The financing of Japanese industry[1]

- *The rapid expansion of the Japanese economy has been founded mainly on a high rate of productivity growth stimulated by a high level of investment.*
- *The banks have played the major financing role, encouraged by high personal savings, tax incentives and the group structure of Japanese industry. One consequence is that industrial companies typically have high debt ratios and low equity ratios—although this feature is exaggerated by differences between Japanese and western accounting practices.*
- *Despite its success in contributing to Japan's economic growth, this system has some disadvantages and problems, and changes are in evidence. Following the first oil crisis, industry is becoming more reliant on internal funds and is diversifying its sources of external finance away from the banking system and towards the capital markets, both at home and overseas.*
- *These trends are likely to continue, with the result that equity ratios in Japanese industry will rise, if only slowly, and the financial behaviour of industry and the banking system may move closer to that obtaining in other developed countries.*

Introduction

Much criticism has appeared in the United Kingdom to the effect, first, that UK taxation policy and institutional arrangements have directed too much of the available credit towards financing housing and consumption and not enough towards financing industrial investment and growth; and second, that the UK financial system in general, and the banks in particular, have failed to provide adequate medium-term and long-term finance for investment; have tended to impose excessively stringent conditions on their lending to industry; and have not taken enough risks in supporting new industry and technology.

Answers to these criticisms have not been in short supply: first, that there is no medium-term or long-term financing gap in the United Kingdom, but that what is lacking is the demand for funds for viable investment projects; second, that the banks are increasing lending at medium-term or long-term; and third, that the banks are substantially relaxing their normal lending criteria in order to help industry through a period of deep recession.

This article does not seek to judge the relative merits of these arguments; but since part of the criticism of UK financing arrangements for industry has been based on a comparison with the Japanese system, it might be instructive to examine the main characteristics of, and trends in, the financing of Japanese industry.

The socio-economic background

The causes of high investment and rapid economic growth in Japan are many and various; and many have nothing to do with Japan's industrial financing arrangements. On the social side, there is a highly educated workforce, the seniority system for wages and, in the larger firms, the lifetime employment system; together, these have produced non-confrontational industrial relations based on company unions, and a high degree of adaptability and mobility (intra-company if not inter-company) of labour. In addition, the lifetime employment system means that a large section of the labour force need not fear that the introduction of new technology might lead to the loss of jobs.

On the industrial side, Japan's particular structure, with a large number of small companies depending in a sub-contractual relationship on the health of a small number of large firms organised to some extent in heterogeneous industrial groupings, has also made a major contribution to growth.

Finally, from the Government there have been stable and consistent policies, allied with a combination of direction and persuasion by means of a system of incentives and penalties. As a result, industry has developed in a way that has been founded on a general consensus among all interested parties.

In the final analysis, however, the rapid expansion of the Japanese economy must primarily be ascribed to the rapid growth of labour productivity, which itself has been fuelled by a high level of savings and investment. In this process, the financial system in Japan has played its part and Japanese industry in general can claim to have been well supported by the banks.

(1) This article has been prepared by C D Elston, who is currently Financial Attaché at the British Embassy in Tokyo on secondment from the Bank of England. This article has been seen by the Bank of Japan, who made a number of helpful comments. An article on the financing of British industry may be found in the September 1980 *Bulletin*, page 319.

Table A
Composition of personal financial assets[a]
Percentages

End-year	1965	1970	1975	1976	1977	1978	1979	1980(b)
Cash and demand deposits	19.6	19.2	17.9	17.1	16.0	15.8	14.9	13.2
Time deposits	44.3	47.1	51.1	51.2	51.8	52.1	52.9	54.5
of which, Postal Savings	*8.8*	*10.9*	*14.1*	*14.9*	*16.0*	*16.8*	*17.3*	*18.4*
Trusts	4.9	5.9	6.2	6.4	6.5	6.4	6.4	6.3
Life insurance	12.3	13.4	12.8	12.9	13.0	13.0	13.4	13.8
Securities	18.9	14.4	12.0	12.4	12.7	12.7	12.4	12.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Bank of Japan, Flow of Funds Statistics.

(a) Stocks at face value.
(b) Preliminary.

Savings and their deployment

A major characteristic of the Japanese financial system is the habitually high level of personal savings and the spread of financial assets in which they are held (Table A). Personal savings in Japan have typically represented between about 20% and 25% of disposable income, considerably more than in other major countries. Surveys reveal several reasons for this. Those most often cited are the lack of an adequate welfare system, giving rise to the need to save for emergencies such as medical expenses; education and marriage expenses; housing; and provision for old age. In addition, a high savings rate is facilitated by the system whereby a large, and increasing, proportion of household income is paid in the form of half-yearly bonuses.

Reflecting these savings motives, the bulk of personal savings has habitually been held in low-risk assets. Thus, despite a relatively low and very often negative real rate of return, cash and deposits have formed 65%–70% of total personal financial assets. Within this total the proportion formed by cash and demand deposits has been falling, while that formed by time deposits has been rising; and within time deposits those held with the Postal Savings System have been increasing their share. Long-term trust deposits and life insurance have provided typically about 6% and 13% respectively of total personal financial assets. This pattern of savings has been encouraged by tax incentives which allow larger exemptions from income tax on interest on bank deposits, postal savings and, latterly, government bonds than on dividend income from equity holdings.

Securities are thus not a major part of personal financial assets. The Japanese stock market has shown a degree of volatility and has come to be regarded by individuals as risky and speculative. Moreover, there has been no encouragement by companies of the growth of a large body of interested and knowledgeable individual stockholders. As a result, the ratio of securities in personal financial assets, and the proportion of all stocks held by individuals, have fallen, while the proportion of stocks held by financial institutions and companies has risen. The increasing concentration of stock ownership has served further to encourage the belief among individual savers that the stock market has come to be subject to manipulation by professionals with inside information.

The banks, for their part, have been efficient and successful in collecting personal savings. The large banks have been aided by their nation-wide network of branches; they have fostered the image of serving the local community, for example by providing meeting facilities and holding seminars; and they have employed a large force of door-to-door salesmen to solicit the savings of individuals.

Finally, part of the company sector itself has provided a major source of savings in Japan which has boosted the deposits of the banking system. While companies in surplus commonly hold securities, they are mostly stable investments in affiliated or customer companies. Companies are often also obliged by their bankers to hold a substantial proportion of their available funds in bank deposits, often in the form of compensating balances.

Thus the banking system has effectively collected the bulk of the nation's savings, including a fair proportion of the surplus funds of the corporate sector. And it has developed the lending of those funds to industry as its natural role.

The financial system

In Japan's post-war recovery, the Government decided that, in the absence of an adequate capital market, the necessary funds for industry should come from the banks. Tax incentives were introduced, complementing those directing personal savings to the banks, which made it advantageous for companies to borrow from the banks. The banks were closely regulated and relied to a large extent on government funding through the Bank of Japan. The Government was thus able to control the direction of lending towards priority industries. This process was further aided by a virtually non-existent history of lending to the personal sector for consumption and little private bank finance for housing (which has traditionally been provided mainly by public sector institutions).

With recovery established, the succeeding period of rapid growth required finance on too large a scale to be mobilised quickly or easily on the undeveloped capital markets. Thus a bank-oriented system grew up which was self-reinforcing. There was initially little financial sophistication in industry, so companies relied on the banks for financial advice. Banks were prohibited by law from engaging in underwriting, so they tended to steer business away from the capital markets

and towards the use of banking services. As a result, instead of the banks' services being tailored to the differing needs of individual companies, a system emerged whereby companies' needs were geared more closely to the services which the banks were permitted to provide.

The Japanese banking system has evolved—or has been designed—in such a way that different types of banks specialise in different types of lending (Table B). Shorter-term lending has typically come from the retail commercial banks—the large city banks and the smaller regional banks. The former typically lend to large corporations with their head offices in the major cities, while the latter have tended to service smaller companies. These distinctions are, however, breaking down: a large proportion of lending by the city banks now goes to smaller companies, and both the city and the regional banks, while the bulk of their lending is still, at least nominally, at short term (ie up to one year), quite commonly make loans of up to five years maturity. Longer-term finance is provided by three specialist long-term credit banks funded largely by five-year bank debentures, and by the trust banks funded by medium-term and long-term trust deposits. Loans from these sources average between five and ten years and many individual loans are for substantially longer. In addition, there are various financial institutions, for example the mutual loan and savings banks and the credit associations, which typically make loans to small businesses. Finally, the insurance companies are a further significant source of long-term loans; in Japan, they are permitted to lend direct to industry, unlike in other advanced countries where they are major investors in the equity market.

Table B
Lending outstanding by type of financial institution

Yen trillions
Percentages in parentheses

End-year	1975		1980	
All banks	100.8	(48.5)	154.0	(42.1)
of which:				
City banks	*47.7*	*(23.0)*	*71.3*	*(19.5)*
Regional banks	*26.8*	*(12.9)*	*43.8*	*(12.0)*
Trust banks(a)	*15.2*	*(7.3)*	*22.4*	*(6.1)*
Long-term credit banks	*11.1*	*(5.3)*	*16.5*	*(4.5)*
Mutual loan and savings banks	12.5	(6.0)	21.4	(5.8)
Credit associations	15.6	(7.5)	26.3	(7.2)
Agricultural and other banks	14.5	(7.0)	22.6	(6.2)
Life insurance companies	8.4	(4.0)	15.2	(4.2)
Non-life insurance companies	1.2	(0.6)	1.6	(0.4)
Government financial institutions	19.2	(9.3)	42.0	(11.5)
Trust fund bureaux	32.5	(15.6)	76.2	(20.8)
Postal life insurance and annuity	3.2	(1.5)	6.7	(1.8)
Total	**207.9**		**366.0**	

Source: Bank of Japan, Economic Statistics.

(a) Includes trust accounts of non-trust banks.

In the 1970s, usually between 80%–90% of all bank lending went to industry. About 75% of this was for operating funds (working capital) and 25% for equipment funds (investment). In addition, 30%–40% of all bank lending was long-term—though on the Japanese definition long-term means over one year. The bulk of such long-term lending is provided by the long-term credit banks on a fixed-rate basis or by the trust banks at rates varying with the long-term prime rate. But much nominally short-term lending by the city and regional banks is repeatedly rolled over, with the interest rate being frequently renegotiated, so that the distinction between short-term and long-term lending is blurred.

The banks and industry have therefore become highly inter-dependent. Industry relies heavily on the banks as a stable source of finance, and the banks in turn depend on industry as a stable source of loan demand.

The group structure of Japanese industry

The development of the banks' role has been facilitated by the close relationship of Japanese banks with industry, which has its roots in the post-war development of the group structure of industry. The pre-war *zaibatsu* were in the nature of holding companies controlled by wealthy families in which the banks tended to have, if not a subordinate position, at least not a dominant one. After the post-war dissolution of the *zaibatsu,* a looser group structure emerged, based in part on the old *zaibatsu,* but to a large extent under the leadership of the major banks.

The well-known present-day groups which have emerged from the old *zaibatsu* are Mitsubishi, Mitsui and Sumitomo; while examples of groups not connected with the old *zaibatsu* are Dai-Ichi Kangyo and Sanwa. Other groups do not rely on the leadership of a bank: some major industrial concerns, such as Toyota, Hitachi and Matsushita, have formed independent groups based on a more homogeneous range of products. In general, however, groups tend to be made up of a heterogeneous collection of companies and interests which have substantial cross-holdings of shares. Their structure is looser and their control more decentralised than in the pre-war *zaibatsu.*

From a bank's point of view there are several advantages of the present-day group structure; these stem from the opportunities for spreading lending risk, from the reduction of risk inherent in the mutual support of group companies, and from the complementary nature of group financing needs. The types of company in a group typically range from a number of differing financial institutions through a general trading company to a wide variety of manufacturing and service companies. Some companies in the group will be operating primarily in domestic markets and others in export markets; and some will be producing capital goods and others consumer goods. As a result of this range of interests, group financing needs can be to a considerable extent complementary, seasonal fluctuations in demand for funds can be smoothed, and cyclical variations in the strength of economic demand can be more easily handled. In addition, the existence of different types of financial institution within a group—typically a commercial bank, a trust bank and an insurance company—enables the differing financial needs of the group to be met. Finally, a group trading company, itself financed to a significant extent by the group bank, provides trade finance to smaller firms in the group with which it is in more knowledgeable contact and thus provides a buffer to the bank against the riskier end of the lending spectrum. A final advantage for the bank comes from the availability of a

large number of group employees who are encouraged to put their savings with the group bank and thus provide a source of stable deposits.

Other, more general, advantages of a group structure include the control of stock voting power through the intra-group shareholdings, which serve to minimise the risk of takeover; and the ability to exchange personnel and to hold out senior management positions in group companies as rewards on retirement for senior executives.

The pressure for a bank to emerge as the core of a group was strong. It came primarily from the group's need for credit and from the commitment by a bank to protect members in all but the direst circumstances. Loans from a group bank in effect help to improve the unbalanced nature of a company's capital structure. They tend to be regarded almost as in the nature of subordinated debt and they can thereby be held to improve the quality of the company's other debt. In return, the group bank tends to receive better quality collateral than other lenders.

When a group company gets into difficulty, it tends to be the bank which acts, perhaps in co-ordination with other group members, to put in delegates from its senior staff or from other group companies to replace weak or incompetent management. Finally, within the group, banks and insurance companies are sought as stable holders of group companies' equity, although by law a bank can hold up to only 5% of a company's equity.(1)

Thus banks tend to fulfil the role not only of lender but also of financial adviser in general and of the co-ordinator of the group as a whole. This role is enhanced by regular meetings, often under the auspices of the bank, of presidents, deputy presidents, planning directors and other leaders of the group companies, at which group policy is formulated and decisions taken.

Nevertheless, despite this seemingly close-knit structure, there is no exclusiveness. Although there are wide divergences, typically only about 20%–30% of a group bank's lending goes to group companies; and group companies tend to borrow only about 20% of their total financing needs from their group bank.

Banks' lending criteria

A Japanese bank, like banks in other developed countries, will be reluctant to lend to a small, unfamiliar company with a poor growth and profits record, with a dubious product and prospects, and with weak management and poor industrial relations. Not all of these failings tend to occur in one company in Japan, any more than in other countries. But weak companies do exist in Japan and they find it difficult to obtain credit, especially in times of credit stringency as over the two years up to early 1981. It is also not unknown for Japanese banks to be criticised for failing to provide adequate support for technological innovation.

In deciding whether to lend to a company, a Japanese bank tends to rely particularly on its relationship with that company and on its knowledge of its affairs. This applies both to the banks and companies within a group and also to those not so organised. The main bank relationship in Japan is considerably stronger than in other developed countries. As has been noted, the bank might hold a proportion of the company's equity; the employees of a company are encouraged to hold their savings with the company's main bank; the company itself tends to hold considerable funds on current account; and the company gives priority to using the bank's other facilities such as foreign exchange services. In return, the bank has a detailed knowledge of the company's affairs; it is provided with a stable source of demand for its funds; and it implicitly guarantees that funds will be available to the company, even if it means recourse to temporarily uneconomical sources of funding.

There tends, therefore, to be less reliance in Japan than elsewhere on a borrower's balance-sheet ratios. In any case, the high economic growth in Japan has in the past produced little risk of bankruptcy or default, so there has been no great fear of low equity ratios. A Japanese banker will instead rely on a firm's profits and growth record, on its growth prospects, and on its capacity for innovation and its position within its industry. For security a bank will take land, premises, plant and machinery. The high level of investment and the huge increase in the value of land mean that collateral has always tended to be available. Moreover, advancing loans on the security of land has made it possible for banks to supply funds to medium and small enterprises, many of which would otherwise have received a low credit rating.

The role of government

The hand of government has been conspicuous, both in the development of industry and in its financing. Government strategy in the post-war years was based first on the development of key industries such as steel, electric power and shipbuilding; more recently it has been switched to the development of high-technology industries, such as semi-conductors, industrial robots and computers. In this process the market allocation of funds was not in the early years given a high priority. But a system of incentives and penalties was developed which required from industry a competitive, market-oriented response.

The general method has been to identify a firm or industry with the required promise of growth; then to nurture it under a protective umbrella; and finally to remove the protection and leave the company to benefit from competition. This process has applied in general to both export-oriented and domestically based industries.

To finance this process the Government has used a mixture of direct budget allocations and government financing institutions, the most important of which are the

(1) Up to 1977 the maximum permitted stake was 10%, but a grace period of ten years has been allowed for those banks with holdings of more than 5% in any one company to comply with the new maximum.

Japan Development Bank, the Export-Import Bank of Japan (Ex-Im Bank) and the Small Business Finance Corporation. These institutions have been funded largely through the Government's Trust Fund Bureau, which itself receives large funds, mainly in the form of postal savings and welfare insurance contributions. The range of financing options either provided or at least influenced by government is wide. First, there are grants from the budget of the Ministry of International Trade and Industry (MITI), which might be repayable out of profits only if the project financed is successful; second, although the scheme is now more limited than in the past, the Government subsidises some interest costs on loans, typically to larger companies, by the Japan Development Bank; third, small businesses can have recourse to the Small Business Finance Corporation for loans or to the Small Business Investment Corporation for equity; fourth, companies can borrow from a commercial bank which might enjoy the benefit of a joint government/local government guarantee; and finally, a company with government approval for its expansion plans will find a bank more willing to lend when the project is known to have the implicit support of a government department.

Direct government lending to industry has typically provided about 10% of total external funding (Table C). A relatively large proportion of government lending has been devoted to financing technological research and development, contributing perhaps as much as 30% of total corporate research and development expenditure, eg through MITI's Agency of Industrial Science and Technology.

A further major tool of government policy for financing industry in Japan, as in other countries, is taxation. As already noted, tax incentives are used to influence the direction of savings and the sources of corporate finance. In the corporate sector, tax measures are used both as part of the normal taxation system and as special measures; they are complex and are used for a wide variety of purposes.

Normal tax measures include, for example, depreciation allowances based on statutory guidelines for the useful life of assets and in some cases on shortened useful lives. Special measures include accelerated depreciation and increased initial depreciation in important industries. In addition, there is a wide range of tax-free reserves and tax credits. Such measures are used, along with direct financing measures through government financial institutions, for encouraging small and medium-sized business and for promoting risk taking, research and development, and anti-pollution measures. An important area which has come under such government influence since the first oil shock is tax incentives and other assistance for encouraging energy saving in general, for curtailing capacity in high-energy-using industries and for promoting new, energy-efficient investment both in existing industries and in new 'knowledge-intensive' industry. Between 1973 and 1979, government spending on the implementation of such industrial policies increased at an average annual rate of 18% and in 1979 totalled ¥5½ trillion.

The effect on industry

So far, this article has described the financing of Japanese industry from the viewpoint of the banks and the Government. It turns now to the effects of this system on industry itself. It follows from the system described that the major characteristics of Japanese corporate finance have been a high dependence on bank debt and a low dependence on the issue of securities. The result is an apparently uneven balance sheet structure with, typically, extremely low equity ratios (defined as the ratio of shareholders' equity to total assets). Japanese industry has not, in fact, always operated under low equity ratios, but they have been on a

Table C
Fund raising of non-financial corporate businesses[a]
Percentages of total within each category

Calendar years	1954–63	1964–73	1974–79	1974	1975	1976	1977	1978	1979
Financing ratio									
Internal	41.4	46.3	48.0	37.5	37.6	43.1	52.6	59.7	57.2
External	58.6	53.7	52.0	62.5	62.4	56.9	47.4	40.3	42.8
External financing									
(i) Borrowings	70.9	85.1	83.3	82.1	87.5	86.8	89.8	77.8	75.8
of which from:									
Government	*7.4*	*8.2*	*11.3*	*9.4*	*11.4*	*9.6*	*12.4*	*10.3*	*14.5*
Banks	*43.9*	*46.3*	*41.5*	*39.0*	*41.0*	*43.4*	*50.5*	*47.1*	*27.9*
Other private financial institutions	*19.6*	*30.6*	*30.5*	*33.7*	*35.1*	*33.8*	*26.9*	*20.4*	*33.4*
(ii) Securities	23.0	11.4	14.3	8.8	16.5	11.0	14.1	15.8	19.6
of which:									
Bonds	*4.5*	*3.7*	*5.4*	*3.4*	*7.7*	*3.9*	*4.9*	*5.8*	*6.6*
Stocks	*18.5*	*7.6*	*7.4*	*5.2*	*6.9*	*5.4*	*8.1*	*8.9*	*10.1*
Foreign currency bonds	—	*0.1*	*1.5*	*0.2*	*1.9*	*1.7*	*1.1*	*1.1*	*2.9*
(iii) Foreign credit	6.1	3.5	2.4	9.1	−4.0	2.2	−3.9	6.4	4.6
Borrowings									
Equipment funds	33.1	36.9	27.1	27.1	35.4	28.1	18.6	11.0	42.2
Operating funds	66.9	63.1	72.9	72.9	64.6	71.9	81.4	89.0	57.8

Sources: Data on internal financing, consisting of net savings and capital depreciation reserves, are taken from the Economic Planning Agency's National Income Accounts.
Data on external financing are taken from the Bank of Japan's Flow of Funds Accounts.

(a) For years up to 1969, the financial sector is included in data on internal financing.

long declining trend.[1] In the middle 1930s the ratio stood at around 60%, by 1954 it had dropped to 40%, by the early 1960s to 30%, by 1970 to under 20%, and it reached a low point of around 17% for manufacturing industry (14% for all industries) in the middle 1970s (Table D). This compares with 35%–40% in West Germany, around 50% in the United Kingdom, and 50%–60% in the United States.

Table D
Equity ratios in Japanese industry[a]
Percentages

Fiscal years	All industries	Manufacturing industry
1970	16.1	19.8
1971	15.8	19.3
1972	15.3	19.1
1973	14.4	18.1
1974	14.3	17.9
1975	13.9	16.9
1976	13.7	17.0
1977	14.1	17.4
1978	14.3	18.4
1979	14.3	19.3
1980	15.3	20.6

Source: Ministry of Finance, *Quarterly Bulletin of Financial Statistics*.

(a) All companies capitalised at ¥10 million or more. Figures represent shareholders' equity as a proportion of total assets.

The reasons for this structure are not hard to find. Apart from the effects of rapid growth and the inability of capital markets to provide funds on the scale required, they relate to taxation policy and share-issuing practices. First, as in other major countries, interest costs are deducted from taxable income, so there is a tax incentive for raising debt through borrowing. Second, since dividends are paid after the computation of tax on income, there is a strong disincentive to issuing shares. Third, since until recent years the normal method of issuing shares was by means of rights issues to existing shareholders at par value when the market value has typically been at some multiple of par, and when dividends are paid as a fixed percentage of par value rather than varying with the performance of a company, more shares have to be issued to raise a given amount of capital, giving rise to a higher than otherwise dividend cost. For all these reasons, the cost of issuing shares has been much higher than the cost of borrowing, even allowing for compensating balances held with the banks.

A serious note of caution has, however, to be entered when comparing the equity ratios of Japanese companies with those of companies in other developed countries. This arises largely from some special characteristics of Japanese accounting practice and has three main elements.[1] First, as already noted, Japanese companies can deduct from their computation of retained earnings a wide range of tax-free reserves for special purposes; although such deductions are not uncommon in other countries, they are more wide-ranging in Japan than is generally the case elsewhere. Such allowances include reserves for bad debts, for bonus payments to employees, for retirement allowances, for price fluctuations, and, in the case of small and medium-size companies, a reserve for overseas market development. These deductions have the effect of reducing reported income before tax, thereby reducing the effective tax rate, and of increasing internal funds at the disposal of the firm. Such reserves habitually appear under the long-term liabilities of a company rather than as part of its equity. As a result, stockholders' equity tends to be understated.

The second special characteristic is a tendency towards unusually high debtor balances and accounts payable. The former usually exceed the latter by a considerable margin, reflecting the practice of the larger listed Japanese companies of providing trade finance to smaller unlisted sub-contracting companies further down the line. A fairer reflection of a company's short-term liabilities position might be obtained if the excess of receivables over payables were deducted from short-term debt.

Finally, in the absence of inflation accounting, capital assets have failed to be adequately revalued over time. This deficiency has been especially important in the case of land, which is owned in significant amounts by Japanese companies: between 1955 and March 1981, the industrial land price index rose from 100 to 3,288.

These three factors have the effect either of understating equity or of overstating liabilities. Although for various reasons it would be unrealistic to do so, if Japanese company balance sheets were adjusted for these factors the equity ratio would have been raised, on an official estimate for 1967, from 18% to 35%. Subsequent unofficial attempts at adjustment suggest that the ratio for 1975 could have been between 40%–50%.[1] At this level, the ratio would not be significantly different from that in other advanced countries.

Japanese practices of accounting for profitability create further difficulties of interpretation. As measured by the rate of return on equity, Japanese company profitability is high because the equity base is so low. But reported profitability is low because of the practice of deducting tax-free reserves and because of the large proportion of revenues deducted in interest payments on the high proportion of debt before current profits are calculated. These factors serve to question the thesis that Japanese companies have habitually been willing to sacrifice short-term profitability for market share and longer-term gains. This has undoubtedly tended to occur, but the identification of the tendency is not without complications.

Because of problems caused by differing accounting practices, therefore, comparisons of bank lending criteria between different countries cannot be based on a straightforward comparison of equity ratios and profitability as they appear in company balance sheets.

Some disadvantages of the system

While it can be claimed that the Japanese system of industrial finance has made a major contribution to the success of the economy, nevertheless there are some

(1) *Japanese Corporate Finance 1977–1980*, a business study by International Business Information Inc., published by The Financial Times Limited, 1977.

problems and possible disadvantages both for industry and for the banks.

The first and most important is that high and inflexible interest costs raise industry's break-even point and increase its vulnerability at times of recession and low profits. This was particularly evident after the first oil shock. With other sources of finance inadequately developed, credit squeezes are also likely to bear disproportionately on those companies which the banks have to turn away.

Second, interest rates have not on the whole fully reflected the demand for funds. The Government has tended to keep interest rates artificially low; this has enabled it to finance its own deficit more cheaply and, by means of excess demand for funds and the resulting need for credit rationing, to influence the direction of lending more easily. In these circumstances, with government constraints on the market allocation of funds, there is the danger that financial resources can be misallocated.

Two examples of this possible misallocation can be cited. Credit rationing and government influence over the direction of lending, combined with the group relationship, could have tended to create a privileged class of borrower, with the effect that some more promising borrowers with brighter growth prospects could have been crowded out. As an example, the privileged position of major firms with their main banks is thought to have given rise in the aftermath of the first oil crisis to a degree of priority lending which was later identified as having been used for speculation in land and commodities, thus contributing to the subsequent burst of inflation. This led to pressure for more disclosure of the banks' activities and for limits to be set on large loans to individual customers. These pressures have now come to fruition in a revised Banking Law that has recently been enacted.

A corollary to the emergence of a privileged class of borrower is perhaps the persistence of government controls. The natural reluctance of government to relinquish powers of control has perhaps tended to slow down the move towards greater liberalisation and internationalisation of the Japanese financial system, although such a development is undoubtedly in progress.

A second example of the possible misallocation of resources lies in the relative under-development of the Japanese stock market, which is at least partly the intentional result of government policy. In the absence of the discipline provided by a large and interested body of shareholders, mistakes and mismanagement in a company could tend to come to light more slowly. This characteristic is illustrated by the way in which Japanese companies tend to treat their smaller shareholders: disclosure of information is rudimentary, and stockholders' meetings can be unhelpful and uninformative.

The problems and disadvantages of the Japanese system are beginning to be recognised. Some are themselves giving rise to change; others are being recognised as change comes about.

The forces for change and changing trends

The changes that have become discernible in the Japanese system of industrial finance in recent years have derived their main impetus from the first oil shock of 1973–74. The subsequent inflation, negative growth and loss of profits marked the end of Japan's high growth period and set the economy on to a path of more moderate growth in the second half of the 1970s. In this period, changes began to appear in the savings habits of individuals, in the behaviour of the banks and, above all, in the balance sheets and sources of finance for companies.

While the personal saving ratio has changed little, the composition of personal financial assets has started to move towards higher-yielding, less tax-prone areas. Thus cash and demand deposits, which in 1970 accounted for 19% of assets, represented only 13% in 1980 (Table A). The share of time deposits, on the other hand, has risen from 47% to nearly 55%, the increase being in the form of savings with the postal system rather than with the banks; these postal system savings have risen from 11% to 18% of total personal financial assets. The reason for their attraction has been not only a higher rate of interest and greater liquidity, but also the ease with which, to the chagrin of the banks, it is possible to circumvent the rules on the tax-free interest limit by such means as multiple accounts and fictitious names.

The banks, therefore, have not in recent years been able to maintain their share of the increase in deposits. Moreover, they have been severely constrained in their lending by 'window guidance', and the margins between interest rates on loans and deposits have tended to narrow, thus squeezing the banks' profits. In addition, the banks have been obliged to subscribe to a large volume of government bonds issued at yields below those prevailing in the secondary market to finance the Government's expanding budget deficit; in many cases they have only been able to sell these at a capital loss.

This squeeze on the banks has coincided with a decline in the demand for funds from industry, so that the banks have begun to look elsewhere for lending opportunities. In 1970 only 4% of the banks' outstanding loans went to financing housing and consumption. By 1980 the proportion had risen to 11%, still low by normal western standards, but undoubtedly rising. The banks are still powerful in their corporate finance role, but their power is waning.

The biggest changes are apparent in the behaviour of industry. After the first oil crisis, Japanese industry, no doubt encouraged by government but probably spurred mainly by severe competitive conditions, has displayed an intense drive to increase labour productivity, to reduce inputs of energy and raw materials and, on the financial side, to seek a greater degree of self-financing and to diversify sources of external finance.

As in the United Kingdom, internal funds have provided a major source of finance for Japanese industry. In the high

growth period up to the early 1970s the internal financing ratio stood typically between 40% and 50% (Table C). It tended to fluctuate quite widely within this range since although there has been a secular increase in depreciation reserve as the capital stock has increased, profits have moved in accordance with changing cyclical conditions. With the loss of production and profits following the first oil crisis, the internal financing ratio fell to a low point of about 37% in 1974 and 1975, but by 1978 it had risen to nearly 60%—not far short of the typical level in the United Kingdom over recent years.

If greater financial independence has been the aim, it can have been achieved only by means of high profits. For a few years after the first oil shock the growth of profits in manufacturing industry was generally slow, but in the fiscal years 1978 and 1979 there was a rapid improvement, with profits growth of 22% and 51% respectively.

This was achieved by high productivity gains and modest wage settlements. In addition, the depreciation of the yen between October 1978 and April 1980 contributed substantially to healthy profits in the exporting sector. With output growing more sluggishly after the second oil crisis, and with the appreciation of the yen during much of 1980, profit rates have declined recently and the internal financing ratio has probably come off its peak.

Toyota provides an extreme example of a company achieving complete financial independence. It has repaid all debts and is operating solely on retained earnings. As a result, it is no longer vulnerable to credit squeezes, and the absence of interest costs leads to lower production costs and a strengthened competitive position. It disposes of a large volume of liquid funds and for this reason it is not uncommon to hear the car company referred to as the Toyota Bank. For such companies, investment income is coming to form an important and increasing part of profits.

This process of striving for greater financial independence has tended to produce a wider disparity in performance between successful and less successful companies. The successful companies, which have reached a position of lower reliance on bank debt, are better placed to raise funds abroad, whether for overseas expansion or for domestic use. The less successful, on the other hand, are relatively more reliant on bank lending, and this could have implications for the banking system.

As has been mentioned, there are signs that group relationships are becoming looser and less formal and one sign of this trend is the restriction placed on large loans to individual borrowers, which has been subject to informal guidance for some years and has recently been given statutory backing in the new Banking Law. The result should be to make banks' portfolios more diversified and therefore healthier, but if the segment of industry becoming more reliant on bank lending is the less successful one, it has been suggested[1] that the banks may find themselves having to be more selective and applying stricter lending criteria in supporting the weaker companies. Against this, however, there may be a greater incentive than in the past for the banks to seek out and support more promising new growth companies, instead of relying heavily on government direction, whether formal or informal, and on the group relationship.

The diversification of external funding sources is more complex (Table E). Contrary to received doctrine, between the periods 1954–63 and 1964–73, companies' dependence on borrowing declined and internal sources of funding increased in importance. But because of the large fall in the importance of stock issues and the only minor drop in the rate of borrowings, the equity ratio fell steadily.

Table E
Sources of funds in manufacturing industry
Percentages

Fiscal years	1954–63	1964–73	1974–80
Internal			
Retained earnings	1.8	7.8	13.6
Reserves	2.9	5.9	4.8
Depreciation	17.7	23.0	28.1
Total	22.4	36.7	46.5
External			
Proceeds of stock issues	13.4	2.3	2.9
Short-term borrowing(a)	20.6	16.9	20.1
Long-term borrowing(b)	17.2	16.1	6.4
Accounts payable	14.6	15.4	8.2
Other	11.8	12.6	15.9
Total	77.6	63.3	53.5

Sources: Economic Planning Agency, Economic White Paper, 1976 (1954–63 and 1964–73).
Bank of Japan, Financial Statements of Principal Enterprises (1974–80).

(a) Includes promissory notes payable.
(b) Includes bonds.

Corporate loan demand from private financial institutions was at its highest in 1972 when it comprised 84% of external funding. By 1979 it had fallen to 61% (Table C). Over the period 1974–80, while companies' dependence on internal funding continued to increase sharply, their dependence on borrowing, particularly at long term, fell further, while the importance of stock issues increased slightly. The result was a reversal of the long-term declining trend in equity ratios. For all industries the ratio rose from 13.7% in fiscal year 1976 to 15.3% in fiscal year 1980 (Table D). For manufacturing industry alone the change is more marked, with the ratio rising from 16.9% in fiscal year 1975 to 20.6% in fiscal year 1980. This reversal of trend, for all its newness and slightness, is significant and represents the adoption of concepts of corporate financial structures which it is the aim of Japanese industry to pursue further.

One of the most important elements in this process of change towards raising funds in the capital markets has been the switch from issuing shares at par to issuing at or near to market price. This practice became prominent as

(1) *Japanese Corporate Finance 1977–1980.*

early as 1972, but gathered pace from 1976, since when stocks issued at market value have formed, by value, about 70% of all stock issued (Table F). The effect of this change has been to lessen considerably the cost advantage of borrowing over issuing stock, with the result that the proportion of stock issues, which in the early 1970s provided around 6% of external corporate finance, had reached 10% by 1979 (Table C). There was probably some decline in the proportion of finance raised by stock issues in 1980, but the rising trend has almost certainly been resumed in 1981.

Table F
Stock issues on the Tokyo Stock Exchange[a]
Yen billions

Calendar years	All stock issues	Stock issues at market price(b)	*2* as a percentage of *1*
	1	*2*	*3*
1970	656.2	132.6	*20.2*
1971	508.0	76.6	*15.1*
1972	998.8	637.7	*63.9*
1973	869.5	519.8	*59.8*
1974	507.8	261.7	*51.5*
1975	969.8	212.3	*21.9*
1976	660.8	484.9	*73.4*
1977	873.0	565.5	*64.8*
1978	846.8	530.3	*62.6*
1979	893.4	580.1	*64.9*
1980	998.2	842.2	*84.4*

Sources: Japan Securities Association.
Tokyo Stock Exchange.

(a) The figures refer to proceeds of stock issues on the Tokyo Stock Exchange, which accounts for some 90% of the total stock market.
(b) Public placement issues only.

There has been a similar trend in bond financing, where the proportion has doubled from 3%–4% in the early 1970s to 7% in 1979. The main factors here have been, first, the development of the bond market towards a more flexible, responsive structure; and second, the need for companies, in the post oil-crisis world, to seek greater control over interest costs, especially at times of high interest rates, than can be secured through a large volume of floating-rate long-term loans. As a result, in the latter half of the 1970s long-term borrowing has come to play a much reduced role in corporate finance.

A further aspect of developing financial markets in Japan and of the search by industry for greater independence from the banks is the growth of the *gensaki* market. This market has allowed companies holding a large volume of liquid funds to invest them at short term independently of the banking system. In addition, some companies holding bonds have been able to raise short-term funds by selling their bonds to securities companies with a repurchase agreement. By this means companies can utilise their bond holdings to raise short-term finance outside the banking system without risking capital loss on the outright sale of bonds.

Finally, with the internationalisation of Japanese business and the increasing flow of overseas investment, it is natural that Japanese companies should seek to raise a greater proportion of their funding abroad, whether on the eurocurrency or national capital markets, or in the form of 'impact' loans (loans in foreign currency not tied to a particular project). These activities have always been closely regulated by the Ministry of Finance according to the dictates of balance of payments policy and exchange rate and interest rate considerations. But the issue of foreign currency bonds accelerated sharply in 1975, and 'impact' loans have been popular since 1978 and recently received a boost from the relaxation of exchange control regulations.

Conclusions

This article has sought to describe the Japanese system of corporate finance, to identify areas where it is changing and to explain the reasons for such changes. It seems clear that since the system of incentives and the institutional arrangements still work in favour of debt financing, any movement towards a greater reliance on capital issues is unlikely to be rapid. Nevertheless, the shift from borrowing to direct financing, both in domestic and foreign capital markets, though it has only recently started, seems likely to continue. As domestic capital markets develop and mature and introduce greater flexibility into the terms and conditions of issue, and as the internationalisation of business activity increases, the shift is likely to become a self-reinforcing process, just as was the case with bank finance when the power of the banks was at its peak.

The Japanese financial system is in a process of transition as it is gradually released from an initial position of government control over the allocation of funds, over the level of interest rates, and over the relative positions and strictly delineated functions of the various types of financial institution. The liberalisation and the internationalisation of financial markets should lead to a theoretically more efficient allocation of financial resources. But it will also produce a more complicated life for the policy makers as the markets become more vulnerable to external influence. One such consequence is likely to be increasing volatility of interest rates, and this, above all, has alerted Japanese industry, bankers and government alike to the dangers of excessively high gearing. For this reason, the lessons of the first oil crisis have been well learnt and Japan is likely to witness a continuing decline in the gearing of companies in line with the reduction in the relative power of the banks and the development of alternative sources of corporate finance.