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The Financial Reform in Finland

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Abstract

This paper examines the evolution of the Finnish financial system from a restrictive system based on credit limitations and rationing to an open system which relies on indirect, market-oriented policies. The main beneficiaries are found to be the banks and those that previously had restricted access to bank credit. Two major remaining problems are the anti-savings biases associated with the generous tax treatment of household interest payments and the cartel-like system used in providing tax-free deposits to households. The paper also challenges the argument that the reform caused a loss of monetary autonomy.

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Summary

In the 1970s, Finnish monetary policy operated through quotas on borrowing and indirect controls on bank lending. By the 1980s, however, a gray market had emerged that reduced the effectiveness of interest rate ceilings and credit controls at the same time that international integration eroded the effectiveness of capital controls. Rather than seeking to regulate the gray market, the Bank of Finland attempted to integrate it into the financial system, which required moving to an indirect, market-oriented monetary control system. This move forced the elimination of interest rate ceilings and the ending of credit rationing. The reform also required the creation of an efficient and active money market, which did not exist in a meaningful sense before 1986. The Bank of Finland created such a market by encouraging the development of the domestic certificate of deposit (CD) market. With the growth of this market, the Bank was able to downgrade its call money rate and, to a lesser extent, the base rate and to carry out policy through the CD market.

The main beneficiaries of the reform were borrowers whose access to bank credit had formerly been restricted because of rationing or who had been shut out of the market altogether because of interest rate ceilings. These beneficiaries included newer, smaller firms as well as quickly expanding firms. Banks also benefited since they were able to extend credit to all borrowers at market interest rates, while they were able to raise large amounts of funds at below market rates through their cartel on tax-exempt household deposits.

This reform was attended by a loss of autonomy in the conduct of monetary policy. Although the loss should not be blamed on the reform, the authorities appear to have had the choice of letting the regulated markets be dominated by the gray market or pursuing the reform and accepting some loss in monetary autonomy. Had they not acted, the gray market would probably have expanded, moving increasingly into channels outside the Bank of Finland's control. Had this occurred, not only would much of the financial system have become unregulated, but arbitrage between markets would have minimized any benefits from any remaining regulations.

With the end of rationing, household borrowing surged. Higher nominal interest rates did not discourage borrowers because previously the effective marginal interest rate had often been infinite. Reducing the benefits of tax deductions on interest payments would have slowed the surge in the demand for credit by raising the real after-tax interest rate on borrowing.

The Reform of the Finnish Financial System

1. Introduction

Finland, like a number of other industrial countries, has introduced broad-based reforms in its financial system in recent years. 1/ While the reforms were introduced somewhat later than in many countries, with most taking place since 1982, they have been far reaching, changing the financial system from a restrictive one based on indirect credit limitations and rationing to a relatively open and free system in which prices clear most markets.

This paper presents an overview of the financial reform, focusing primarily on the banking system. The main goal is to provide an analytical history of developments in the late 1970s and 1980s, including an examination of why the reform process followed the path it did and what might be the path of future reform. The presentation is in five parts. The first describes the traditional financial system and the early development of the gray or unofficial market. The description is broad, emphasizing the general characteristics and important distortions of the system. The second follows the reform from 1979 to the present, emphasizing structural changes. Short-term developments are ignored, except when they are seen as having a longer-term impact. The third examines lessons which may be learned from the Finnish experience. The fourth discusses two areas where further reform is both appropriate and likely. The fifth concludes. The paper also includes an appendix, which is a brief study of the demand for money in Finland.

2. The traditional financial system and the gray market

a. The traditional system

The Finnish financial markets have traditionally been narrow and dominated by a small number of banks. The banks' dominance of the financial system has stemmed from their monopoly on the provision of tax-exempt deposits to households. Banks have generally depended on the Bank of Finland for their marginal funds, with access to funding limited by quotas and penalty rates. The banking system has been highly regulated, with tightly controlled and rigid lending rates. Financial flows have been closely and effectively controlled. There has also been a political preference for low interest rates. Low rates and binding capital controls have resulted in credit rationing. Access to credit has, in turn, been linked to close customer relationships.

1/ For a description of reforms in a number of other industrial countries, see Germany and Morton (85).

Most bank funding came from customer deposits. Interest on household deposits was tax-exempt as long as all banks offered the same set of interest rates on the various classes of household deposits. 1/ Thus the government effectively forced the creation of a bank cartel which, as expected, offered low deposit rates. Interest on corporate deposits, on the other hand, has been taxable, with no limits placed on the competition for these deposits. At times, a de facto cartel has apparently existed with respect to such deposits.

Banks' marginal funding came from the Bank of Finland. Originally, this was through quota-controlled advances at the Bank of Finland's base or discount rate; additional funding was also available at a penalty rate. The base rate was usually low and its movements were generally sticky. It was kept low to permit lower lending rates; changes in household deposit rates were also tied to the base rate. It was sticky because the rate not only governed the marginal cost of banks' funds, but it was also the reference rate for longer term loans, virtually all of which had floating rates.

The call money market was started in 1975 to help banks manage their short-term liquidity in the absence of a true money market. Under the system, banks could, within limits, deposit or borrow overnight funds at the Bank of Finland at the call money rate. The rate was generally higher than the base rate and it usually exceeded the banks' average lending rate. Banks could, however, still make profits on loans, even if the call money rate exceeded the average lending rate, because indirect fees and other charges constituted a large part of loan charges, bringing the effective loan rate above the call money rate. These indirect payments obscured the true cost of borrowing.

In the 1970s and early 1980s, the Bank of Finland also made effective use of exchange control and intervention in the forward foreign exchange market. 2/3/ Finland has followed a fixed exchange rate policy, while having an excess demand for capital, caused, at least in part, by a large stock of investment opportunities and artificially

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1/ This regulation was introduced in the early 1930s to protect bank profitability and solvency, while allowing lending to key sectors at low rates of interest.

2/ Until 1980, the Bank of Finland operated the forward foreign exchange market. After the market was turned over to the banks, the Bank of Finland intervened through the banks.

3/ The Bank of Finland has also used special credit arrangements, involving direct lending to companies, and credit policy guidelines; however, the importance of these instruments has declined markedly in recent years.

low domestic interest rates. During this period, the main goals of exchange control were to limit any incipient capital outflows, while trying to allocate capital inflows to favored sectors.

Bank lending was subject to direct limits on interest rates and indirect limits on volume. Loan rates were constrained by a ceiling on average lending rates, although individual loans could, within limits, exceed the ceiling. Loan volume was controlled by adjusting the quotas on central bank advances or by altering the spread between central bank finance and lending rates. The spread could be altered by changing quotas or penalty rates on advances at the Bank of Finland's base rate or the call money rate or by changing the ceiling on the average lending rate. 1/ Changes in the base rate, on the other hand, automatically changed the rate on regulated deposits as well as the rates on most outstanding bank loans.

Low interest rates and rising costs on banks' marginal credit caused a nearly continuous excess demand for credit. This was compounded by a lack of alternative funding sources. Capital imports were effectively controlled, with the funding quite limited. The bond market was small and illiquid, largely because potential issuers were discouraged by the high rates they needed to offer to compete with tax-exempt government and mortgage credit bank bonds and bank deposits; issues were also subject to the approval of the Bank of Finland. At the same time, competition within the domestic banking system was restricted, partly by a prohibition of foreign-owned banks. As a result, the market was cleared through rationing, with access to credit normally linked to prior savings and the use of other banking services. Customers' concerns about relations with their banks may have, in turn, discouraged their seeking more profitable outlets for their deposits.

Under this system, bankers and "preferred" borrowers benefited at the expense of savers and "non-preferred" borrowers. 2/ Banks benefited

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1/ During much of the 1970s, there was no explicit regulation of the average lending rate. However, the Bank of Finland tracked average lending rates, stating that it would reimpose these regulations if "slippages" between the base rate and the average lending rate became too large.

2/ While the Bank of Finland did not dictate to which customers banks were to lend, interest rate ceilings coupled with the need for credit rationing gave rise to a distinction between preferred and non-preferred borrowers. Interest rate ceilings tended to shut out relatively risky, but potentially creditworthy, borrowers, forcing them to go outside the banking system for credit. Rationing, on the other hand, encouraged banks to lend to only the safest, and presumably the most established borrowers, while falling most heavily on new and expanding firms. For firms with bank access but with large or growing credit demands, preferred status was a relative term.

because their monopoly on the provision of tax-exempt deposits allowed them a profitable spread in their lending operations, even if lending rates were kept artificially low, while preferred borrowers benefited from the artificially low interest rates. Savers, on the other hand, were discriminated against by the cartel in the provision of tax-exempt deposits, while the non-preferred borrowers suffered because of rationing of bank loans, sometimes being shut out of traditional, bank-lending channels altogether.

b. The early stages of the gray market

The system was relatively stable until the late 1970s, when tensions began to emerge. 1/ First, higher inflation resulted in negative real lending and deposit rates, increasing the excess demand for credit, as well as unregulated interest rates. This increased the implicit cost of the system to savers and non-preferred borrowers, while increasing the gains for those able to borrow through the banking system. Second, increasing incomes raised the supply of available savings, causing many depositors to seek more aggressively to improve return on their deposits. Third, rising international trade and increased contacts with foreign capital markets led to greater capital mobility and heightened borrowers' sensitivity (especially non-preferred borrowers) to international interest differentials. Fourth, over time, non-preferred borrowers became increasingly flexible in order to avoid limitations on their access to bank credit, either because of rationing or because interest ceilings had shut them out of the market. Fifth, as the gray market began to develop, the wider spread between regulated and unregulated rates increased the potential arbitrage profits arising from preferred borrowers borrowing from traditional sources and relending to non-preferred borrowers through the unregulated market.

The gray market was a direct outgrowth of these strains. It grew by offering advantages to virtually all market participants. Depositors were drawn in by higher nominal deposit rates, reducing the system's bias against savers. Borrowers were drawn in by allowing them, at a price, to raise funds they could not raise through traditional channels, reducing the system's bias against non-preferred borrowers. Financial institutions helped to develop the market because of the profit opportunities it provided; the early activity largely involved arranging loans through off-balance sheet operations at banks' trust departments and, later, lending by bank-owned finance companies.

By the early 1980s, the gray market was beginning to cause structural strains in the financial system. Financial activities were moving out of traditional channels into the gray market, reducing the effectiveness of the traditional instruments of monetary policy, while

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1/ The tensions that eventually resulted in the financial reform are similar to those in a number of industrial countries, see Germany and Morton (85) and Walsh (87).

interest rate regulations were being bypassed with cocktail loans, which were made up of a mixture of regulated and unregulated loans. At the same time, arbitrage both between regulated and unregulated domestic markets and between foreign and domestic markets was yielding large profits and distorting the credit and monetary aggregates. In addition, market conditions appeared unstable, since excess demand pressures in the domestic financial market were pushed into the gray market, causing gray market rates to be both high and volatile.

The development of the gray market also marked the beginning of the end of traditionally close banking relationships. As banks were able to assure adequate returns on their lending operations, they relied less on full service relationships to achieve adequate profits, permitting increased competition in customer services. At the same time, loans were increasingly available to customers willing to pay a higher price, making customers less vulnerable to rationing and more willing to shop around. The higher rates on unregulated deposits also encouraged large depositors to take their business to the highest bidder. As the financial system became increasingly price and market oriented, old relationships gradually broke down.

3. Reform of the financial system

This section examines the financial reform. The presentation is in three parts. The first examines changes in the regulation of bank funding. The second covers changes in the regulation of bank lending. The third explores changes in the system of monetary control, including the instruments of policy, the methods of control, and the announced goals of policy.

a. Bank funding

The reform of the regulation of bank funding began in April 1980, when the Bank of Finland turned over the operation of the forward exchange market in convertible currencies to the commercial banks (Table 1). Limitations were placed on banks' open foreign exchange positions, while allowing them to borrow and lend abroad to cover the exchange risk from their forward positions. This was done because the Bank of Finland believed that the banks were in a better position to operate this market efficiently. Freer access to the forward market made it easier for companies to exploit international interest differentials, while increasing general awareness of those differentials. The Bank of Finland began to open the domestic banking system by permitting foreign-owned banks to establish domestic subsidiaries in 1982. The main effect was to increase competition in the money market and in international services.

Table 1. Finland: Major Changes in Foreign Exchange Regulations Relating to Capital Controls

April 1980	Bank of Finland terminates its convertible currency operations in the forward exchange market and turns over operation to authorized banks. Guidelines issued on banks' open foreign exchange positions to allow banks to raise forward cover for foreign exchange risks.
January 1981	Banks permitted to sell foreign exchange for current transactions.
September 1981	Banks permitted to use forward market to cover foreign denominated domestic credits.
January 1982	Foreign banks permitted to open subsidiaries. Bank of Finland intervenes in forward market on an experimental basis.
October 1982	Swing margin on exchange rate index narrowed from 6 percent to 4 percent.
December 1984	Banks permitted to lend abroad and to invest in foreign securities.
June 1985	Sales abroad of bonds and debentures quoted on the Helsinki Stock Exchange prohibited.
September 1985	Permissible use of foreign cover expanded to allow cover of either net foreign exchange risk or, as before, individual transactions.
January 1986	Rules governing purchases of foreign securities and leases abroad liberalized. New Foreign Exchange Act becomes effective.
May 1986	Export receivables may be financed by foreign banks or by domestic banks using foreign credit. Upper limit on foreign credit for financial imports mediated by domestic banks ended. Banks prohibited from granting domestic credits denominated in foreign currency.
June 1986	Certain exemptions granted for the purchase of Finnish bonds and debentures by nonresidents. Banks and other securities agents permitted, within limits, to sell foreign securities to residents.
August 1986	Bank of Finland temporarily granted unlimited powers to raise call money rate to defend exchange rate and official foreign exchange holdings. Foreign credits with a maturity of at least five years for financing own operations of manufacturing and shipping companies exempted from exchange control regulations.
October 1986	Ceiling on call money rate re-established.
June 1987	Restrictions relaxed on direct foreign investment, purchases of foreign housing, and foreign investments in quoted securities.
August 1987	Companies and cooperative societies, excluding financial and insurance institutions, allowed to raise financial credits with maturities of over five years for financing their own business operations.
August 1988	Restrictions on direct foreign investment, purchases of foreign securities and acquisition of real property and housing abroad relaxed.

Source: Bank of Finland.

Table 3. Finland: Changes in the Regulations Governing Bank Funding

July 1979	Call money quota introduced, with two penalty tranches.
January 1981	Ceiling on call money rate set at 15 percent over the base rate.
February 1982	Lower penalty rate on call money advances abolished.
May 1983	Remaining call money penalty rate abolished.
January 1984	Base rate quotas abolished. Limit on call money borrowing set at 20 percent of bank assets. Foreign-owned banks permitted to participate in call money market.
April 1984	Call money credit ceiling abolished.
January 1986	Call money credit rate and call money deposit rate split.
August 1986	Bank of Finland temporarily granted unlimited permission to raise call money rate to defend exchange rate and foreign exchange reserves.
October 1986	Ceiling on call money rate reset at 15 percentage points over base rate.
December 1986	Three-month, fixed rate financing introduced by the Bank of Finland. Rates and volume three-month credits to be set daily, with same interest rate limit as on call money rate.
February 1987	Banks allowed to make bids for three-month, fixed rate deposits at the Bank of Finland.
March 1987	Access to call money credit restricted and penalty rate on excess borrowings introduced.
April 1987	Bank of Finland begins open market operations in the CD market, buying and selling its own CDs and those of banks on a daily basis.
May 1987	Three-month, fixed rate deposit and credit rates quoted only exceptionally. One-, two-, three-, six-, and 12-month HELIBOR (Helsinki Inter-Bank offered rate) introduced. Rates based on daily market bid rate for each category of CD.
July 1987	Limits on call money credits eased.
October 1987	Savings and cooperative banks permitted to deal in CDs. Right to use call money credit, without penalty expanded.
November 1987	Rules established for Bank of Finland intervention involving rates of over one day maturity. Intervention must be at rates between the base rate and the base rate plus 5 percentage points, unless market forces move rates outside of range, in which case, intervention must be in the direction of the range. Intervention permitted to include maturities of over six months; the previous limit was six months.

Source: Bank of Finland.

In late-1986 and in 1987, the Bank of Finland and the commercial banks worked together to develop the domestic CD market. The key measure was an agreement to exempt CDs from the cash reserve requirement from January 1987 (see below). 1/ This allowed banks to offer competitive interest rates on CDs and to trade them at minimal cost. At end-1986, the major banks also agreed to rules of behavior in the CD market, including one making quotations binding on all transactions of up to Fmk 10 million. In February 1987, the Bank of Finland began to issue its own CDs. In March, it started to engage in open market operations, buying and selling CDs to influence money market conditions. 2/ In 1987, efforts to develop the market were aided by the need to absorb a large rise in liquidity caused by a surge in capital inflows, following the restoration of confidence in the markka. 3/ The CD market developed rapidly, becoming of primary importance for monetary policy. The development of the CD market was also the main cause of the decline of the term credit market. The term credit market effectively ceased operation by May 1987, while outstanding call money credits fell from Fmk 6.8 billion at end-1986 to zero at end-1987.

The short-term money market has grown rapidly in recent years, with the stock of money market instruments rising from Fmk 44 billion at end-1985 to Fmk 104 billion in mid-1988 (Chart 1). Recently, marketable instruments have grown the most rapidly, rising from Fmk 3 billion at end-1985 to Fmk 64 billion in mid-1988 (Chart 2). The two areas of strength have been commercial paper and CDs. The commercial paper market was started in the spring of 1986. Activity began slowly, with the stock of paper growing to less than Fmk 2 billion at end-1986. However, by mid-1988, the stock rose to Fmk 11 billion. The stock of CDs has grown from Fmk 2 billion, or 5 percent of the money market at end-1986, to Fmk 48 billion, or 46 percent of the market at mid-1988, including Fmk 7 billion in Bank of Finland CDs.

b. Bank lending

While central bank control over bank lending decisions was minimal, bank interest rates were tightly controlled until recently. Average bank lending rates were subject to low and binding ceilings until May 1983, when the restriction was relaxed by allowing banks to pass on part of the cost of their unregulated funds. In January 1986, the upper

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1/ At this time, the Ministry of Finance also relaxed its tight restrictions on CD issues.

2/ Open market operations are usually in the government paper market, but this market is small in Finland, partly because of the low level of Government debt. The Bank of Finland chose to carry out open market operations in the CD market because it thought this market had the best prospects for development and it preferred to issue its own paper rather than to have Government debt policy controlled by monetary policy.

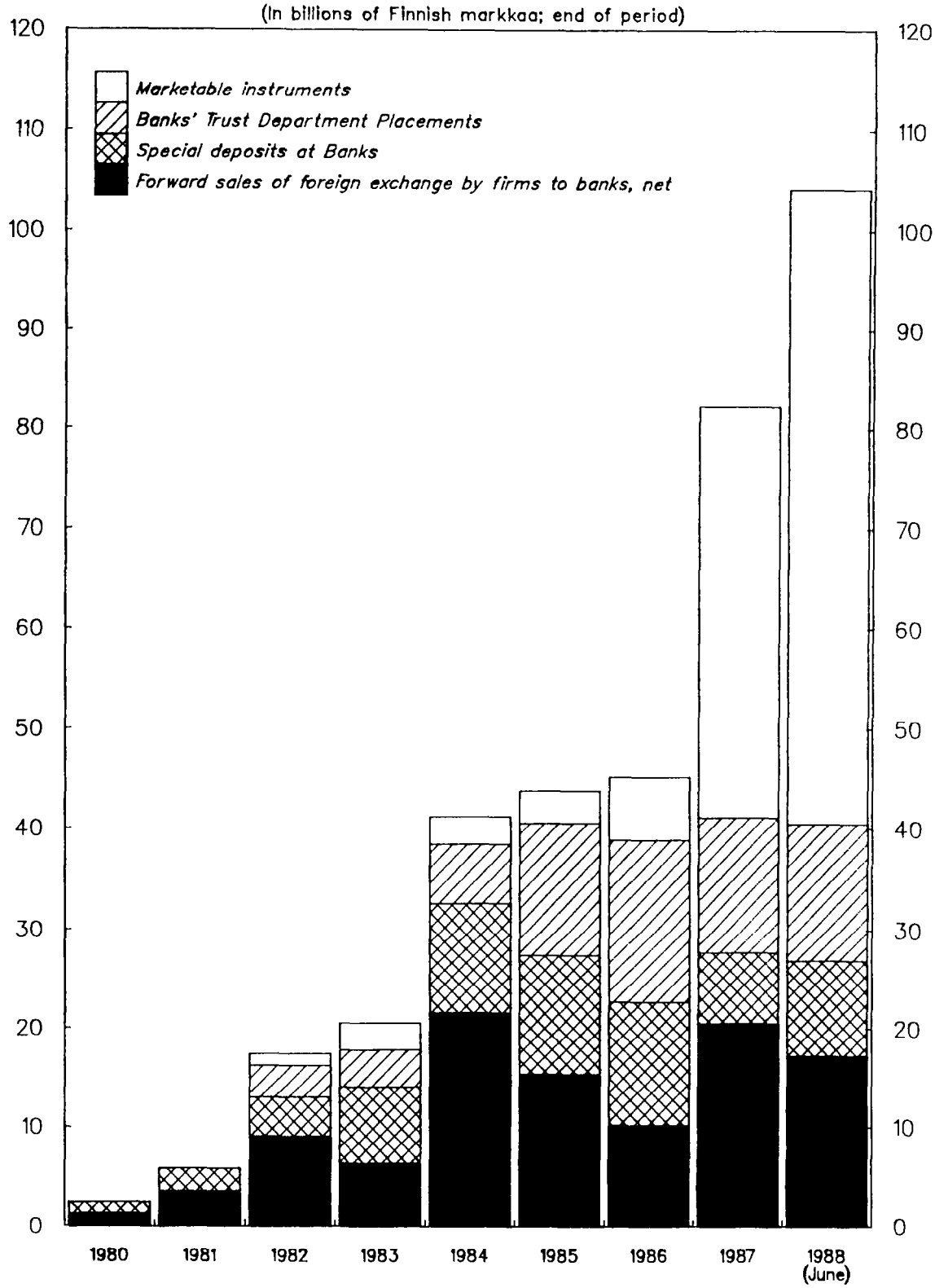
3/ In the past, this would have been done through purchases of foreign exchange in the forward market.

CHART 1

FINLAND

MONEY MARKET INSTRUMENTS OUTSTANDING

(In billions of Finnish markkaa; end of period)



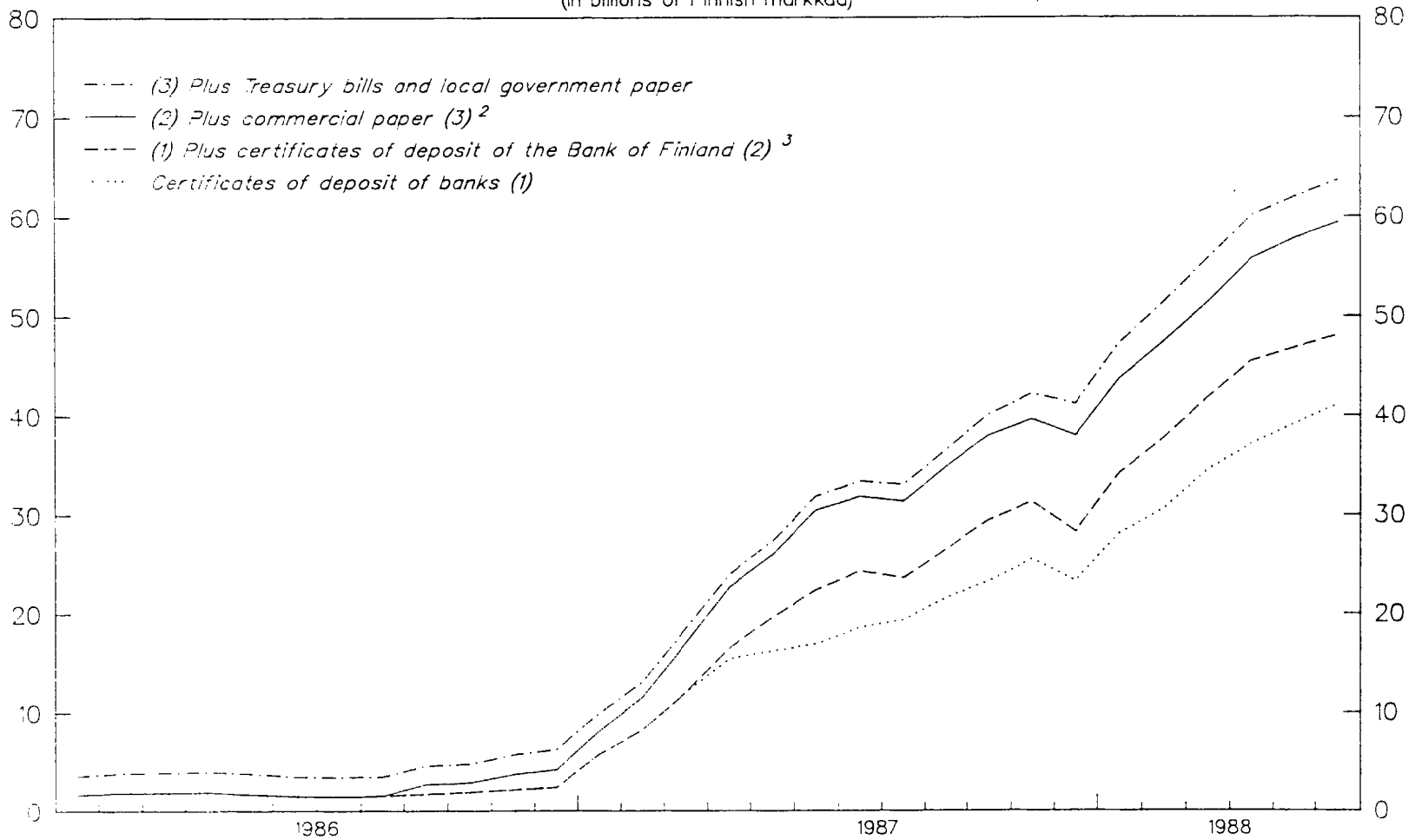
Source: Data provided by the Bank of Finland.

CHART 2

FINLAND

MARKETABLE MONEY MARKET INSTRUMENTS OUTSTANDING[1]

(In billions of Finnish markkaa)



Source: Data provided by the Bank of Finland.
[1] The totals are additive, each line is the sum of that instrument plus the lines under it.
[2] The first commercial paper was issued in September 1986.
[3] The first Bank of Finland certificates of deposit were issued in March 1987.

limit on bank lending rates was eliminated on all loans, except those for the purchase of personal dwellings. At that time, the ceiling on banks' average lending rates was also eased by allowing the average lending rate to be tied to a bank's average markka-deposit rate in cases where it had a large stock of unregulated deposits. In May, the ceiling was further eased and in July the regulation of average bank lending rates was ended. However, the deregulation may have done more to reduce the inefficiencies caused by the avoidance of interest rate regulations than to raise the effective lending rates. For, as noted, for some time, banks had been able to circumvent the ceilings on average lending rates by the use of cocktail loans.

In Finland, longer term loans are normally tied to a reference rate, with the rate moving with the reference rate. Historically, the reference rate on all loans has been the Bank of Finland's base rate. Decisions to change this rate are made by the Parliamentary Bank Supervisors, based on proposals by the Bank of Finland's Board of Management. 1/ Since low interest rates were long a political priority, and movements in the base rate caused rate changes throughout the system, the rate has tended to be sticky, lagging real and financial developments within the system. In recent years, this has increased the interest rate risk of banks as they have increasingly funded their lending with unregulated deposits, whose rates are market-related.

In December 1985, the Bank of Finland took the first step toward the use of other reference rates, allowing banks to link loans of up to one year to the call money rate. In November 1986, banks were allowed to link loans of up to five years to a reference rate which reflected the cost of unregulated short-term funding. However, housing loans and loans of more than five years still had to be linked to the base rate. In May 1987, banks were allowed to link all loans, except housing loans, to any of a set of newly created market-related rates. The new rates were the 1, 2, 3, 6 and 12 month HELIBOR (Helsinki Inter-Bank Offered Rate) rates, which were calculated daily based on the average bid rates for each category of CD. HELIBOR rates quickly became the primary reference rates on new loans, especially commercial loans. In January 1988, banks were also allowed to link housing loans and loans of over five years to long-term market reference rates. For this purpose, the Bank of Finland began to publish 3- and 5-year market rates, based on the offered rates in the secondary market for taxable, fixed rate bonds.

The use of market-related reference rates instead of the base rate has to an extent eased the conduct of monetary policy. By allowing banks to tie lending rates to a market rate, the Bank of Finland has

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1/ The Parliamentary Supervisory Board has the power to fix interest rates controlled by the Bank of Finland and to propose changes in the fluctuation range of the currency index, i.e., to change external value of the markka. Beyond this, the Bank of Finland's Board of Management is relatively independent in its conduct of monetary policy.

been able to pursue its monetary goals indirectly through the market, while avoiding the political scrutiny associated with movements in the base rate. Experience has shown that unwanted market developments, e.g., a rise in interest rates, are more palatable politically when they are "caused" by the market than when they are dictated by official declaration, i.e. by moving the base rate. However, some 80-90 percent of existing loans remain linked to the base rate and, because of borrowers' preferences, over half of new loans to households, especially housing loans, are still tied to the base rate. 1/

c. Monetary policy and the methods of monetary control

During most of the post-war period, monetary control was effected using credit control instruments, made up of a combination of ceilings on lending rates, quotas on borrowing from the central bank and penalty rates on excess borrowings. In the 1970s, policy operated directly through borrowing quotas and indirectly through controls over lending margins, by varying both the ceiling on lending rates and the marginal costs of funds. However, in the 1980s, monetary control evolved with the financial markets, becoming increasingly indirect and market oriented. This shift was accompanied by further changes in the instruments of monetary control, with the role of the call money rate and, to a lesser extent the base rate, being downgraded and greater reliance being placed on market determined interest rates.

The first important change was in 1979, when the Bank of Finland and the commercial banks agreed on the use of a cash reserve requirement (Table 4). Under the agreement, banks could be required to deposit part of their funds with the Bank of Finland. The Bank of Finland, in turn, agreed to pay interest on these deposits, although the interest rate was below comparable market rates. The reserve requirement worked through its impact on profitability, with changes in the list of reservable items and in the ratio itself allowing a degree of flexibility in the implementation of monetary policy. 2/ However, its use was limited, since large increases in the ratio could cause financial operations to shift back into the gray market.

With the freeing of domestic interest rates and the increasing international integration of the financial system, both the size and the responsiveness of capital flows have risen. Countering these flows has

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1/ Since the base rate usually lags market rates, changes in the rate tend to have a minimal impact on market rates. Thus, while raising the base rate does tighten domestic monetary conditions, its impact on capital flows tends to be minimal.

2/ Vihriälä (87), pp. 30-31, observes that, with the abolition of the call money quota in January 1984, the reserve requirement became a tax on deposits rather than a constraint on liquidity. However, with the reintroduction of limits on call money credit in April 1986, it again became a constraint on liquidity.

Table 4. Finland: Major Changes in the Cash Reserve Requirement

April 1979	Cash reserve requirement introduced. Initially calculated based on deposits of public on a monthly basis. Residents foreign exchange deposits counted at half their value. The ceiling on the ratio was initially set at 5 percent. Interest to be paid on cash reserves deposits was set at 0.75 percentage point below base rate.
September 1984	Cash reserve base expanded to include all foreign denominated deposits, special deposits net foreign liabilities after certain deductions. Upper limit on cash reserve requirement raised from 5 percent to 8 percent and interest paid on cash reserve deposits set at 0.25 percentage points below the base rate.
January 1985	Base expanded to include loans on exports and imports raised in banks' own names from foreign financial institutions.
September 1986	Interest paid on cash reserves temporarily raised to the higher of 3 percentage points below the call money credit rate or 0.25 percentage point below the base rate during September-December 1986.
January 1987	CDs and certain long term foreign credits, including credits for financing long term loans, exempted from cash reserve base.

Source: Bank of Finland.

become increasingly important for the preservation of a degree of monetary autonomy. The forward market played a key role in this regard during the 1984-86 period. In 1984, relatively high domestic interest rates resulted in inflows of Fmk 31 billion at the Bank of Finland, including forward purchases; however, the rise in official convertible reserves was only Fmk 11 billion, because most of the inflows were sterilized by the purchase of forward foreign exchange (Charts 3 and 4). During 1985 and 1986, interest rates declined and the markka came under pressure. In 1985-86 the Bank of Finland's convertible foreign exchange position fell by Fmk 28 billion; however, the decline in its convertible reserves was held to Fmk 8 billion, by allowing its net forward position to decline from Fmk 20 billion to near zero.

Changes in exchange control regulations have usually been timed to support monetary policy objectives. While these regulations have been liberalized in recent years, the timing of these actions, as well as an occasional tightening of rules, has usually acted to support domestic monetary goals by helping to offset unwanted capital flows. Thus, in 1984 and the first three quarters of 1985, at a time of strong capital inflows, domestic banks' foreign lending and portfolio investment alternatives were widened and they were allowed to open branches abroad, while the sale of markka bonds abroad was banned and rules on the sale of forward cover on commercial transactions were tightened. In mid-1986, at a time of strong capital outflows, regulations on the use of foreign credit to finance domestic exporters' long-term receivables were eased and restrictions on long-term foreign borrowing by shipping and manufacturing companies were also eased. The resumption of strong capital inflows since early 1987 has permitted a further easing controls on capital outflows including those on direct foreign investment and purchases of foreign securities and foreign dwellings. On the other hand, several relatively important measures were introduced which gave rise to increased capital inflows, including a measure lifting restrictions on long-term borrowing by all domestic firms.

The reform of the financial system has resulted in changes in the conduct of monetary policy, as well as in the instruments of policy. In July 1986, the Bank of Finland was temporarily granted unlimited powers to raise the call money rate to defend both the exchange value of the markka and an "adequate" level of reserves, during a period of capital outflows. 1/ This was also significant because it was the first indication of willingness to use interest rates, and hence market conditions, to achieve the policy targets.

Perhaps the most important recent development in monetary policy has been the growth of the CD market, which has shifted from a small,

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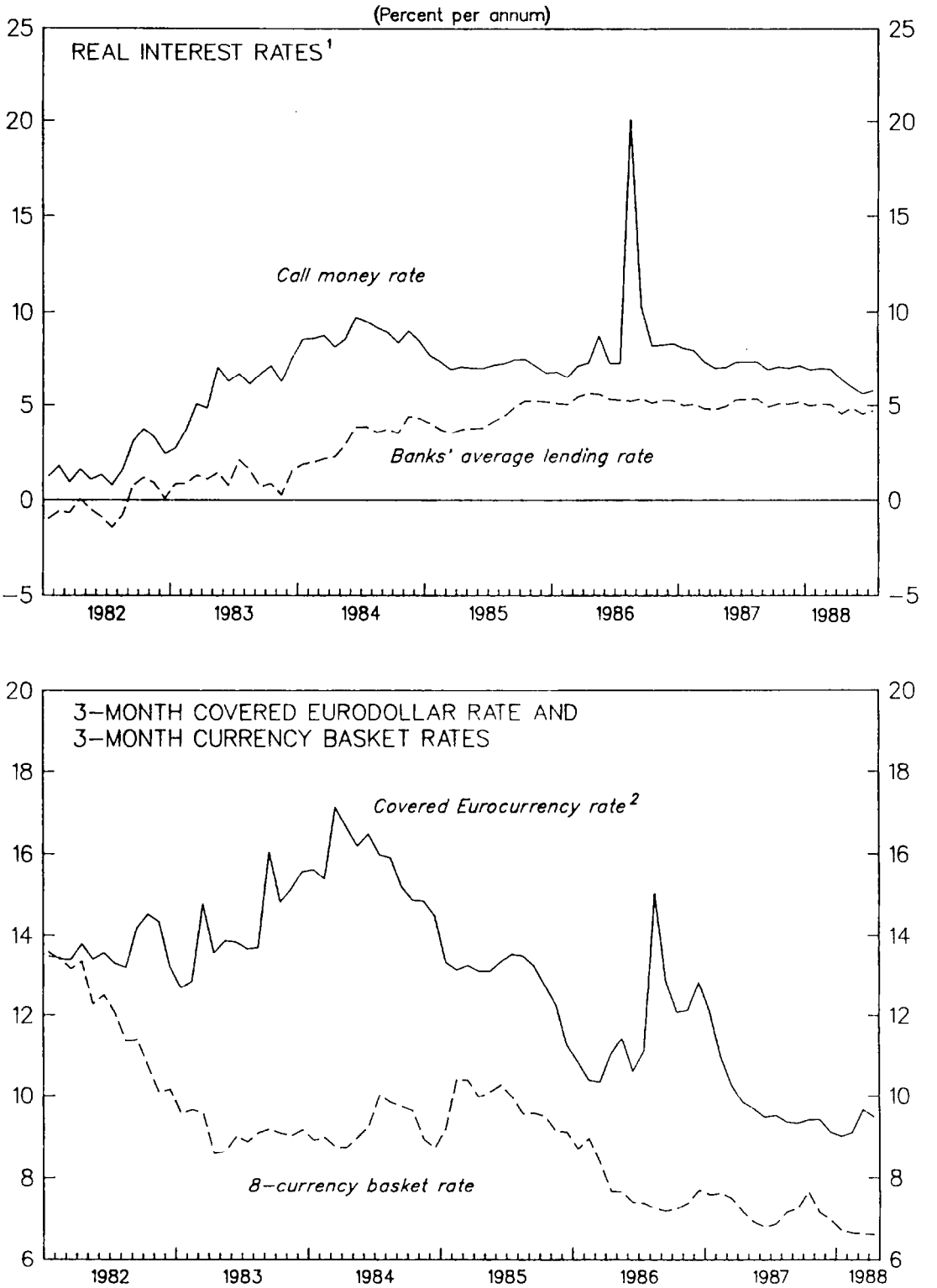
1/ Defending an "adequate" level of official reserves did not constitute an additional policy target, since "adequate" was defined as the minimum stock of reserves necessary for the central bank to conduct orderly foreign exchange operations at the existing exchange rate.

CHART 3

FINLAND

REAL DOMESTIC INTEREST RATES AND INTERNATIONAL INTEREST RATE DEFFERENTIALS

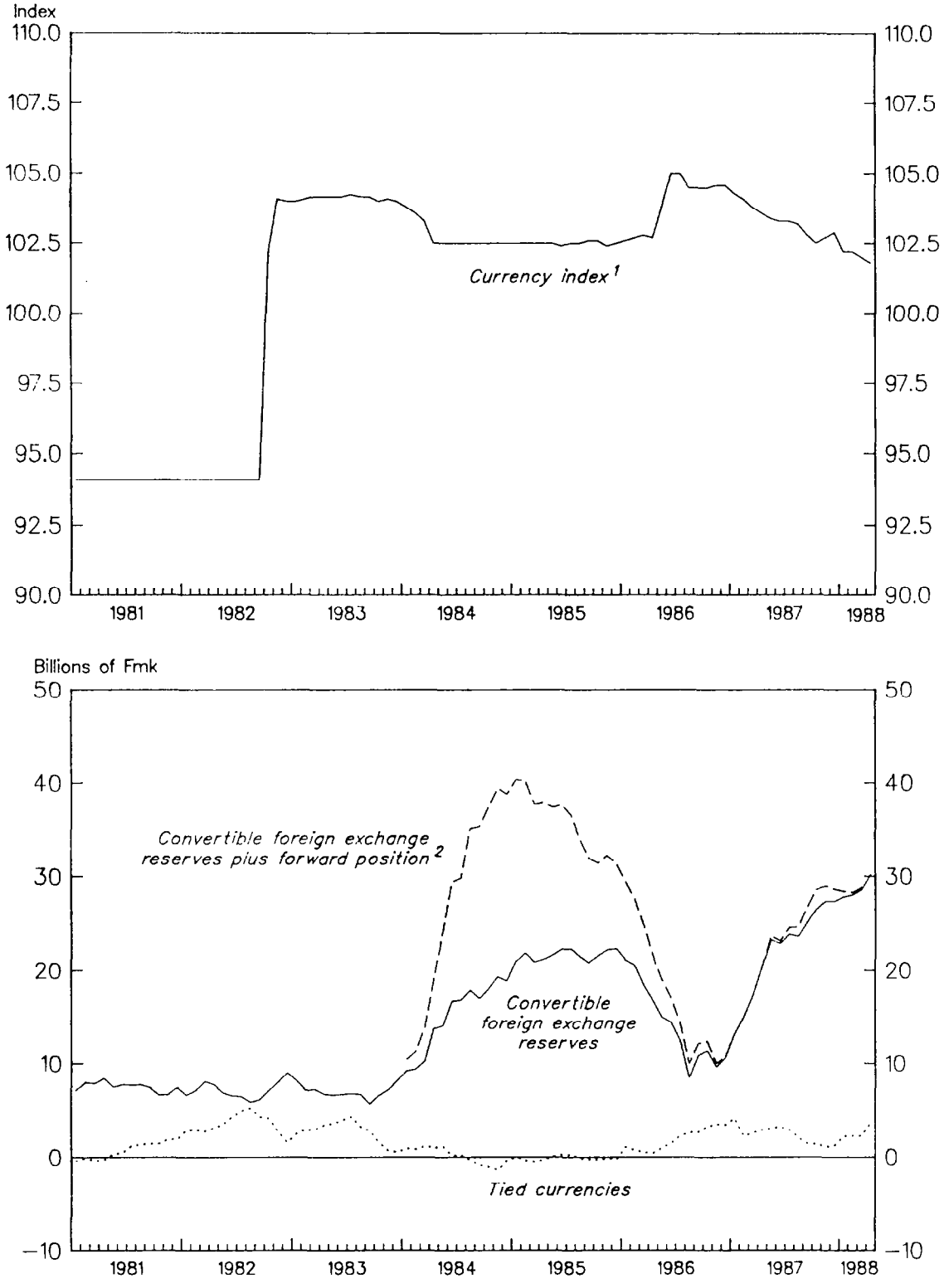


Sources: IMF, Data Fund; and information supplied by the Finnish authorities.
[1] Deflated by the CPI.
[2] Implicit three–month euro–markkaa rate.

CHART 4

FINLAND

BANK OF FINLAND CURRENCY INDEX AND OFFICIAL FOREIGN EXCHANGE RESERVES AND FORWARD POSITION



Source: Bank of Finland, *Bulletin*.

1 Rise indicates depreciation.

2 Forward position in convertible currencies only.

relatively unimportant market in 1986, to being the central money market and the focus of monetary policy in 1987. The new system of monetary control, based on open market operations in the CD market, is favored because it gives the Bank of Finland greater flexibility in the conduct of policy. 1/ First, it allows the Bank of Finland to intervene over a broader range of maturities. Second, it could allow supply and demand to determine rates in periods where policy is directed at protecting or stabilizing official reserves. Third, should the authorities desire, it could also allow a shift away from a policy of interest rate targeting, in favor of a policy of base money targeting.

4. Lessons from the Finnish experience

This section examines several aspects of the experience with the Finnish financial reform to see what lessons can be learned. The discussion focuses on five issues: the selection of short-run monetary policy targets, the loss of monetary autonomy, the rapid expansion of money and credit, the speed of reform and the benefits of reform.

a. The selection of short-run and intermediate monetary policy targets and indicators

The reform brought about major changes in the financial system, requiring important changes in the conduct of monetary policy. First, the channels of financial intermediation moved in a state of flux for a period of years, causing a series of shocks and, ultimately, a shift in the money supply function (discussed in the previous section). This made developments in money and credit aggregates hard to interpret. Second, interest rate deregulation and the end of credit rationing helped to make interest rates the true alternative cost of finance. While this increased the usefulness of interest rates for monetary policy, it also caused a series of portfolio shocks, ultimately altering the characteristics of the money demand function. 2/ 3/ During this period, monetary policy was also complicated by the internationalization of financial markets, which reduced the effectiveness of exchange control, as capital flows became increasingly sensitive to international interest differentials and exchange rate expectations.

1/ For further discussion including a description of the system of open market operations, see Korkman (87).

2/ The Appendix is a brief empirical study of the demand for money in Finland.

3/ Akhtar (83) noted that these first two effects were general characteristics of financial change in large industrial countries.

Sellon and Teigen (82) studied the optimal short-run targets for monetary policy with various types of disturbances and monetary autonomy. 1/ They showed that if the most likely shock was a money supply disturbance, the appropriate intermediate target, that is, the interest rate or monetary aggregate thought to be linked to the ultimate targets, could be either an interest rate or a monetary or credit aggregate, while the appropriate operating target, that is, the interest rate or reserve aggregate which is closely controlled by the authority, would be an interest rate. On the other hand, if the shock was a portfolio disturbance, the appropriate intermediate and operating targets were both interest rates. Since the financial reform caused both portfolio and money supply disturbances, interest rates should have been used as both the operating and the intermediate targets.

At the start of the reform, monetary policy targets were similar to those Sellon and Teigen would propose; however, as the reform progressed, policies moved in an entirely different direction, because of increased capital mobility and the associated reduction in monetary autonomy (see below). Initially, effective capital controls and an underdeveloped financial market allowed sufficient autonomy for the interest rate and the exchange rate objectives to be treated separately. During this period, the Bank of Finland conducted monetary policy using an interest rate operating target, as Sellon and Teigen would propose, but without specific intermediate targets. 2/ Instead, they used a wide range of indicators including market interest rates and ultimate target variables. 3/ However, as capital flows became increasingly interest sensitive, the exchange rate became the primary intermediate target and interest rates increasingly were set to defend this end.

b. The loss of monetary autonomy

One problem associated with the financial reform has been the loss and possibly the elimination of autonomy in seeking to direct monetary policy at domestic policy targets. 4/ It may be argued that internal deregulation shifted interest rate decisions to the market place. It may also be argued that the external deregulation increased capital mobility, and that this, together with the increased sensitivity to interest differentials and exchange rate expectations, has required that monetary policy be directed solely at the exchange rate target.

1/ Their research was generalized from Poole (70) on the choice of intermediate policy targets for monetary policy. While it was based on a large economy, the United States, the analysis would also apply with a fixed exchange rate and binding capital controls.

2/ Low interest rates may have been the true intermediate target in the 1970s and the early 1980s.

3/ Such an eclectic policy was espoused by Akhtar (83).

4/ Of course, abandoning the fixed exchange rate objective would have restored this autonomy.

However, while it is true that much autonomy has been lost, it is possible that as much, or more, autonomy would have been lost in the absence of the reforms.

The first question is whether the financial reform was responsible for the loss of autonomy. Indirect evidence suggests that this was not the case, since autonomy may have been greatly reduced, or lost, even without the reform. In the late 1970s and early 1980s, the gray market grew rapidly. By 1983, one fourth of all loans and one fifth of deposits were unregulated, and these percentages were rising. 1/ Concerns about the loss of effective monetary control to the gray market in fact led to many reforms. The authorities saw themselves as having a choice of letting the regulated markets be dominated by the gray market, or permitting financial reform and accepting some associated loss of autonomy in the regulated markets. On the external side, capital flows appeared to be increasing as much from the internationalization of business as from the reduction in capital controls. Market behavior was also changing, with an increasing share of transactions moving through channels not regulated by the Bank of Finland. 2/ In the absence of reform, higher interest rate differentials, caused by the maintenance of capital controls, might have also raised the rewards from arbitrage sufficiently that capital controls would have become self-defeating in any case.

A study of the interest sensitivity of capital flows by Åkerholm and Tarkka (86) showed that, while autonomy had been reduced, some short-run flexibility remained. They found that the short-term sensitivity of capital flows had doubled from 1977-82 to 1982-85, while the long-term effects rose eight-fold. Thus, while it may still be possible, within limits, to adjust the interest differential to pursue domestic goals over shorter periods, over the longer run such a stance would be increasingly difficult to maintain.

c. The rapid growth of money and credit

The end of credit rationing together with reduced monetary autonomy caused an undesired surge in the money and credit growth during much of the 1980s. This occurred for three reasons. First, in the old system, household borrowing was rationed and, although market interest rates were low, the effective marginal rate was high or infinite, causing considerable repressed demand. Thus, while measured market rates rose, the effective interest rate may have fallen, certainly at the margin. Second, within limits, household interest payments were tax deductible, lowering the effective rate and increasing loan demand at any interest rate. Third, as discussed, increased interest sensitivity of capital

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1/ Swoboda (86), p. 14.

2/ While nearly 90 percent of all capital flows in the 1970s were through channels regulated by the Bank of Finland, less than 20 percent of the flow in 1986 was through regulated channels.

flows limited the ability of the Bank of Finland to raise domestic interest rates, even when higher interest rates were clearly in order. One factor which increased capital flows was the reduced restrictions on foreign borrowing by firms, which allowed them to borrow abroad when domestic interest rates rose. While most of these problems were a natural result of financial decontrol, one was clearly avoidable. In the old system, the anti-savings bias caused by the tax deductibility of household interest payments was minimized by rationing; however, the problems associated with the resulting credit expansion were aggravated by not ending or reducing deductibility before or with the end of rationing.

d. The pace of the reform

The Bank of Finland has taken a gradualistic approach to the reform. In fact, the approach is so gradualistic that the reform is still not complete. This strategy has been based on the belief that borrowers become habituated to low and stable rates and need time to adjust to the new environment, while deregulation posed risks for the banking system, especially the small banks. The authorities also feared that rapid deregulation could cause policy errors and possibly an unwanted contraction or overheating of the economy. On the other hand, an unregulated market working in parallel with a regulated market posed increasing risks of large-scale arbitrage activities between the low regulated rates and the higher market rates, as well as having potential to destabilize interest rate movements and capital flows. 1/

The evidence about the speed of the financial reform is mostly indirect, but it appears that it was almost certainly not too fast and it could have been too slow. The evidence that it was not too fast lies in Finland's strong economic performance during the 1980s. During this period, the Bank of Finland had considerable success in achieving its goals of maintaining a stable exchange rate while bringing inflation down toward the OECD average. No significant exchange rate adjustments were necessary after 1982, while inflation declined steadily to under 4 percent. At the same time, the reform did not appear to interfere with the performance of the real sector, with GDP expanding steadily and faster than the OECD average, unemployment held relatively low, and fears about damage to the banking system going unfulfilled.

1/ Higher lending rates in the unregulated market impose an implicit tax on those using the market, while giving an implicit subsidy to those using the regulated market. Further, the smaller the relative size of the unregulated market, the higher and more volatile unregulated rates would be likely to be. This could also result in destabilizing capital movements, since capital flows would be expected to be more responsive to unregulated rates.

Arguments relating to whether the adjustment has been too slow are even more indirect. Profits from arbitrage between markets cannot be measured. However, the spread on bank lending has risen during the reform, because the cartel-like arrangement on household deposit rates has been maintained, keeping deposit rates low, while most lending rates have been freed. The spread between the average lending rate and the average deposit rate rose from 3.4 percent in 1984 to 3.8 percent in 1987. 1/ Destabilizing capital flows are also difficult to measure, since it is not clear what flows occurred because of distortions arising from the slow pace of the reform and what portion occurred because of other factors, including the reform itself.

e. Benefits of the reform

Discussions of financial reform tend to emphasize the problems that occur during and after the reform and the costs associated with the action, rarely noting the benefits of the reform. Thus, some mention of the benefits would seem to be in order. First, the greatest benefits probably came from the end of credit rationing and the elimination of ceilings on lending rates. By allowing credit to be allocated by price, smaller, newer and growing firms were given freer access to bank credit, while older and more stagnant firms could no longer gain risk-free profits from their access to subsidized credit; consumers were also major beneficiaries of the end of rationing. On the other side, the banks' continued cartel on offering tax-exempt deposits to households allowed them to profit from higher lending rates, without the need to offer higher interest rates to household depositors. Second, the end of rationing allowed firms to borrow only when they needed credit, rather than effectively forcing them to borrow whenever credit was offered, increasing the efficiency of the use of credit. Third, the reform helped to reduce banks' reliance on indirect charges and fees, which increased the opacity of bank charges for loans as well as services. Fourth, merging the gray market with the traditional financial market has ended the benefits of arbitrage between these markets, reducing the distortions and problems associated with such transactions.

5. Areas for potential future reforms

While the reform of the financial system has been far-reaching, certain distortions and problems remain. Three of the most important issues are the tax treatment of interest payments, the cartel-like arrangement for setting interest rates on household deposits, and the controls on capital exports. As noted, interest payments by households are, within limits, tax deductible, which tends to discourage savings. Under the present law, interest payments are deductible up to Fmk 25 thousand per household per year, with a lower sublimit on

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1/ The spread on the average rate on new loans probably increased by about 1/2 percentage point more. Data on the average deposit rate are not available before 1984.

interest on consumption loans. 1/ The greater the tax savings on interest payments, the higher is expected domestic borrowing at any interest rate, and the lower domestic savings. Thus, if domestic interest rates approximate foreign rates, as implied by a successful fixed exchange rate policy, a higher effective rate of deductibility would imply a weaker current account balance, with unchanged public sector savings. However, ceilings on deductions tend to limit borrowing and protect the current account. Cuts in marginal tax rates and reductions in the deductibility of interest payments--which are both proposed in the tax reform currently being considered--would also be expected to increase savings and improve the current account. 2/

High domestic inflation can intensify this problem. International interest differentials are largely based on inflation differentials, while borrowing is based largely on real after-tax interest rates. With capital mobility, interest differentials tend to be limited to inflation differentials--or the differential in the total expected return--implying the higher domestic inflation, the lower real, after-tax interest rates, and the weaker the current account. Fortunately, in recent years, inflation in Finland has been reduced, though in 1988 it is again rising.

As noted, Finnish law makes the interest paid by banks on household deposits tax-exempt, if the banks set a uniform interest rate structure for these deposits. 3/ The cartel-like arrangement allows banks to set rates in a monopolistic manner, which probably results in lower deposit rates than under competitive conditions. Maintaining the cartel while decontrolling lending rates has benefited the banks, because they have been able to raise their average lending rate faster than they have had to raise their average deposit rate. This law expires at the end of 1988 and new legislation will need to be passed during 1988. 4/

1/ In 1986, only one fifth of individuals claiming the interest rate deduction were at the overall limit.

2/ A main goal of the proposed tax reform is to reduce marginal tax rates. The reform is also expected to reduce the deductions for interest payments. While a ceiling on deductions of interest payments will be retained, only a portion of payments below the ceiling will be deductible. Under the current proposal, 90 percent of interest payments below the ceiling will be exempted from taxation in 1989, with the exemption being cut by 5 percent annually until it drops to 60 percent.

3/ The same legislation also allows tax exemptions for government and mortgage credit bank bonds.

4/ The latest version of the tax reform would reduce the exemption of interest on bank deposits; however, interest on "ordinary" household deposits would remain tax-deductible. The deduction would be based on the interest rate on the deposit, rather than on the earlier requirement that the banks offer a uniform interest rate on that deposit class.

In recent years, controls on capital inflows have been largely dismantled, reducing any remaining bias against non-preferred borrowers; however, major controls on capital outflows remain. These controls discriminate against savers, in favor of borrowers and banks. Reducing them would also allow the authorities greater freedom to maintain high domestic interest rates in periods where domestic conditions call for interest rates that put upward pressure on the exchange rate.

6. Summary and conclusions

In the 1970s, monetary policy operated directly through borrowing quotas and indirectly through controls over bank lending. However, by the 1980s, a flourishing gray market had developed that reduced the effectiveness of interest rate ceilings and credit restrictions; at the same time, increased international integration eroded the effectiveness of capital controls. Rather than seeking to regulate the gray market, the Bank of Finland chose to try to gradually integrate the market into the financial system, which required moving to an indirect, market-oriented monetary control system. Central to the reform was the removal of interest rate ceilings on bank lending and the ending of the controls that gave rise to credit rationing. The reform also required the creation of an efficient and active money market, which did not exist in a meaningful sense before 1986. The Bank of Finland did this by aiding the development of the domestic CD market. With the growth of this market, the Bank of Finland was able to downgrade its call money rate and, to a lesser extent, the base rate and carry out policy through intervention in the CD market.

The main beneficiaries of the reform were borrowers whose access to bank credit had previously been restricted because of rationing or who had been shut out of the market altogether because of interest rate ceilings. This included the newer, smaller firms and the firms which were growing the fastest and households. On the other hand, the main losers were the older, more stagnant firms with established bank credit lines. These firms lost the benefit of being able to borrow at below market rates of interest. Banks also benefited from the reform since they were able to extend credit to all borrowers at market interest rates, while being able to raise large amounts of funds at below market rates through their cartel on tax-exempt household deposits.

One possible criticism of the reform is that it caused a loss of autonomy in the conduct of monetary policy, giving the authorities the choice of either maintaining their fixed exchange rate policy or directing monetary policy at domestic objectives, but not both. While it is true that monetary autonomy was greatly reduced, it is probably not true that the financial reform caused the loss. In fact, it was concern about the loss of effective monetary control that led to many of the reforms. The authorities saw themselves as having a choice of allowing the regulated market be dominated by the gray market or pursuing the financial reform and possibly accelerating the loss of monetary autonomy, which would happen in any case. Had they not acted,

the gray market probably would have continued to expand, moving increasingly into channels outside the Bank of Finland's control, while arbitrage between regulated and unregulated markets would have minimized any benefits from any remaining regulations.

The rapid monetary and credit expansion in 1987 and early 1988 helped to highlight the anti-savings bias caused by the generous tax deductions allowed on household interest payments. Under the old system, this was not a problem because credit rationing constrained household borrowing. However, with the end of rationing, borrowing surged as households sought to raise their debt to a level consistent with real after-tax domestic interest rates. Higher nominal interest rates did not necessarily discourage borrowers because previously credit rationing had made the effective marginal interest rate infinite. Reducing the benefits of tax deductions on interest payments would have reduced the surge in credit demand by raising the real after-tax rate on borrowing.

Money Demand in Finland

Limitations on banks' access to marginal funding constrained the supply of credit during the 1960s and 1970s. This, together with a political preference for low and stable interest rates, gave rise to the need for credit rationing. Attempts to estimate a demand for money equation for this period lend support to the belief that the supply constraint on credit was binding and that an excess demand for money existed throughout much or all of this period. For example, Söderlund (forthcoming) examined the literature on Finnish money demand equations and found that models using data from the the 1960s and 1970s usually did not even include interest elasticities. The main exception was Solttila and Johansson (1987) who did estimate negative interest elasticities on selected financial assets using several definitions of M1 during the 1975-85; however, the estimated elasticities were much larger during the 1983-85 period. The emergence of a negative interest elasticity in the late 1970s may be taken as indirect evidence of the increasing importance of the gray market during this period.

This appendix presents a model of the demand for real money balances over the 1976-87 period. The model is of the form:

$$RM_t^d = a_o + a_1 R_t + a_2 Y_t + \varepsilon_t \qquad (1)$$

and

$$\varepsilon_t = \rho \varepsilon_{t-1} + u_t \qquad (2)$$

where RM^d is the real money stock; R is the opportunity cost of holding money balances; and, Y is a scale variable such as real income, which acts as a measure of the transactions demand for money. 1/ The real money stock is defined as M1 (IMF definition) deflated by the consumer price index. 2/ The opportunity cost of holding money is the Bank of Finland's call money rate. The call money rate is assumed to represent the opportunity cost on corporate deposits. Most household deposit rates are tied to the base rate and the base rate was only changed infrequently during this period. The scale variable is real GDP, which

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1/ Money demand equations are often partial adjustment models, using the lagged dependent variable as a proxy for the partial adjustment. Tests of this specification found the coefficient on the lagged dependent variable to be generally insignificant and often negative.

2/ The model was also estimated by using nominal money demand as the dependent variable and inflation as an independent variable; however, the price variable was generally insignificantly different from one, implying that the model should be specified in real terms, i.e., an absence of money illusion. Similar equations were also run for the demand broad money (M_3), including an additional interest rate for the return on broad money holdings. However, the results did not appear meaningful and were not included.

is defined as quarterly GDP deflated by the consumer price index. The model is estimated using quarterly data over the period from 1976:Q1 through 1987:Q3. The sample is also stratified into three subperiods, 1976:Q1-1980:Q4, the period prior just to the the reform; 1980:Q1-1983:Q4, the early part of the reform period; and 1984:Q1-1987:Q3, the later part of the reform period. This was done to examine whether the model changed over time. The models is log-linear, so the estimated coefficients are elasticities.

The results are presented in Table 5. The results show that rather interesting changes took place in the model across the three subperiods. 1/ During the 1976-79 period, equation 1.b, the interest elasticity of money demand was significantly negative, possibly because the gray market already had an important impact on money demand during this period. The 1980-83 period, equation 1.c, appears to be a period of transition and the results are somewhat puzzling. 2/ During this period, the estimated interest elasticity is insignificantly different from zero, possibly showing that structural shifts associated with the financial reform and developments in the gray market dominated the underlying money demand equation. In the 1984-87 period, equation 1.d, there is evidence that a somewhat different money demand equation emerged as a result of the financial reform. During this period, the interest elasticity is once again negative, with a coefficient significantly more negative than during the earlier subperiods. On the other hand, the evidence does not support the hypothesis that the elasticity of money demand with respect to real GDP changed between the subperiods.

1/ A chow test, testing for a structural change in the model across the three subperiods, yielded an F-statistic of 14.51, rejecting the null hypothesis of no structural change at the 1 percent confidence level.

2/ The model is a simple one and perhaps the insignificance is caused by the exclusion of a key variable. The autocorrelation in the model would tend to support this argument.

Table 5. Finland: Regression Results for Money Demand Equation 1/

(Quarterly data; in natural logarithms)

Regression	Dependent Variable	Period	Independent Variables: Constant	Call money rate (R)	Real GDP (Y) 2/	ρ	S.E.E.	Adj. R^2	Durbin-Watson
1 a	Real M_1 (RM) 3/	1976:Q1-1987:Q3	5.50 (69.04)	-0.0074 (-1.96)	0.55 (6.96)	0.74	0.042	0.87	2.13
1 b	Real M_1 (RM) 3/	1976:Q1-1979:Q4	5.47 (38.55)	-0.0067 (-2.29)	0.59 (3.39)	0.29	0.038	0.63	1.96
1 c	Real M_1 (RM) 3/	1980:Q1-1983:Q4	5.22 (32.27)	0.0039 (0.45)	0.38 (2.78)	0.55	0.035	0.50	2.00
1 d	Real M_1 (RM) 3/	1984:Q1-1987:Q3	5.79 (72.88)	-0.025 (-6.36)	0.53 (3.59)	-0.23	0.031	0.80	2.25

Source: IMF, International Financial Statistics; and staff calculations.

1/ t-statistics in parentheses.
2/ Y = ln (GDP) - ln (CPI).
3/ RM = ln (M_1) - ln (CPI).

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