sign an agreement giving a group of oil companies, with Statoil at the fore, sole rights to oil and gas exploration outside Nuuk on West Greenland.

10. Aukra Industrier concludes a contract, worth between NKr 250 and 300 million, for supplying a chemical and oil tanker to a company owned by Anders Utkilsens Rederi AS.

12. Umoe in Haugesund is awarded the contract for building the semi-submersible platform which Norsk Hydro shall install on Troll C. The contract is worth NKr 3.5 billion.

14. The Labour Party and the Conservative Party secure a majority in the Storting for building a tunnel under the Oslo Fjord between Hurum in Buskerud and Frogn in Akershus. The project is estimated to cost NKr 1.06 billion.

16. The Labour Party, Centre Party, Christian Democratic Party and Liberal Party reach a compromise on the government budget for 1997. The compromise involves NKr 4.85 billion in higher expenditure, mostly in the form of transfers to municipalities, and the same amount in savings or higher revenues for other items. Taxes on petrol, alcohol and tobacco are raised by 3.5 per cent.

17. Fosen Mekaniske Verksted (FMV) is awarded a contract, worth NKr 712 million, to build a ship for the Greek shipping company Minoan Line. The ship will be the third FMV builds for this company.

17. Minister of Oil and Energy Grete Faremo submits her resignation. The reason is that she, as former Minister of Justice, was responsible when the National Security Police investigated Berge Furre while he was a member of the Lund Commission, which was appointed by the Storting to investigate activities in the secret services. The new minister will be Ranveig Frøiland.

18. Knut Kloster jr., along with other investors, will invest about NKr 3 billion in a new cruise ship. The cruise ship will be the world's most expensive and will be financed by selling 280 accommodation units on board to private individuals and companies.

20. Statoil expects to be able to produce a total of 2.7 billion barrels of oil from the Gullfaks block. This is more than estimated earlier and ensures profitable operations up to 2012. Remaining recoverable reserves are estimated at 1.5 billion barrels.

20. The Fredriksen Group is given responsibility for oil production on the Galley field in the British sector of the North Sea. A letter of intent is signed with the operator Texaco. The agreement runs for three years with an option for an additional six. If the option is used, operating income may amount to about NKr 2.5 billion.

20. Kværner Pulping wins a contract, worth NKr 2 billion, to build a paper pulp factory for an Indonesian company. The contract is the largest the company has ever been awarded. The factory shall be built in a yet unannounced Asian country.

21. Kongsberg Offshore wins a contract to build subsea production systems on the Terra Nova field outside Canada. The contract, worth NKr 350 million, was signed with Petro Canada.

21. Smedvig signs a contract with Azerbaijan International Operating Company for the operation of the Chiraq field in Azerbaijan. The contract refers to operations for four years with annual options for an additional two years. The contract is worth NKr 115 million.

24. Smedvig wins a contract for the closure and plugging of around 100 oil wells for Phillips Petroleum on the Ekofisk field. The contract is worth about NKr 450 million. Hitec will be Smedvig's partner in the project and will have subcontracts worth between NKr 150 and 200 million.

24. The Kværner Group is awarded two new contracts with a combined value of about NKr 1 billion. The largest, which relates to a letter of intent for the upgrading of an exploration rig in Baku, will be shared by Kværner with Statoil and British Petroleum. The price for the upgrading is expected to be NKr 650 million. In addition, the German subsidiary Kværner Bison has signed agreements in Canada and Thailand worth about NKr 400 million.

24. Baker Oil Tool from Tananger is awarded a contract from Norsk Hydro worth NKr 1.3 billion. The agreement relates to supplies of well equipment for the Visund and Njord fields for five years.

30. The value of Norway's fish exports rises for the eighth consecutive year. In 1996, Norway exported fish worth NKr 22.5 billion.

January 1997

3. Bergesen d.y. ASA shall transport steel and coal for British Steel for a period of 15 years. The contract can ensure freight earnings of NKr 900 million. In this connection the company orders a new 175 000 tonne bulk carrier from South Korea, worth an estimated NKr 310 million.

8. The all-share index of the Oslo Stock Exchanges passes 1000 points for the first time, thereby showing a tenfold increase since 1983.

8. Norges Bank announces that with effect from 9 January it is lowering commercial and savings banks' sight deposit rate in the central bank and the banks' overnight lending rate by half a percentage point. The decision was made in response to developments in the money and foreign exchange markets. There has recently been persistent and strong pressure on the krone exchange rate. Even though Norges Bank has so far this year purchased foreign exchange equivalent to NKr 20 billion, the krone has appreciated to its strongest level against European currencies since the link to the ECU was abandoned in December 1992. The deposit rate and overnight lending rate now stand at 3.5 and 5.5 per cent, respectively.

9. Norsk Hydro signs an agreement for participation in the construction of a petrochemical plant in Qatar, estimated to cost NKr 3.3 billion. Hydro's share is 29.7 per cent. The plant is scheduled for completion in the year 2000, and shall produce raw materials for plastic based in part on local gas finds.

10. Norges Bank lowers its deposit and overnight lending rates by a quarter of a percentage point, and also decides that it will not to any significant extent intervene in the foreign exchange market. The background for the decision is that the krone has continued to appreciate in spite of the last interest rate cut (see 8 January) and substantial foreign exchange purchases the last two days. The deposit rate and overnight lending rate now stand at 3.25 and 5.25 per cent, respectively.

10. Saga Petroleum makes a large gas find on Halten banks. The find is probably the second largest after Troll. As a result of a lack of gas contracts, it may take a long time before the field is developed.

13. Norges Bank signs an agreement with ABN AMRO Asset Management from the UK and Goldman Sachs Asset Management from the US for the management of parts of the foreign exchange reserves by these institutions. ABN AMRO shall manage a securities portfolio with a total value of DM 150 million, which can be invested in interest-bearing instruments in various, selected European currencies as well as the ECU. Goldman Sachs is given responsibility for managing a portfolio in interest-bearing instruments in US and Canadian dollars. The aim is to give Norges Bank a basis for comparing its own management of reserves with international fund managers, and to establish contact with these institutions.

16. The shipping company Sea Truck from Sandnes orders two new platform supply ships worth about NKr 250 million. The ships will be ready for delivery next year.

17. Raufoss Technology is awarded contracts by both Mercedes Benz and Volkswagen. The two car factories will purchase components for steering mechanisms cast in aluminium for NKr 300 million.

17. Statoil, Norsk Hydro and the French oil company Total sign a contract for the sale of 264 million cu.m. of gas to Ireland this year.

21. Kværner Construction wins a contract from Nirex for the construction of an underground laboratory in North England. The contract, which is conditional on building approval, is worth NKr 450 million.

22. Kværner Construction is part of a consortium that wins the contract for building one of the world's largest broadcasting studios in Egypt. The contract is worth NKr 1.9 billion, and Kværner's share is NKr 1.25 billion.

22. The Ministry of Petroleum and Energy presents new upgraded forecasts for future petroleum production. The forecasts show that in a few years Norway will produce 3.7 million b/d, 20 per cent more than today.

23. The Gas Negotiations Committee signs an agreement with the Italian company SNAM for annual deliveries of six billion cu.m. of gas for 25 years. Mobil and Total also participated in addition to the permanent members of the Committee, Statoil, Hydro and Saga. The agreement is the first with Italy and is worth Nkr 90 billion.

23. Kværner John Brown signs a contract for the upgrading of a chemical processing plant for an oxy-alcohol factory in the city Jilin in China. The contract is worth nearly NKr 200 million.

25. Statoil and its partners BP and Norsk Hydro make a large gas discovery by the Gullfaks field in the North Sea. The find is estimated at 70 billion standard cu.m. with a value of NKr 45 billion.

25. Petroleum Geo Services (PGS) signs an agreement for the sale of seismic data from the Gulf of Mexico with Spinnaker Exploration Company. Spinnaker has pledged to purchase copies of a minimum of half of PGS' base for seismic data. The minimum value of the agreement is estimated at between NKr 25 and 30 million.

28. The merger between Aker ASA and RGI (Norway) AS is implemented.

28. Statoil orders three new buoy-loading tankers worth NKr 1.7 billion. The ships will be built at the Spanish shipping yard Astilleros Espanoles SA, where Statoil had an option after having ordered a ship in February 1996. The Rasmussen Group in Kristiansand is awarded a contract for follow-up and later the maritime operation of the ships.

30. During a debate in the Storting, both a majority and Minister of Transport and Communications Sissel Rønbeck reject a proposal to partially privatize Telenor. Managing Director Tormod Hermanson of Telenor had expressed a desire to see the company quoted on the stock exchange in order to obtain capital.

30. Oil production on the Vigdis field starts five months earlier than planned. The accelerated start entails that development costs are reduced by 10 per cent to NKr 4.5 billion.

30. The rig company Transocean is awarded a contract with the Mexican state oil company Pemex for drilling three wells. The contract will run for two years and is worth NKr 124 million.

31. The Visund platform which is being built by Umoe in Haugesund for Norsk Hydro is likely to be NKr 1 billion more expensive than the NKr 3.1 billion specified in the development plans approved by the Storting. Part of the costs are linked to changes Hydro has made under way. The Visund field contains 305 million barrels of oil.

February

1. Kværner Rosenberg in Stavanger is awarded the contract to build the Åsgard B platform for Statoil. Åsgard B will be the world's largest floating production structure for gas. The contract is worth NKr 6.6 billion, and is the largest single contract ever awarded by Statoil.

1. The Rattsø II report is presented. The main message from the expert committee is that municipalities shall be allowed to keep a higher share of income tax revenues and the dependence on central government transfers shall be reduced. The committee proposes that both the company tax and the wealth tax be phased out as a source of financing for municipalities and counties, and instead accrue to the state in their entirety. The proposal is justified on the grounds that the tax is cyclically sensitive and fairly unpredictable.

4. Braathens SAFE buys six new aircraft of the type Boeing 737 for NKr 1.5 billion. Braathen has also signed an option for an additional ten aircraft with a value of NKr 2.5 billion for possible delivery after 2000.

4. Minister of Justice Anne Holt submits her resignation due to illness. The new minister will be Gerd Liv Valla.

Revision of the balance of payments

Elisabeth Nørgaard and Tore Halvorsen

Norway's balance of payments has been revised in connection with the main revision of the national accounts. This article describes the background for the changes and reviews the most important new elements in the statistics. It also presents the basic principles for constructing the balance of payments as well as important sources.

The balance of payments is a statistical statement of Norway's economic transactions with the rest of the world for a specific period of time. The statistics are compiled and presented in accordance with international guidelines, and are published on a monthly basis.

In most countries the central bank is responsible for the compilation and publication of the balance of payments. In some countries, including Norway, it is the national statistical office that is given this task because emphasis is placed on having the balance of payments fully integrated in the national accounts.

The recent major revision of the Norwegian national accounts also encompassed the balance of payments. The first results of the revision were published in July 1995, see Statistics Norway (1995). During a transitional phase only quarterly figures for the balance of payments were published, but publication of the data on a monthly basis was resumed from the second quarter of 1996. For the first time since the revision the balance of payments was also presented in a complete form.

New guidelines

The balance of payments is presented in accordance with internationally approved guidelines. These are specified in The Balance of Payments Manual, 5th edition" (BPM5), published by the International Monetary Fund (IMF). The principles and definitions presented there are in full accord with corresponding international rules for the presentation of the national accounts, as laid down in the manual "System of National Accounts 1993" (SNA 1993), and which are published by a number of international organizations jointly, including the UN.

The EU has prepared its own edition of the national accounts manual, "European System of Accounts 1995" (ESA 1995), which accommodates special conditions in member countries. Pursuant to the EEA Agreement, Norway is obligated to adhere to this system. The reporting of national accounts data in accordance with ESA definitions to EUROSTAT, the EU's statistical office, has a legal basis, which is not the case for the balance of payments. Here, as an alternative, a "gentleman's agreement" has been drawn up between EUROSTAT and each member country. The aim of these agreements is to enhance the overall presentation of balance of payments figures for countries in the EEA and to improve the quality of the data by harmonizing the methods of compilation and calculation.

Over the past years there have been new editions of the international manuals, and Norway has adapted to these as part of the main revision of the national accounts. Compared with earlier, the revised manuals provide a more complete description of economic relations with other countries and entail a greater degree of harmonization between the various systems.

Structural changes in the balance of payments

Changes in definitions and principles in the statistics are necessary to capture new phenomena and relationships in the economy. In the new recommendations, additional emphasis has been placed on two aspects: the strong expansion in international trade in services and the growth in cross-border capital movements.

One noticeable result of the main revision of the Norwegian national accounts is the upward adjustment of service industries and their share of GDP[1]. The new national accounts figures reflect the ever-expanding scope of the service economy. International trade in services has exhibited a similar growth. In the wake of this development, the demand for improved and more detailed statistics on trade in services has increased, among other things based on the requirements of the World Trade Organization (WTO) in conjunction with the GATS agreement (General Agreement on Trade in Services). The greater focus on services has influenced international guidelines through the elaboration of clearer definitions and more detailed classifications.

Similarly, international capital movements have expanded markedly in the 1980s and 1990s. One important reason is

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[1] For 1990, the share was revised upwards from 53 to 58 per cent.

the growth in world trade, but the emergence of new types of financial instruments, new technology and not least the liberalization of international capital transactions have been of significance. These developments have intensified the requirements for statistical registration and description of these relationships. The new international guidelines for the balance of payments also reflect this development, among other things through the treatment of new financial instruments and in the classification of different types of investment in financial assets.

Basic concepts and recording principles

Like the national accounts, the balance of payments accounts are constructed around three basic concepts: economic entities, economic objects and transactions. In brief, the accounting systems describe transactions in which economic objects are provided or received in exchange for other economic objects.

Economic entities are institutional units which make economic decisions on an independent basis and can present complete accounts for their activities. The institutional unit normally coincides with a body corporate, e.g. joint-stock company, or natural person.

Economic objects can either be real resources, i.e. goods and services, or financial items which represent various assets and liabilities.

The basic criterion for entering a transaction in the balance of payments is that it involves an exchange between a domestic entity (resident) and a foreign entity (non-resident). Residents are institutional units that engage and intend to continue to engage in economic activities and transactions within a country's territory, with one year or more serving as the conventional guideline.

In the balance of payments, a transaction shall in principle be allocated to the period in which there is a change of ownership for the economic object. Conventionally, it is often said that a change of ownership has taken place when the parties to the transaction register it in their books or accounts. In the case of exports and imports of goods, it is in practice when the good crosses the frontier, as registered through customs declarations, which determines the time of recording the transaction.

All transactions shall be valued at market prices. Market prices are defined as amounts of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties and on the basis of commercial considerations only. Total exports and total imports shall be recorded at f.o.b. prices[2]. The transaction date or the average rate for the shortest period applicable shall be used for converting transactions currencies into the national currency. Stocks of assets and liabilities are to be valued at prices or rates in effect at the time to which the balance sheet relates.

Income and expenditure are defined in the national accounts and balance of payments excluding gains and losses, irrespective of whether they are realized or unrealized. Such items, however, help to explain total balance sheet changes that take place in the course of a period and are registered in an account for revaluation.

The construction of the balance of payments accounts is based on the rules for double entry bookkeeping. All transactions are represented by two entries, a credit and debit entry. Most transactions are those in which economic objects are provided or received in exchange for other economic objects, entailing that offsetting credit and debit entries will normally be registered. For example, the export of a good will be registered in external trade statistics and recorded as a credit entry in the balance of payments accounts, whereas the accompanying increase in foreign assets, e.g. in the form of higher foreign exchange reserves, is registered in Norges Bank's foreign exchange statistics and recorded as a transaction on the debit side of the balance of payments accounts. In other cases, items are given away rather than exchanged, or a recording is onesided for other reasons, and there is only one recording in the data sources. In these cases a counter entry is constructed, in this example in the form of a transfer so that the double entry requirement is satisfied.

Structure and definitional relationships

The balance of payments is an integrated part of the national accounts and is constructed as a mirror image of the institutional sector "rest of the world" in the national accounts. In the balance of payments, transactions are seen from Norway's point of view, while in the institutional sector accounts they will be seen from the perspective of the rest of the world. A surplus on Norway's current account will in the national accounts appear as a deficit for the sector "rest of the world".

The balance of payments consists of two main parts: a current account, which shows current transactions with the rest of the world, and a capital and financial account, which records investment transactions in the form of purchases and sales of financial instruments.

The current account comprises, first, exports and imports of goods and services, with the balance of goods and serves as a balance. In addition, data are provided for compensation of employees, investment income and expenditure as well as current transfers to and from the rest of the world. The balance for this component is net interest and transfers. By adding up the balances for these two components we arrive at the total current account balance.

[2] F.o.b. = free on board, i.e. the value when passing the border of the country of export. On a detailed commodity level, c.i.f. prices (cost-insurance-freight) are used, i.e. including transport and insurance costs up to the border of the importing country.

Main items in the balance of payments

Current account:

	Exports
-	Imports
=	Goods and services balance (I)
	Compensation of employees, investment income and transfers from abroad
-	Compensation of employees, investment income and transfers abroad
=	Net interest and transfers (II)
	(I) + (II)
=	Current account balance (III)

Capital account:

	Current account balance (III)
+	Net capital transfers
=	Net lending (IV)
	Net acquisitions of financial assets
-	Net acquisitions of financial liabilities
=	Net lending (IV)
	Net lending (IV)
+	Net valuation changes, etc.
=	Change in net financial assets (V)

The capital account shows how transactions recorded in the current account result in changes in foreign assets and liabilities, and in addition to purchases and sales of financial instruments includes capital transfers. This entails that the balance on the current account must be adjusted for net capital transfers in order to arrive at net lending.

The definitional relationship between the current account and the capital account is that a current account surplus, adjusted for net capital transfers, increases net foreign assets (or reduces net liabilities), while a deficit on the current account will reduce net assets (or increase net liabilities).

The capital account also includes transactions that do not have a counter entry in the current account. One example would be a resident who uses funds in a foreign bank account to repay a loan raised abroad.

Total asset transactions less total liability transactions result in the figure for net lending. By then adjusting net lending for valuation changes and other balance sheet changes not caused by transactions[3], we arrive at changes in Norway's net foreign assets/liabilities.

Statistical sources

The main sources for the compilation of the balance of payments are foreign exchange statistics and banking statistics produced by Norges Bank (Central Bank of Norway), Statistics Norway's external trade statistics for goods, shipping statistics, statistics for oil and gas activities and the government accounts. There are no major changes in the use of sources compared with earlier.

Norges Bank's foreign exchange regulations stipulate that a foreign exchange bank is required to report payments between a resident and a non-resident to the central bank. Foreign exchange banks electronically submit reports on their own payments and payments they arrange on behalf of others. A resident who sets up a payment arrangement or other arrangements for settlement directly with a non-resident without using a foreign exchange bank is obligated to notify Norges Bank. This entails that enterprises and persons maintaining an account abroad are obligated to report transactions through these accounts to Norges Bank. Information is collected on payer and recipient as well as country, currency denomination, amounts and what the payment refers to. Those submitting reports classify the payments in 30-40 payment types, and Norges Bank undertakes a further breakdown of the reports' classifications into about 300 types. Norges Bank reports the data to Statistics Norway electronically, where they are recoded and included in the system for calculating the balance of payments.

Statistics on external trade in goods are based on the administrative returns collected by the customs authorities. When goods are imported or exported, the import and export declarations are registered electronically and the information is sent to Statistics Norway. Information on imports and exports from Norway, but outside the scope of the customs authorities, e.g. purchases and sales of ships and direct imports to the Norwegian continental shelf, is collected from other sources.

Shipping statistics are annual statistics on operating income and expenditure, which in principle cover all vessels in ocean transport operated by a Norwegian shipping company independent of the country of registration. The statistics are based on reports from shipping companies for each ship over 250 gross dwt, including chartered vessels with foreign ownership.

Statistics on oil and gas activities comprise quarterly investment data with information on accrued costs for exploration, field development, fields in operation and land-based activities. This specifies acquisitions which are imported directly from abroad to the Norwegian continental shelf and which are therefore not captured by the statistics on external trade in goods. Detailed information on operating expenditure with figures for direct imports is collected on an annual basis.

For exports and imports of aviation, postal and telecommunications services, figures are computed by the Section for National Accounts in Statistics Norway based on information obtained directly from key operators.

[3] Certain types of debt forgiveness and a change in a statistical unit's sectoral classification are examples of balance sheet changes that are not based on transactions.

Tabell 1. Reinvested earnings 1988-1994. Billion NKr

	From abroad	To abroad	Net
1988	-1,1	2,1	-3,2
1989	0,8	1,7	-0,9
1990	0,7	4,0	-3,3
1991	-2,5	4,2	-6,7
1992	-3,2	-8,6	5,4
1993	-1,5	-7,3	5,8
1994	-1,1	4,2	-5,3

Banking statistics are monthly data for banks and other financial institutions which show balance sheet figures, and thus balance sheet changes, for assets and liabilities by financial instrument. Based on balance sheet changes vis-à-vis other countries, banks' investment in financial assets is calculated.

Figures from the government accounts are used, among other things, for general government transfers and some investment transactions.

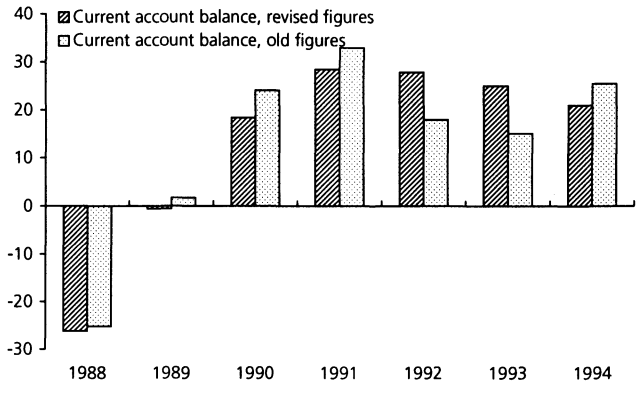
New definitions

A distinction can be made between definitional changes which influence the total current account balance and those which only entail a reclassification of items in the current account balance. The first category includes the new income concept reinvested earnings. This variable is closely linked to the capital concept direct investment. Direct investment is defined as a cross-border financial investment made by an investor for the purpose of acquiring a lasting interest in the enterprise, and exerting a degree of influence on that enterprise's operations. The establishment of a subsidiary abroad is an example of a direct investment.

The total operating surplus in direct investment enterprises is recorded as income for the investor. Reinvested earnings are the difference between the total surplus and distributed dividends. Previously, only actual dividend payments were included in the accounts. The offset to the income item reinvested earnings is found in the capital account under the same designation. Retained earnings in a direct investment enterprise, represented by a positive figure for the item direct investment, is in the balance of payments accounts shown as an investment transaction which increases the investor's claims on the investment enterprise. If dividend payments exceed the surplus, reinvested earnings are negative, which can be interpreted as disinvestment.

Table 1 shows time series for reinvested earnings from and to the rest of the world as well as the net effect on the current account balance. We see that, with the exception of the years 1992 and 1993, reinvested earnings have had a negative effect on the current account balance. In both years mentioned reinvested earnings to and from the rest of the world were negative, i.e. actual dividend payments exceeded the surplus in direct investment enterprises both

Figur 1. Current account balance 1988-1994. Billion NKr



Tabell 2. Main items in the current account balance. Results of revisions for 1990. Billion NKr

	Old figures	Revised figures	Deviation	Deviaton in per cent
Balance of goods and services	50,2	47,4	-2,8	
Exports of goods and services	215,5	213,6	-1,9	-0,9
Exports of services	77,6	80,1	2,5	3,2
Imports of goods	171,8	179,5	7,7	4,5
Imports of services	71,1	66,8	-4,3	-6,0
Net interest and transfers	-26,1	-29,0	-2,9	
Income from abroad	27,2	27,4	0,2	
Expenditure to abroad	53,3	56,3	3,0	
Current account balance	24,1	18,4	-5,7	

in Norway and abroad. However, this occurred to a somewhat greater extent from foreign-owned enterprises in Norway and the net effect was thus positive.

In the new national accounts, investment in platforms for oil production is now recorded on a continuous basis while previously such investment was registered at the time the platforms were towed to the field. This has resulted in a different time of recording for such investment, with a corresponding effect on imports for oil activities. Viewed over a longer period of time, however, this type of import has not changed.

Another new element is that a distinction is made between current transfers and capital transfers. For example shall an investment grant or a transfer of cash linked to the aquisition of a fixed asset now be recorded as a capital transfer in the capital account. Some government transfers, in addition to transfers in connection with immigration and emigration, are also recorded as capital transfers. Previously, these types of transfers were included in the current account of the balance of payments.

Among the transactions that have only been reclassified in the current account we find compensation of employees residing in other economies. This item is influenced by two factors. First, foreign seamen on Norwegian ships are rede-

fined from residents to non-residents, entailing that their wages are no longer recorded as a combination of direct purchases abroad by resident households and transfers abroad, but entirely as compensation of non-resident workers. Second, compensation paid to foreign crews on chartered ships is recorded as compensation of non-resident workers, whereas previously this was included as part of the shipping sector's operating expenditure abroad. The result is basically a redistribution between the balance of goods and services and net interest and transfers.

Payments for licence fees, proprietary rights, etc. shall now be recorded as services transactions and not income as previously. This entails a redistribution between net interest and transfers and the balance of goods and services. The redistribution does not influence the surplus on the current account.

The content of the item travel has been reduced. The reason is that part of the expenditure for the carriage of passengers, which was previously included in travel, has been transferred to the item transport services. Imports of passenger services are defined as the transport of Norwegians on non-resident carriers, either between Norway and abroad, between two destinations abroad or in Norway. Exports of transport services are defined in a corresponding manner. This results in a reduction in travel figures and a corresponding upward adjustment of exports and imports of transport services. The changes are only a redistribution of items within the balance of goods and services and have no effect on this or the current account balance.

The content of the items operating expenditure for shipping and oil drilling, respectively, has been reduced compared with earlier in that expenditure on bunker fuels has been transferred to merchandise imports, while expenditure on insurance and repairs is included in imports of financial and business services and other services, respectively. However, the shipping sector's net freight earnings, i.e. freight earnings less consumption of all types of goods and services, are presented in a separate memorandum item when published.

The total current account based on the new balance of payments accounts are presented in figure 1 along with the old figures. We see that the result has been revised downwards each year with the exception of 1992 and 1993 when reinvested earnings made a positive net contribution to the surplus.

Table 2 shows the revision of main items in the current account balance for 1990. The balance of goods and services and net interest and transfers made approximately the same contribution to the downward revision of the surplus, which all total was reduced by NKr 5.7 billion. The greatest revision in the balance of goods and services related to merchandise imports, which were revised upwards by nearly NKr 7.7 billion, or 4.5 per cent. The greatest change for net interest and transfers was that investment income and compensation paid to non-resident employees were revised upwards by a good NKr 5 billion, of which reinvested earnings accounted for NKr 4.0 billion.

Publication of tables

The tables that are used in the publication of the balance of payments have also been revised. Two considerations have figured prominently in the presentation of the new tables. First, the distinctive aspects of the Norwegian balance of payments, notably shipping and oil activities, should be made evident. Second, emphasis has been placed on observing international recommendations in order to facilitate comparison with other countries' published tables. This consideration has been of particular importance for the table showing the capital account.

Compared with the old balance of payments accounts, the component list of transactions in services has been expanded. This applies to transport and communications services and financial and business services. At a detailed level, however, many more services components are found than those which are shown in the published tables.

The specifications in the capital account have also been revised. One important change is that the overriding distinction between short- and long-term assets and liabilities has been abandoned. This is a result of developments in international capital markets, which has entailed that the analytic usefulness of this distinction has been sharply diminished. For example, the original contractual maturity specified in a debt instrument does not reflect the creditor's investment motive to the same extent as earlier.

In the main classification that is now followed a distinction is made between direct investment, portfolio investment, other investment in financial assets and international reserves. Under each main category there is a domestic sectoral classification and, at times, a breakdown also by industry, with definitions in accordance with the national accounts. The classification of financial instruments is in accordance with national accounting principles. Other investment in financial assets includes trade credits, loans and deposits. International reserves are defined as Norges Bank's foreign exchange assets as well as drawing rights and the reserve position in the IMF.

Conclusion

The revision of the balance of payments is, as part of the main revision of the national accounts, a project which is now being concluded. The revision has already resulted in new time series back to 1988, improved methods and a change in the way in which the accounts are presented. The work that remains is the publication of revised time series further back in time. According to plans, data for the period 1978-1987 will be published in the first half of 1997. Figures for the years prior to 1978 will be calculated on a more aggregated level than the current balance of payments accounts. For the years prior to 1995 only annual

and quarterly figures will be computed instead of monthly figures.

In the period ahead a continuous evaluation will be made of the prevailing methods with a view to improving the quality of the statistics. The plans also call for expanding the figures by presenting a country distribution for the most important items in the current account, which will enhance the possibilities for analyzing economic relations with different countries and regions. At the moment only merchandise trade is distributed by country in Statistics Norway's external trade statistics.

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Military expenditure in Norway's main partner countries for development assistance

Mette Rolland

Military expenditure in developing countries is now the subject of increased attention in an aid policy context, and the question of to what extent recipient countries should be required to implement reductions in their defence budgets is being discussed in various fora. However, if military spending is to be subject to conditionality, we must first have reliable data on how much resources the defence sector actually uses. This article examines possible reasons why the size of military expenditure for the same country can show considerable variations depending on the data source used, and discusses the most well-known international sources for military expenditure. The discussion is concretized with the help of available statistics for Norway's main partner countries for development assistance. Indicators of the degree of militarization for the various countries are computed. The data situation for Norway's main partner countries is, with few exceptions, constantly improving. The indicators show that in the majority of countries the defence sector is using increasingly fewer resources in relative terms.

Introduction*

In recent years military expenditure in developing countries has been the subject of increased attention on the aid policy agency, both in individual donor countries and in multilateral organizations. The subject has particularly been discussed in connection with the debate on good governance, i.e. transparent, efficient, accountable and democratic government management of the resources available, based on general principles of the rule of law and respect for human rights.[1]

Both public and private resources are very limited in most developing countries, a fact which will most likely be the case into the next century. It is therefore important to analyze the use of resources in all parts of the economy, and to reduce expenditure which contributes least to economic development and higher living standards in the population.

The effect of military spending on economic growth has been the subject of many studies in recent years. The results from simple econometric models have often been contradictory. However, the message of more complex models seems to be clear: higher military expenditure results in lower economic growth.[2] Arms purchases often drain scarce foreign exchange earnings which could have been used to import productive capital equipment, thereby enhancing the possibilities for sustainable growth. High military expenditure in one country may also increase regional tensions and result in rearmament in neighbouring countries, with negative developments for the entire region.

One general conclusion also appears to be that social indicators such as life expectancy, infant mortality, illiteracy and nutrition are poorer in countries that use a relatively high share of resources for the military establishment. In addition to lower physical living standards, resources for the military sector might be used to violate human rights in those countries where the armed forces have an oppressive role.

It is difficult to weigh and evaluate what may be considered unnecessarily high military expenditure. Countries have a legitimate need for security and must be able to defend themselves against external threats. On the other hand, we may consider an *expanded security concept* in which the country's citizens, in addition to security against traditional military threats, have a right to security against poverty and environmental degradation.[3] It may thus be argued that resources used to combat poverty and protect the environment safeguard the security of the people just as much and perhaps more than high military expenditure. In many cases a transfer of resources from the military sector to social sectors will probably result in increased security for the country's inhabitants when the expanded concept of security is applied. The inclusion of this element makes it simpler to compare the use of resources for defence with other uses of public sector funds.

* My thanks to Solveig Glomsrød and Ole A. Lindaas for useful comments on earlier versions. I am also grateful that Kristian Lønø made me aware of the CIA's Internet pages. Robin Choudhury deserves thanks for his considerable patience with my lacking Excel skills!

[1] The definition of good governance was obtained from the Ministry of Foreign Affairs in Denmark (1994).

[2] See Deger (1992), Knight et al. (1996) and Dunne (1996)

[3] The expanded concept of security was raised in the OECD (1993).

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Development assistance has becoming increasing result-oriented, and various forms of conditionality have been introduced in a number of contexts. One example here is the 20-20 objective in which 20 per cent of the assistance and 20 per cent of general government expenditure in recipient countries are to be earmarked for health and education. It is natural to assume that the use of resources for the defence sector will also be critically evaluated by donor countries and be met with demands for reductions. However, if greater attention is to be devoted to military expenditure in the aid policy dialogue, and possibly be subject to conditionality, we must first have reliable data on how much resources the defence sector actually uses. Reliability is particularly a problem with regard to studies covering military expenditure. No other sector is shrouded with so much secrecy and attempts to manipulate the figures. One of the conclusions of the "Tokyo Workshop on Military Expenditure and Aid" in November 1992 was that there was also a considerable need for greater transparency of military expenditure and that better data collection is required.

Various expert groups have arrived at very different conclusions when military expenditure is to be analyzed. I will therefore briefly examine possible reasons why the size of military expenditure for the same country can show considerable variations depending on the data source used. Based on this discussion, I will then examine more closely the most important and most widely used international sources for military expenditure. The sources are evaluated in brief on the basis of how they tackle any pitfalls.

In order to concretize the general discussion I have started with available data on military expenditure for Norway's main partner countries for development assistance. I have therefore calculated various indicators for the degree of militarization in our main partner countries and compared these with indicators for the country's social standards. Here I wanted to reveal any pattern as it is often assumed that high military expenditure provides little scope for resources for important public social sectors.

It is also of interest to examine the attitudes that are manifested with regard to the publication of data on military expenditure and the capacity for data collection. Norway considers transparency desirable so that as many people as possible have some knowledge of national/government economic issues as this is deemed important for democratic development.[4]

Problems of measuring military expenditure

The first problem often encountered when determining the size of military expenditure is that there are several different *definitions* of the concept. The question of what is relevant to include in "military expenditure" may be debated. The answer will depend somewhat on the subject of the study. If the study is to attempt to comment on military striking power, expenditure is perhaps not the best measure to start with - and in any case the amount used, for example, for pensions for military personnel is uninteresting. If, on the other hand, the study is to focus on how much it actually costs a society to maintain its military establishment, it is natural to start with "opportunity costs", i.e. the value of the goods and services the civilian sector of the population is deprived of because the appropriating authorities allocate resources to the military sector. In this type of analysis it is important to be aware that expenditure on pensions for former military personnel - which can be substantial in many countries in which military personnel have higher pensions than civilians - is paid for by the public sector and in this way uses resources that could have been allocated to other sectors. Pension expenditure should therefore be included in the total amount for military expenditure. Another example is countries which have compulsory military service (as e.g. in Norway) and where wages paid to conscripts are considerably lower than the alternative pay of conscripts. This results in artificially low figures for military expenditure. For developing countries with high unemployment, however, the opportunity cost of conscripts may be minimal. The fact that conscript wages in these countries seem to exceed the opportunity cost contributes to pushing up military expenditure in many developing countries.

One problem closely related to different definitions is to what extent the existing statistical material is *mutually consistent*. Ball (1988) points to examples where the same type of expenditure (as e.g. expenditure on paramilitary forces) is included under various ministries in different years. If we look at data for several countries, it is not inconceivable that expenditure which some of the countries include under the Ministry of Defence is in other countries included under the Ministry of the Interior or the Ministry of Justice (as e.g. expenditure on security forces).

Differences in *updating routines* in the various sources give rise to considerable variations in the statistical material. The figures presented are in many cases budgeted expenditure and not actual expenditure. Several years may elapse between the publication of the first estimates and the actual amount, and there are often substantial differences between budgeted and actual expenditure.

Many of the international sources that publish data on military expenditure obtain their figures from national sources - particularly government budgets and national accounts. One problem in this connection is that the *fiscal year often does not coincide with the calendar year*, and that the beginning and end of the fiscal year vary from one country to another. Attempts at standardization may give rise to inconsistent data.

In cross-section analyses where countries are entities, it is difficult to compare expenditure that is measured in *different currencies*. There are several methods for making the data comparable. The most frequently used method is to convert all figures to a common currency - usually the US

[4] This has been asserted by the Ministry of Foreign Affairs (1992).

dollar - with the help of the countries' exchange rates. The method does not always produce a satisfactory basis for comparison when exchange rates are overvalued or undervalued, which is often the case in developing countries. Considerable efforts have therefore been made to construct purchasing power parities, i.e. that goods and services are valued in a common set of prices instead of using the various national prices. In this way the conclusions of cross-section analyses which include military expenditure are drawn against the background of a more correct basis for comparison. Another possibility is to calculate rates, i.e. military expenditure as a percentage of e.g. gross domestic product.

If a time-series analysis is to be carried out, it is necessary to *deflate* military expenditure for various years to separate the inflation component from the real changes. Depending on the problem to be analyzed and the aim of the study, various price deflators are often used, a factor which may produce different results.

Precisely because a country's real military expenditure is such a sensitive subject, many methods have been devised to *camouflage expenditure* on both personnel and equipment in government budgets. The situation is rendered even more difficult in that a number of countries are prohibited by law from publishing data on military expenditure since this is assumed to constitute a threat to the country's security.

International sources for military expenditure in developing countries

There are many sources providing information on military expenditure. I have confined this study to the most well-known sources since these are most readily available and most comprehensive with regard to countries. Publications from the following institutions are evaluated:

- International Institute of Strategic Studies (IISS)
- United States Arms Control Disarmament Agency (ACDA)
- Stockholm International Peace Research Institute (SIPRI)
- United Nations (UN)
- International Monetary Fund (IMF)
- World Bank
- Central Intelligence Agency (CIA)

The published figures are examined here in the light of how the institutions have chosen to tackle the difficulties described above. It is obvious that it is difficult in terms of data compilation to guard against *deliberate data manipulation*, but it is possible to check the other factors I have looked at. In some cases, however, this would require enormous efforts.

The ideal source specifies, first, data on military expenditure broken down into detailed sub-groups. In this way it is possible to check the items included in a country's total military expenditure and ascertain whether the same type of expenditure is included for all countries (e.g. whether expenditure on pensions for military personnel is included in the total amount). Moreover, updating routines should function satisfactorily so that the amounts specified are not uncertain budgeted figures, but are revised to final accounts figures as soon as these are available. Furthermore, it is important that data on military expenditure are processed to a very limited extent so that the information provided can be checked as simply as possible. It is easiest to carry out such tests when the figures are presented for the fiscal year in national currency at current prices. It is probably unnecessary to add that the ideal source for data on military expenditure is at the moment impossible to find!

One common perception, also among researchers, is that data published by these recognized institutions are more reliable than figures provided by different governments in their budgets. Before drawing this conclusion, however, it is necessary to be aware of two things. First, data on military expenditure that are published by the authorities in various countries are the primary source for all international sources. Second, particularly with regard to developing countries, very few adjustments are made to the figure specified in the budgets under such items as "Defence", "Armed forces" or "Ministry of Defence" before these are published internationally. The institution's own assessments are therefore seldom reflected in the specified total amounts. One of the reasons for this is presumably access to data. It is difficult and requires considerable resources to collect all the documents that are necessary to compute figures for military expenditure based on one common definition for all the countries for which data are published.

It is no simple task to evaluate and compare the various sources since all of them have both advantages and disadvantages. With the help of econometric tests of figures on military expenditure in the sources mentioned above, Brzoska (1981) found that the *IISS* deviated substantially and systematically from the other sources. His findings indicate that the IISS is the least satisfactory with regard to data on developing countries, at least for the period prior to 1980. However, sporadic tests of data for Norway's main partner countries after 1980 do not show systematic deviation. The IISS uses a standard definition for NATO countries whereas data for developing countries are largely accepted as they are reported in the budgets. It is noted that, when possible, capital expenditure is added to current expenditure for the defence sector. It is, however, difficult to ascertain which countries this applies to since the method of calculation is relatively poorly documented. Another problem is that the time series in each edition are so short. This entails that updating routines do not always function satisfactorily, and many editions are required to make a time-series analysis. The advantage of the source is that it contains information about a great many countries, particularly in the latest editions, and the figures are presented in national currency at current prices. It is also

among the first to provide information by including budgeted figures.

The *ACDA*'s publications have extensive documentation of the methods used for computing the data. The ACDA also generally accepts the figure presented under the Ministry of Defence, but in those cases where it is known that the total amount for military expenditure contains amounts used for security forces, these are eliminated. The greatest drawback of this source is that all figures are shown in US dollars computed with the help of official exchange rates. As noted earlier, this is problematic - particularly for developing countries with overvalued or undervalued exchange rates. The figures are updated regularly, but it is difficult to check whether this is the case because the figures change from being budgeted figures to figures from the accounts or whether the ACDA only changes the base year. Different dollar exchange rates in different base years will thus change the total figures even if the figures are identical in national currency. The source also has the drawback that its older publications are difficult to find. Moreover, the ACDA's publications have the advantage that each edition contains time series of eleven years which cover a great many countries. This makes it possible to carry out an extensive panel analysis with the help of data from one source.

In order to achieve consistency between data from various countries, the *UN* encourages all reporting countries to follow the organization's System of National Accounts. The statistics are published at a late date, but have the positive feature that they contain some data split up into current costs and capital costs. Moreover, the figures are presented in national currency at current prices. In some cases expenditure at the state/provincial level is also included, but this is not always noted in the text to the tables. Central government expenditure is of greatest importance for military expenditure, but expenditure on health and education often varies considerable if local government resources are included. The UN's statistics have the drawback that few countries are covered and that it takes a long time before the series are updated.

The *World Bank* obtains its figures from the IMF so that the quality of the data is the same for both sources. It is, however, a problem that military expenditure is only specified as a percentage of central government expenditure since this can result in considerable distortions in the material. There are considerable variations between countries in the degree of local autonomy. A country which has decentralized many government functions will have considerably higher military expenditure in per cent of central government expenditure than a country that has a high degree of centralization. This is the case even if the decentralized country in reality may use fewer resources on defence than the centrally governed country. As a result of the routines for publishing data only for the latest available year, it is necessary to have access to many annual editions in order to carry out a time-series analysis. A cross-section analysis is also hampered by very low coverage, particularly of developing countries.

The *CIA*'s Internet pages are interesting because they are among the first to provide information and are very comprehensive with regard to number of countries. This type of publication, however, has limitations as a result of little documentation for the method used. No information is provided on the definition of military expenditure that is used. The figures are published in US dollars converted with the help of official exchange rates, but military spending as a percentage of GDP is also computed. The time series are too short to make an analysis and there are no updating routines.

The conclusion of the study indicates that the *SIPRI* and *IMF* are the best sources even though they also have some shortcomings. Statistical documentation is good, the figures are updated and they are presented in national currency at current prices. The IMF has its own definition of what is to be included in a country's military expenditure, and assumes that the reporting countries follow the existing guidelines. The SIPRI uses NATO's definition of military expenditure. However, the various countries' budgets are used as the main sources for developing countries. Since the items included by the various countries in the total amount for defence spending usually vary, the same definition is probably not used for all of Norway's main partner countries. The figures published by the IMF and SIPRI have been in greater accord in the most recent editions. The SIPRI also has an additional advantage over the IMF in that it usually provides information at an earlier date and covers a far greater number of countries.

Military expenditure in Norway's main partner countries for development assistance

In this section I will evaluate available data on military expenditure in Norway's main partner countries for development assistance. Based on the number of sources containing information on the various countries and the accord between the figures in the various publications, I will attempt to comment on the quality of data and openness in the various countries with regard to military expenditure. I will also discuss the size of military expenditure in Norway's main partner countries.

In general, the available data are of such a quality that it is primarily *trends* in military expenditure relative to other variables in the economy that are most reliable. Shedding light on these trends is important from a development assistance standpoint. It is of interest to determine whether military spending is rising or declining over time. Since, as noted earlier, there are deflation problems associated with time series of absolute figures, I have chosen to look at the change in relative figures (rates) over time. In my opinion the use of rates as an indicator of the degree of militarization provides a more interesting picture than changes in total figures. Even though military spending growth in itself

is of significance, from a development point of view it is more important to see the relative importance of the defence sector in relation to the rest of the economy. A country with high economic growth and a high level of income is in a better position to sustain high military expenditure than is the case for a poor country with declining output. The use of rates allows us to look at both the economic burden of defence and the ranking of priorities between the miliary and civilian sector.

I have calculated the rate for military expenditure in per cent of GDP for Norway's main partner countries for the period 1980 and up to the latest published data with the help of figures from the IMF and the UN, which both present military expenditure in national currency at current prices. I have compared my calculations with the rates presented in the international sources discussed above. In addition to military expenditure in per cent of GDP, I have calculated military expenditure in relation to social expenditure. Social expenditure is defined as the sum of that part of total government expenditure used for education and health. This rate is intended to provide some indications of the countries' priorities and is compared with two indicators of the society's social standard. I have selected infant mortality (number of deaths of infants under one year per thousand live births, converted to per cent) and primary education (the number of pupils enrolled in primary schools, irrespective of age, divided by the number of persons in the age group for which the grade level is intended, converted to per cent). The last indicator may exceed 100 per cent if older pupils are enrolled in schools at a lower level then their age should imply. It is assumed that active efforts to improve the primary health service and primary education will benefit the poorer segment of the population and lay the basis for economic growth and higher social standards for all members of society.

African partner countries

The data situation for partner countries in Africa varies considerably both with regard to openness and quality. As shown in table 1, the relative size of military expenditure also varies sharply, and must be viewed in the light of the countries' very different backgrounds.

It is relatively simple to find statistics on total military expenditure in *Botswana*, but there are substantial divergences between the sources. Thus far it has not been possible to obtain data broken down into sub-groups, and it is therefore difficult to evaluate whether the various sources include the same expenditure, as e.g. capital expenditure or expenditure on security forces, in the total amount. This makes it difficult to evaluate the quality of the data. If the IMF's data are relatively correct, the trend is worrisome. Military expenditure as a percentage of government expenditure was in 1992 (the most recent figure) higher than ever before. The trend is also negative in relation to social expenditure. It must be added, however, that Botswana has low military expenditure relative to social expenditure if we compare the figures with Norway's other main partner countries. This is also reflected in relatively favourable social indicators.

Access to data on military expenditure in *Eritrea* is limited since it is a relatively new independent country. Eritrea declared itself independent from Ethiopia on 27 april 1993. Only the SIPRI and the IISS have information on military expenditure, making the data situation on military expenditure in Eritrea unsatisfactory. This must be expected, however, considering the country's recent war history. There is a large divergence between figures published in the two sources. While the SIPRI has a very low estimate of military expenditure in Eritrea (the lowest estimated military burden among all Norway's main partner countries for development assistance at 0.5 per cent in 1993), the IISS publishes figures above the average rate for the Norwegian partner countries. I tend to believe that the figures from the IISS are most plausible. Eritrea has been ravaged by war for many years and even if some demobilisation of forces started as early as the end of 1993, the armed forces are probably still rather large. In addition, there have been skirmishes between Eritrea and neighbouring countries recently and funds are needed for operations of this kind. It must be stressed, however, that the figures on military expenditure in Eritrea are very uncertain. I have not been able to obtain any social indicators.

Access to information on military expenditure in *Ethiopia* seems to have improved substantially the last few years. There are many indications that the defence sector has used increasingly fewer resources following the change in regime. At the moment the time series are very short. Military expenditure in relation to government expenditure on health and education is among the highest in Norway's main partner countries for development assistance. This must be viewed against the background of the war which ravaged the country until the formation of a transitional government in May 1991. Ethiopia's social indicators are also among the least favourable compared with other main partner countries. Infant mortality, however, has been declining the last few years. The primary education rate in 1992 was 22 per cent and is also very low compared with other poor countries.

Malawi has not reported military expenditure to the IMF since 1988 or to the UN. The other sources, however, provide figures which are very similar in the latter part of the period. These sources have relatively long time series, and there is no major divergence between the various sources. Malawi has low military expenditure in per cent of GDP and social expenditure, and this is likely to continue. Social indicators show that Malawi has one of the highest infant mortality rates among our main partner countries for development assistance, and the primary education rate is low. Infant mortality peaked in 1980 and fell during the 1980s and early 1990s. In 1993, however, infant mortality increased. This must be seen in conjunction with a large fall in GDP in 1992, and the latest figures from the World Bank show that infant mortality decreased again to 13.4 per cent in 1994. The negative impression left by the social

Table 1. Military expenditure, social expenditure, infant mortality and primary education rate for African partner countries. All figures in per cent

	1989	1990	1991	1992	1993
Botswana					
Military expenditure/GDP	3.6	4.4	4.7	4.3	4.1
Military expenditure/Social expenditure	46.6	52.1	51.9	46.9	..
Infant mortality	3.9	3.8	3.6	3.5	4.2
Primary education	111	110	119	116	..
Eritrea					
Military expenditure/GDP	..	..	..	..	6.2
Ethiopia					
Military expenditure/GDP	10.2	10.2	6.1	3.0	2.6
Military expenditure/Social expenditure	269.9	307.4	290.0	..	..
Infant mortality	13.3	13.2	13.0	12.2	11.7
Primary education	38	38	25	22	..
Malawi					
Military expenditure/GDP	1.5	1.3	1.1	1.0	0.8
Military expenditure/Social expenditure	..	..	..	..	..
Infant mortality	14.7	14.9	14.1	13.4	14.2
Primary education	67	71	66	66	..
Mozambique					
Military expenditure/GDP	10.3	10.1	8.7	8.3	7.6
Military expenditure/Social expenditure	210.7	191.3	160.4	137.0	159.8
Infant mortality	13.7	13.7	14.9	16.2	14.6
Primary education	..	58	63	60	..
Namibia					
Military expenditure/GDP	2.9	2.2	2.7	2.5	2.2
Military expenditure/Social expenditure	..	17.4	20.4	..	..
Infant mortality	10.1	10.0	7.2	5.7	5.9
Primary education	..	94	119	124	..
South Africa					
Military expenditure/GDP	4.0	3.7	4.3	3.7	3.0
Military expenditure/Social expenditure	..	..	..	..	..
Infant mortality	6.8	6.6	5.4	5.3	5.2
Primary education	..	..	111	111	111
Tanzania					
Military expenditure/GDP	2.2	2.1	1.7	..	..
Military expenditure/Social expenditure	90.6	74.7	52.1	..	..
Infant mortality	11.2	11.5	11.5	9.2	8.4
Primary education	63	63	69	68	..
Uganda					
Military expenditure/GDP	2.5	3.0	2.7	1.7	1.5
Military expenditure/Social expenditure	..	..	..	..	..
Infant mortality	9.9	11.7	11.8	12.2	11.4
Primary education	..	76	71	71	67
Zambia					
Military expenditure/GDP	1.6	1.9	6.3	..	1.3
Military expenditure/Social expenditure	..	..	..	..	..
Infant mortality	7.6	8.2	10.6	10.7	10.3
Primary education	95	93	92	..	97
Zimbabwe					
Military expenditure/GDP	6.1	6.3	5.0	4.4	3.8
Military expenditure/Social expenditure	16.5	13.1	14.3	..	..
Infant mortality	4.6	4.9	4.8	4.7	6.7
Primary education	125	117	..	119	..

Source: SIPRI, World Bank and my own calculations based on data from the IMF and the UN. IISS for Eritrea.

indicators are more likely caused by general poverty than excessive militarization.

Access to data on military expenditure in *Mozambique* has improved substantially over the past two years even though there are still some shortcomings. The time series are short, only eight years, but there is greater accord between the sources than was the case with earlier analyses. Taking into account that the country was ravaged by war since the 1970s, it is not surprising that the data situation is poor and military expenditure high. It is therefore encouraging to see progress in the area of data availability. The indicator for military expenditure in relation to social expenditure is very high, but has exhibited a downward trend in the 1990s. Infant mortality is among the highest in our main partner countries, and the primary education rate has not picked up again to any extent following the sharp fall at the beginning of the 1980s. With the onset of peace, it is possible to transfer more resources from defence to the social sectors. However, there is still a need for better statistical material in order to determine how much is actually allocated to each sector.

After *Namibia* showed promise of becoming a model country in the area of statistics on military expenditure, a negative trend has taken place the last few years. The country has not reported to the IMF, which has thus not updated or revised the estimates for 1990 and 1991, and the national budgets for the last few years have not been as readily available as previously. The budgets, including expenditure for the Ministry of Defence, are presented in full openess, however. There is good accord between the various sources which specify military expenditure. Namibia is below the average of developing countries in terms of the military burden (military expenditure/GDP). For the two years for which I have had the opportunity to calculate the rate, military expenditure only amounted to about a fifth of social expenditure, thereby indicating that the country is giving priority to health and education. Infant mortality has been declining since the country became independent, and the primary education rate has risen.

South Africa has not reported its military expenditure to either the IMF or the UN. The national budget for 1995/96, however, is readily available and contains detailed information on expenditure of all ministries, including the Ministry of Defence. In addition to the ordinary budget, a special publication - "A citizen's guide to the 1995/96 budget" - has been prepared. Expenditure in the national budget is divided into capital and current expenditure and seems to be presented in an orderly and satisfactory manner. There are many indications that it will be easy to gain access to statistics on military expenditure from South Africa in the period ahead. Data on primary education figures, however, are lacking, and only UNESCO has published figures for certain years. The primary education rate in these years is very high. Infant mortality has declined gradually throughout the period of study, but is still high. It must be added, however, that there are probably considerable differences between population groups.

The access to data on military expenditure in *Tanzania* has improved somewhat the last few years, and the divergences between figures published in different publications have been reduced. As is the case for most of Norway's main partner countries for development assistance, much remains to be done with regard to data collection. Indicators calculated on the basis of data from the UN do not indicate that Tanzania has particularly high military expenditure in relative terms. Following a negative trend in the mid-1980s, military expenditure has since declined substantially in relation to social expenditure. Social indicators have nevertheless moved in an unfavourable direction. Infant mortality is higher and the percentage of pupils enrolled in primary schools is lower than was the case ten years ago. This is probably ascribable to the economic setbacks experienced by Tanzania in recent years rather than attempts at rearmament.

Uganda has not reported military expenditure to the IMF since 1986 and has never reported to the UN. The other sources, however, provide figures which are very similar in the period after 1991, whereas there were considerable divergences between sources in earlier years. It appears as though Uganda has gradually reduced military expenditure in per cent of GDP after passing a peak at the beginning of the 1990s. This must be viewed in conjunction with the political situation in the country. According to the IISS, however, an increase took place in 1995 and is budgeted to increase further in 1996. The increase is reflecting the instabilities caused by fighting and general lawlessness in neighbouring countries, in particular Sudan and Rwanda, which has lead Uganda to raise imports of major military equipment. Infant mortality exhibited a negative trend since 1980, but recent figures indicate a decrease in infant mortality rate from 1992. The primary education rate has fallen by 10 percentage points since 1990. The country is, however, experiencing increasing democratization and sharp economic growth, and will thus be in a better position to give priority to social development in the near future.

Access to data in *Zambia* has improved substantially after the government lifted the ban on the publication of military expenditure for the 1995 fiscal year. The national budget is readily available, divided into current and capital costs and presented in great detail. Figures published in international sources show that the country has low military expenditure in relation to GDP, probably less than 2 per cent after 1990. The rates for the beginning of the 1990s, however, must be considered very uncertain. In addition to high inflation, Zambia has recorded a decline in GDP since 1989, a factor which will push up the rate even if military expenditure is kept constant. Both the SIPRI and the ACDA lack information on military expenditure in per cent of GDP for some years after 1990, and the rates specified deviate substantially. For example, the SIPRI estimates the rate for military expenditure/GDP at 6.3 per cent in 1991, whereas no rate is calculated for 1992. The ACDA, on the other hand, has no estimate for 1991, but estimates the military burden at 1.5 per cent in 1992. The country

has recorded a negative trend in social indicators in recent years, with infant mortality at 10.8 per cent in 1994. This is probably ascribable to the economic setbacks experienced by Zambia rather than high military expenditure.

Access to data in *Zimbabwe* is satisfactory and there is a large degree of openness. However, considerable divergences between data from various sources entail that it is difficult to evaluate the quality of the existing material. Calculations made with the help of figures from the UN show that Zimbabwe reduced military expenditure in relation to social expenditure to a little less than 42 per cent in 1991. Previously the country's position was relatively favourable with regard to social indicators, but infant mortality rose sharply in 1993, to 6.7 per cent. This is probably due more to the difficulties experienced by the country, including a protracted drought, than increasing militarization and the rate fell to 5.4 per cent in 1994. The education rate is very high, and it is obvious that the authorities are giving priority to primary education inasmuch as a greater number of pupils are enrolled outside their relevant grade level.

Asian partner countries

It is relatively easy to find data on military expenditure in Norway's partner countries in Asia, but the divergences between figures from various sources are often considerable. The tense situation between India and Pakistan is reflected in military expenditure, particularly for Pakistan.

Access to data on military expenditure in *India* appears to be satisfactory. National budgets are available to the public, and the country reports on a regular basis to international sources. Divergences between the various sources exist, but they are not substantial. The greatest divergence I have come across is in the calculation of the rate for military expenditure in relation to social expenditure. In the calculations, I have made use of figures from the IMF when this has been possible. However, the IMF only reports central government expenditure. Inasmuch as there is considerable government expenditure involved at the local government level, the indicator for military expenditure in relation to total expenditure will be very different. In the case of India, for example, military expenditure amounted to more than 410 per cent of total central government expenditure on health and education in 1990, while the same rate calculated with figures from the UN, which includes expenditure in the various states in its total amount, was 73 per cent. Expenditure on education in particular shows a sharp increase, with the figure nine times higher when the various states are included, while health expenditure shows a threefold increase. The social indicators also show that

Table 2. Military expenditure, social expenditure, infant mortality and primary education rate for Asian partner countries. All figures in per cent

	1989	1990	1991	1992	1993
Bangladesh					
Military expenditure/GDP	1.5	1.5	1.4	1.5	1.6
Military expenditure/Social expenditure	56.1	57.0	..	..	..
Infant mortality	10.6	10.5	10.3	9.1	10.6
Primary education	70	73	77	..	..
India					
Military expenditure/GDP	3.2	2.9	2.7	2.5	2.7
Military expenditure/Social expenditure[1]	454.0	410.7	408.3	397.7	400.1
Military expenditure/Social expenditure[2]	80.6	72.9	..	..	..
Infant mortality	13.3	13.2	13.0	12.2	11.7
Primary education	38	38	25	22	..
Nepal					
Military expenditure/GDP	1.0	1.2	1.2	..	..
Military expenditure/Social expenditure	34.5	38.4	37.6	..	..
Infant mortality	12.4	12.1	10.1	9.9	9.6
Primary education	86	86	..	102	..
Pakistan					
Military expenditure/GDP	6.2	6.2	6.0	6.0	6.3
Military expenditure/Social expenditure[2]	254	238	236	..	..
Infant mortality	10.6	10.3	9.7	9.5	8.8
Primary education	38	37	46	46	..
Sri Lanka					
Military expenditure/GDP	1.8	2.7	3.0	3.2	3.2
Military expenditure/Social expenditure	79.7	104.1	112.2	116.9	..
Infant mortality	2.0	1.9	1.8	1.8	1.7
Primary education	107	107	108	..	..

[1] The indicators were calculated on the basis of figures from the IMF.
[2] The indicators were calculated on the basis of figures from the UN.
Source: SIPRI, World Bank and my own calculations based on data from the IMF and the UN.

priority is being given to education, but infant mortality remains high. However, infant mortality has been reduced substantially the last twenty years.

The availability of data on military expenditure in *Pakistan* appears to be satisfactory. However, the information provided shows fairly considerable variation, a factor which makes it difficult to evaluate the material. There is nevertheless no doubt that Pakistan has high military expenditure in relative terms. This is particularly true when measured against the amounts allocated to health and education. Even when the indicator is calculated with the help of the highest reported figures for social expenditure, military expenditure is more than two and a half times greater. The social indicators also reflect Pakistan's priorities. Infant mortality is high, and the country has the lowest primary education rate among all of Norway's main partner countries for development assistance. To some extent this may be ascribable to cultural factors since the rate for boys enrolled in primary education was 49 per cent in 1990 compared with only 27 per cent for girls. However, the figure is still very low when compared with another Muslim country, Bangladesh, where the rate for boys enrolled in primary education was 78 per cent and the rate for girls was 68 per cent.

During the last two years it has become easier to judge the quality of data on military expenditure in *Bangladesh*, as there is now considerably greater accord between the sources. It is not inconceivable, however, that the various sources make use of each other's publications, which may have a certain contagious effect. It is nevertheless easier to use series that do not diverge substantially. Figures for the latter part of the period indicate that military expenditure is rising slightly relative to GDP, but in spite of this development the country does not appear to be particularly militarized. The social indicators point to a negative situation for the country's social standards, but the *trend* has been positive the last few years and stood at 8.1 per cent in 1994.

Access to data on military expenditure in *Nepal* appears to be satisfactory. Most sources have relatively long time series, and there is no major divergence between the various sources. I have not succeeded in obtaining the national budget, entailing that it has not been possible to carry out a more detailed examination of the various sub-groups. This is probably because the country is relatively new in terms of Norway's official development aid, and libraries have therefore not yet given priority to obtaining sufficiently detailed information about the country. As shown in table 2, Nepal has low military expenditure in per cent of GDP and social expenditure if we compare the figures with Norway's other main partner countries. Nevertheless, the country's position is relatively unfavourable with regard to social indicators. Infant mortality is high, 9.1 per cent in 1994, but has exhibited a downward trend since 1980.

There are many sources that publish military expenditure for *Sri Lanka*, but because of the substantial divergences in the amounts reported it is difficult to judge which information is correct. The highest estimates for more recent years, however, are the most credible and this is also confirmed by newly published budgeted figures. A state of war has existed in several provinces in Sri Lanka, and this will naturally be reflected in higher expenditure on military activities. However, this has not had a negative effect on the social indicators thus far. The country has the lowest infant mortality rate among all of Norway's main partner countries for development assistance, and the primary education rate is very high.

Central American partner countries

Access to data on military expenditure in *Guatemala* appears to be satisfactory. Most sources have relatively long time series, and there are no major divergences between the various sources. I have not succeeded in obtaining the national budget, entailing that it has not been possible to carry out a more detailed examination of the various subgroups. This is probably because the country is relatively new in terms of Norway's official development aid, and libraries have therefore not yet given priority to obtaining sufficiently detailed information about the country. Data from all the international sources show that Guatemala has low military expenditure in per cent of GDP and social expenditure. This is somewhat surprising in view of the pro-

Table 3. Military expenditure, social expenditure, infant mortality and primary education rate for Central American partner countries. All figures in per cent

	1989	1990	1991	1992	1993
Guatemala					
Military expenditure/GDP	1.4	1.2	1.1	1.0	0.9
Military expenditure/Social expenditure	45.0	59.6	60.4	56.7	51.3
Infant mortality	5.5	6.2	6.0	..	4.6
Primary education	79	..	79	..	..
Nicaragua					
Military expenditure/GDP	..	15.7	3.8	3.1	2.7
Military expenditure/Social expenditure	..	105.8	34.3	27	24.4
Infant mortality	..	5.5	5.6	..	5.1
Primary education	99	98	101	102	..

Source: SIPRI, ACDA, World Bank and my own calculations based on data from the IMF.

tracted civil war in the country. One explanation may be that official figures do not include expenditure on paramilitary forces. Social indicators have improved in recent years. Infant mortality was more than 6 per cent at the beginning of the 1990s, while the World Bank's latest figure shows that it fell to 4.4 per cent in 1994.

It is very difficult to find long, consistent time series for military expenditure in *Nicaragua*, although it is far easier to find data for the period after 1990. Several sources publish figures, and the sources are in greater accord even though there are still some divergences. There are many indications that the country is heading in the right direction with regard to access to data on military expenditure. Since the end of the war, the defence sector is laying claim to considerably fewer resources. The country has also recorded a positive trend in social indicators following the resumption of peace. Even though infant mortality is high, the figures are moving on a downward *trend*, and the primary education rate is on a par with that of OECD countries.

Conclusion

In recent years the size of a country's military expenditure has been the subject of increased attention on the aid policy agenda. The problem has particularly been linked to the debate on good governance where increased transparency is an important ingredient. However, if greater attention is to be devoted to military expenditure in the aid policy dialogue, we must first have credible information on how much resources the defence sector actually uses. In this article, I have evaluated problems that may arise in connection with the use of economic statistics in general and data on military expenditure in particular. Furthermore, in the light of these problems I have analyzed the most widely used international sources for military expenditure. Moreover, I have calculated the following indicators: military expenditure as a percentage of GDP (the military burden) and military expenditure in relation to total expenditure on health and education. Norwegian development aid is poverty oriented, and the last indicator was calculated based on the notion that a good public health and education programme will benefit the poorest segment of the population. In order to obtain some indication of the society's social standards I also included infant mortality and the primary education rate for the countries. The data situation for Norway's main partner countries for development assistance was reviewed with the following two aims:

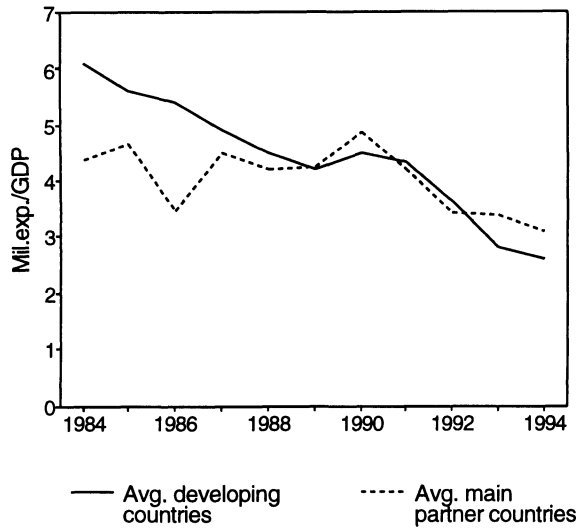
- Evaluate available statistics in order to identify data quality and the authorities' openness with regard to military expenditure
- Indicate the degree of militarization and priorities between various welfare purposes among our main partner countries

If the countries are to be judged on the basis of data availability, Zimbabwe is in a class by itself. It is relatively simple to obtain detailed information from the government budgets, the country is covered in most international sources, and there are few divergences between the various publications. India also appears to have a liberal attitude towards public inspection of military budgets, but there are greater divergences between the various sources, and it is thereby more difficult to judge the quality of the data. Traditionally, Namibia provided extensive data, but the country has not reported data on military expenditure to the IMF the last two years. The most gratifying change has taken place in Zambia. Previously, it was not possible to find satisfactory information about military resource use since the government refused to disclose military expenditure. This emerged clearly in that the military sector was not discussed in the readily available and detailed national budgets. In Zambia's national budget for 1995, however, the defence sector is included and broken down into current and capital expenditure as prescribed. Access to data from Norway's main partner countries which were in a state of war until recently has also improved during the last few years. Even though the situation has improved with regard to data availability, there is with few exceptions a constant need for a dialogue with our main partner countries concerning the publication of military expenditure. In some cases it may also be advantageous to provide assistance in the form of general training in data processing since the lack of statistical know-how is a problem which does not only apply to military expenditure.

Without making this a main element in Norway's development assistance programme, it would probably still be useful to discuss the routines for access to data on military expenditure in bilateral talks with our main partner countries. Moreover, this is a subject which is also on the agenda in multilateral talks. As early as 1981 the UN General Assembly adopted a resolution on the obligation of member states to report the size of military expenditure to the UN. As members of the UN, our main partner countries can also be urged to comply with UN resolutions. Several UN agencies are also interested in military resource use, and the UNDP has raised the issue of military expenditure with recipient countries in connection with talks on public sector reforms. Meetings in the consultative groups (C.G. meetings) for cooperation between developing countries and the IMF/World Bank also appear to be an appropriate forum for talks on good governance, including military expenditure.

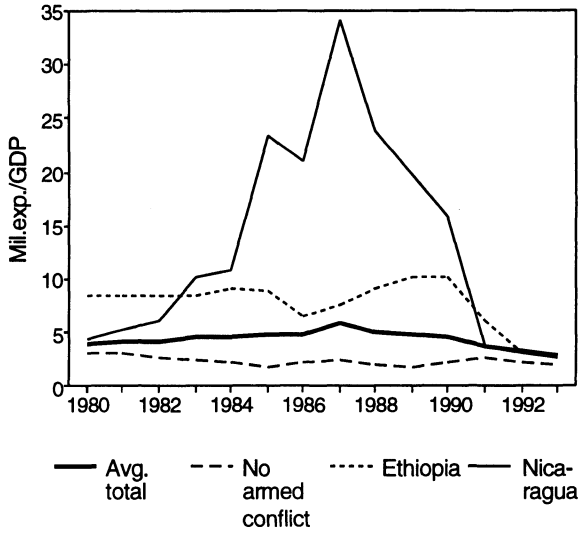
Both the IMF and World Bank are attempting to improve the data base and are analyzing the relationship between military expenditure and development. Through their "Public Expenditure Reviews" and Article IV consultations, they are also making efforts to ensure that maximum resources are used for development and minimum resources for defence. The IMF and World Bank, however, have thus far experienced difficulties in obtaining sufficiently detailed information in order to carry out sound analyses. Another problem is that the aim of the institutions is not to become involved in political decisions in the various countries, and the defence sector is an area in which countries do not want external interference. With a view to the

Figure 1. Average military expenditure in developing countries and Norway's main partner countries. Per cent of GDP



Source: ACDA (1995).

Figure 2. Military expenditure in Norway's main partner countries. Per cent of GDP



Source: SIPRI (1992, 1995 and 1996).

Table 4. Military expenditure in per cent of GDP for developing countries and Norway's main partner countries

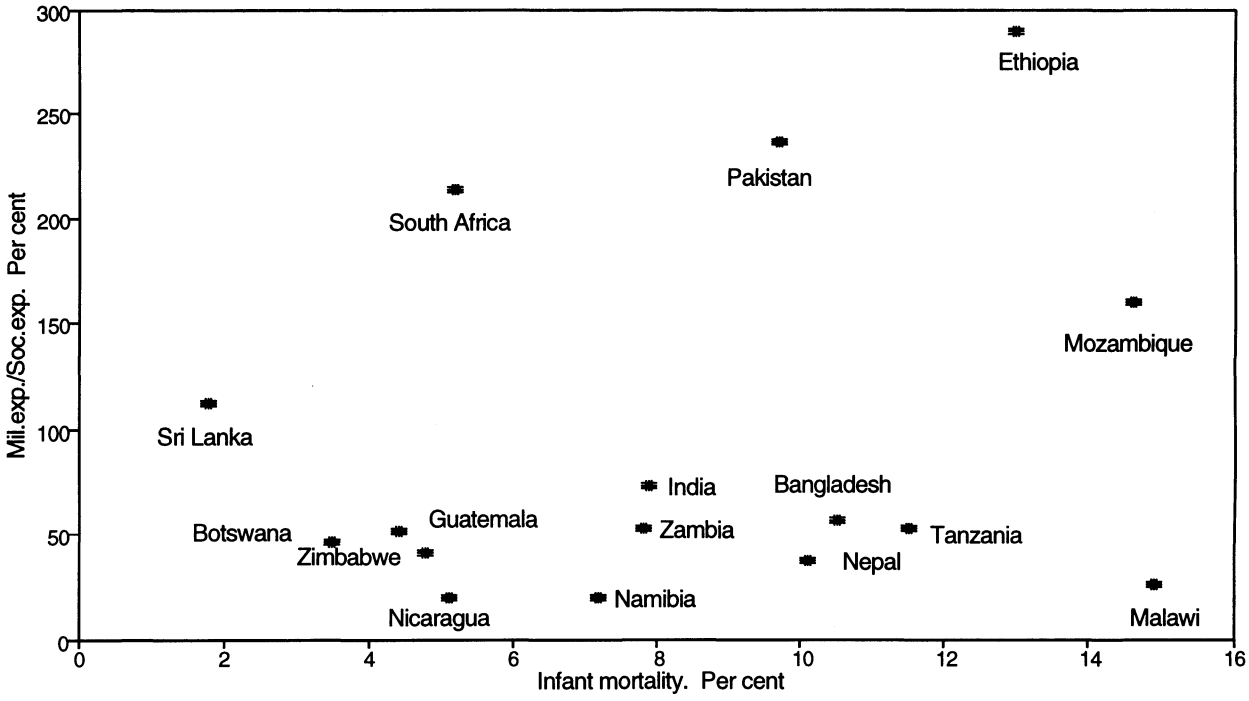
	1990	1991	1992	1993	1994
Developing countries	4.5	4.3	3.6	2.8	2.6
Average partner countries[1]	4.9	4.2	3.4	3.4	3.1
Africa					
Botswana	5.5	5.3	4.8	6.4	6.0
Eritrea	..	..	..	6.2	6.1
Ethiopia	11.1	9.0	..	2.9	2.6
Malawi	1.3	1.1	1.1	1.2	1.1
Mozambique	9.2	11.7	10.1	8.7	8.7
Namibia	1.9	2.7	2.4	2.2	1.9
South Africa	4.2	3.5	3.0	3.1	2.4
Tanzania	4.7	..	4.5	4.1	3.3
Uganda	2.4	3.2	2.4	1.7	1.5
Zambia	2.7	..	1.5	1.7	1.2
Zimbabwe	5.3	5.6	5.5	4.3	3.7
Asia					
Bangladesh	1.5	1.4	1.5	1.7	1.7
Nepal	1.0	0.9	0.9	1.1	1.1
India	2.9	2.7	2.5	2.8	2.9
Pakistan	6.9	6.1	6.2	6.5	6.0
Sri Lanka	4.8	4.8	3.8	4.9	4.5
Central America					
Guatemala	1.5	1.4	1.5	1.4	1.4
Nicaragua	15.7	3.8	3.1	2.7	2.6

[1] Excluding Eritrea
Source: ACDA (1995) and IISS (1996/97) for Eritrea.

data problems which continue to exist with regard to military expenditure, it would be an advantage for Norway to support the IMF and the World Bank in their efforts to improve data availability and openness in this area.

The SIPRI has estimated the average military burden (military expenditure/GDP) for developing countries at 3.8 per cent in 1991, down from about 5 per cent in 1985. By starting with the SIPRI rates for seventeen of Norway's main partner countries (Eritrea is excluded due to a lack of data), we find that seven countries were above the average in 1991 while ten countries were at or below the average. The calculations also show that military expenditure as a percentage of GDP *rose* from 1985 to 1991 in three coun-

Figure 3. Military expenditure in per cent of social expenditure and infant mortality in sixteen of Norway's main partner countries



Source: IMF and World Bank.

tries, notably Botswana, Zambia and Sri Lanka. This is a worrisome development and at variance with the trend in developing countries.

In its yearbook for 1995, the ACDA has calculated the military burden (military expenditure/GDP) for developing countries for the period 1984-1994, and thus has slightly more recent figures than the SIPRI. As shown in figure 1, the average (unweighted) for Norway's main partner countries was below the average for all developing countries up to 1987, but has since been higher than the average at some points especially during the latter period. The average figure for Norway's main partner countries conceals considerable variations. Details for the last five years are presented in table 4.

The table shows that whereas in 1990 eight countries were above the average for developing countries, this was the case for six of these countries in 1994, notably Botswana, Mozambique, Tanzania, Zimbabwe, Pakistan and Sri Lanka. The figures for Ethiopia and Nicaragua, which were very high in 1990, had been reduced to the average level five years later. Developments in the latter two countries are typical for countries that move from a state of war to peace. The pattern for differences between countries in a state of war and those that are spared emerges clearly in figure 2 where countries that have not been in a state of war throughout the period[5] are shown separately. Military expenditure in per cent of GDP for this group is stable and low, whereas the rate for the two countries that have experienced a protracted war has risen sharply. This applies in particular to Nicaragua which, according to the SIPRI Yearbook 1992, had a military burden of 34.2 per cent in 1987. Even though Ethiopia never used such a high percentage, the trend is the same, with a sharp rise prior to the decline in the wake of peace.

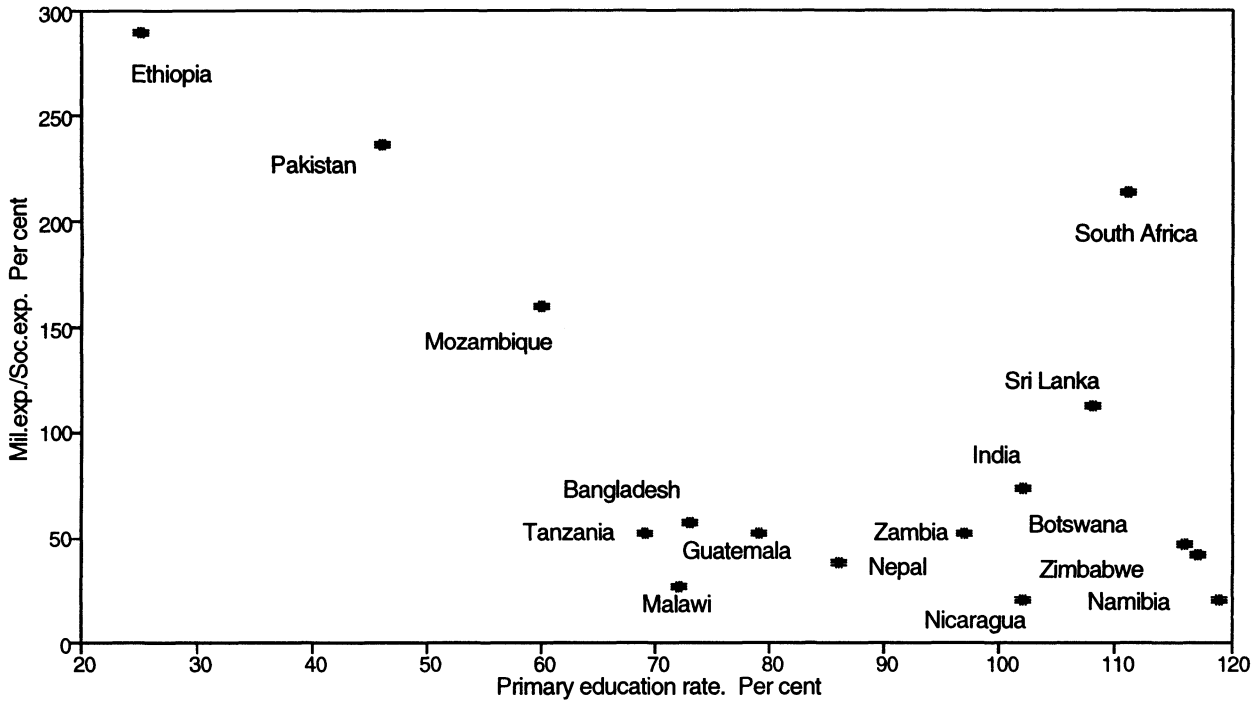
If we look at the trend in the five-year period, the figures indicate that Botswana continues to increase its military spending in relative terms. Bangladesh and Nepal have also recorded a slight rise in their military burden, but the starting level here was low. The other countries have either shown a substantial fall in military expenditure in per cent of GDP or had a virtually constant rate.

As will be seen in figures 3 and 4[6], there appears to be a certain pattern with regard to the size of military expenditure in relation to social expenditure and the social indicators. The countries with the highest military expenditure in relative terms also have high infant mortality. This particularly applies to three countries, Pakistan, Ethiopia and Mozambique, and the latter two have experienced a protracted

[5] Countries without war in the period are Botswana, Malawi, Tanzania, Zambia, Bangladesh and Nepal.

[6] The figures were obtained by using the information from the latest available year for all countries when this is possible. In other words, the figures have not been obtained for the same year for all countries. The figures cover 16 countries as it has not been possible to find information about expenditure on social sectors in Eritrea and Uganda in the sources I have evaluated.

Figure 4. Military expenditure in per cent of social expenditure and primary education rate in sixteen of Norway's main partner countries



Source: IMF and World Bank.

war. With regard to the relationship between the primary education rate and military expenditure in relation to social expenditure, it seems that countries with high relative military expenditure have a low primary education rate. However, this picture is again dominated by the same three countries as for infant mortality. One exception here is South Africa, which in spite of high relative military expenditure has a rather low infant mortality and very high primary education rate. This is probably ascribable to the country's very special recent history. In the wake of the demise of the apartheid system, the transitional government has made considerable efforts to educate the black members of the population, at the same time that too swift a reduction in defence might have a destabilizing effect. I would emphasize, however, that the figures are only meant to serve as an illustration. No statistical causal analysis has been carried out here, and the problems are so complex that a greater number of explanatory variables is required. The indicators are also rough, and they do not capture the possibility that high government health and education expenditure can be distributed within each sector in a manner which favours costly hospitals and universities and gives little priority to primary programmes. Nor has account been taken of private programmes, a factor which influences the situation particularly in South Africa, but also some of the other countries.

The conclusion of my study is that the data situation for military expenditure in Norway's main partner countries for development assistance has, with few exceptions, improved during the last few years. The figures indicate that for the majority of countries the defence sector is using an increasingly smaller share of resources.

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World Bank (1981 - 1996): *World Development Report, Washington D.C.*

Zambian Ministry of Finance (1984-89, 1995): Estimates of Revenue and Expenditure, Lusaka, Zambia: Government Printer.

Zimbabwean Ministry of Finance (1987-89, 1993): Estimates of Expenditure for the Financial Year ending June 30, Harare, Zimbabwe: Government Printer.

Research publications in English

New titles

Social and Economic Studies

Knut H. Alfsen, Torstein Bye and Erling Holmøy (eds.):
MSG-EE: An Applied General Equilibrium Model for Energy and Environmental Analyses
SES 96, 1996. pp.171. ISBN 82-537-4342-4

The economic research activity of Statistics Norway has been directed to a considerable extent towards the development of operational tools for policy analysis and planning. Given the importance of various environmental problems in the current policy debate, perhaps with the so called greenhouse effect as the "front runner", it is not surprising that the development of economic models encompassing energy and environmental issues has been a prime concern for Statistics Norway.

This book presents some results from work carried out in this direction. The first part (chapter 1 to 3) describes the background and structure of an integrated economy-energy-environment general equilibrium model for the Norwegian economy called MSG-EE (Multi-Sectoral Growth-Energy and Environment). The second part (chapter 4-7) illustrates the use of the model for various policy analysis (understanding economic growth, carbon taxes, electricity markets and transport). Chapter 8 summarizes and concludes.

Reports

Terje Skjerpen and Anders Rygh Swensen:
Forecasting Manufacturing Investment Using Survey Information
Reports 97/3, 1997. pp. 23. ISBN 82-537-4374-2

Forecasting of realized investments in the Norwegian manufacturing sector are conducted utilizing survey data. The first time realized investments for an arbitrary year is forecasted in the second quarter in the year preceding the investment year. One has then just obtained the first preliminary estimate from the survey. New preliminary estimates are obtained through the next six quarters and the forecasts for final investment are accordingly updated at these stages. Different forecasting methods/ models are compared with regard to the precision of forecasts using criteria which are relative versions of the wellknown RMSE and MAPE measures. It turns out that some of the simpler methods/models outperform the more complicated ones.

Discussion papers

Brita Bye:
Environmental Tax Reform and Producer Foresight: An Intertemporal Computable General Equilibrium Analysis
DP no. 185, 1996. pp. 36.

This paper analyses the non-evironmental welfare costs of an environmental tax reform using a numerical intertemporal general equilibrium model for the Norwegian economy. The tax reform is revenue neutral such that an increase in the carbon tax rate is accompanied by a reduction in the payroll tax. By exploiting existing tax wedges in the labour market and between consumption and saving, the total non-environmental welfare effect of the tax reform is positive. The paper also analyses how imperfect price expectations for the investors in real capital influence the total welfare costs of the tax reform. The welfare effect is the same due to exploitation of initial distortions, but the transitional dynamics are quite different in the two paths.

Sverre Grepperud:
Soil Depletion Choices under Production and Price Uncertainty
DP no. 186, 1997. pp. 35.

This paper studies soil depletion incentives in a dynamic economic model under two different sources of revenue uncertainty (production- and output price risk). The focus is on the long-term effects of risk averse preferences. The land manager is assumed to posses three classes of instruments to control natural topsoil fertility over time. Each instrument is also assumed to have implications for expected short-run production. The analysis shows that the forces at play are different across the three agricultural activities considered and varies for the two sources of risk analysed. In order to predict how risk aversion may influence soil conservation incentives detailed information is needed about input use and cultivation practices and the farmers' perception of their risk implications. If higher output is associated with higher levels of soil degredation, risk averse preferences will strenghten the incentives for soil conservation under output price uncertainty, and the same outcome is likely under production uncertainty. If higher levels of outputs is associated with lower levels of soil degradation, risk averse preferences will induce a farmer to conserve less soil under output price uncertainty, while the likely outcome of production uncertainty is the opposite.

Nils-Martin Stølen and Turid Åvitsland:
Has Growth in Supply of Educated Persons Been Important for the Composition of Employment?
DP no. 187, 1997. pp. 34.

In the Norwegian fabricated metal industry there has been a shift in demand from unskilled to skilled workers during the period 1972 to 1990, and relative demand for white collar employees has also increased. The paper analyses the factors behind the shift in the composition of these three kinds of labour. A translog cost function approach is applied, using an error-correction representation of the development in cost shares. The results indicate substitutability between unskilled and both skilled and white collar workers. Increased supplies of skilled workers and engineers seem to have been the most important factors for the change in the composition of employment, indicating lack of persons with these kinds of educations. In addition, unskilled workers have been rationalized away as a result of technical progress.

Tor Jakob Klette and Zvi Griliches:
Empirical Patterns of Firm Growth and R&D Investment: A Quality Ladder Model Interpretation
DP no. 188, 1997. pp. 29.

We present a model of endogenous firm growth with R&D investment and innovation as the engine of growth. The objective of our analysis is to present a framework that can be used for microeconometric analysis of firm performance in high-tech industries. The model for firm growth is partial equilibrium model drawing on the quality ladder models in the macro growth

literature, but also on the literature on patent races and the discrete choice models of product differentiation. We examine to what extent the assumptions and the empirical content of our model are consistent with the findings that have emerged from empirical studies of growth, productivity, R&D and patenting at the firm level. The analysis shows that the model fits well empirical patterns such as (i) a skewed size distribution of firms with persistent differences in firm sizes, (ii) firm growth (roughly) independent of firm size (the so-called Gibrat's law) and (iii) R&D investment proportional to sales, as well as a number of other empirical patterns.

Reprints

Snorre Kverndokk:
Global CO_2 Agreements: A Cost-Effective Approach
Reprints no. 90, 1996. pp. 22.

Reprint from The Energy Journal Vol. 14, No. 2.

Leo Andreas Grünfeld:
Monetary Aspects of Norwegian Business Cycles: An Exploratory Study Based on Historical Data
Reprints no. 94, 1997. pp. 23.

Reprint from Scandinavian Economic History Review Vol. 44, 1996.

Documents

Sverre Grepperud:
The impact of Policy on Farm Conservation Incentives in Developing Countries: What can be Learned from Theory?
Documents 97/2, 1997. pp. 24.

The consequences of agricultural pricing reforms for the resource management of cultivated land have attracted attention in the literature. This paper reviews some of the theoretical studies on the subject and focus in particular on soil conservation incentives. In addition some empirical literature on the causes to land degredation processes are also surveyed. On the basis of this evidence a classification scheme for agricultural investments depending on both soil fertility and agricultural output are suggested. The role of various agricultural activities and their effects on soil conservation incentives due to policy reforms are then discussed. It is shown that the effects on resource management incentives in theoretical models depend on technology and the options available to a household. The presence and knowledge of soil conservation measures and win-win technologies are necessary conditions for the success of agricultural policy reforms which increase farm profitability.

Previously issued

Reports

Einar Bowitz, Nils-Øyvind Mæhle, Virza S. Sasmitawidjaja and Sentot B. Widoyono:
MEMLI The Indonesian Model for Environmental Analysis. Technical Documentation. **Reports 96/1, 1996.**

Knut H. Alfsen, Pål Boug and Dag Kolsrud:
Energy demand, carbon emissions and acid rain. Consequences of a changing Western Europe. **Reports 96/12, 1996.**

Marie W. Arneberg:
Theory and Practice in the World Bank and IMF Economic Policy Models. Case study Mozambique. **Reports 96/13, 1996.**

Discussion Papers

Torbjørn Hægeland:
Monopolistic Competition, Resource Allocation and the Effects of Industrial Policy. **DP no. 161, 1996.**

Sverre Grepperud:
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John K. Dagsvik, Dag G. Wetterwald and Rolf Aaberge:
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Appendix

List of tables

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National accounts for Norway

NATIONAL ACCOUNTS FOR NORWAY

Table A2. Macroeconomic figures. At constant 1993-prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Final consumption exp. of households and NPIS	439 735	460 362	103 503	104 723	112 474	119 034	109 377	108 437	117 114	125 433
Goods	237 868	252 584	54 706	56 539	59 076	67 547	58 886	59 194	61 967	72 537
Services	199 269	204 300	49 337	47 704	52 080	50 148	50 672	48 814	53 546	51 267
Direct purchases abroad by resident househ.	17 298	18 447	2 676	3 827	6 880	3 915	2 908	3 974	7 255	4 310
- Direct purchases by non-residents	-14 700	-14 969	-3 215	-3 348	-5 562	-2 575	-3 090	-3 544	-5 654	-2 681
Final consumption exp. of general government	181 182	184 075	44 626	45 045	45 653	45 858	45 718	46 046	46 094	46 217
Final consumption exp. of central government.	72 744	74 012	18 061	18 131	18 283	18 268	18 462	18 584	18 445	18 522
Central government, defence	53 001	54 153	13 135	13 221	13 331	13 314	13 502	13 644	13 431	13 575
Central government, defence	19 743	19 858	4 926	4 910	4 952	4 954	4 960	4 939	5 013	4 946
Final consumption exp. of local government	108 438	110 064	26 565	26 914	27 369	27 590	27 256	27 463	27 650	27 695
Gross fixed capital formation	187 837	193 656	43 184	46 221	45 487	52 945	43 163	46 330	49 085	55 078
Crude petr., gas extr., transp. via pipelines	46 014	45 473	10 054	11 495	11 700	12 766	9 588	11 464	11 452	12 970
Ocean transport and oil drilling	3 373	3 665	1 681	1 595	-1 067	1 164	793	795	1 372	704
Mainland industries	138 449	144 518	31 449	33 131	34 854	39 015	32 782	34 071	36 261	41 404
Manufacturing and mining	15 158	16 519	2 758	3 700	4 067	4 633	3 252	3 900	4 139	5 228
Production of other goods	11 731	11 641	2 262	3 251	3 086	3 132	2 257	3 104	2 996	3 284
General government	27 562	28 920	5 873	5 991	6 970	8 729	6 216	6 300	7 249	9 154
Dwelling service	26 510	25 605	6 565	6 407	6 565	6 972	6 194	6 052	6 552	6 807
Other services	57 488	61 834	13 992	13 782	14 166	15 549	14 864	14 715	15 325	16 931
Changes in inventories	23 997	15 722	9 041	6 292	5 283	3 381	9 775	4 605	4 835	-3 492
Gross capital formation	211 834	209 378	52 225	52 513	50 770	56 326	52 938	50 935	53 920	51 585
Final domestic use of goods and services	832 751	853 815	200 355	202 281	208 897	221 218	208 033	205 419	217 128	223 236
Demand from Mainland-Norway	759 366	788 956	179 579	182 899	192 981	203 907	187 877	188 555	199 470	213 055
Exports	354 689	383 863	88 149	85 221	89 704	91 615	95 692	93 357	96 169	98 646
Traditional goods	132 372	144 872	34 644	31 328	32 057	34 343	37 829	34 952	34 864	37 228
Crude oil and natural gas	125 818	145 655	30 700	29 844	30 493	34 781	35 546	35 613	36 441	38 055
Ships and platforms	10 954	6 842	2 043	3 037	3 731	2 143	1 932	1 663	913	2 334
Services	85 544	86 495	20 762	21 011	23 422	20 348	20 386	21 129	23 951	21 030
Total use of goods and services	1 187 439	1 237 679	288 504	287 502	298 601	312 833	303 724	298 776	313 297	321 882
Imports	294 127	301 372	69 593	72 896	73 877	77 761	72 582	72 698	77 486	78 607
Traditional goods	200 845	213 922	48 661	49 561	49 049	53 574	52 253	51 981	52 223	57 465
Crude oil	1 244	1 124	349	382	328	185	214	219	226	465
Ships and platforms	13 250	9 600	3 198	2 566	2 425	5 061	3 083	2 112	2 792	1 614
Services	78 787	76 726	17 385	20 387	22 075	18 940	17 032	18 386	22 245	19 063
Gross domestic product	893 312	936 307	218 911	214 606	224 723	235 072	231 143	226 078	235 811	243 275
Mainland-Norway	745 023	768 900	182 728	179 215	188 319	194 760	190 093	185 127	193 673	200 007
Oil activities and ocean transport	148 290	167 406	36 183	35 391	36 404	40 312	41 050	40 951	42 138	43 268
Mainland industries	666 373	683 621	164 405	160 415	168 421	173 133	169 966	164 982	172 278	176 395
Manufacturing and mining	104 322	107 253	27 099	26 272	24 197	26 754	27 806	26 352	25 307	27 788
Production of other goods	75 588	73 022	18 759	15 047	20 906	20 876	19 546	14 506	19 842	19 127
General government	135 321	138 155	33 358	33 552	34 066	34 345	34 280	34 365	34 694	34 816
Private services	351 141	365 191	85 189	85 544	89 251	91 157	88 333	89 759	92 435	94 663
Correction items	78 649	85 280	18 323	18 801	19 899	21 627	20 127	20 145	21 395	23 612

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

NATIONAL ACCOUNTS FOR NORWAY

Table A3. Macroeconomic figures.
Percentage change in volume from preceding year

	1994	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Final consumption exp. of households and NPIS	4,1	2,6	4,7	1,1	2,9	3,8	2,6	5,7	3,5	4,1	5,4
Goods	5,1	3,0	6,2	1,7	4,0	4,1	2,4	7,6	4,7	4,9	7,4
Services	3,3	1,6	2,5	1,1	0,9	1,5	3,1	2,7	2,3	2,8	2,2
Direct purchases abroad by resident househ.	8,6	0,1	6,6	-8,3	-0,3	3,8	0,3	8,7	3,8	5,4	10,1
- Direct purchases by non-residents	13,5	-5,8	1,8	3,2	-10,2	-11,9	4,8	-3,9	5,9	1,6	4,1
Final consumption exp. of general government	0,7	0,2	1,6	-0,4	0,1	0,4	0,6	2,4	2,2	1,0	0,8
Final consumption exp. of central government.	-1,2	-0,7	1,7	-0,4	-0,6	-0,8	-0,9	2,2	2,5	0,9	1,4
Central government, defence	-0,1	0,3	2,2	0,5	0,3	0,2	0,1	2,8	3,2	0,8	2,0
Central government, defence	-3,9	-3,1	0,6	-2,8	-2,8	-3,5	-3,5	0,7	0,6	1,2	-0,2
Final consumption exp. of local government	2,0	0,7	1,5	-0,4	0,6	1,2	1,6	2,6	2,0	1,0	0,4
Gross fixed capital formation	6,9	4,5	3,1	7,1	0,3	-0,3	10,9	-0,0	0,2	7,9	4,0
Crude petr., gas extr., transp. via pipelines	-7,3	-13,1	-1,2	-17,7	-30,7	-9,7	14,0	-4,6	-0,3	-2,1	1,6
Ocean transport and oil drilling	-30,5	-30,1	8,6	-31,9	2,5	.	.	-52,8	-50,1	.	-39,6
Mainland industries	17,2	13,5	4,4	22,6	18,7	10,4	5,9	4,2	2,8	4,0	6,1
Manufacturing and mining	8,3	41,7	9,0	45,6	59,8	38,8	30,2	17,9	5,4	1,8	12,8
Production of other goods	2,5	4,3	-0,8	13,1	0,4	2,4	4,5	-0,2	-4,5	-2,9	4,8
General government	1,6	-0,5	4,9	3,1	3,0	5,0	-8,7	5,8	5,2	4,0	4,9
Dwelling service	34,9	12,7	-3,4	31,6	19,4	6,1	-0,1	-5,7	-5,5	-0,2	-2,4
Other services	26,6	17,8	7,6	26,3	23,3	10,8	13,2	6,2	6,8	8,2	8,9
Changes in inventories	40,2	77,7	-34,5	29,8	74,7	161,0	269,6	8,1	-26,8	-8,5	.
Gross capital formation	8,7	9,6	-1,2	10,4	5,7	6,6	15,8	1,4	-3,0	6,2	-8,4
Final domestic use of goods and services	4,4	3,7	2,5	3,0	3,0	3,7	5,2	3,8	1,6	3,9	0,9
Demand from Mainland-Norway	5,2	3,8	3,9	3,9	4,7	4,1	2,7	4,6	3,1	3,4	4,5
Exports	8,2	3,8	8,2	6,8	2,0	5,8	0,8	8,6	9,5	7,2	7,7
Traditional goods	13,1	4,1	9,4	15,1	1,1	2,1	-0,8	9,2	11,6	8,8	8,4
Crude oil and natural gas	11,6	8,4	15,8	4,6	4,4	14,8	10,0	15,8	19,3	19,5	9,4
Ships and platforms	-12,0	5,2	-37,5	0,4	68,2	55,6	-48,7	-5,5	-45,2	-75,5	8,9
Services	0,6	-3,0	1,1	-1,5	-5,3	-4,3	-0,6	-1,8	0,6	2,3	3,3
Total use of goods and services	5,5	3,7	4,2	4,1	2,7	4,3	3,9	5,3	3,9	4,9	2,9
Imports	6,9	5,1	2,5	4,9	3,6	4,1	7,8	4,3	-0,3	4,9	1,1
Traditional goods	15,3	9,1	6,5	12,4	9,5	7,0	7,8	7,4	4,9	6,5	7,3
Crude oil	-17,5	32,0	-9,7	48,5	66,9	30,8	-18,9	-38,7	-42,8	-31,1	151,5
Ships and platforms	-33,9	6,5	-27,5	-28,2	-31,5	28,0	115,3	-3,6	-17,7	15,1	-68,1
Services	0,4	-4,3	-2,6	-5,1	-3,5	-4,0	-4,6	-2,0	-9,8	0,8	0,6
Gross domestic product	5,0	3,3	4,8	3,9	2,4	4,3	2,6	5,6	5,3	4,9	3,5
Mainland-Norway	4,3	2,7	3,2	3,8	2,3	3,2	1,7	4,0	3,3	2,8	2,7
Oil activities and ocean transport	8,8	6,3	12,9	4,4	2,6	11,0	7,1	13,5	15,7	15,7	7,3
Mainland industries	4,0	2,4	2,6	3,4	1,8	2,7	1,5	3,4	2,8	2,3	1,9
Manufacturing and mining	5,4	2,9	2,8	9,3	1,2	1,3	-0,0	2,6	0,3	4,6	3,9
Production of other goods	0,8	8,8	-3,4	10,1	10,4	6,7	8,6	4,2	-3,6	-5,1	-8,4
General government	1,1	0,6	2,1	-0,5	0,4	0,9	1,3	2,8	2,4	1,8	1,4
Private services	5,4	1,6	4,0	1,8	1,1	2,9	0,6	3,7	4,9	3,6	3,8
Correction items	7,5	6,0	8,4	7,7	6,7	6,7	3,4	9,8	7,2	7,5	9,2

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A4. Macroeconomic figures.
Percentage change in prices from preceding year

	1994	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Final consumption exp. of households and NPIS	1,5	2,5	1,5	2,9	2,3	2,2	2,5	0,6	1,4	1,7	2,2
Goods	1,6	2,5	0,6	3,1	3,0	2,0	1,9	-0,3	-0,0	0,8	1,8
Services	1,1	2,6	2,4	2,6	1,8	2,4	3,4	1,5	2,8	2,4	2,9
Direct purchases abroad by resident househ.	2,5	0,9	3,4	-0,0	-0,9	1,4	2,6	3,9	5,4	3,9	0,4
- Direct purchases by non-residents	0,8	2,1	1,7	1,6	2,2	2,1	2,1	1,5	1,9	1,7	1,8
Final consumption exp. of general government	2,4	3,5	3,9	4,0	3,5	3,2	3,1	2,8	3,4	4,0	5,5
Final consumption exp. of central government.	2,3	3,3	3,4	3,0	3,1	3,4	3,7	2,7	3,3	3,4	4,1
Central government, defence	1,9	3,6	3,3	3,3	3,4	3,6	4,0	2,7	3,3	3,4	3,8
Central government, defence	3,3	2,6	3,6	2,3	2,2	2,9	3,0	2,7	3,3	3,3	4,9
Final consumption exp. of local government	2,5	3,6	4,3	4,7	3,8	3,1	2,8	2,9	3,4	4,5	6,5
Gross fixed capital formation	2,1	3,1	2,8	2,5	2,8	3,6	3,2	3,3	2,5	2,1	3,1
Crude petr., gas extr., transp. via pipelines	2,3	2,3	3,0	2,1	2,7	2,5	1,4	2,7	3,3	1,9	3,9
Ocean transport and oil drilling	-3,7	14,0	-1,3	3,9	-0,4	-24,2	-6,8	12,4	10,0	38,3	0,9
Mainland industries	2,3	3,0	2,8	2,4	2,8	3,1	3,5	3,1	1,9	3,2	2,9
Manufacturing and mining	0,7	2,4	2,1	0,4	2,1	3,0	3,3	3,5	0,8	2,1	2,2
Production of other goods	1,4	2,4	2,1	1,2	2,5	2,7	3,0	2,7	1,1	2,7	2,0
General government	2,1	3,7	3,6	3,1	3,4	4,2	4,0	3,5	2,7	4,2	3,9
Dwelling service	3,2	5,1	4,4	5,0	6,3	4,7	4,9	4,2	4,3	4,5	4,6
Other services	2,5	2,0	2,1	1,4	1,1	2,1	3,0	2,6	1,0	2,6	2,2
Changes in inventories	-0,5	-2,0	2,4	-2,9	-1,3	-7,5	32,9	5,1	11,8	-9,5	3,3
Gross capital formation	1,9	2,4	3,0	1,6	2,3	2,2	3,4	3,5	3,4	1,5	3,9
Final domestic use of goods and services	1,8	2,7	2,4	2,8	2,6	2,4	2,9	1,8	2,3	2,1	3,2
Demand from Mainland-Norway	1,8	2,8	2,3	3,1	2,7	2,6	2,9	1,6	2,0	2,5	3,0
Exports	-2,0	2,2	6,1	6,0	3,2	-0,4	0,4	1,4	3,8	7,1	11,8
Traditional goods	1,1	7,1	-1,3	11,0	8,2	6,0	3,8	-3,0	-1,0	-2,6	1,2
Crude oil and natural gas	-8,3	-1,8	18,4	4,4	-1,1	-7,3	-3,0	6,7	9,9	23,5	33,1
Ships and platforms	1,7	-5,1	6,6	-4,4	-0,6	-6,8	-6,5	2,2	4,1	10,8	9,5
Services	1,2	1,4	1,8	0,5	2,0	1,0	2,1	3,0	3,5	2,0	-1,0
Total use of goods and services	0,6	2,5	3,4	3,7	2,8	1,6	2,2	1,7	2,7	3,5	5,7
Imports	0,8	0,9	1,2	1,0	0,9	0,9	0,8	0,3	1,3	0,9	2,2
Traditional goods	0,3	0,7	0,4	0,7	1,2	0,4	0,4	0,4	-0,1	0,2	0,9
Crude oil	-8,1	-2,0	38,0	-0,7	3,0	-11,0	0,7	9,2	25,3	40,2	56,0
Ships and platforms	-0,7	-2,2	5,6	-2,5	-5,1	-0,7	-2,6	6,1	9,8	1,7	7,3
Services	2,3	2,4	2,4	2,7	1,0	2,7	3,1	-0,9	3,9	2,1	3,9
Gross domestic product	0,6	3,1	4,2	4,5	3,4	1,8	2,6	2,1	3,1	4,4	6,8
Mainland-Norway	2,2	4,2	1,9	4,9	4,2	3,6	3,9	1,1	2,0	1,6	3,0
Oil activities and ocean transport	-8,0	-2,8	17,7	2,5	-1,2	-8,2	-3,9	9,1	10,0	22,5	29,1
Mainland industries	0,8	3,7	2,0	4,7	3,2	3,3	3,6	0,7	2,6	1,7	3,1
Manufacturing and mining	2,6	10,3	0,4	9,0	10,1	12,2	10,4	1,3	3,2	-2,0	-1,1
Production of other goods	2,5	3,0	5,2	7,9	5,8	-0,1	-0,0	1,9	2,9	3,9	11,4
General government	2,9	3,7	4,4	4,8	3,8	3,4	3,1	3,2	3,7	4,6	6,2
Private services	-0,9	1,8	1,0	2,6	0,3	1,6	2,6	-0,8	2,1	1,1	1,5
Correction items	14,8	7,1	0,6	5,8	11,6	5,4	6,1	3,4	-2,8	0,5	1,3

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

NATIONAL ACCOUNTS FOR NORWAY

Table A5. Gross domestic product by kind of activity. At current prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Gross domestic product	925 866	1 010 738	226 657	223 585	231 225	244 398	244 410	242 923	253 325	270 080
Agriculture	12 077	12 251	2 567	182	6 114	3 214	2 515	111	6 108	3 518
Forestry and logging	3 507	3 363	1 432	953	290	832	1 309	861	333	860
Fishing and fish farms	6 445	5 920	1 978	1 602	1 574	1 290	1 916	1 273	1 262	1 469
Oil activities	102 660	144 619	25 059	25 817	23 938	27 846	31 685	34 021	36 491	42 422
Crude petroleum and natural gas extraction	100 494	141 754	24 484	25 400	23 438	27 172	31 133	33 389	35 708	41 524
Service activities incidental to oil and gas	2 167	2 866	575	417	500	674	552	632	783	898
Mining and quarrying	1 532	1 495	374	407	374	377	388	405	344	357
Manufacturing	116 608	120 425	29 686	29 239	27 763	29 921	30 863	30 296	28 498	30 767
Food products, beverages and tobacco	17 374	18 349	4 078	4 471	4 250	4 576	4 403	4 905	4 535	4 507
Textiles,wearing apparel and leather products	2 379	2 405	691	618	493	576	616	592	561	636
Paper and paper products	7 744	5 557	1 671	1 800	2 074	2 200	1 699	1 317	1 231	1 310
Printing and publishing	12 004	13 651	3 081	2 943	2 817	3 163	3 488	3 376	3 256	3 531
Petroleum refining	2 054	2 119	364	415	612	663	456	677	447	539
Basic chemicals	6 851	6 674	1 838	1 820	1 748	1 445	1 706	1 637	1 539	1 791
Chemical and mineral products	10 383	11 063	2 663	2 583	2 372	2 765	2 872	2 814	2 495	2 881
Metal products	12 492	11 305	3 303	3 133	3 068	2 988	3 188	3 129	2 535	2 454
Machinery, ships and other transport equipm.	37 194	41 362	9 792	9 469	8 567	9 366	10 419	9 964	10 059	10 921
Wood products, furniture and other manuf.	8 133	7 939	2 203	1 987	1 763	2 180	2 016	1 887	1 840	2 196
Electricity, gas and water supply	23 938	21 342	6 806	5 233	4 905	6 995	7 302	4 580	3 705	5 754
Construction	33 897	38 269	7 430	8 428	8 594	9 445	8 421	9 452	9 776	10 620
Wholesale and retail trade	88 735	92 373	20 914	21 473	21 957	24 391	21 535	22 630	22 568	25 640
Hotels and restaurants	11 684	12 205	2 484	2 746	3 074	3 379	2 614	2 949	3 191	3 450
Transport via pipelines	13 463	15 424	3 253	3 190	3 231	3 789	3 859	3 805	3 854	3 906
Other transport and communication	58 266	62 355	13 287	14 521	15 348	15 110	14 272	15 782	16 376	15 925
Inland water and coastal transport	18 528	18 132	4 500	4 802	4 822	4 404	4 957	5 088	4 742	3 346
Ocean transport	16 523	16 253	4 060	4 288	4 270	3 906	4 527	4 561	4 229	2 935
Inland water and costal transport	2 005	1 880	440	514	552	498	430	527	512	411
Financial intermediation and insurance	36 718	36 811	10 858	7 366	7 972	10 521	9 382	8 479	7 996	10 953
Dwelling service	63 398	65 262	15 672	15 782	15 908	16 037	16 136	16 293	16 361	16 472
Business activities	47 867	52 952	11 533	11 786	12 216	12 331	12 631	13 071	13 564	13 687
Private services	45 442	48 153	11 626	10 799	12 054	10 963	12 335	11 360	12 720	11 737
General government	144 418	153 968	35 358	35 771	36 467	36 822	37 490	37 998	38 838	39 642
Central government	42 184	44 845	10 337	10 442	10 653	10 752	10 879	11 060	11 384	11 522
Civilian	31 441	33 919	7 705	7 783	7 940	8 013	8 202	8 356	8 625	8 736
Defence	10 743	10 926	2 632	2 659	2 713	2 739	2 677	2 704	2 759	2 786
Local government	102 234	109 123	25 021	25 329	25 814	26 070	26 611	26 938	27 454	28 120
FISIM 1)	-29 590	-29 963	-7 543	-7 397	-7 088	-7 561	-7 191	-7 389	-7 301	-8 082
Value added tax and investment levy	89 080	95 570	20 759	21 478	22 291	24 552	22 368	22 425	23 836	26 941
Other taxes on products, net	36 010	39 546	8 333	9 284	8 886	9 507	9 370	9 311	9 875	10 991
Statistical discrepancy	1 182	267	293	122	533	234	255	120	188	-296
Mainland industries	696 538	729 022	172 444	166 804	175 164	182 126	179 538	176 068	182 153	191 263
Market producers	607 551	671 229	150 463	145 195	150 558	161 335	162 465	160 612	167 586	180 566
Non-market producers	221 633	234 089	54 353	54 904	56 044	56 332	57 143	57 843	59 142	59 961

Financial intermediation services indirectly measured

Table A6. Gross domestic product by kind of activity.
Percentage change in volume from preceding year

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Gross domestic product	3,3	4,8	3,9	2,4	4,3	2,6	5,6	5,3	4,9	3,5
Agriculture	7,9	3,6	2,5	-8,5	12,3	6,9	4,9	20,0	1,4	4,6
Forestry and logging	6,1	-17,2	30,8	-5,8	-6,8	-5,5	-22,0	-21,9	0,2	-10,4
Fishing and fish farms	7,7	2,5	4,9	11,6	4,9	9,8	14,1	4,6	0,7	-8,3
Oil activities	6,9	14,3	4,1	2,4	13,7	7,6	16,4	17,2	17,8	7,0
Crude petroleum and natural gas extraction	7,2	14,3	4,8	3,0	14,1	7,3	17,0	17,0	17,4	6,7
Service activities incidental to oil and gas	-6,3	17,2	-19,5	-23,5	-1,6	22,0	-9,0	25,8	38,6	17,5
Mining and quarrying	2,6	0,9	11,2	4,1	-2,4	-0,8	6,3	-0,9	-2,6	1,1
Manufacturing	2,9	2,8	9,3	1,2	1,4	0,0	2,6	0,3	4,7	3,9
Food products, beverages and tobacco	1,7	1,6	5,6	1,2	-0,6	0,9	4,7	0,7	1,3	0,1
Textiles,wearing apparel and leather products	-3,7	0,4	13,6	-3,4	-6,6	-16,8	-10,9	-4,3	9,9	10,5
Paper and paper products	4,6	-7,0	9,5	7,1	3,8	-1,7	-5,1	-10,4	-6,7	-6,1
Printing and publishing	3,4	3,3	4,4	1,5	3,1	4,4	4,1	4,8	3,9	0,5
Petroleum refining	-9,4	13,6	-3,6	-8,1	-7,6	-17,9	0,4	1,8	17,7	36,8
Basic chemicals	0,0	0,4	5,9	0,8	-3,0	-3,8	-1,6	-9,5	5,4	7,9
Chemical and mineral products	6,7	3,4	15,6	1,5	6,2	4,2	3,3	3,6	3,2	3,5
Metal products	-2,3	3,0	5,2	-4,4	-5,0	-4,8	1,6	3,7	3,3	3,4
Machinery, ships and other transport equipm.	5,1	4,3	12,0	2,8	4,5	1,5	4,0	-0,4	7,9	6,1
Wood products, furniture and other manuf.	1,6	3,1	12,5	-0,6	-2,4	-2,5	0,7	2,9	5,2	3,9
Electricity, gas and water supply	8,7	-15,3	1,9	8,3	8,4	16,6	7,9	-14,0	-29,8	-28,2
Construction	9,8	2,2	20,7	15,5	2,0	4,6	2,4	1,8	2,5	2,1
Wholesale and retail trade	4,0	6,4	7,5	3,5	4,2	1,2	6,8	6,1	5,1	7,5
Hotels and restaurants	-0,5	2,9	-4,4	-1,3	1,2	1,8	2,6	2,6	2,9	3,5
Transport via pipelines	8,6	14,7	6,8	3,5	15,7	8,8	16,8	17,7	16,7	8,3
Other transport and communication	7,1	5,7	9,0	6,8	5,7	7,1	5,3	7,1	6,3	4,1
Inland water and coastal transport	0,4	1,8	3,9	2,7	-5,7	1,2	-6,5	4,7	1,8	7,9
Ocean transport	0,8	2,0	4,8	3,6	-6,3	1,7	-6,9	4,6	2,0	9,5
Inland water and costal transport	-3,1	0,0	-4,4	-4,4	-1,3	-2,6	-2,6	5,5	1,0	-3,9
Financial intermediation and insurance	-5,8	0,4	-4,9	-6,6	-7,6	-4,1	-1,2	7,0	-2,0	-1,9
Dwelling service	1,0	1,3	0,9	1,0	1,1	1,1	1,2	1,3	1,2	1,4
Business activities	0,2	6,7	-5,1	-0,9	14,3	-5,4	5,6	6,8	7,5	7,0
Private services	-0,1	1,5	-0,2	-0,6	0,1	0,2	2,2	1,4	1,3	1,0
General government	0,6	2,1	-0,5	0,4	0,9	1,3	2,8	2,4	1,8	1,4
Central government	-0,8	2,5	-0,8	-0,6	-0,9	-0,8	2,2	2,2	2,9	2,5
Civilian	-0,1	4,0	-0,0	-0,1	-0,1	-0,0	3,3	3,8	4,4	4,3
Defence	-2,9	-2,0	-3,1	-2,1	-3,3	-3,0	-1,0	-2,3	-1,6	-3,0
Local government	1,1	1,9	-0,3	0,9	1,7	2,2	3,0	2,5	1,4	0,9
FISIM 1)	1,0	-0,4	0,7	-0,0	1,4	2,1	-0,5	-0,4	-0,4	-0,4
Value added tax and investment levy	4,5	4,5	5,2	5,2	4,7	3,1	5,4	3,5	3,8	5,4
Other taxes on products, net	4,1	8,9	5,8	2,7	5,8	2,4	9,6	8,4	8,4	9,1
Statistical discrepancy		66,9	208,4	231,2			36,5	15,5	27,9	160,3
Mainland industries	2,4	2,6	3,4	1,8	2,7	1,5	3,4	2,8	2,3	1,9
Market producers	3,9	5,4	4,9	2,5	5,3	3,0	6,2	6,3	5,7	3,4
Non-market producers	0,7	1,9	0,0	0,6	0,9	1,1	2,4	2,1	1,7	1,4

Financial intermediation services indirectly measured

NATIONAL ACCOUNTS FOR NORWAY

Table A7. Final consumption expenditure of housholds. At current prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Final consumption expenditure of households	434 687	461 692	102 119	102 621	110 961	118 987	108 593	107 626	117 421	128 052
Food, beverages and tobacco	93 728	97 122	20 862	23 556	24 303	25 007	21 748	23 959	25 059	26 356
Clothing and footwear	25 969	26 878	5 474	6 243	6 136	8 116	5 550	6 309	6 352	8 666
Housing, water, electr., gas and other fuels	101 326	105 886	26 360	24 238	23 695	27 033	27 576	25 082	24 663	28 565
Furnishings, household equipment etc.	28 113	29 135	6 157	5 978	6 987	8 991	6 566	6 031	7 105	9 432
Health	10 736	11 484	2 555	2 659	2 684	2 837	2 759	2 833	2 870	3 023
Transport	68 910	78 464	15 846	17 504	18 735	16 825	18 070	19 697	21 175	19 521
Leisure, entertainment and culture	40 802	43 026	10 007	8 377	11 353	11 065	10 648	8 800	11 721	11 857
Education	2 061	2 127	488	432	560	580	503	452	570	602
Hotels, cafes and restaurants	23 325	24 434	4 854	5 376	6 739	6 357	5 072	5 623	7 068	6 672
Miscellaneous goods and services	36 952	39 083	10 072	7 862	8 297	10 721	10 223	8 355	8 877	11 628
Direct purchases abroad by resident househ.	17 890	19 725	2 742	3 864	7 136	4 149	3 097	4 227	7 815	4 585
- Direct purchases by non-residents	-15 127	-15 672	-3 300	-3 469	-5 664	-2 694	-3 220	-3 743	-5 855	-2 854
Goods	247 613	264 598	56 742	59 036	61 574	70 260	60 909	61 804	65 113	76 772
Services	184 311	193 041	45 935	43 190	47 915	47 272	47 807	45 338	50 348	49 549
Services, dwellings	81 892	84 574	20 240	20 256	20 497	20 898	20 857	20 985	21 158	21 575
Other services	102 420	108 467	25 695	22 934	27 417	26 374	26 950	24 353	29 190	27 974

Table A8. Final consumption expenditure of housholds.
Percentage change in volume from preceding year

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Final consumption expenditure of households	2,8	4,8	1,2	3,1	4,0	2,8	5,8	3,6	4,2	5,5
Food, beverages and tobacco	3,8	1,7	0,8	5,2	5,6	3,4	3,4	0,5	0,4	2,6
Clothing and footwear	-3,8	7,0	-1,0	-2,9	-3,9	-6,1	5,5	5,2	7,1	9,3
Housing, water, electr., gas and other fuels	1,8	1,8	-0,5	1,9	1,6	4,2	3,6	1,3	1,3	1,0
Furnishings, household equipment etc.	5,1	2,5	4,5	5,5	6,7	4,0	5,5	-0,1	0,7	3,5
Health	-0,6	3,0	0,5	-1,2	-1,6	-0,1	1,8	2,4	3,6	4,1
Transport	3,7	13,7	7,2	2,4	3,0	2,5	13,4	11,9	13,4	16,1
Leisure, entertainment and culture	5,5	5,1	5,7	5,7	5,2	5,4	6,1	5,4	2,6	6,6
Education	0,4	-1,3	3,3	0,5	-1,2	-0,5	-1,8	-0,4	-2,5	-0,5
Hotels, cafes and restaurants	-0,7	2,5	-5,9	-1,5	1,3	2,1	2,6	2,2	2,7	2,6
Miscellaneous goods and services	2,8	4,6	0,4	3,1	3,2	4,5	4,0	3,5	5,2	5,5
Direct purchases abroad by resident househ.	0,1	6,6	-8,3	-0,3	3,8	0,3	8,7	3,8	5,4	10,1
- Direct purchases by non-residents	-5,8	1,8	3,2	-10,2	-11,9	4,8	-3,9	5,9	1,6	4,1
Goods	3,0	6,2	1,7	4,0	4,1	2,4	7,6	4,7	4,9	7,4
Services	2,0	2,5	1,4	1,1	1,8	3,7	2,7	2,3	2,8	2,3
Services, dwellings	1,4	1,2	1,7	0,9	1,0	2,0	1,2	1,2	1,1	1,2
Other services	2,5	3,6	1,2	1,3	2,4	5,1	3,9	3,1	4,1	3,1

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

NATIONAL ACCOUNTS FOR NORWAY

Table A9. Gross fixed capital formation by type of capital goods and economic activity.
At current prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Gross fixed capital formation	197 664	209 401	44 848	48 579	48 061	56 176	46 285	49 907	52 969	60 240
Buildings and structures	83 391	84 970	18 618	20 179	20 944	23 649	19 272	19 794	21 464	24 441
Oil exploration, drilling, pipelines for oil	17 938	21 374	3 553	4 473	5 346	4 565	4 119	4 921	5 853	6 482
Oil platforms etc.	25 911	25 000	5 811	6 500	5 894	7 707	5 291	6 446	6 269	6 994
Ships end boats	4 929	5 098	1 982	1 784	-453	1 616	1 211	1 129	1 594	1 164
Other transport equipment	17 432	21 839	4 511	4 321	4 139	4 461	5 367	5 648	5 113	5 710
Machinery and equipment	48 063	51 120	10 373	11 322	12 191	14 178	11 025	11 970	12 676	15 450
Agriculture	5 315	5 577	921	1 599	1 493	1 302	962	1 686	1 574	1 354
Forestry and logging	531	548	132	133	131	134	136	137	137	139
Fishing and fish farms	671	510	217	183	118	154	254	102	130	25
Oil activities	41 719	42 211	9 646	10 458	9 808	11 807	8 968	10 624	10 410	12 210
Crude petroleum and natural gas extraction	42 059	42 717	9 641	10 453	10 022	11 942	8 966	10 775	10 410	12 567
Service activities incidental to oil and gas	-340	-506	4	5	-215	-135	2	-151	-	-357
Mining and quarrying	442	321	100	102	101	138	72	54	108	86
Manufacturing	15 190	17 070	2 691	3 711	4 084	4 703	3 335	3 998	4 240	5 497
Food products, beverages and tobacco	3 008	3 040	552	821	728	906	574	673	664	1 129
Textiles, wearing apparel and leather product.	176	192	53	44	33	47	39	40	55	59
Paper and paper products	1 616	1 439	206	400	583	427	382	312	238	507
Printing and publishing	817	944	182	151	157	326	201	223	218	302
Petroleum refining	300	174	73	102	46	78	57	16	35	66
Basic chemicals	3 073	2 323	439	869	913	852	594	556	600	573
Chemical and mineral products	1 159	1 457	229	266	325	338	286	332	374	465
Metal products	1 478	3 092	297	283	355	544	422	770	835	1 064
Machinery, ships and other transport equipm.	2 361	2 644	463	499	644	756	517	649	614	864
Wood products, furniture and other manuf.	1 201	1 763	197	277	299	428	263	426	606	468
Electricity, gas and water supply	4 527	4 498	776	1 174	1 195	1 382	742	1 020	1 066	1 671
Construction	1 136	1 200	273	290	266	306	283	316	287	315
Wholesale and retail trade	19 472	21 191	4 647	4 739	4 654	5 433	5 137	5 000	5 137	5 917
Hotels and restaurants	1 902	2 126	467	501	474	460	561	525	531	509
Transport via pipelines	6 086	6 287	766	1 549	2 299	1 472	1 224	1 586	1 878	1 599
Other transport and comunications	19 831	22 442	4 667	4 530	4 930	5 705	5 040	5 288	5 474	6 639
Water transtort	4 608	4 891	1 852	1 676	-502	1 582	1 027	1 094	1 552	1 218
Ocean transport	4 043	4 477	1 676	1 546	-598	1 419	890	1 001	1 446	1 140
Inland water and costal transport	565	414	176	130	96	163	137	93	106	78
Financial intermediation and insurance	3 870	3 947	937	974	946	1 013	963	939	996	1 049
Dwelling service	28 735	28 985	6 993	6 966	7 140	7 635	6 875	6 866	7 447	7 798
Business activities	7 914	8 801	1 922	2 032	1 935	2 024	2 134	2 144	2 219	2 304
Other private service activities	6 552	7 092	1 712	1 619	1 605	1 617	1 860	1 678	1 782	1 772
General government	29 164	31 703	6 129	6 342	7 384	9 309	6 713	6 850	8 001	10 139
Central government	13 488	14 359	2 947	2 905	3 332	4 304	3 192	3 047	3 521	4 599
Lokal government	15 676	17 344	3 182	3 437	4 052	5 005	3 521	3 803	4 480	5 540
Mainland industries	145 816	156 426	32 759	35 026	36 552	41 478	35 204	36 696	39 235	45 291

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A10. Gross fixed capital formation by type of capital goods and economic activity. Percentage change in volume from preceding year

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Gross fixed capital formation	4,5	3,1	7,1	0,3	-0,3	10,9	-0,0	0,2	7,9	4,0
Buildings and structures	14,2	-2,5	31,8	24.4	3,3	5,4	-0,7	-6,1	-2,1	-1,3
Oil exploration, drilling, pipelines for oil	-17,5	15,2	-29,9	-36,8	2,5	4,9	13,2	5,8	7,0	35,7
Oil platforms etc.	-3,9	-6,3	-1,0	-23,3	-8,9	25,7	-11,4	-3,8	4,8	-13,0
Ships end boats	-33,9	3,6	-43,8	-11,7	.	.	-44,6	-42,0	.	-27,4
Other transport equipment	0,1	23,8	2,8	1,7	2,7	-6,4	17,0	30,5	19,9	28,2
Machinery and equipment	12,7	5,7	17,8	10,6	14,7	9,3	4,5	7,2	2,9	7,7
Agriculture	9,0	2,9	11,6	7,7	6,9	11,4	2,0	4,5	2,5	2,2
Forestry and logging	0,1	-0,3	0,6	-0,1	-0,0	-0,1	-0,6	-0,4	0,0	-0,2
Fishing and fish farms	-22,8	-26,9	-16,8	-20,7	-27,5	-30,2	11,8	-48,6	11,5	-91,1
Oil activities	-8,9	-2,2	-6,7	-23,2	-13,3	12,4	-9,6	-2,0	4,1	-1,3
Crude petroleum and natural gas extraction	-9,6	-1,8	-12,2	-24,1	-10,9	13,8	-9,6	-0,4	1,7	0,6
Service activities incidental to oil and gas	-52,4	48,2	.	.	.	.	-49,1	.	.	164,2
Mining and quarrying	79,0	-29,6	202,9	107,2	47,3	43,6	-30,5	-47,4	3,7	-40,4
Manufacturing	40,8	10,1	42,8	58,8	38,6	29,8	19,7	6,9	1,7	14,5
Food products, beverages and tobacco	13,5	-2,1	3,5	40,8	0,6	12,0	1,5	-20,0	-12,7	20,9
Textiles, wearing apparel and leather product.	-5,4	7,5	49,3	-14,7	-14,5	-23,7	-28,8	-10,1	65,8	24,0
Paper and paper products	186,6	-14,5	273,9	315,4	282,5	63,0	77,9	-24,8	-60,6	14,1
Printing and publishing	-15,3	14,5	-0,4	-20,3	-39,0	-1,9	7,8	47,8	36,0	-8,1
Petroleum refining	51,0	-44,0	178,5	158,0	12,2	-15,2	-24,8	-84,8	-29,8	-16,7
Basic chemicals	166,6	-25,1	165,9	256,2	224,1	84,0	28,5	-35,5	-34,7	-33,1
Chemical and mineral products	24,1	23,0	26,5	14,4	61,5	6,0	21,7	24,0	12,5	33,4
Metal products	46,7	100,8	93,5	49,6	20,6	46,2	35,6	162,9	123,8	89,1
Machinery, ships and other transport equipm.	12,3	11,2	14,4	2,2	5,6	26,0	9,9	31,1	-6,0	13,6
Wood products, furniture and other manuf.	23,6	45,9	35,7	34,5	-6,3	42,6	30,1	53,8	101,2	8,6
Electricity, gas and water supply	1,5	-2,7	27,4	-7,7	-2,2	1,6	-6,6	-13,6	-12,9	17,8
Construction	20,1	4,4	21,9	20,2	21,1	17,4	1,2	9,4	4,3	2,6
Wholesale and retail trade	14,8	7,0	27,4	18,9	7,6	8,6	7,7	5,4	7,0	7,6
Hotels and restaurants	9,8	8,7	16,1	22,3	0,7	2,5	15,8	3,0	8,3	8,0
Transport via pipelines	-32,0	2,9	-54,3	-56,7	-4,3	15,4	59,2	1,0	-18,9	9,5
Other transport and comunications	33,1	10,8	30,0	35,2	31,6	35,5	5,9	14,8	9,3	13,1
Water transtort	-30,6	6,5	-44,0	-8,4	.	.	-50,2	-40,1	.	-22,4
Ocean transport	-33,0	12,3	-45,8	-6,7	.	.	-52,8	-40,5	.	-18,4
Inland water and costal transport	-10,1	-30,7	-17,7	-24,2	-12,9	25,3	-25,8	-35,3	7,7	-54,9
Financial intermediation and insurance	13,3	-0,3	29,3	25,2	0,1	4,5	-0,1	-4,2	2,4	0,9
Dwelling service	12,7	-3,4	31,6	19,4	6,1	-0,1	-5,7	-5,5	-0,2	-2,4
Business activities	16,1	8,5	34,7	29,2	5,8	1,8	7,7	4,4	10,9	11,1
Other private service activities	0,0	6,1	15,0	7,7	-10,5	-8,6	5,9	2,9	8,3	7,2
General government	-0,5	4,9	3,1	3,0	5,0	-8,7	5,8	5,2	4,0	4,9
Central government	-6,1	2,7	0,7	1,6	5,1	-20,4	4,8	2,4	0,9	2,8
Lokal government	4,9	6,9	5,6	4,2	5,0	4,7	6,8	7,5	6,6	6,7
Mainland industries	13,5	4,4	22,6	18,7	10,4	5,9	4,2	2,8	4,0	6,1

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A11. Exports of goods and services. At current prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Exports	355 041	407 526	89 294	86 302	88 500	90 945	98 330	98 130	101 572	109 494
Goods	267 225	317 093	68 084	64 865	64 608	69 668	76 879	75 817	76 664	87 733
Crude oil and natural gas	113 231	155 188	28 000	28 003	26 353	30 875	34 593	36 717	38 903	44 975
Ships, new	4 138	3 403	546	2 277	949	366	324	918	492	1 669
Ships, second-hand	5 791	2 834	1 358	685	2 251	1 497	1 504	598	389	343
Oil platforms and modules, new	63	59	12	1	46	4	11	12	25	11
Oil platforms, second-hand	492	619	27	37	254	174	36	172	18	393
Direct exports in relation to oil activities	97	128	23	24	25	25	24	24	32	48
Other goods	143 413	154 862	38 118	33 838	34 730	36 727	40 387	37 376	36 805	40 294
Agriculture, forestry and fishing	6 767	7 069	1 694	1 658	1 584	1 831	1 683	1 798	1 655	1 932
Mining and quarrying	2 271	2 356	540	548	556	627	662	600	549	545
Manufacturing products	133 131	144 450	35 556	31 390	32 277	33 908	37 471	34 763	34 504	37 712
Food products, beverages and tobacco	17 161	19 514	4 545	3 492	4 283	4 841	5 278	4 066	4 610	5 560
Textiles, wearing apparel etc.	2 138	2 212	616	506	489	527	546	515	540	611
Wood products	3 003	2 865	860	738	679	726	678	710	710	767
Paper and paper products	12 864	11 590	3 244	2 997	3 298	3 325	3 262	2 807	2 791	2 730
Printing and publishing	378	565	98	90	95	95	147	126	134	158
Refined petroleum products	12 988	17 125	3 677	3 568	3 206	2 537	3 927	4 036	4 144	5 018
Basic chemicals	12 019	12 113	3 363	2 891	3 184	2 581	3 204	2 775	3 085	3 049
Chemical and mineral products	8 923	9 598	2 247	2 266	2 108	2 302	2 364	2 301	2 516	2 417
Metal products	29 798	29 684	8 308	7 204	7 053	7 233	8 159	7 723	7 048	6 754
Machinery and transport equipment	31 065	36 021	7 896	7 027	7 210	8 932	9 109	8 982	8 165	9 765
Other manufacturing products n.e.c.	2 794	3 163	702	611	672	809	797	722	761	883
Electricity	1 244	988	328	242	313	361	571	215	97	105
Services	87 816	90 433	21 210	21 437	23 892	21 277	21 451	22 313	24 908	21 761
Gross receipts from shipping	44 924	46 232	11 392	11 360	11 143	11 029	11 480	11 743	11 672	11 337
Gross receipts from oil drilling	624	714	154	158	153	159	177	177	180	180
Direct exports in relation to oil activities	1 155	1 120	348	269	312	226	264	263	374	219
Transport via pipelines	2 176	2 789	571	493	450	662	736	685	684	684
Direct purchases by non-residents	15 127	15 672	3 300	3 469	5 664	2 694	3 220	3 743	5 855	2 854
Other services	23 810	23 906	5 445	5 688	6 170	6 507	5 574	5 702	6 143	6 486

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A12. Exports of goods and services.
Percentage change in volume from preceding year

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Exports	3,8	8,2	6,8	2,0	5,8	0,8	8,6	9,5	7,2	7,7
Goods	6,1	10,5	9,6	4,6	9,8	1,2	11,8	12,5	9,0	8,9
Crude oil and natural gas	8,4	15,8	4,6	4,4	14,8	10,0	15,8	19,3	19,5	9,4
Ships, new	-7,8	-20,6	-30,0	672,4	-43,1	-79,4	-42,0	-60,9	-50,0	343,7
Ships, second-hand	22,3	-54,5	139,5	-42,3	225,6	-35,2	7,0	-22,5	-84,6	-78,9
Oil platforms and modules, new	450,4	-7,9	66,1	-67,6	.	.	-9,9	.	-46,8	171,4
Oil platforms, second-hand	-42,1	25,8	-95,8	-78,3	.	900,0	33,3	364,9	-92,9	125,9
Direct exports in relation to oil activities	59,0	27,3	21,9	26,7	125,8	106,9	1,6	-4,6	24,4	84,6
Other goods	4,1	9,4	15,1	1,1	2,1	-0,8	9,2	11,6	8,8	8,4
Agriculture, forestry and fishing	14,8	14,6	16,3	15,0	16,1	12,7	11,1	26,5	25,1	0,8
Mining and quarrying	-2,2	3,9	-0,3	-5,9	-11,8	10,2	24,0	6,8	-0,8	-10,4
Manufacturing products	3,3	9,7	15,0	0,3	1,3	-2,4	8,7	11,2	8,7	10,2
Food products, beverages and tobacco	2,2	11,5	8,9	-6,2	8,1	-1,8	16,3	17,0	6,7	7,5
Textiles, wearing apparel etc.	-5,0	1,7	40,7	11,2	-22,5	-27,1	-9,2	1,1	5,3	11,6
Wood products	-4,3	1,7	11,3	-11,6	-6,6	-8,9	-10,9	5,7	7,6	6,0
Paper and paper products	4,6	3,2	22,9	3,7	-2,1	-4,3	-2,7	3,8	7,8	4,7
Printing and publishing	-15,9	60,1	0,9	-10,0	-7,5	-36,5	95,3	71,0	31,5	48,4
Refined petroleum products	-0,0	10,3	19,1	8,0	5,3	-28,8	-0,8	-1,6	9,9	43,6
Basic chemicals	-3,2	6,5	13,0	-16,7	5,2	-11,7	6,4	2,5	2,9	14,5
Chemical and mineral products	7,5	7,5	25,9	6,4	-6,0	8,1	8,6	-2,8	17,3	7,7
Metal products	-4,7	9,0	6,6	-7,1	-12,2	-5,7	2,6	12,7	12,2	9,5
Machinery and transport equipment	14,7	12,9	19,1	10,6	12,2	16,5	20,7	23,9	7,4	2,1
Other manufacturing products n.e.c.	8,1	11,2	7,4	3,7	10,5	10,3	15,6	14,8	1,4	13,8
Electricity	80,6	-49,9	78,9	80,8	59,4	107,3	32,8	-52,8	-76,2	-85,2
Services	-3,0	1,1	-1,5	-5,3	-4,3	-0,6	-1,8	0,6	2,3	3,3
Gross receipts from shipping	0,3	2,0	6,6	-0,4	-4,1	-0,4	-3,0	0,4	4,0	6,9
Gross receipts from oil drilling	4,4	12,5	-1,4	1,6	11,8	6,9	13,0	10,2	15,2	11,7
Direct exports in relation to oil activities	-32,0	-9,5	-35,2	-23,1	-28,2	-40,3	-26,8	-11,3	11,5	-10,0
Transport via pipelines	16,4	21,9	19,1	8,8	26,2	12,6	17,4	25,6	22,8	22,5
Direct purchases by non-residents	-5,8	1,8	3,2	-10,2	-11,9	4,8	-3,9	5,9	1,6	4,1
Other services	-6,7	-2,8	-16,6	-11,0	3,0	-1,7	1,1	-4,1	-3,0	-4,7

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A13. Imports of goods and services. At current prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Imports	299 352	310 324	71 130	73 395	75 114	79 713	74 377	74 127	79 484	82 336
Goods	216 841	228 060	52 621	52 649	51 983	59 588	56 414	54 680	55 684	61 282
Ships	6 324	2 579	2 192	1 425	761	1 946	1 152	494	878	55
Oil platforms and modules	359	282	52	50	78	179	33	32	192	25
Direct imports related to other oil activitie	6 183	6 979	815	940	1 574	2 854	1 944	1 656	1 756	1 623
Other goods	203 975	218 220	49 562	50 234	49 570	54 609	53 285	52 498	52 858	59 579
Agriculture, forestry and fishing	7 890	8 087	2 168	2 100	1 663	1 959	2 299	1 907	1 728	2 153
Crude oil	1 121	1 397	326	356	270	169	218	255	261	663
Mining and quarrying	2 802	2 899	660	733	634	775	835	663	667	734
Manufacturing products	191 914	202 492	46 316	46 940	46 971	51 687	49 687	48 947	49 019	54 839
Food products, beverages and tobacco	8 927	9 497	1 874	2 313	2 449	2 291	2 162	2 340	2 505	2 490
Textiles, wearing apparel etc.	15 201	15 359	4 377	2 899	4 466	3 459	4 061	2 975	4 523	3 800
Wood products	3 883	4 110	993	988	880	1 022	948	1 032	998	1 132
Paper and paper products	6 469	6 370	1 608	1 573	1 594	1 694	1 693	1 544	1 487	1 646
Printing and publishing	2 799	3 394	676	624	687	812	836	715	853	990
Refined petroleum products	8 747	9 332	2 014	2 341	2 241	2 151	2 081	2 227	2 495	2 529
Basic chemicals	9 449	9 073	2 432	2 458	2 352	2 207	2 309	2 366	2 265	2 133
Chemical and mineral products	20 551	21 759	4 930	5 195	4 989	5 437	5 279	5 509	5 287	5 684
Metal products	21 043	21 190	4 964	5 361	5 008	5 710	5 588	5 417	4 735	5 450
Machinery and transport equipment	77 813	82 317	18 397	18 796	18 311	22 309	20 524	20 022	19 038	22 733
Other manufacturing products n.e.c.	6 587	7 057	1 594	1 452	1 513	2 028	1 686	1 555	1 659	2 157
Transport equipment not produced in Norway	10 445	13 034	2 457	2 940	2 481	2 567	2 520	3 245	3 174	4 095
Electricity	248	3 345	92	105	32	19	246	726	1 183	1 190
Services	82 511	82 263	18 509	20 746	23 131	20 125	17 963	19 447	23 800	21 053
Gross expenditures for shipping	19 284	19 985	5 000	4 789	4 802	4 693	4 601	4 863	5 005	5 516
Gross expenditures for oil drilling	1 331	1 234	238	330	430	333	359	288	308	279
Direct imports related to other oil activitie	4 257	3 805	674	1 554	1 312	717	795	1 092	994	924
Direct purchases abroad by residents	26 763	29 328	4 854	6 020	9 388	6 501	5 407	6 581	10 280	7 060
Other services	30 876	27 912	7 743	8 053	7 199	7 881	6 801	6 623	7 213	7 275

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A14. Imports of goods and services.
Percentage change in volume from preceding year

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Imports	5,1	2,5	4,9	3,6	4,1	7,8	4,3	-0,3	4,9	1,1
Goods	9,0	4,3	8,8	6,7	8,0	12,5	6,4	3,4	6,6	1,2
Ships	-15,9	-61,3	-28,3	-35,0	-23,3	56,4	-48,9	-68,4	6,0	-97,2
Oil platforms and modules	102,7	-21,4	-43,5	18,7	.	228,6	-32,3	-26,8	198,8	-83,7
Direct imports related to other oil activitie	45,9	11,5	-26,3	-26,6	88,0	187,8	134,5	73,2	9,3	-43,9
Other goods	9,2	6,4	12,6	9,8	7,1	7,7	7,1	4,5	6,2	7,8
Agriculture, forestry and fishing	7,0	4,1	30,3	24,9	-7,6	-11,9	3,3	-8,9	8,8	14,8
Crude oil	32,0	-9,7	48,5	66,9	30,8	-18,9	-38,7	-42,8	-31,1	151,5
Mining and quarrying	2,0	0,7	-15,0	1,2	4,5	21,5	27,3	-16,0	-2,5	-2,0
Manufacturing products	9,4	5,6	12,5	9,3	7,6	8,7	7,1	4,8	4,7	5,7
Food products, beverages and tobacco	4,0	4,3	-0,0	4,5	14,5	-3,0	11,2	0,0	0,6	7,0
Textiles, wearing apparel etc.	1,6	-1,6	14,9	2,6	-0,4	-10,7	-10,0	-0,1	-0,6	6,8
Wood products	3,2	8,2	32,4	2,2	-8,8	-5,1	0,0	6,1	15,2	12,1
Paper and paper products	5,9	1,4	10,8	4,2	4,0	4,6	-1,1	0,6	1,3	5,0
Printing and publishing	7,6	14,1	4,1	8,4	0,3	16,8	14,3	5,2	20,2	15,3
Refined petroleum products	9,0	-8,4	15,4	-4,5	22,0	6,4	-3,9	-10,3	-7,9	-11,2
Basic chemicals	8,3	2,1	15,4	2,3	5,4	11,2	9,2	0,5	3,2	-4,0
Chemical and mineral products	9,9	9,4	14,9	10,3	5,8	9,1	10,6	6,7	8,9	11,6
Metal products	1,0	6,8	-6,1	6,7	-7,8	12,4	15,5	3,2	1,8	7,3
Machinery and transport equipment	17,0	6,2	21,4	15,1	17,4	15,0	10,8	9,1	4,6	1,2
Other manufacturing products n.e.c.	7,5	3,9	9,6	1,5	5,7	11,9	4,4	4,8	3,6	3,0
Transport equipment not produced in Norway	-3,8	19,1	-10,5	13,7	-10,0	-7,3	-0,0	0,8	25,9	52,4
Electricity	-54,5	.	-68,2	-26,3	-30,2	-84,8	155,9	391,0	.	.
Services	-4,3	-2,6	-5,1	-3,5	-4,0	-4,6	-2,0	-9,8	0,8	0,6
Gross expenditures for shipping	0,1	2,0	7,7	-2,4	-2,9	-1,5	-0,7	-1,8	5,2	5,6
Gross expenditures for oil drilling	43,8	-9,7	11,9	43,3	86,1	32,1	47,9	-15,3	-30,5	-18,6
Direct imports related to other oil activitie	-38,4	-11,9	-44,8	-31,9	-43,9	-33,0	16,9	-30,7	-25,3	25,8
Direct purchases abroad by residents	1,2	6,0	-2,5	0,8	3,9	0,8	7,2	3,7	5,4	8,2
Other services	-5,3	-11,4	-8,0	-0,8	-4,7	-7,8	-12,2	-20,3	-1,5	-10,2

For the 4th quarter of 1996 the calculations are based upon forecasts or available estimations done by Statistics Norway

Table A15. Balance of payments. Summary. At current prices. Million kroner

	1995	1996	95:1	95:2	95:3	95:4	96:1	96:2	96:3	96:4
Exports	355 041	407 526	89 294	86 302	88 500	90 945	98 330	98 130	101 572	109 494
Goods	267 225	317 093	68 084	64 865	64 608	69 668	76 879	75 817	76 664	87 733
Services	87 816	90 433	21 210	21 437	23 892	21 277	21 451	22 313	24 908	21 761
Imports	299 352	310 324	71 130	73 395	75 114	79 713	74 377	74 127	79 484	82 336
Goods	216 841	228 060	52 621	52 649	51 983	59 588	56 414	54 680	55 684	61 282
Services	82 511	82 263	18 509	20 746	23 131	20 125	17 963	19 447	23 800	21 053
External balance	55 689	97 202	18 164	12 907	13 386	11 232	23 953	24 003	22 088	27 158
Primary income and transfers from abroad	31 143	37 082	7 885	7 186	7 832	8 240	10 309	9 209	9 014	8 550
Interest	21 823	21 801	5 689	5 134	5 277	5 723	6 076	5 343	5 382	5 000
Dividends etc.	2 853	3 165	530	995	758	570	1 358	687	570	550
Reinvested earnings	-2 179	2 500	-413	-811	-556	-399	43	796	861	800
Current transfers to Norway	8 646	9 616	2 079	1 868	2 353	2 346	2 832	2 383	2 201	2 200
Primary income and transfers to abroad	58 436	58 873	15 028	15 033	12 711	15 664	14 782	15 429	12 912	15 750
Interest	24 378	20 799	6 876	6 619	4 720	6 163	6 054	6 055	3 890	4 800
Dividends etc.	11 489	14 218	3 934	4 812	1 305	1 438	3 160	4 896	3 712	2 450
Reinvested earnings	1 953	3 863	-710	-1 112	1 934	1 841	1 283	-109	689	2 000
Current transfers from Norway	20 616	19 993	4 928	4 714	4 752	6 222	4 285	4 587	4 621	6 500
Primary income and transfers from abroad, net	-27 293	-21 791	-7 143	-7 847	-4 879	-7 424	-4 473	-6 220	-3 898	-7 200
Current external balance, net	28 396	75 411	11 021	5 060	8 507	3 808	19 480	17 783	18 190	19 958
Revaluation	10 092	865	6 613	54	-8 687	12 112	2 742	1 978	-855	-3 000
Total net inflow on capital transactions	-1 224	-1 107	-56	-79	-66	-1 023	22	-5	-24	-1 100
Decrease in the net debt of Norway	37 264	75 169	17 578	5 035	-246	14 897	22 244	19 756	17 311	15 858

Reconciliation due to changes in exchange rates

Table A16. Employment by kind of activity. Employees and self-employed. Absolute figures and annual percentage change

	Employed persons (1000)			Full-time equiv. empl. (1000)			Total hours worked (mill.)		
	Abs. figures		Percent	Abs. figures		Percent	Abs. figures		Percent
	1995	1996	1996	1995	1996	1996	1995	1996	1996
Total	2103,3	2157,9	2,6	1806,6	1853,1	2,6	2980,5	3041,5	2,0
Agriculture	80,6	79,2	-1,8	66,3	65,2	-1,7	161,8	158,0	-2,4
Forestry and logging	6,0	6,0	-0,3	5,5	5,4	-0,4	9,7	9,7	-0,5
Fishing and fish farms	18,0	17,7	-2,0	17,2	16,8	-2,3	31,6	30,8	-2,7
Oil actvities	21,6	22,4	3,6	21,2	22,0	3,7	36,2	37,4	3,3
Crude petroleum and natural gas extraction	17,5	18,1	3,5	17,1	17,7	3,5	29,3	30,3	3,2
Service activies incidential to oil and gas	4,1	4,3	4,4	4,1	4,2	4,4	6,8	7,1	4,1
Mining and quarrying	4,8	4,8	0,0	4,8	4,8	0,0	7,6	7,5	-0,8
Manufacturing	300,9	307,2	2,1	280,8	286,8	2,1	463,9	472,2	1,8
Food products, beverages and tobacco	54,4	55,6	2,2	50,7	51,8	2,3	83,8	85,2	1,8
Textiles, wearing apparel and leather products	9,5	9,4	-0,9	8,5	8,5	-0,9	13,7	13,7	-0,1
Paper and paper products	11,9	11,7	-2,0	11,5	11,2	-2,0	18,6	18,2	-2,1
Printing and publishing	39,6	40,4	1,9	31,7	32,3	2,0	53,1	53,9	1,5
Petroleum refining	2,0	2,0	0,0	2,0	2,0	0,0	3,0	3,0	-0,3
Basic chemicals	9,2	9,5	3,0	9,1	9,4	3,0	14,7	15,1	2,7
Chemical and mineral products	21,5	22,4	4,0	20,6	21,4	4,0	33,5	34,7	3,6
Metal products	16,7	17,1	2,0	16,0	16,4	2,0	26,0	26,4	1,7
Macinery, ships and transport equipment	107,6	110,3	2,5	103,5	106,1	2,5	172,9	176,6	2,1
Wood products, furniture and other manuf	28,4	29,0	2,1	27,2	27,8	2,1	44,5	45,3	1,6
Electricity, gas and water supply	20,0	20,2	0,7	19,3	19,4	0,7	29,9	30,0	0,3
Construction	105,9	108,6	2,6	102,0	104,6	2,6	171,4	174,9	2,1
Wholesale and retail trade	290,5	305,2	5,1	238,0	250,2	5,1	408,0	425,8	4,4
Hotels and restaurants	57,1	59,8	4,7	45,0	47,2	4,7	72,1	75,0	4,0
Transport via pipelines	0,4	0,4	0,0	0,4	0,4	0,0	0,7	0,7	0,0
Other transport and communication	140,0	142,1	1,5	124,8	126,8	1,5	205,5	207,9	1,2
Inland water and coastal transport	50,6	50,1	-1,0	50,3	49,7	-1,0	92,2	91,0	-1,2
Ocean transport	41,9	41,2	-1,6	41,7	41,0	-1,6	77,8	76,5	-1,7
Inland water and coastal transport	8,7	8,9	1,8	8,6	8,7	1,9	14,3	14,5	1,5
Financial intermediation and and insurance	50,7	50,4	-0,6	47,4	47,2	-0,5	75,2	74,7	-0,6
Dwellings	1,2	1,2	2,6	1,1	1,1	2,7	1,8	1,8	2,3
Business activities	121,8	130,0	6,7	106,7	114,1	6,9	171,9	183,0	6,4
Private services	186,0	190,8	2,6	154,6	158,4	2,5	242,6	247,7	2,1
General government	647,1	661,8	2,3	521,3	533,1	2,2	798,6	813,4	1,9
Central government	150,0	153,2	2,1	141,0	144,0	2,1	228,2	232,0	1,7
Civilian	104,9	109,4	4,4	96,4	100,6	4,4	145,8	152,2	4,4
Defence	45,2	43,8	-3,1	44,7	43,3	-3,0	82,4	79,8	-3,1
Local government	497,0	508,6	2,3	380,3	389,1	2,3	570,4	581,4	1,9
Mainland industries	2039,4	2093,9	2,7	1743,3	1789,7	2,7	2865,8	2926,9	2,1

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Tabell A17. Wages and salaries per full-time equivalent employee and per hour worked by activity. 1996. Annual percentage change

	Wages and salaries per full-time equivalent employee	Wages and salaries per hour worked	Compensation of employees per hour worked
Total	4.4	4.8	4.9
Agriculture	4,0	4,3	4,4
Forestry and logging	3,6	3,8	3,8
Fishing and fish farms	3,7	4,1	4,2
Oil actvities	4,8	5,2	5,5
Crude petroleum and natural gas extraction	4,9	5,2	5,6
Service activies incidential to oil and gas	4,6	4,9	5,1
Mining and quarrying	3,5	4,3	4,5
Manufacturing	4,3	4,6	4,8
Food products, beverages and tobacco	3,7	4,2	4,5
Textiles, wearing apparel and leather produc	4,8	3,8	3,8
Paper and paper products	5,1	5,2	5,3
Printing and publishing	3,6	4,0	3,9
Petroleum refining	4,7	5,0	5,4
Basic chemicals	5,3	5,6	6,1
Chemical and mineral products	3,9	4,3	4,4
Metal products	5,4	5,7	6,3
Macinery, ships and transport equipment	4,3	4,6	4,7
Wood products, furniture and other manuf	4,2	4,7	4,9
Electricity, gas and water supply	4,2	4,6	4,9
Construction	4,4	4,9	4,9
Wholesale and retail trade	4,4	5,0	4,9
Hotels and restaurants	4,7	5,3	5,4
Transport via pipelines	4,5	4,5	4,4
Other transport and communication	4,5	4,8	5,0
Inland water and coastal transport	2,8	3,0	3,2
Ocean transport	2,4	2,5	2,6
Inland water and coastal transport	3,0	3,4	3,6
Financial intermediation and and insurance	4,9	5,0	5,3
Dwellings	4,5	5,0	4,9
Business activities	4,5	4,8	5,0
Private services	4,2	4,6	4,6
General government	4,4	4,8	4,9
Central government 1)	4,8	5,2	5,2
Civilian	4,2	4,2	4,0
Defence	4,2	4,3	4,6
Local government	4,3	4,7	4,8
Mainland industries	4.4	4.8	4.9

1) Decrease in the number of conscripts causes a shift in the employment composition which is pulling up the percentage change of wages and salaries in central government.

B-blad

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