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CRISIS IN JAPAN AND THE WAY OUT: A COUNTER-ARGUMENT TO PESSIMISTIC VIEWS

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INTRODUCTION

The Japanese economy accounts for about 15 per cent of total world GDP. Its course undoubtedly has great significance for the future of the world economy. This paper will focus on a review of the present state of, and outlook for the Japanese economy. The paper consists of three parts. The first (Section I) describes the interrelation between the East Asian economies and Japan. Here I will argue that Japan did not cause the Asian currency crisis. The second part (Sections II–V) describes the current state of the Japanese economy after the bubble burst. I will also discuss the medium- and long-term challenges that face the Japanese economy. The third part (Section VI) concentrates on the short-term issues of deflation and the type of "liquidity trap" Japan is experiencing. I argue that the yen's exchange rate is more likely to appreciate than depreciate by pumping liquidity into the economy while interest rates cannot be lowered any further (Section VI-A), and a "helicopter money" policy is the only way to induce a positive inflation rate and escape from the liquidity trap (Section VI-B).

I. JAPAN AND THE ASIAN CURRENCY CRISIS

In the first half of 1998 a prevailing argument throughout the world was that Japan was to blame for the Asian currency crisis, whether as the cause of the crisis or for hampering the recovery of the Asian economies. In my opinion this "Japan bashing" was based on an overstatement of the position. I believe that Japan became the scapegoat for such international criticism.

I make this contention for four reasons. First, the international business cycle contagion has not been as extensive as is generally believed (note that I am not

¹ Even today, for example, Stanley Fischer of the International Monetary Fund (IMF) says, "I suspect the weakness of the Japanese economy also played an important role (in causing the Asian currency crisis)" ("Cause and Effect," *Far Eastern Economic Review*, July 1, 1999). The IMF's "Japan bashing" and attempt to shift responsibility for the crisis onto Japan is understandable given the heavy fire it is under for its treatment of the Asian currency crisis.

saying there has not been contagion but that it has not been enough to cause the crisis). This is clear from the impact of Japan's economic growth on the East Asian economies. Kunimune (1998) made an approximate estimate of this impact based on three assumptions: (1) that a 1 per cent increase in Japan's GDP growth rate would increase imports by about 1 per cent; (2) that about one-third of East Asian exports are directed to Japan; and (3) that East Asian exports account for about onethird of the GDP for that region. This assessment suggested that a 1 per cent growth of GDP in Japan would drive an increase of about 0.09 per cent in East Asian GDP.² This estimate was a rough one,³ but some subsequent studies have produced equivalent figures. Urata (1999) concluded that a 1 per cent increase in Japan's GDP growth rate would have an insignificant effect on increases in East Asian GDP (with assessed rates differing from 0.0 per cent to 0.1 per cent for different countries, Table 9 in his paper). Sano (1998) and Ono and Kato (1998) also assessed the magnitude of this effect at about 0.1 per cent. From these studies, we may infer that even if Japan's economic growth rate for 1998 had been 5 per cent higher than its actual rate of negative 2.5 per cent (thereby achieving a growth rate of 2.5 per cent), it would have pushed the East Asian GDP growth rate up by only 0.5 per cent.

I join others in believing that Japan's economic recovery is desirable for the sake of the East Asian economy and for the world economy at large. Nevertheless, I wish to emphasize that it would be totally beside the point to contend that Japan's economic stagnation was responsible for the economic crisis which plunged the East Asian countries into negative growth rates of 6–15 per cent in 1998.

Conversely, what was the effect of the East Asian crisis on Japan's economic growth? Kameda and Ogino (1999) estimate that East Asian negative growth in 1998 held Japan's economic growth rate down by 0.5 per cent. Likewise, OECD (1997) estimates put the deceleration effect at 0.5 per cent; the Economic Planning Agency (1998) estimates put it at 0.4–0.5 per cent; and Fukazawa, Suzuki, and Inagaki (1999) at 1.1 per cent. These figures are the same as or slightly larger than the figures from the evaluations of the impact that Japan has had on East Asia.⁴

There is thus some bilateral contagion in the economic cycle between Japan and East Asia, but its effect is not sufficiently large to plunge either party into economic crisis. It is improper, therefore, to ascribe the latter's economic crisis to the economic conditions in the former. Accordingly, economic recovery should be pursued

² At much the same time, Komine (1998) and Kawasaki (1998) also made similar findings. As far as I know, Komine presented his results first and produced a smaller figure of 0.06 per cent.

³ Here the multiplier effect of increased exports is assumed to be 1. In theory the multiplier could be in excess of 1. However, considering the potential for crowding out as a result of higher interest rates and increased export leakage in the form of increased purchases of raw materials, the multiplier would not be very large. It is not unrealistic, therefore, to assume the multiplier to be 1.

⁴ The impact of a 0.5 per cent fall in growth rate may be greater on Japan's already low-growth economy than the reverse effect on the overall East Asian economy which still has a potential growth rate of over 5 per cent.

not through dependency on action by others, but primarily through one's own economic policies.

Nevertheless, Japan was actually regarded, throughout 1998, as the ringleader for the economic deterioration in East Asia. For instance, Noland, Robinson, and Wang (1998) concluded, "The reduction in the emerging (current account) surpluses of the crisis-affected countries is greater than the Japanese bilateral aid commitments under the International Monetary Fund programs in Thailand, Indonesia, and South Korea." The most significant assumption leading to this conclusion is that the yen would depreciate by 10–30 per cent. It is only natural that a country's currency depreciation should generate a current-account surplus while causing deficits for trading partners. However, the yen appreciated instead of depreciating against the dollar in the subsequent months (Figure 1) and blames against Japan turned out to be groundless. Moreover, since Japan has a floating exchange rate, it would be missing the point to lay the blame on Japan, on the ground that its exchange rate has changed.⁵ The exchange rate is not a policy variable in Japan. Japan does sometimes intervene in the currency markets, but only to moderate sharp changes in exchange rates and not to peg the yen to the dollar. When the dollar depreciated sharply as a result of U.S. fiscal policies in the first half of the 1980s, did anyone criticize the United States for its higher dollar? If anyone had, that criticism would have been deemed unreasonable because the dollar's appreciation was no reflection of U.S. policy objectives, but merely of their results. In Section VI I will show that it is difficult for the Japanese government to make the yen depreciate.

The second reason I think that Japan became the scapegoat is based on Japan's foreign direct investment (FDI) in East Asian countries. Urata (1999) estimates that a 10 per cent increase in Japan's FDI would push East Asia's GDP up by about 0.02 per cent. This is a very modest figure and does not take into account secondary effects, including the technology transfer that is incidental to FDI, the improved efficiency of business operations in host countries, the dissemination of good com-

⁵ In the quotation from Noland, Robinson, and Wang, expected changes in the current account balance are compared with the amount of external aid. This comparison is also inappropriate, however, because exchange rates are not policy objectives, whereas economic assistance represents policy commitments on the part of Japan.

⁶ The Bank of Japan's interventions (actually implemented on behalf of the Ministry of Finance) in June and July 1999 proved newsworthy events. This type of intervention is infrequent (and thus, significant news) and was intended to prevent a too rapid appreciation of the yen. In general, intervention by Japan is intended to contain unusual changes in the currency market, but never to maintain exchange rates at a certain level. Moreover, yen-dollar trading in the exchange market is so large that Japan's monetary authorities could not maintain the rates at a certain level.

⁷ In contrast, the People's Republic of China controls exchange rates and follows what is virtually a fixed rate system. Therefore, China can be asked not to devalue its currency. Devaluation, if it took place, would be only on the authorization of the Chinese government. In July 1999 the government began to announce that the rate of the yuan was to be set by market forces. This was positioning to evade responsibility in the case of a possible devaluation of the yuan.

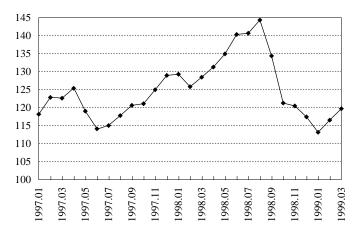


Fig. 1. Yen-Dollar Exchange Rates

mercial practices through the delivery of goods, and an enhanced awareness of product quality.

In any case, FDI from Japan had nothing to do with the currency crisis because even in the face of the crisis, few Japanese companies operating in East Asian countries chose to pull out. They expressed their intention to stay, and won acclaim from these countries.

The third reason is the flow of private capital, such as bank loans. Before the currency crisis, Japan accounted for the lion's share (about 30 per cent) of this capital inflow into East Asian countries. Since the crisis, capital outflows from these countries seem to have outpaced inflows. However, private bank loans are based on commercial considerations and no one can criticize banks for a reluctance to lend or collect outstanding loans in an effort to protect their credit ratings. Needless to say, Western banks have withdrawn their funds just as Japanese banks have done.⁸

The final reason is governmental financial assistance. Japan's assistance, worth U.S.\$30 billion, goes under the name of the "New Miyazawa Initiative." This was announced late in 1998. However, it is little known that before the end of 1998, Japan had already pledged to provide a total of U.S.\$44 billion. If the additional assistance announced after the New Miyazawa Initiative is included, assistance from Japan announced since the outbreak of the currency crisis would exceed U.S.\$80 billion. More than half of this assistance has already been implemented.⁹

In summation, most of the points where blame has been directed at Japan have in fact had few ill effects, or lie outside the responsibility of the Japanese government.

⁸ It was said that there was a reckless lending rush prior to the crisis. However, it was European rather than Japanese banks that sharply expanded their loans in 1996 and 1997.

⁹ See the Ministry of Finance home page: http://www.mof.go.jp/english/if/sien.htm.

On the other hand, the financial contribution from Japan has been given less consideration than it deserves. As a result, unfair views against Japan have prevailed regarding the effects it has had on the other East Asian economies.

The following four sections will deal with the current state of the Japanese economy and the medium- and long-term challenges it faces. Section II is a review of the present situation using warfare as an analogy. Section III takes up the issues of "default" and "deregulation"; Section IV takes up "debt" and "demography," while Section V presents two principles for dealing effectively with these four issues.

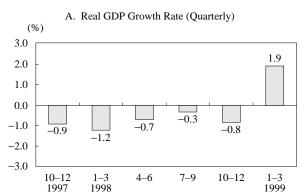
II. COLLAPSE OF A "BUBBLE ECONOMY" LIKE A DEFEAT IN WAR

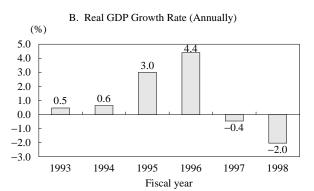
A bubble economy and its collapse is like the course of a war and subsequent defeat. To conduct a war the government builds warships and carriers and manufactures fighters, tanks, and ammunition. These weapons may stimulate total demand, but they are either consumed in the course of the war or they become valueless upon its termination. In other words, they have nothing to do with long-term economic productivity. Moreover, in a war that is lost, air raids and attacks by ground forces destroy production facilities and equipment (capital stock) and reduce long-term productivity. What is left behind after a war is a huge amount of government debt.

All this bears a strong parallel to what happened during Japan's bubble economy and its collapse (Figure 2). Generous amounts of funds were spent on public works, regardless of their utility, such as on embankments for which there was little immediate need or on roads and bridges in remote villages with little traffic, just as huge sums are spent during a war on things that have nothing to do with long-term productivity. Thoughtless corporate management, together with the depreciation of asset values and prices, added to the growth in bad assets and bad loans. In effect, they damaged capital stock just as effectively as air raids can destroy plant and equipment. The outcome has been a huge amount of government debt (Table I) and bad assets in the corporate sector.

This analogy can also be used in assessing medium- and long-term prospects by referring to the course that Japan took in rebuilding itself following the defeat in World War II. This approach should offer, rather paradoxically, a very optimistic medium- and long-term view. Far from failing after the war, Japan began within a few years a period of almost miraculously high economic growth. In fact, this achievement had something to do with the war. The massive wartime destruction of capital stock was arguably the very reason for Japan's postwar economic growth which was led by an investment boom. The process of renewing stock accumulation created the remarkable economic reconstruction. In an analogous way, the present state of virtual destruction caused to capital stock by the bursting of the

Fig. 2





Source: Economic Planning Agency.

bubble can become the source of medium- and long-term growth. If bad assets are eliminated by cleaning up the financial mess and a process of really efficient capital formation is begun, it would not be impossible for the Japanese economy to launch into another period of miraculous growth in the early 2000s.

It should be noted, however, that the basis for the postwar reconstruction was the drastic reforms carried out during the unsettled years immediately after the defeat. These reforms included fundamental changes in the economic system and corporate management. Likewise, at present, the prerequisite for economic transformation will be painful restructuring by changing systems and prodding failed companies and managers into withdrawal from the market.

Let us now briefly review the process of Japan's economic debacle more closely. Today's economic stagnation can be ascribed to the deterioration of business balance sheets after the bursting of the bubble economy in the early 1990s. The burst of the economic bubble was just like the explosions of the wartime bombs, causing

TABLE I
CENTRAL GOVERNMENT DEBT OUTSTANDING
(As of the end of March 1999)

	(Billion yen)
Category	Amount
Government bonds	310,740.2
Straight bonds	295,249.1
Long term (10 years and over)	242,743.3
Medium term (2–6 years)	34,884.7
Short term (less than 1 year)	17,621.1
Subsidy bonds	654.2
Subscription/contribution bonds	2,969.4
Government bonds issued to the Deposit Insurance Corporation	5,800.8
Government bonds converted from the Japanese National	
Railways Settlement Corporation bonds	6,066.7
Borrowings	97,035.3
Financing bills	29,779.0
Total	437,554.5

Source: Ministry of Finance.

Note: Figures do not sum up to the "total" because of rounding.

the virtual destruction of corporate assets. Managerial misjudgment and misleading government policy aggravated the situation, just as the incompetence of a commander leads to a defeat; and the postponement of efforts on the part of both the public and private sectors to solve the problems because of overly optimistic economic outlooks has led to more extensive damage.

The problems of this initial stage were exacerbated by the increase in consumption tax in the spring of 1997 as well as the financial uncertainty and credit crunch triggered by the failures of Yamaichi Securities and Hokkaido Takushoku Bank in late 1997. There were certainly gross errors in the government's macroeconomic management. Behind this, however, lay the deteriorated corporate balance sheets that remained after the bubble burst. In other words, by late 1997 latent problems in the economy had begun to surface.

Throughout this period deflation continued which worsened the situation (Figure 3). The progress of debt-deflation was particularly noticeable. Debt-deflation is the phenomenon of a deflationary spiral that is caused by unexpected transfers of income from the debtor to the creditor as a result of deflation when debtor-creditor contracts are formed on the basis of nominal amounts of money. This income transfer causes a further deterioration in the debtor's balance sheet and finally adds to the creditor's (bank's) bad loans. As a consequence, the bank's risk-bearing capability is strained, leading to a credit crunch which in turn slows currency circulation

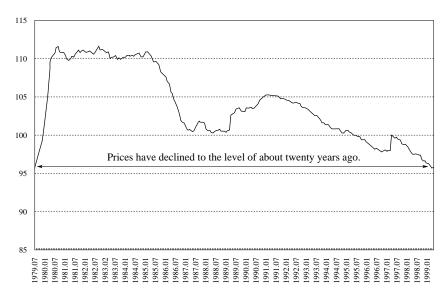


Fig. 3. Domestic Wholesale Price Index (January 1980 = 100)

Source: Bank of Japan

and creates further deflationary pressure. The vicious circle of a deflationary spiral is thus formed. 10

Deflation tends to lower nominal interest rates (in what is called the Fisher effect). In Japan it is not only short-term rates but also long-term rates, that have declined to nearly zero (Figure 4). As a result, the Japanese economy has been caught in a liquidity trap in which no further monetary policy can prove efficacious (Krugman 1998a).¹¹

For the Japanese economy, it looks as if there is no hope for the future. Asher and Smithers (1998) ascribe the problems of the Japanese economy to the "five Ds"; debt, deflation, default, demography, and deregulation. "Debt" means that the government is saddled with a huge amount of debt. "Deflation" has been explained above. "Default" implies that the issue of bad corporate balance sheets will have to come to be confronted. "Demography" points to the possible collapse of the pension system because of the rapidly aging Japanese population. "Deregulation," although it needs to happen eventually, can further deteriorate the economic situation

¹⁰ The term "debt-deflation" was coined by Irving Fisher (1867–1947), who explained the phenomenon of the debt-deflation spiral by assuming that the debtor's propensity to consume exceeds that of creditor's. Such a classical explanation can also be applied to the deflation process in Japan.

¹¹ Krugman has focused on discussion of Japan's monetary policy and the liquidity trap since 1998. See Krugman (1998a, 1998b, 1998c, 1998d, 1998e, 1998f, 1999a, 1999b, 1999c).

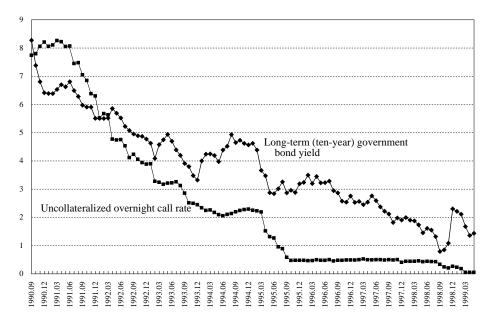


Fig. 4. Long-Term and Short-Term Interest Rates

Source: Bank of Japan.

in the short run as it entails layoffs and depresses industries that have long been protected.

The concept of the five Ds typifies the pessimistic views of the Japanese economy. This paper will now review the economic situation through these five Ds. I do not agree with the pessimism they construe, and in the next sections I will argue against them. With the exception of deflation, the other four Ds are simplistic constructs based on superficial phenomena. They need to be considered in a much more fundamental way. First, I will discuss these four Ds showing how they relate to medium- and long-term issues in the Japanese economy, and present two principles that can be used to deal with them. Then I will comment on ways of coping with deflation, which is the most urgent short-term issue.

III. DEFAULT AND DEREGULATION

These are both welcome developments. Deregulation is desirable, of course, but why is default also welcome? The answer lies in a comparison between the destruction of production capacity from air raids and from the deterioration of balance sheets. The former is apparent to anyone the moment the destruction occurs, but the

latter is not. When plants and buildings are destroyed by an air raid, efforts to rebuild them start immediately. The same is not true of destruction by balance sheet deterioration. In the case of this latter destruction caused by the bursting of the bubble, efforts were expended not on rebuilding but on glossing over the problems at the cost of efforts that should have been expended on promising productive activities. This is a major reason for the nearly ten-year prolongation of Japan's economic slump. Indeed the situation has advanced to a point where it is no longer possible to paper over the problems, thereby forcing banks and large companies to default. From the medium- and long-term perspective this is a welcome situation in that it could provide a good opportunity for a renewed start.

In this context, the Financial Supervisory Agency (FSA) and the Financial Reconstruction Commission (FRC) have done a worthy job in dealing with insolvent financial institutions. Their judgment that Nippon Credit Bank has excess debt large enough to justify its temporary nationalization came as a welcome surprise, as much to me as to everyone else. The task of inspecting regional banks and life insurance companies and declaring some of them in default is well under way (Table II).

After some delay structural reform of the Japanese economy is now gaining momentum, and reforms are being implemented in many ways. Two examples are the industrial reconstruction law to support corporate restructuring and a move to establish a new type of bankruptcy law to provide for the prompt working out of debt.

As Asher and Smithers (1998) comment, however, in the short run these measures work to increase unemployment and decelerate economic growth. Nevertheless, there should be no delay. A desirable step would be to adopt a policy mix of appropriate macroeconomic policies which counters the ill effects on the macroeconomy, while reform of the economic structure is promoted at the microeconomic level.¹²

It needs to be pointed out that "default" and "deregulation" are only means to an end. If the means become the end, they may prove dangerous and cause confusion. The final objective is to promote efficiency. Deregulation should aim to enhance the efficiency of an economy as a whole, and default should be tolerated so as to force inefficient companies out of the market or compel their restructuring.

In this regard, there has been a recent tendency in Japan to interpret "efficiency" in a narrow sense and see it as the generation of fat profits. This tendency to identify high profits with corporate efficiency seems to come from a superficial acceptance of the American concept of corporate governance.

¹² Care should be taken to avoid the folly of achieving macroeconomic stabilization through intervention in microeconomic activity. For instance, it would be a mistaken policy for the government to seek to achieve macroeconomic stability through direct market intervention in support of stock prices. Prompt action to counter an economic slump through adequate macroeconomic policy is also necessary to prevent such inappropriate action.

TABLE II ACHIEVEMENTS OF THE FINANCIAL SUPERVISORY AGENCY AND THE FINANCIAL RECONSTRUCTION COMMISSION

1998		
June 22	Inauguration of the Financial Supervisory Agency	
Oct. 23	Long-Term Credit Bank of Japan	Special public management was decided on (which included temporary nationalization).
Dec. 13	Nippon Credit Bank	Special public management was decided on (which included temporary nationalization).
Dec. 15	Inauguration of the Financial Reconstruction Commission	
1999		
Mar. 12	Major 15 banks	Capital injection was decided (¥7,459.2 billion).
Mar. 30	Long-Term Credit Bank of Japan	Stock redumption price was set at zero.
Apr. 11	Kokumin Bank	Assignment of financial resolution receiver was decided.
May 14	Kofuku Bank	Prompt corrective action was taken.
May 21	Kofuku Bank	Assignment of financial resolution receiver was decided.
May 31	Tokyo-Sowa Bank	Prompt corrective action was taken.
June 4	Toho Insurance Co.	Operation suspension was ordered.
June 5	Toho Insurance Co.	Assignment of insurance custodian was decided.
June 11	Tokyo-Sowa Bank	Assignment of financial resolution receiver was decided.
June 14	Nippon Credit Bank	Stock redumption price was set at zero.
June 17	Paribas Asset Management Japan	Administrative action was decided (suspension of new contracts for a month from June 21).
July 1	Issuance of the "Financial Inspection Manual"	Stricter and regular inspection of deposit-receiving financial institutions was taken.
July 29	Credit Suisse Group	Administrative action was decided (which included revoking of the license of a group company).
Aug. 7	Namihaya Bank	Assignment of financial resolution receiver was decided.

Strictly speaking, however, fat profit does not necessarily mean efficiency.¹³ Efficiency in its real sense means economic behavior that generates more value added through the input of fewer factors of production. Profit is certainly a part of value added, but not the only part. A nation's aggregate value added represents its GDP which is distributed to labor and to capital. As profit is a part of capital distribution, it is merely a portion of the total value added.¹⁴

The reason why profit deserves greater weight is that there is an expectation that this will have favorable governance effects on corporate management. Maximizing profit means maximizing shareholder value. Therefore, making management aim for fat profits is a principal concern under the American style of corporate governance that attaches importance to the shareholder's role in disciplining management. In short, the primary objective should be to pursue efficiency by improving corporate governance. Profit targets are merely a means of achieving this objective.

However, contributions to higher production efficiency do not come from share-holders efforts alone. Stakeholders in a broader sense such as employees and creditors (and probably subcontractors and other trade partners) are also important. These stakeholders other than shareholders also have a stake in corporate efficiency. According to the efficiency wage hypothesis, for example, whether employees retain a sense of loyalty and unity with the company is an essential consideration in efficient production activity. If this hypothesis is correct, the business model that gives priority only to shareholder interest may fall into an unexpected trap. If the portion distributed to labor is simply cut from value added (through wage cuts or layoffs), it may be possible to increase the portion of dividend. However, this step entails the possibility of a reduction in employee work motivation. In the United States, for example, if the presently healthy economic environment and high stock prices collapse, hitherto latent problems, such as the low labor distribution and large wage discrepancies, may come to the fore all at once and force a revision of the business model.

Distributions to creditors are also not regarded as profit. Value added is distributed to creditors in the form of an interest payment which is treated as a cost for the purpose of corporate accounting. As a result, the profitability of a company which distributes most of its value added (aside from the portion for labor) in the form of interest payments will be lower. This outcome may reflect the importance attached to other stakeholders, i.e., creditors. It may also reflect the big role played by credi-

¹³ If the extent of profit is identified solely with efficiency, how can we explain the fact that products made by Japanese companies with narrow profit margins are well received in the world market?

¹⁴ Take, for example, an extreme case where two companies manufacture a similar product (a car for instance), and Company J has zero profit and Company A has a large profit margin. If the cost for parts for both companies (intermediate input) is 600,000 yen and the price of their cars is 1 million yen, they have generated the same added value (400,000 yen) through their production activity. The difference between companies J and A could be simply that the former distributes a greater portion as labor remuneration (the total value added in this case).

tors with regard to corporate governance under the Japanese "main banking system."

Nevertheless, it may be dangerous to slight shareholders by attaching importance only to workers and creditors, just as the opposite is dangerous. What is essential is to keep in mind the objective of raising the efficiency of corporate management and producing more value added. Generally speaking, the optimum form of corporate governance is likely to differ with the corporate culture peculiar to individual companies, and so will the corresponding distribution structure of value added. The optimal approach may not be limited to a single type, even within one country. What is essential is neither to introduce a stereotyped American business style, nor to adhere to a stereotyped Japanese or East Asian model. Individual companies must now realize that there are reasons for seeking their own most efficient form of operation, and work out the business style best suited for this purpose. This is a challenge for companies to make every efforts to deal with this issue through fair competition and through repeated trial and error. This principle should apply throughout other East Asian countries too.

To promote this process, the role of the government is not to interfere unnecessarily with corporate decisions, but to oversee fair competition, to make sure it is taking place, and to create a business environment that promotes to private sector initiative. Deregulation, of course, is included in this endeavor. In addition, efforts should be made not only to deregulate but also to ensure that there will be no inappropriate behavior. The way government manages itself is also important. The government should aim to achieve greater administrative efficiency through smaller-scale, lower-cost operations, and it must work out the way to discipline itself to this end.

IV. DEBT AND DEMOGRAPHY

These issues are serious ones. However, they matter in ways that are different from what is generally believed. The reason is that government debt cannot be treated the same as household debt or corporate debt. The Japanese government's debt is mostly a domestic debt, and one it owes to itself in the context of the entire macroeconomy. Then whether or not the government defaults is not a matter of concern. What really matters when the government debt swells are: (1) it makes it hard to take fiscal expansion in time of need and (2) it necessarily accompanies redistribution of income. The answer to the former problem is simple: Now is the time. The latter is a question that requires much more deliberation.

¹⁵ From the macroeconomic perspective, domestic government bonds represent nothing but one's debt to oneself. Accumulation of them causes income redistribution among people depending on (1) the way the government utilizes the purchasing power gained from the issuance of debt and (2) the way funds are raised for redemption. For example, when the money is used in public works, some entities benefit and others do not. When income taxes are used for redemption, workers' purchasing power declines, but retired people are not affected.

Income redistribution that becomes a problem in the course of government debt reduction is related to taxation. Generally, taxation creates unevenness in resource distribution. This can have a serious impact, particularly on the incentives for economic activity. Undoubtedly, excessive income tax and corporate tax directly dampen worker and manager incentives. Tax rates that are too high may also lead to the allocation of management resources for the purpose of tax evasion and result in the waste of resources.

Such outcomes can be avoided in only one way: the redemption of government debt will be achieved through reductions in the scale of government expenditure at a certain time in the future instead of through increases in taxation. In this sense, Japan is in a favorable position, because present government spending appears to be very inefficient. The more inefficient the spending, the greater the room that there is for spending cuts generated by improvements in efficiency. The greater the government's present debt, the stronger the motivation for urgent fiscal reexamination.

If there is no need to worry about the short-term macroeconomic effects (that is, if the economy is stabilized), the reduction of the scale of government expenditure will be a good thing for resource distribution. If GDP remains unchanged, a reduction in government spending means an addition to the economic resources that can be used for private sector economic activity, which means that we can expect an effect exactly the opposite of crowding-out. The "crowding-in" of private sector investment and consumption in place of government activities should enhance the vitality of the entire economy.

Nevertheless, there could be two factors for concern; one related to the size of the outstanding government debt and the other related to whether the government will endeavor to cut expenditures in the future. The first factor should be negligible because even today government debt is no larger than 100 per cent of GDP (though this proportion is expected to rise to about 140 per cent in the near future). It was not infrequent that wartime government debt to GDP ratio was more than 200 per cent, and indeed countries often resorted to foreign borrowings. In comparison, Japan's debt comes primarily from domestic borrowing, and for this reason warrants little worry.

Nor do I have to worry about the latter fact. The Japanese have always been enthusiastic regaining the nation's fiscal health, as indicated by former Prime Minister Ryutaro Hashimoto's hasty attempt in the first half of 1997 to achieve a fiscal surplus by raising the consumption tax rate, which unfortunately only resulted in a serious recession.

The issue of "demography" is essentially a similar problem to "debt." As an issue concerning an aging population, it is feared that Japan's public pension fund system will collapse and raise government liabilities. But like most developed countries, Japan has adopted a pay-as-you-go pension system, under which premiums

collected from the present younger generation are distributed to the beneficiaries of the present retired generation. This is, in essence, nothing but income transfer among "different" generations at the "same" point of time.

Demographic aging means, in relative terms, an increase in the retired population and a decrease in the working population. In order to maintain the per capita amount of pension received by the increasing numbers of retirees, the per capita burden on the decreasing number of workers will have to be raised substantially. Conversely, to keep the per capita burden on the working population unchanged, the amount of the pension received by retirees will have to be reduced sharply. A rough evaluation suggests that these are the only two available options. The first option would dampen the motive to work among the working population and would be the most likely to erode the productivity of the entire society. The remaining realistic option is thus a marked reduction in beneficiary receipts. The fact that this is the only available option may seem an unhappy prospect, but in reality it is not. It is not because it indicates that there will have to be a revision of Japan's pension system to take this reduction into account and, what is more, such a change will not entail problems such as an increase in the government debt. 16

Again, the most important problem lies not with the solvency of the government but in how best to arrange the method of income redistribution so as not to adversely affect payer incentives. This is a very important point, because the fact that the problem lies in the method of income redistribution means that there can be a solution (a good method of redistribution) if GDP, as the nation's total pie, can be maintained at a certain level.

If the problem with pensions is seen only in terms of repayment capability and only in the context of government solvency, one may be tempted to conclude that the only solution is an increase in taxes. However, a tax increase is most likely to add to the burden on the working generation, rather than to that on the aging generation. This would cause a transfer of income from the working to the aging generation. As a result, the effort is no different from that of simple pay-as-you-go schemes.

If the problem is recognized properly as one that relates to redistribution, the fact that there must be some people retaining vested interests comes to light. If Japan's income as a whole is maintained at an almost constant level, there exists some way of redistribution which will not hurt the economy's efficiency very much. As long as the size of entire pie remains unchanged, any contraction in the share received by some people can happen only when other people expand their share. If the burden on the working population becomes heavier, as is claimed will be the case for pension payments, some people with vested interests in the retired spectrum of the population must be receiving a greater share. They include aged persons, who may

¹⁶ There is the problem of a shift to a fully funded pension scheme, but this is another matter.

appear to be low-income earners but who actually have sufficient assets, and other aged people who have retired only to receive pensions even though they could continue to work.

If it is adequately understood that the basis of the problem is in essence one of redistribution, I am convinced that the people of Japan will be able to solve this problem without causing major confusion (that is, there should be no strong objection to the relinquishment of their vested interests). This is because the people share an ethical attitude that it is shameful to secure one's own interest at the expense of others. This attitude was evident at the time of the great earthquake that hit the Kobe and Osaka area in 1995 (killing more than 8,000 citizens, injuring 41,500, and destroying 200,000 houses). The afflicted survivors behaved in an orderly manner in receiving food and rescue supplies, causing little confusion, simply because of the implicit moral norm shared by the Japanese (as opposed to behavior that is only for the sake of oneself or one's family when many others are suffering from similar disaster).

On the other hand, the greatest risk comes from a misunderstanding about the nature of the real problem, meaning that the problem is seen as government fiscal health rather than as income redistribution. In that event, attempts will be made to solve the problem by the simple doctrine of a balanced budget, and impose an excessive tax burden on a certain strata of people which will greatly impair the vitality of the entire economy. It is critical, therefore, to look into the true nature of the problem instead of looking merely at its surface. The above observations (Sections III and IV) can now be brought together into two principles which will be explained in Section V.

V. NOT FOUR Ds BUT TWO PRINCIPLES

From the medium- and long-term perspective, it would be superficial to try to understand the Japanese economy merely by means of the four Ds. It would be too narrow to focus only on these. One has to focus on the real underlying problems and consider countermeasures from a broader perspective. As we have seen, the underlying problem with "default" and "deregulation" is how to find ways to more efficiently generate value added. The key issue with "debt" and "demography" is how best to achieve income distribution without adversely affecting people's incentives. From these points arise two principles: (1) to enhance the efficiency of economic activity and raise the total value added (GDP) and (2) to adequately redistribute the value added thus generated (or to avoid its inadequate redistribution).¹⁷

¹⁷ The issue of distribution is related to that of efficiency as is indicated by welfare and public economics. Due care should be taken regarding the risk that tax-induced distortions on incentives can have on economic growth. See Sandmo (1999) for example. In discussing the issue of distribution,

A proper recognition of these two principles should lead to the development of adequate measures for the medium and long term. Then it will be fairly straightforward to achieve moderate economic growth. If inefficiency really exists in the Japanese economy, as is often talked about, the greater the inefficiency, the greater the potential for growth. After the war we witnessed the Japanese economy starting off on a path of high growth after its physical capital was badly damaged during the war. Now the economy could again potentially achieve marked growth, if truly efficient capital accumulation begins.

Consequently, of the five Ds, the one of real concern is "deflation," and the challenge to the economy is the prevention of a deflationary spiral.

VI. DEFLATION, MONETARY POLICY, AND CONCERNS ABOUT A WEAK YEN

As the foregoing observation suggests, the long-term outlook for the Japanese economy is not necessarily pessimistic. However, short-term issues must also be addressed adequately. The gravest of these are the prevention of deflation and the use of monetary policy to cope with the "liquidity trap." At the time of writing (end of June 1999) there were signs of optimism due in part to the fact that the GDP growth rate for the first quarter of 1999 was 1.9 per cent above the level for the previous quarter (7.6 per cent on an annual basis) and much higher than had been forecast. However, based on data such as growth in bank lending and price indices, this fact alone does not warrant any assertion at this time that the deflationary trend has disappeared.

As a way of getting out of the liquidity trap, Krugman¹⁸ and many other observers recommend expansion of the money supply and depreciation of the yen. Yet others like Feldstein (1999) suggest measures to increase defense spending so that Japan becomes a military power,¹⁹ in addition to depreciation of the yen.

A more realistic and likely option would be a temporary freezing of the consumption tax followed by a gradual rising of the consumption tax rate as suggested by Suzuki (1999). This idea, which is not of Suzuki's creation, is well known in Japan. As far as I know, it was first proposed by Professor Fukao of Keio University in early 1998. In essence, I agree with this plan. If Japan's

it should be kept in mind that the time frame should not be limited to a specific point in time, but that income distribution among different generations must be carried out through the adoption of the generational accounting approach. See Kotlikoff (1992).

¹⁸ See Krugman (1998a, 1998b, 1998c, 1998d, 1998e, 1998f, 1990a, 1990b, 1990c).

¹⁹ This paper does not discuss fiscal policy, but this footnote will touch on it briefly. The idea of growth as a military power, as proposed by Feldstein, should be discussed on the basis of international politics. It is not a matter for casual discussion by economists. (Maybe an economist as prominent as Feldstein can be allowed to consider such issues.) As a Japanese with easier access to relevant information than foreign non-specialists in Japanese politics, I can say that no Japanese politician has ever put forward a plan to expend taxpayer money on turning Japan into a military power. Only the wildest of imaginations would suggest that any Japanese leader would do so in the near future.

Worries about Japan's increasing current account surplus among those outside Japan, as a result of a weaker yen, are quite understandable. On the other hand, worries about the Japanese government taking measures to lower the value of the yen are unnecessary as it is very difficult, even impossible, to achieve this aim, and I would like to argue against this worry.

A. Concerns about the Yen's Depreciation

To begin with, it must be noted that ever since the collapse of the Bretton Woods system in the early 1970s, Japan has consistently adopted a floating exchange rate system and it has never endeavored to maintain the rate at certain levels. Today it has become impossible to guide exchange rates to certain chosen levels. Even the central bank of an advanced nation can no longer manipulate exchange rates given that international capital flows are now so vast. Of course, like many other developed countries, Japan, while adopting the floating exchange rate system, intervenes in the foreign exchange market when there are signs of too rapid change in the exchange rates. However, this step is never intended to manipulate the market. It would be ridiculous, therefore, to imagine that Japan's government might take steps to weaken the yen in opposition to market forces.

Even if the Japanese government had plans to depreciate the yen indirectly (i.e., through monetary policy), those plans would be invalid these days for the following reason.

According to the Mundell-Fleming model, under a floating exchange rate system, lower interest rates caused by an increased money supply will trigger capital outflows. These will cause depreciation.

This could not happen in Japan because there is no room for any further decline in Japan's interest rates, no matter how much the money supply is increased. Nominal interest rates cannot possibly drop below zero. Indeed, at the time of writing, concerns over the foreign exchange market are not so much about a weak yen caused by low interest rates as about a strong yen induced by expectations of higher interest rates in response to Japan's economic recovery. In the asset market, people's future expectations are very important. In the present situation, a rational view, where no further drop in interest rates is physically possible, is that "a lower interest rate risk is zero." On the other hand, a higher interest rate risk is not zero, although the probability of this is estimated to be fairly small. This means expected future value of interest rates becomes higher than current rate. It is reasonable, therefore, to expect a stronger rather than a weaker yen.

economic situation worsens further, it is one which would be deserving of serious discussion, and one which would very probably be implemented.

Although public works are generally believed to have a higher multiplier effect than tax cuts, it is more advisable in Japan's present circumstances to cut tax, thereby allowing taxpayers to use the money and resources in place of spending on public works whose efficiency is doubtful.

Where there are many people and institutions with an effective liquidity constraint, however, a quantitative effect of increased money supply can have a direct impact without any drop in interest rates. Though interest rates remain unchanged, it is theoretically possible for their availability of funds to expand, leading to outflows of funds. Japan is now in the midst of a credit crunch. Accordingly, many entities may be subject to credit rationing and liquidity constraint.

However, further investigation of this situation shows that the possibility of a weaker yen due to easing in liquidity is small. It is prospective borrowers rather than creditors that are suffering liquidity constraints. Specifically, those faced with liquidity constraints are the corporations which have restrained investments as well as the consumers who have reduced consumption rather than those who want to acquire financial assets such as healthy banks and life insurance companies. When liquidity constraints on corporations and consumers are relaxed, the most likely result will be increased investment and consumption in Japan domestically. In the context of the overall macroeconomic balance, increased consumption and investment tend to reduce the total net savings of a country. This would reduce net foreign investment, causing the country's currency to appreciate. Indeed, the expansion of the range of government guarantees for loans to small and medium-size enterprises in late 1998²¹ (20 trillion yen) helped substantially with a relaxation of liquidity constraints. It also sustained domestic investment, thus playing a role in the strengthening of the yen since the beginning of 1999.

Let's examine some other possibilities, such as the application of the quantity theory of money and a case where a certain rate of increase in the nominal money supply causes inflation at the same rate (a situation which would be most welcome if it were to happen in Japan). In this case, if other conditions are constant, there should be a depreciation of the nominal exchange rates. However, the real exchange rate would remain unchanged. This is explained by the following relationship: rate of real exchange rate depreciation = rate of nominal exchange rate depreciation + inflation rates overseas – inflation rate in Japan.

This means that the effect of a depreciation of the nominal exchange rate on the depreciation of the real exchange rate will be fully offset by a rise in Japan's inflation rate.²²

This type of yen depreciation does not warrant concern. While some people's concern about yen depreciation arise from their worry about a possible increase in Japan's current account surplus, depreciation of only nominal exchange rates should

Weak banks and life insurance companies, which face fund-raising difficulties given their huge nonperforming loans, also face liquidity constraints. However, sooner or later these companies will be closed by the Financial Supervisory Agency (FSA). But even if the liquidity constraints on these institutions should be eased, the resulting available funds will be used only to compensate for losses, leaving little leftover for capital outflows.

²¹ However, this approach is a highly questionable one from the viewpoint of efficiency.

²² This is the open economics' version of "monetary neutrality."

present no problem because it is the real exchange rates that actually influence the current account balance.

If however full monetary neutrality is not attained, then the yen's real exchange rate would increase instead. The reason for this is the same as what we saw for the liquidity constraint. In other words, prices are not pushed up by the full amount of the increase in the money supply. When part of the increase has an effect which stimulates the economy, neutrality collapses. This would help to expand the opportunities for investment and consumption within Japan and check the outflow of funds.²³

However, the yen could depreciate for reasons that are beyond the control of the Japanese government. The greatest concern is a rise in U.S. interest rates. In effect this leads to an appreciation of the U.S. dollar from the standpoint of asset substitution. Such depreciation of the yen would be caused by factors on the U.S. side and not by factors within the influence of the Japanese government. I do not think, however, that the U.S. government should restrain interest rates just to keep the yen from depreciating. After all, the rules of the game demand that the monetary policy of a country with a floating exchange rate system be used to stabilize its own economy and not to manage exchange rates. The U.S. government should no more be blamed for the effect of its monetary policy on exchange rates than the Japanese government should be blamed for the external effects of its own monetary policy.

B. Liquidity Trap and Monetary Policy

In the classical view, the liquidity trap describes a situation where the interest rate elasticity of demand for money becomes infinite, and a decline in interest rates due to asset substitution among money and bonds cannot occur no matter how much the money supply is increased. The current Japanese situation demonstrates an extreme case in which interest rates have fallen to almost zero and, therefore, technically there is no room for any further lowering of interest rates. In this situation no ordinary monetary policy based on lower interest rates can have any meaning, and in this sense this situation may be designated as another case of a "liquidity trap."

"The Cat and the Mouse" is one of Aesop's Fables well known in Japan. When the mice gathered to discuss ways of dealing with the cat, one mouse suggested putting a bell around the cat's neck so that they could flee to safety at the first sound of the approaching cat. The story ends with laughter because no mouse could figure out how they could put the bell on the cat's neck, or who could do it.

²³ Another possible argument relates to the potential for overshooting of the exchange rate (Dornbusch 1976). Basically, this is a dynamic model that links the long-term equilibrium which is characterized by monetary neutrality with the short-term dynamics in accordance with the sticky price model. This cannot happen in Japan, however, because the previously mentioned short-term Mundell-Fleming model is the precondition for the overshooting model. In other words, there should be no overshooting without a decline in interest rates.

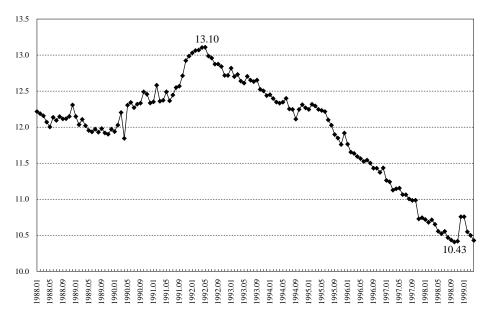


Fig. 5. Money Multiplier (based on M2+CD)

Source: Bank of Japan.

Discussions of the Japan's liquidity trap are reminiscent of this fable. Everyone knows monetary policy will begin to function effectively only if we can prevent prices from falling and secure moderate inflation (of about 2 per cent, for example). However, when it comes to implementation of the plan (how to put the bell on the cat's neck), there is nobody with a really effective idea. Paul Krugman, for instance, proposes that the Bank of Japan should turn on the printing presses. He seems to think that the Bank of Japan has been tightening monetary conditions. In reality, the Bank of Japan has supplied generous amounts of base money for many years, but has, nevertheless, failed to check deflation.

The problem is that an increase in base money has not helped to expand the money supply as projected (indicating a decline in the money multiplier) (Figure 5) and, more importantly, bank lending has not increased (Figure 6). It is evident that the culprit is a credit crunch triggered by the deterioration of bank balance sheets. The textbook argument about the money multiplier is that an increase in base money can generate many times the amount of the money supply once the banks start lending. When banks are collecting loans instead of lending more money, as we see today, there is no increase in the money supply, let alone any inflation, no matter how much the Bank of Japan increases base money by turning on its printing presses.

Theoretically speaking, there is only one way out of this bleak situation. In what

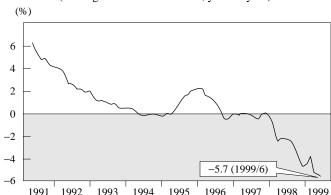


Fig. 6. Growth Rates of Bank Lending (Average mid-month balance, year-to-year)

Source: Bank of Japan.

is called "helicopter money," money is distributed directly (handed over) to people, in addition to turning on the printing presses. In conventional monetary policy, the central bank simply supplies liquidity to commercial banks (not free of charge, but by equal-value exchanges with government bonds or debentures). As a result, if a credit crunch occurs (a situation where commercial banks do not want to lend money) conventional monetary policy will become invalid just like a stopped-up faucet will not work. The way out is to use another route ("from heaven" so to speak) and pour the water (cash) directly into the bathtub (people), instead of using the clogged faucet (banks).

Scattering money "from heaven" is of course a metaphor. In reality, a certain amount of cash should be given to every person. This approach aims to reduce the value of money by a certain ratio (generating inflation) through a forced increase in the amount of money. The surest way of realizing this approach would be to provide money at a certain ratio in proportion to people's money holdings. This method is very similar to the depreciation of stock prices through splits. If the number of stocks is doubled through splits when corporate value is constant, the price of a stock unit should halve. In the case of money, however, a policy of distributing money in proportion to money holdings is difficult to implement. An easier approach which I would like to propose is the allocation of money in an equal amount per person (Kunimune 1999).

In implementing this policy, two points need to be considered: who would do it and to what extent? Regarding the first point, the Bank of Japan should not be in charge of this policy. It is not within the realm of the Bank of Japan's traditional monetary policy tools, and therefore the Bank of Japan could and should not voluntarily implement it. It is a matter to be deliberated and decided by the National Diet.

This is desirable also from the standpoint of maintaining the central bank's credibility as an inflation fighter. The National Diet (or politicians) should be directly responsible for the success or failure of this policy. As a secondary matter, there should be no leeway for parliamentarians to appropriate the policy for their own interests. Such actions would raise the cost of policy implementation and distort resource distribution. Thus parliamentary deliberation should not include ways for distributing the money which favor specific individuals or organizations, but which provide money in equal amounts to every one, from babies to the aged.

Point two ("to what extent?") can be addressed from the standpoint of maintaining the purchasing power of aggregate money stock at a constant level, because the loss of it is always the reason for opposition to this kind of policy. Japan's money supply balance (M2 + CD) amounts to about 500 trillion yen, which is almost equal to Japan's GDP. If a 2 per cent inflation is successfully generated, the lost purchasing power of money would be about 10 trillion yen ($500 \times 0.02 = 10$). If the same amount of money is transferred to the people, the purchasing power of total money stock can be kept unchanged. A difficulty with this approach is that this sum, if provided in cash, might cause a money multiplier effect, eventually resulting in a money supply many times larger than what was initially provided, and the resulting inflation may be of a scale that is larger than projected. ²⁵

There is another possible way to determine the amount of money to be given to the people. As the balance of Japan's base money is 50 trillion yen, or approximately 10 per cent of the money supply, the (average) money multiplier comes to about ten. Assuming that the marginal money multiplier coincides with the average money multiplier (although the validity of this assumption is problematic due to the credit crunch), the money supply can be increased by 10 trillion yen through the provision of about 1 trillion yen more in base money. Unlike the previous calculation (which requires 10 trillion yen in cash), 1 trillion yen would be sufficient by using this approach.

The simplest policy-mix to fill the gap between these two figures is for the government to supply 10 trillion yen in cash to the people, and, at the same time, for the Bank of Japan to collect base money worth 9 trillion yen through its open market operations (sell bonds).

Another complex policy-mix is to provide 1 trillion yen in cash immediately, and then to supply discount bonds with contingency claims (face value of 9 trillion yen). The redemption of these bonds would be contingent upon the real inflation rate, with the full amount redeemed for an inflation rate of the projected 2 per cent, half for an inflation rate of 1 per cent, and zero for an inflation rate under 0 per cent. The reason for this is to compensate exactly for the inflation-induced reduction of the purchasing power of the money stock. Moreover, to prevent the redemption of

²⁴ To simplify estimates, rounded figures are used. This applies to the figures in the following pages.

²⁵ Note that this need not be a cause for concern if the credit crunch limits the credit creation process.

government bonds from further increasing the money supply, the Bank of Japan should, at the time of redemption, absorb base money from the market in the same amount as the transferred money, using such means as its open market operations.

In terms of simplicity, the first policy-mix appears the better, but the second is better in providing for an accurate transfer of inflation-induced capital loss. Currently it appears that the credit creation process has been damaged and that the marginal money multiplier has been destabilized. In these circumstances it is not certain that the projected inflationary effect can be ensured. It may be necessary to distribute a larger amount of helicopter money than was calculated to cause inflation. In that event, it is advisable to print much more money and to adopt the second policy-mix, by promising redemption at above face value if the inflation rate exceeds the projected level, in case the target should be overshot. This option would seem politically easier for garnering popular support.

If either policy fails to generate the projected rate of inflation, the same policy should be tried again (a year later, for instance), but on a larger scale than before.

It should be noted that measures which cause inflation in whatever way lead on to a serious problem which is seldom discussed. It is the danger of plunging money markets into chaos. In particular, there is a danger of a collapse in government bond prices. ²⁶ A possible scenario in such an event would be outflows of funds and a dramatic depreciation of the yen. The idea of discount bonds with contingency claims could be meaningfully utilized in dealing with this problem. Under this scheme, contingent bonds, redemption of which increase in step with inflation, would be provided in proportion to the current value of existing bonds, and the contingency conditionality would be decided in ways which offset the inflation-induced capital loss in bonds. This is a virtual indexation of government bonds. The plan would ensure an orderly implementation of inflation policy.

CONCLUSION

In the first part (Section I) of this paper, I argued that the notion that Japan caused the Asian currency crisis is not true. In the second part (Sections II–V) I discussed the medium- and long-term prospects for the Japanese economy can be excellent on condition that people recognize the true problem rather than be obsessed by overly pessimistic and superficial diagnoses. The only valuable principles we should be concerned about are "to raise efficiency" and "to be careful about redistribution (not to dampen people's incentives)." In the third part (Section VI) I presented the "helicopter money" policy as the only way to generate a positive inflation rate and get the Japanese economy out of its "liquidity trap."

²⁶ A rise (or an expected rise) in the inflation rate means that the nominal interest rate climbs by the same margin in what is called the Fisher effect. A rise in the government bond nominal interest rate (yield) means a drop in the government bond price.

Forgetting that I am a Japanese, Japan's economic situation these days are very much interesting research object. Reminding that I am a Japanese, to think and to try the way out of this situation are very much exciting. I am confident that the way out will come and am cautiously optimistic about the long-term prospects. In the short run, it seems it will take more time to stabilize the economy, unless the drastic monetary policy presented in this paper is taken. Although the economy might regain strength over time even without these drastic measures, the occurrence of economic upheavals overseas could easily undermine the recovery. Indeed, the stock market could crush in the United States, or there could be a recurrence of the currency crises in neighboring economies. So we should not hesitate to ride the helicopter and let the money drop.

REFERENCES

- Asher, David, and Andrew Smithers. 1998. "Japan's Key Challenges for the 21st Century: Debt, Deflation, Default, Demography, and Deregulation." SAIS Policy Forum Series. Washington, D.C.: Johns Hopkins University, School of Advanced International Studies.
- Dornbusch, Rudiger. 1976. "Expectations and Exchange Rate Dynamics." *Journal of Political Economy* 84, no. 6: 1161–76.
- Feldstein, Martin. 1999. "What Next for Japan." Asian Wall Street Journal, June 21.
- Fukazawa, Eiji; Takehiko Suzuki; and Hiroshi Inagaki. 1999. "Ajia tsūka kiki ga Nihon ni oyoboshiteiru eikyō—Sono haikē to kongo no tembō" [The impact of the Asian economic crisis on the Japanese economy—Its background and future outlook]. *Fuji Sōken ronshū*, no. 1999-I: 63–94.
- Japan, Eonomic Planning Agency. 1998. *Nihon keizai no genkyō*, 1998 [The present state of the Japanese economy, 1998]. Tokyo: Ministry of Finance, Printing Bureau.
- Kameda, Keigo, and Takehiko Ogino. 1999. "Ajia tsūka kiki no Nihon ni taisuru eikyō ni tsuite—Ōpun makuro moderu o mochiita riron jisshō bunseki" [The impact of the Asian currency crisis on Japan—A corroborating theoretical analysis using an open macro model]. JCER Paper, no. 56. Tokyo: Japan Economic Research Center.
- Kawasaki, Ken'ichi. 1998. "Ajia kinyū kiki wa sekai keizai ni totte hontō ni shinkoku ka?" [Is the Asian financial crisis really serious for the world economy?]. *Keizai seminā*, no. 521: 52–57.
- Komine, Takao. 1998. "Ajia no yushutsu o meguru tsūsetsu o ginmi suru" [Examining the commonly accepted view of Asian exports]. *Ronsō Tōyōkeizai*, no. 13: 156–59.
- Kotlikoff, Laurence J. 1992. Generational Accounting: Knowing Who Pays, and When, for What We Spend. New York: Free Press.
- Krugman, Paul. 1998a. "Further Notes on Japan's Liquidity Trap." The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.
- ——. 1998b. "It's Back: Japan's Slump and the Return of the Liquidity Trap." The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.
- ——. 1998c. "Japan: Still Trapped." The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.

- ——. 1998d. "Japan's Bank Bailout." The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.
- ——. 1998e. "Japan's Trap." The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.
- ——. 1998f. "Setting Sun Japan: What Went Wrong." The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.
- . 1999a. "Japan Heads for the Edge." *Financial Times*, January 20.
- ——. 1999b. "Morning in Japan?" The Official Paul Krugman Web Page, http://web.mit.edu/krugman/www.
- ———. 1999c. "Still Depressed about Japan." *Financial Times*, May.
- Kunimune, Kōzō. 1998. "Higashi Ajia de Nihon ga hatasubeki yakuwari wa nanika" [What role should Japan play in East Asia?]. *Keizai seminā*, no. 521: 46–51.
- . 1999. "Herikoputā manē seisaku no susume" [A suggestion for a helicopter money policy]. *Keizai seminā*, no. 534: 38–42.
- Noland, Marcus; Sherman Robinson; and Zhi Wang. 1998. *The Global Effects of the Japanese Crisis*. Working Paper Series, no. 98-6. Washington, D.C.: Institute for International Economics.
- Ono, Tatsuya, and Yoshihiko Kato. 1998. "Higashi Ajia to Nichi-Bei-Ō no sōgo izon kankei no henka" [Changes in interdependence between East Asia and Japan–the United States–Europe]. *Sangyō renkan* 8, no. 3: 21–29.
- Organisation for Economic Cooperation and Development (OECD). 1997. Economic Outlook and Policies, General Assessment of the Macroeconomic Situation. Paris: OECD.
- Sandmo, Agnar. 1999. "Asymmetric Information and Public Economics: The Mirrlees-Vichrey Nobel Prize." *Journal of Economic Perspectives* 13, no. 1: 165–80.
- Sano, Takao. 1998. "Higashi Ajia ni okeru shotoku no hakyū" [Spreading income in East Asia]. In *Kenshō: Fukamaru Higashi Ajia no kokusai sangyō rinkēji: Kokusai I-O bunseki no shiten* [Verification: Deepening international industrial linkage in East Asia: A look at international I-O analysis], ed. Takao Sano and Hiroshi Osada. IDE Topic Report, 1998-4. Tokyo: Institute of Developing Economies.
- Suzuki, Yoshio. 1999. "Suspend the Consumption Tax to Save Japan." *Asian Wall Street Journal*, June 23.
- Urata, Shujiro. 1999. "Ajia keizai no fukkatsu to Nihon no yakuwari" [Japan's role in the recovery of the Asian economy]. JCER Paper, no. 57. Tokyo: Japan Economic Research Center.