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Flow of Funds in Japan, 1996

Summary

In 1996, the gross amounts of fund-raising and financial investment by the domestic nonfinancial sector (comprising the corporate business, personal, and public sectors) during the year both decreased from the previous year, remaining at low levels compared with the past. The sector's fund-raising through borrowing declined, while funds raised through government bond issues reached a record high. As for financial investment, there was a larger net redemption of securities (excluding investment trusts) than in 1995, and the net investment in insurance products narrowed significantly.

In the corporate business sector, the financial surplus marked a record high. This was because (1) cash flow improved in excess of the continued growth in fixed investment, due mainly to a recovery in sales; and (2) interest payments decreased, reflecting low interest rates. The sector's fund-raising was at its lowest level since 1956 -- the third year of compilation of the flow of funds accounts -- primarily on account of a net decline in loans, which was more significant than the previous year, particularly in those from private financial institutions. At the same time, financial investment also declined from the previous year. Such overall sluggishness of fund-raising and financial investment activities can be attributed to the persisting balance-sheet adjustment pressure.

In the personal sector, the financial surplus narrowed, the ratio of financial surplus to nominal GDP marking a record low. This was because (1) consumption expenditures increased by a larger margin than the improvement in employees' income; and (2) housing investment increased due to the effects of low interest rates and a surge in demand ahead of the rise in the consumption tax rate in fiscal 1997. Both fund-raising and financial investment fell below the previous year's levels, with conspicuous declines in investments in long-term assets such as insurance, securities, and trusts. The outstanding amount of financial assets in the personal sector reached ¥1,200 trillion for the first time at the end of 1996.

In the public sector, a large financial deficit remained, due to expanded public-sector investment during the first half of the year. Fund-raising through government bond issues, almost all of which were purchased by the financial sector, marked a record high.

Profits and Balance-Sheet Developments of Japanese Banks in Fiscal 1996

Overview

Operating profits<sup>1</sup> of Japanese banks<sup>2</sup> in fiscal 1996 amounted to ¥6.4 trillion, 5 percent lower than in the previous year. This decline reflects a decrease in the net bond-related

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<sup>1</sup> "Operating profits" signifies earnings from core banking operations, arrived at by subtracting "general loan-loss provisions," "general and administrative expenses" and "expenses for debenture issuance" from the total of "net interest income" (e.g., interest received/paid) for loans and

profits and in the net interest income of city banks. Excluding a temporary factor<sup>3</sup> which contributed to an increase in profits on trust accounts, the decline in operating profits from the previous year was about 10 percent.

Loan write-offs and loan-loss provisions<sup>4</sup> marked approximately ¥7.6 trillion (including trust accounts), which is the second highest level following fiscal 1995 when the *jusen* (housing loan companies) were liquidated. This suggests that most banks continued to give high priority to solving the problem of nonperforming loans.

Net stock-related profits<sup>5</sup> were no more than about ¥1.0 trillion, approximately ¥2.9 trillion lower than the fiscal 1995 level, due to substantial stock write-downs resulting from the fall in stock prices. This reflects the fact that banks' balance sheets have become more exposed to volatility in stock prices because of a rise in the book values of stocks which resulted from recent cross transactions -- sets of purchases and sales transactions on the same stocks in order to acquire unrealized capital gain. As the loan write-offs and loan-loss provisions virtually matched the total of operating profits and stock-related profits, recurring profits and net income reached close to zero levels, although this represented an improvement from the previous year.

### On the Relationship between Monetary Aggregates and Economic Activities in Japan: A Study Focusing on Long-Term Equilibrium Relationships

#### Introduction

This paper empirically analyzes the relationship between monetary aggregates and economic activities in Japan using actual data and focusing on long-term equilibrium relationships. Long-term time-series data from the 1960s to 1996 are used in the analysis in order to observe long-term relationships between the most commonly used monetary aggregate, M2+CDs, and macroeconomic indicators, such as GDP, rather than limiting the analysis to short-term relationships during the past year or two.<sup>1</sup> In addition to long-term relationships, the

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discounts, deposits and securities), "net fee and commission income" (e.g., fees and commissions received/paid) and "net other operating income" (e.g., net profits related to bonds and foreign exchange).

<sup>2</sup> "Japanese banks" or "banks" in this article refers to "All Banks," comprising the member banks of the Federation of Bankers Associations of Japan, which consists of city banks, long-term credit banks, seven trust banks (excluding foreign-owned trust banks and trust banks that started business after October 1993), the 64 member banks of the Regional Banks Association of Japan (hereafter referred to as regional banks), and the 65 member banks of the Second Association of Regional Banks (hereafter referred to as regional banks II). However, calculated figures exclude data for Hyogo Bank (the present Midori Bank), Taiheiyo Bank (the present Wakashio Bank), and Hanwa Bank.

<sup>3</sup> Specifically, the temporary factor here refers to profits resulting from withdrawals from special reserve funds held by trust banks. The withdrawal profit resulted from a revision of a government ordinance that reduced the ratio of funds to set aside for the special reserve funds (from 3 percent of principal to 0.5 percent of principal). These are accumulated to provide for situations in which the value of a loan trust falls below the value of the principal. The trust banks applied part of the profit to write off nonperforming loans in trusts, and the remainder to be accounted as trust fees and be registered in the banking accounts as net fee and commission income.

<sup>4</sup> This includes not only loan write-offs, but also transfers to special loan-loss accounts (provisions), losses from the sales of nonperforming loans to the Cooperative Credit Purchasing Company (CCPC), and renunciations of claims.

<sup>5</sup> Stock-related profits/losses are calculated by subtracting from "gains on stock-selling operations" the sum of "losses from stock-selling operations" and "stock write-downs".

<sup>1</sup> Note that the sample period includes the period when M2+CDs underwent large fluctuations, i.e. from the latter half of the 1980s to the early 1990s.

stability of the money demand function and also the lead/lag relationships between monetary aggregates and other macroeconomic indicators are tested.

The conclusions of the paper can be summarized as follows.

(1) When developments in M2+CDs and other macroeconomic indicators are viewed in the long term, fluctuations in nominal M2+CDs have a relatively stable relationship with movements in nominal GDP. This can also be confirmed by applying an econometric technique called "cointegration analysis", which suggests that there is a long-term equilibrium relationship between the two. On the other hand, the relationship between M2+CDs and prices -- which along with real GDP make up nominal GDP -- has changed since the latter half of the 1980s, in the sense that fluctuations in prices have clearly diminished relative to those of M2+CDs.

(2) A relatively stable money demand function can be estimated, based on the above long-term equilibrium relationship and incorporating factors for short-term fluctuations. At least in the sample period, the mechanism of short-term fluctuations has been relatively stable in M2+CDs, GDP, interest rates, and asset factors, as represented by the money demand function.

(3) An analysis in terms of lagged cross correlation on the lead/lag relationships between M2+CDs and other macroeconomic variables reveals that M2+CDs basically leads nominal and real GDP, domestic private demand, and prices. However, there are differences in results across sample periods that cannot be ignored.

(4) Similar analyses are conducted, from the standpoints of conclusions (1)-(3) above, on selected monetary and credit aggregates other than M2+CDs, and on monetary aggregates obtained by partially changing the components of M1 and M2+CDs. The results show that these aggregates did not have more stable relationships with macroeconomic indicators than did M2+CDs.

(5) The above results suggest that, in analyzing monetary aggregates, it would be effective to use the long-term equilibrium relationship between M2+CDs and GDP as well as the money demand function incorporating the relationship. In interpreting the empirical results using the statistical techniques, however, it is necessary to bear in mind the following limitations:

(a) Long-term equilibrium relationships indicate only the average relationship in the long run, and hence considerable deviations from equilibrium values may arise in the short term; and

(b) There still remains a possibility that the long-term equilibrium relationships or money demand functions derived from the previously observed data may change, as a result of a large shift of funds caused by deregulation and other structural changes in the financial markets in the future.

### Checklist for the Year 2000 Problem

#### Introduction

The Bank Supervision Department of the Bank of Japan compiled the following checklist (the original is in Japanese) to assist bank examiners in assessing the adequacy of financial institutions' risk management framework for addressing the Year 2000 problem (hereinafter simply "the Problem").<sup>1</sup> On August 19, 1997, the checklist was also distributed to financial institutions to help them in their own evaluation of their action plans.

The checklist emphasizes the significance of each financial institution's understanding and awareness of the Problem, and calls for the commitment of each institution, including the top management, to its action plans. In proceeding with the action plans, each institution is advised to fully assess the effects of the Problem, carefully arrange the scheduling of the plans, and complete renovation and testing prior to the implementation of the action plans. The checklist also stresses the importance of other matters including (1) the monitoring of the progress as to the implementation of the action plans, (2) the scrutiny of legal responsibilities of outside vendors, and (3) the establishment of contingency plans.

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<sup>1</sup> Many computer operating systems and applications use six-digit codes for dates -- date fields -- comprising two digits for the year, two digits for the month, and two digits for the day (for example, December 31, 1999 reads 991231). With such a coding system, the code for the year 2000 will be "00," which may be interpreted as the year 1900, not 2000. This will cause errors in date-sensitive calculations and other issues. Such problems are referred to as the Year 2000 problem. If measures are not taken to address the problem, normal operations of financial institutions will be disrupted, which would lead to disturbances in payment and settlement systems nationwide, the effects of which may spread to other industries.

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