Norway's Approach to Monetary Policy

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The goal of monetary policy as conducted by Norges Bank is to maintain low and stable inflation. The operational target of monetary policy is explicitly defined in a consumer price inflation rate of approximately 2.5 percent over time. Norges Bank sets its interest rate instrument with a view to achieving the inflation target over a two-year horizon, and it will normally tolerate deviations of actual inflation from target that are not in excess of plus or minus 1 percentage point. In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties, and extraordinary temporary circumstances shall not be taken into account.

The inflation target was introduced in March 2001, after a long tradition of exchange rate targeting. After abandoning a fixed-rate regime in 1992, Norges Bank conducted a managed float of the krone, with no explicit stipulation of a central rate and fluctuation margins. Norges Bank had no obligation to intervene in the foreign exchange market, but, in the event of significant changes in the exchange rate, the Bank would orient its instruments with a view to returning the exchange rate over time to its initial range. In practice, this meant that Norges Bank conducted monetary policy with the aim of bringing inflation toward the level of other European trading partners. Thus, the move to an explicit inflation target did not bring significant changes in the conduct of monetary policy.

Norges Bank's Main Monetary Policy Instruments

While in many other countries the central bank sets the interest rate on liquidity supplied through open market operations and thereby signals the market rate it deems appropriate, Norges Bank has decided not to signal interest rates in this way. The policy rates are in fact the rates on Norges Bank's standing facilities, that is, banks' interest rate on sight deposits in Norges Bank (deposit rate) and the interest rate on overnight loans to banks (overnight lending rate). The deposit rate and the overnight lending rate form a corridor for the shortest money market rates.

The difference between the overnight lending rate and the sight deposit rate is kept at 2 percentage points on an annual basis. In recent years Norges Bank has supplied liquidity in a way such that the banking system as a whole has sight deposits with the central bank.[1] Thus, the sight deposit rate is the banking system's marginal rate and the key policy rate in the Bank's conduct of monetary policy. In normal times, money market rates will be close to the prevailing sight deposit rate.

It is, as mentioned, the inflation outlook two years ahead that determines the sight deposit rate set by Norges Bank. In normal times, the Bank takes a gradualist approach when changing the policy rate.

Standing Facilities

Banks can automatically deposit any available liquidity within Norges Bank, which is remunerated at the posted sight deposit rate. Banks can also borrow liquidity during the day and overnight from Norges Bank. No interest or fees are charged on intraday loans, while overnight loans carry an interest rate (the overnight lending rate) which is, as mentioned, 2 percentage points above the posted sight deposit rate. Access to the intraday and overnight lending facility is automatic, and since June 2001 Norges Bank has ceased to set semi-monthly total drawing limits for overnight loans.

For both intraday and overnight loans, usually referred to as D-loans, banks must post collateral in an amount equivalent to 100 percent of the loan. The eligible collateral for D-loans is identical to the collateral Norges Bank requires for loans the Bank issues in open market operations (F-loans), described below.

Norges Bank also has an extraordinary intraday borrowing facility, introduced to provide for the execution of special payment settlements specified by Norges Bank. No collateral is required for such loans, referred to as E-loans, but a fee is charged to deter banks from drawing on this facility.[2]

Open Market Operations[3]

Norges Bank aims at maintaining a stable supply of liquidity in the banking system. Specifically, the Bank ensures that the banking system has sight deposits in Norges Bank of a size sufficient to keep the shortest money market rates down toward the sight deposit rate. Since the central government's working account is in the central bank, the liquidity position of banks can change rapidly, making it necessary for the Bank to intervene frequently in the market.

The main instruments for money market operations are fixed-rate loans (F-loans) that Norges Bank issues against collateral when the banking system has a liquidity deficit. The rates on F-loans are set by auction. As of September 1999, F-loans carry a 100 percent collateral requirement. The 100 percent collateral requirement on F-loans was the culmination of a decade-long process of gradual reintroduction of the principle of full collateral for loans granted by Norges Bank.[4]

Financial instability in the late 1980s was responsible for the reversal in Norges Bank's attitude toward securing the liquidity supplied to the money market. Until then, the collateral requirement had undergone a process of gradual relaxation. Norges Bank first allowed access to its lending facility to banks with securities in their portfolios but did not require the securities to be deposited. Then, in 1986, the collateral requirement was altogether removed from the regulation.

The introduction of 100 percent collateral on F-loans in 1999 is directly linked to the unsuccessful

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[1] The Norwegian system operates without reserve requirements. Banks are subject to the requirement that liquid assets must be at least 6 percent of the individual bank's liabilities.

[2] E-loans may be granted for cash withdrawals and for currency trading with Norges Bank. E-loans must be repaid on the same day they are issued. In the event of repeated use of E-loans, Norges Bank may order a bank to increase its collateral, reduce its exposure in special payment settlements, or decide that the bank may not have access to participate in specific settlements.

[3] This section draws on Norges Bank *Economic Bulletin* (1999/4), pp. 396–400.

[4] Norges Bank first introduced limitations on access to its fixed-rate lending facility, and subsequently required collateral for overnight loans. Since September 1995, the collateral requirement for overnight loans has been 100 percent. Intraday loans, established in 1997, now also require full collateral.

experience of the repo facility. The repo facility was introduced in 1996 with the goal of replacing unsecured F-loans. To encourage the use of the facility by market participants, the repo rate was set at a discount on the F-loan rate. Still, the bidding was modest. Initially, benchmark government bonds were the only securities permitted. The outstanding stock of Norwegian Government securities is limited, and banks traditionally do not hold large portfolios of government paper. Insurance companies, which had large holdings of government paper, were not allowed by regulation to enter the repo market. While in 1999 the repo scheme was extended to include all securities eligible as collateral for loans extended by Norges Bank, because of practical considerations the pool was effectively restricted to government securities and benchmark bonds issued by Norges Kommunalbank.[5] This aspect, and the inability to include counterparties other than banks, limited the effectiveness of the repo facility as a means to enhance the distribution of liquidity in the money market.[6]

Since the repo facility did not displace unsecured F-loans, Norges Bank opted for a full collateral requirement on F-loans. The repo facility is still operational, but it has not been used since September 1999. The reliance on F-loans over repos is likely due to practical issues. The eligible collateral for F-loans and D-loans is in fact the same, and the securities provided as collateral are pooled, making it unnecessary to earmark specific securities for a given type of loan. To mop up liquidity, Norges Bank may invite fixed-rate deposits (F-deposits) with a specified maturity. As for F-loans, the maturity ranges from 1 to 10 days. In 1997, Norges Bank allowed trading of F-deposits between banks, as well as repurchases of F-deposits by the Bank prior to maturity. Occasionally, Norges Bank relies on currency swaps as an additional tool for open market operations. Toward the end of 2000, for example, Norges Bank entered into currency swaps agreements to curb the effect on interest rates of the poorly functioning interbank market at that time.

Eligible Collateral

F-loans, D-loans, and repos have identical eligible collateral. As Table 1 shows, in order to ensure that the system functions in a satisfactory manner, the selection of eligible securities is very broad. The small size of the Norwegian government bond market is the main reason for the broad selection of eligible collateral. Norges Bank has established a rating system for the securities used as collateral for loans in Norges Bank. Rules for reduction in a security's collateral value are based on the rating the security receives in terms of its interest rate risk, credit risk, and currency risk. Credit risk is considered to be zero for government and government-guaranteed issuers in OECD member states. Higher perceived credit risk on the part of the issuer will result in greater reductions to collateral value. All securities denominated in a currency other than Norwegian kroner will be subject to a reduction for currency risk. As Table 1 shows, the reductions are applied to the nominal value of the security. In the near future, Norges Bank intends to shift to a mark-to-market pricing of collateral, so as to improve the balance between the collateral furnished and the actual risk assumed.[7]

Investment of Assets

At the end of 2000, the market value of Norges Bank's net foreign exchange reserves (less foreign liabilities and net foreign exchange sold forward) was 168 billion Norwegian kroner, which is almost 60 percent of the Bank's total assets.[8] Foreign exchange reserves are divided into four sub-portfolios: an immunization portfolio to match government foreign currency debt and neutralize the currency and interest rate risk associated with this debt; a buffer portfolio for the Government Petroleum Fund, to accumulate foreign currency purchases for transfers to the Fund at regular intervals; a liquidity portfolio, to be used in the foreign exchange market in connection with the conduct of monetary policy; and a long-term portfolio, which is to be available for interventions, but to be invested with a view toward achieving a high return in the long term. The long-term portfolio constitutes the largest portion of foreign exchange reserves, with in excess of 100 billion Norwegian kroner. While reserves

[5] See Norges Bank *Economic Bulletin* (1999/4), p. 398.

[6] The Norges Bank Act did not stipulate limitations regarding counterparties in open market operations, but this interpretation was questioned and Norges Bank used banks as the only counterparties. However, in December 1999, section 21 of the Norges Bank Act was amended by explicitly stating that Norges Bank may enter into repurchase agreements with counterparties other than banks.

[7] So far, this solution has been impeded by the lack of necessary systems at Norges Bank. Norges Bank will continue until further notice to calculate the loan value in terms of the nominal value, with the exception of unit trusts that invest only in Norwegian government and government-guaranteed securities. The loan value is calculated on the basis of redemption value for unit trusts. See Norges Bank *Economic Bulletin* (1999/4), pp. 399–400.

[8] Total assets here are defined net of the Government Petroleum Fund, which the Bank manages on behalf of the Ministry of Petroleum and Energy.

Table 1
Securities Accepted as Collateral for Loans Extended by Norges Bank[a]

Collateral security	Value
1. Bonds and certificates issued or guaranteed by Norwegian government or other OECD member state that has not renegotiated foreign debt in the last five years. (Banks must apply to have foreign securities considered as collateral.)	If denominated in Norwegian kroner: 95% of face value. Other: Must be denominated in euros or other eligible currency. Subject to currency risk haircut.
2. Ownership interests in securities funds, which are restricted to investing in Norwegian government-issued and guaranteed bonds and certificates.	95% of face value.
3. Bonds and certificates issued or guaranteed by Norwegian municipalities, counties, state enterprises, and mortgage companies.	90% of face value.
4. Units in unit trusts whose statutes limit investment to (3).	
5. Domestic private bonds and bills—must satisfy certain eligibility criteria, although no absolute rating requirement. VPS-registered bonds and money-market funds may be also furnished as collateral.	Dependent on credit rating of issuer (value less than 90% of face value).
6. Foreign private bonds and bills (issued by OECD member states and satisfying minimum credit rating requirements).	
Not accepted as collateral	
Securities issued by another entity within the same financial group as the bank.	
Bank certificates.	

[a] All securities that are eligible as collateral for loans in Norges Bank can also be used as underlying securities for repurchase agreements with Norges Bank.
Source: Norges Bank, *Economic Bulletin*, 99/4.

in the liquidity portfolio are invested in fixed-income instruments only, about 20 percent of the long-term portfolio is invested in equities. As concerns fixed-income instruments, the long-term portfolio has a longer duration and a broader country distribution than the liquidity portfolio. The main strategic choices for both the liquidity and the long-term portfolio are defined by means of benchmark portfolios with given country distribution and specific securities for the various markets. Limits are set for how much the manager can deviate from the benchmark portfolio.

Selected Fiscal Issues

Fiscal policy has been generally effective in discharging its countercyclical role. In a March 2001 white paper to the Parliament, the Norwegian government set the following guidelines for fiscal policy: (1) Considerable emphasis must be placed on stabilizing economic fluctuations, and (2) Petroleum revenues will be gradually phased into the economy, at a pace in line with the estimated 4 percent real return on the capital of the State Petroleum Fund (SPF).

The Norwegian authorities aim for a sustainable long-run fiscal position through accumulating assets in the SPF during the period of peak production, so that when oil and gas revenues decline, a sufficient buffer fund will be available to finance rising age-dependent expenditures. In Norway's fiscal strategy, the SPF is to be used as a means to insulate the budget from the effects of short- and long-term changes in petroleum revenues. During the ongoing period of high oil production, this means that surplus petroleum revenues are transferred to the SPF, where they are used to acquire financial assets. To help minimize any tendency toward appreciation of the real exchange rate during the period of fiscal and external surpluses, the funds accumulated in the SPF are invested entirely in foreign-currency-denominated assets abroad. The rate of accumulation of assets depends on the amount of fiscal surpluses transferred into the SPF, the timing of transfers, and the rate of return on investment.

The cyclically adjusted non-oil budget balance net of interest payments has improved substantially since 1993. The government budget position is currently in deficit when one excludes net oil revenues. Given that most of the oil revenues are invested abroad, the high government surpluses inclusive of oil revenues have only partially been used to reduce the level of outstanding government debt. The government has long-term fiscal challenges similar to those facing most other OECD countries, such as population aging and increased social security spending when the baby boom generation retires. What makes Norway different is the government's considerable wealth in terms of oil, other energy resources, and net financial assets. Generational accounting methods usually suggest a relatively small generational imbalance between present and future generations.[9]

[9] The generational accounting method was discussed and applied in the *National Budget 1995*, the annual economic policy document of the Norwegian government. Since then, generational accounting has been used by the government on a regular basis to assess the long-run fiscal balance.

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