THE RECENT JAPANESE ECONOMY: THE OIL CRISIS AND THE TRANSITION TO MEDIUM GROWTH PATH

MASARU YOSHITOMI

INTRODUCTION

HE OIL shock has exerted a profound and lasting impact on economic conditions in Japan as well as the economic management by the authorities. The so-called oil crisis consisted of two parts: the export embargo of petroleum undertaken by the OAPEC in the last quarter of 1973 and the price hikes of petroleum between October 1973 and January 1974.

The embargo was short-lived, but apart from its devastating effect on the already accelerating price inflation, it clearly demonstrated how vulnerable the Japanese economy was to external shocks, and that it would remain so in future. The economy is highly industrialized, but resource-poor Japan cannot remain productive without the smooth supply of foreign natural resources. In fiscal year (FY) 1973, 77.4 per cent of total energy consumption was supplied by imports of crude oil [4, Appendix 2]. Therefore, it is no wonder that the concept of "economic security" has been prevalent in various economic circles of Japan. The national consensus immediately after the oil crisis was that we have now entered a new era of limited availability of natural resources instead of an age of almost unlimited supply of inexpensive resources, as in the past. This consensus has been translated into the five-year plan (FY1976-80) which was published in May 1976. The plan has targeted the growth rate of the real GNP at about 6 per cent per annum as compared with nearly 11 per cent achieved during the period 1969-73, that is, the Japanese economy is to grow only half as fast in the next five years. Among the industrialized countries it is only Japan that plans to grow at a much slower pace than in the past, whereas other industrialized countries project more or less the same growth rates as before the oil crisis, or even higher rates. The plan ascribes the lower growth rate partly to the drastic change in the world economy represented by the oil crisis.

The other part of the oil crisis, i.e., the quadrupling of prices of crude petroleum, threw our economy into a so-called trilemma. The word trilemma was meant to describe the simultaneous outbreak of three problems: price inflation, economic recession, and the huge balance of payments deficits. I will discuss each of the three problems in turn.

I. ACCELERATING INFLATION EXACERBATED BY PRICE HIKES OF PETROLEUM

To evaluate the impact of such an external shock on the economy, it is necessary

to understand under what economic circumstances the oil crisis took place in Japan. This is because policy reactions to the external shocks depend greatly on the economic situation during the outbreak of such shocks. The economic situation in the pre-oil crisis was literally unique, especially as to price inflation in Japan.

The wholesale price index (WPI) had started to accelerate in August 1972, i.e., more than a year before the enforcement of the oil embargo. In that month, the WPI rose by 0.7 per cent over the previous month, contrary to its more or less stable movement in the preceding year. After that, the WPI continued to

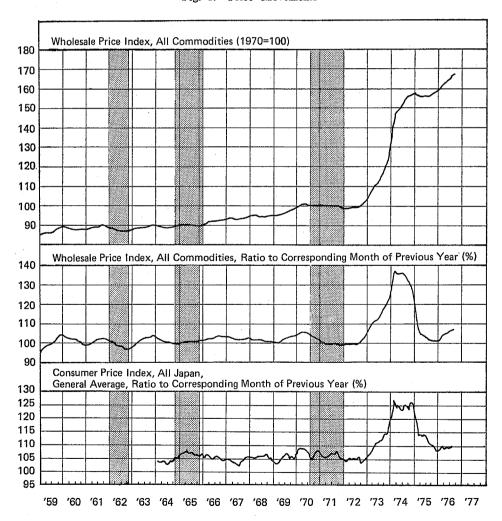


Fig. 1. Price Movements

Source: Economic Planning Agency, Nihon keizai shihyō [Japanese economic indicators], October 1976.

accelerate until an increase of 1.9 per cent per month was attained in October 1973, just before the outbreak of the oil shock. By that time, the WPI had already moved 22.3 per cent higher than in the corresponding month of the previous year (Figure 1). Then, the outbreak of the oil embargo pushed the rate of increase in the WPI up further to a peak of 6.1 per cent per month in December 1973. Since that month, however, the increasingly deflationary effect of the restrictive demand management policy on the economy has caused the rate of rise in the WPI to decelerate, but the monthly rate of increase remained equivalent to a two-digit annual rate of inflation until August 1974.

The rapid acceleration of price inflation in Japan before the oil crisis should be understood in the context of the breakdown of the fixed exchange rate regime under the dollar standard system. The gold convertibility of the dollar was suspended de facto in 1968 when major industrialized countries abandoned intervention in the free gold market of London through the gold pool and reached a gentleman's agreement not to convert accumulated official dollars into gold. Indeed, the dollar remained the international money, but it was no longer convertible into gold, so that the world economy has since then based not on the gold-dollar standard system but on the dollar standard system.

Coincident with the emergence of the new dollar standard system, the current surpluses of Japan began to get larger and larger as time went on, resulting in a continued and rapid increase in official external reserves from only \$2 billion in the pre-1968 period up to a peak of \$19.1 billion (SDR 17.6 billion) in early 1973. Between 1970 and 1973, the world total of external reserves increased by 23 per cent per annum, as compared with 3.1 per cent and 2.3 per cent per annum in the 1960s and 1950s, respectively. During this period, the world total of official reserves increased by SDR 73.3 billion, out of which the increase in Japanese official reserves accounted for SDR 13.4 billion or 18.3 per cent, suggesting that the rapid accumulation of external dollars was then widely spread to many areas of the world.

The enormous increase in official external reserves in the world as well as in Japan, was a reflection of the U.S. balance of payments deficits in relation to the rest of the world, including developing economies except for only a handful of countries (e.g., Pakistan, Sri Lanka, Burma, Ghana, and Sudan). In addition to the large balance of payments deficits of the United States, the large-scale conversion of the privately held dollar into stronger currencies in the anticipation of dollar depreciations contributed to increasing the supply of dollars in foreign exchange markets [5]. Under the dollar standard system with the de facto suspension of the gold convertibility, there was no mechanism which could have prevented American IOUs from increasing almost indefinitely, except revaluations of fixed exchange rates against the dollar by the rest of the world. Monetary authorities of many countries including Japan accumulated the international money rather willingly through intervening in the foreign exchange markets to maintain fixed rates, because they wished to manage domestic economic policies free from the balance of payments constraints imposed by a low level of owned international liquidity. The result was, however, the tremendous increase in money supply in the world, which initiated both a worldwide acceleration of

price inflation and a synchronized upswing of the business cycle in many parts of the world.

In Japan, the money supply (M_2) started since January 1971 to increase by nearly 2 per cent per month, an equivalent of 25 per cent per annum as compared with about 15 per cent annual rate of increase during the second half of the 1960s. In August 1971, the gold convertibility of the dollar was suspended de jure. In that year, the supply of high-powered money originating from the acquisitions of foreign assets by the monetary authorities became substantial. This was followed by the domestic credit expansion of about 25 per cent per annum between the Smithsonian Agreement at the end of 1971 and the initial floating of the yen in February 1973, for the purpose of avoiding further revaluations of the yen.

Thus, the substantial increase in money supply had already resulted in the acceleration of price inflation in Japan at an unpermissible rate before the oil crisis. Then, the oil embargo and petroleum price hikes aggravated the price situation, particularly through intensive inventory stock accumulations undertaken not only by business firms with speculative motives but also by households fearful of the shortage of commodities for daily use. Such inventory stock accumulation was, of course, made possible partly by the overly liquid condition of the economy, as just described.

How much did the oil crisis contribute to the acceleration of price inflation? It is almost impossible to measure the inflation acceleration caused by the aforementioned "speculative" and "precautionary" inventory stock accumulations. Instead, by the use of an econometric model for the Japanese economy, it is possible to estimate what would have been the rate of price inflation if the petroleum price hikes had not occurred, under the normal pass-through mechanism of increases in various production costs. Such an estimate certainly includes the result of interindustry chain reactions to price increases and consequent wage rises. Our macroeconomic model (thirty behavioral, and sixty-two identity equations, see Economic Planning Agency, Keizai geppō, February 1976) showed that, but for the petroleum price increases, the WPI (deflator for inventory

TABLE I
INFLATIONARY AND DEFLATIONARY IMPACT OF PETROLEUM PRICE HIKES

(%)

	Real GNP	Private Consumption	Private Fixed Capital Formation	Wholesale Prices (Deflator for Inventory Investment)	Consumer Prices (Deflator for Private Consumption)
FY1973	-0.2 (6.4)	0 (5.9)	-0.1 (14.4)	1.3 (36.2)	0.1 (14.2)
FY1974	-2.1 (-0.2)	-0.7(3.2)	-3.7(-14.1)	8.5 (7.8)	3.5 (19.9)
FY1975	-3.4(3.0)	-1.3(5.7)	-6.7 (-9.3)	3.0 (2.4)	2.1 (9.5)
FY1976	-1.3 (5.8)	-1.1(3.7)	-2.8(3.4)	2.0 (4.3)	0.8 (8.4)

Sources: Economic Planning Agency, Keizai geppō, [Monthly economic report], February 1976; and idem., Kokumin shotoku tōkei nempō [Annual report on national income statistics], various issues.

Note: Figures in parentheses indicate actuals.

investment) would have been 8.5 per cent lower than the actual in FY1974 figure and 3.0 per cent less in FY1975. The CPI (deflator for private consumption) would have been 3.5 per cent and 2.1 per cent less than the actual results in FY1974 and FY1975 respectively (Table I).

II. INITIAL IMPACT ON THE BALANCE OF PAYMENTS

Much higher payments for petroleum imports indeed worsened the balance of payments situation since the first quarter of 1974. In 1972 and 1973, the average imports of petroleum were about \$4.96 billion (or 269.4 billion KL). In 1974, the value of petroleum imports increased by about \$14.0 billion over the 1972–73 average, with the volume of petroleum imports remaining virtually unchanged. As a result, the current account fell into a deficit of \$4.5 billion in 1974, from an approximate equilibrium in 1973 (Table II).

TABLE II

SUMMARY OF THE BALANCE OF PAYMENTS BEFORE AND AFTER THE OIL CRISIS

(US\$ million)

				(05.	Ψ ΑΙΙΑΙΑΙ ΟΞ,
	Calendar Year				
Balance of Payments Items	1972	1973	1974	1975	1976
Current balance	6,951	74	-4,490	-420	3,917
Government transfers, net	-327	-210	-203	-262	-218
Long-term capital balance	-4,487	-9,750	-3,881	-272	-984
Basic balance	2,137	-9,886	-8,574	-954	2,696
Short-term capital balance	1,966	2,407	1,778	-1,138	111
Errors and omissions	638	-2,595	-43	-584	117
Overall balance	4,741	-10,074	-6,839	-2,676	2,924
Net borrowings by commercial banks	1,771	-3,955	-8,111	-1,973	-865
Changes in official reserves	3,130	-6,119	1,272	-703	3,789
(Reference, at the end of period)	·	•			
Official reserves	18,365	12,246	13,518	12,815	16,604
Outstanding of net borrowings by commercial banks (net liabilities—)	508	-3,465	-11,591	-13,471	-14,092

Source: Bank of Japan, Kokusai shūshi tōkei geppō, [Monthly statistics on the balance of payments], March 1977, and IMF, International Financial Statistics, various issues.

However, the basic balance (current balance plus long-term capital account balance) improved to a \$8.6 billion deficit in 1974 from a \$9.9 billion deficit in 1973. What is equally interesting is that official external reserves declined by \$6.1 billion to \$12.2 billion during 1973, whereas in 1974 they increased by \$1.3 billion. Why did the basic balance and official external reserves improve in 1974, despite the considerably worsened current deficits caused by higher import payments for petroleum? Why did conflicting phenomena such as this take place?

First, with regard to an apparent conflict between the worsened current deficit and the improved basic balance, there was a complete turnaround regarding government policy measures as to long-term capital flows since the outbreak of the oil crisis. In 1972–73, as stated above, the authorities wished to avoid further revaluations of the yen in face of the still rising foreign exchange reserves even after the Smithsonian Agreement. Together with fiscal and monetary expansion at home, the government discouraged capital inflows, but liberalized long-term capital outflows as well as commodity imports. In 1973, deficits on long-term capital account increased to \$9.8 billion from \$4.5 billion in 1972, and at the same time the balance on the current account attained approximate equilibrium in 1973, from the large surplus of \$7.0 billion in 1972.

Exactly when such a drastic turnaround was taking place with regard to basic balance of payments in Japan, the oil shock forced the authorities to reverse the policies on long-term capital flows. After November 1973, the Japanese government adopted policy measures to encourage incoming foreign capital and to discourage the outflow of Japanese capital abroad [3]. In 1974, a complete turnaround occurred concerning the long-term capital account: it improved from the \$9.8 billion deficit in 1973 to only a \$3.9 billion deficit in 1974. This trend continued into 1975 with an even smaller deficit of \$0.3 billion. As a result, the flow of funds from Japan to developing countries increased only nominally in 1974–75 and therefore, declined in relation to GNP from a 1.19 per cent average for 1972–73 to 0.65 per cent in 1974 and 0.59 per cent in 1975 [2]. During the same period, the average rate of all DAC members increased from 0.78 per cent to 0.82 and 1.05 per cent, in 1974 and 1975, respectively. It was only Japan among DAC members that reduced the ratio of the fund flows to LDCs in relation to GNP during these years.

On top of such drastic reductions in net outflows of long-term capital, the current account itself did not deteriorate as much as the increment in import payments caused by the petroleum price hikes. Such an increment can be referred to as "oil deficits."

There are two ways for oil-consuming countries to reduce oil deficits in the current account. One is to export more to, and import less from, oil-producing countries, thereby contributing to reduce the worldwide oil deficits, and reduce the current surplus of oil-producing countries. The other is to increase exports to, and reduce imports from, other oil-consuming countries. In the latter case, the overall oil deficits of oil-consuming countries as a whole, or the current surplus of oil-producing countries remain unchanged. Therefore, any reduction in a country's oil deficits can be made possible by passing its oil deficits onto other oil-consuming countries, so that they will incur larger current deficits.

Between 1973 and 1974, the value of imports from oil-producing countries increased by \$11.7 billion in Japan (Table III). The overall trade account, however, deteriorated only by \$2.3 billion during the same period. In other words, only 20 per cent of Japan's oil deficits was shared by herself. How was the deterioration in the trade account minimized? Indeed, Japan's exports to oil-producing countries increased by 96 per cent, or by \$2.3 billion in 1974, as compared to 1973, but the absolute amount of this increase was too small to make up for her oil deficits of nearly \$12 billion. The most important factor was a \$7.2 billion improvement of trade balance vis-à-vis oil-consuming, particularly, nonoil developing countries (Table III). This improvement accounted

TABLE III

Japan's Trade Balance by Area, 1973–76

(US\$ million)

	Oil-Pro Coun		Advanced Countries	Nonoil Developing Countries	Communist Block	All Countries
	Imports	Exports	Trade Balance	Trade Balance	Trade Balance	Trade Balance
Actuals:						
1973	6,224	2,401	1,650	5,912	-51	3,688
1974	17,956	4,703	3,900	9,619	1,170	1,436
1975	17,914	7,519	2,461	10,954	2,008	5,028
1976	20,325	8,066	8,586	11,466	2,137	9,930
Changes in ac	tuals:					
1973-74	11,732 (100.0)	2,302 (19.6)	2,250 (19.2)	3,707 (31.6)	1,221 (10.4)	-2,252 (19.2)
1973–75	11,690 (100.0)	5,118 (43.8)	811 (6.9)	5,042 (43.1)	2,059 (17.6)	1,340 (11.5)
1973-76	14,101 (100.0)	5,665 (40.2)	6,936 (49.2)	5,554 (39.4)	2,188 (15.5)	6,242 (44.3)

Sources: Ministry of Finance, Gaikoku bōeki gaikyō, [Summary report on the trade of Japan], March 1977; Bank of Japan, Kokusai shūshi tōkei geppō, February 1977. Note: Trade figures are all converted to IMF basis from custom clearance basis. Figures in parentheses indicate percentage distribution.

for more than 60 per cent of Japan's oil deficits. Thus, after sharing nearly 20 per cent of the oil deficit by herself, Japan financed another 20 per cent of her oil deficits by reducing trade surplus of oil-producing countries. The remainder, or more than 60 per cent of the Japan's oil deficit, was passed onto other oil-consuming countries.

In 1975, Japan's trade surplus improved by \$3.6 billion over 1974, but this time, most of the improvement came from a \$2.8 billion increase in exports to oil-producing countries. The improvement in relation to oil-consuming countries was only \$0.7 billion: an improvement with nonoil developing and communist countries more than offset a deterioration against advanced countries. The sharp contrast between 1974 and 1975 in respect to financing Japan's oil deficits is attributed to a considerable change in world trade over the same period. In 1974 when developed countries were already turning into a recession, primary goods-exporting countries whether they were developed or developing countries continued to be in a position to increase imports from industrialized countries, including Japan, because of the commodity boom in 1972-73 and consequent increases in external reserves of the primary goods-exporting countries. However, the deep and synchronized downswing of the business cycle in industrial countries caused a sharp decline in imports from the primary goods-exporting countries and resulted in collapse of the commodity boom and deterioration of the balance of payments situation. Thus, in 1975, the primary goods-exporting as well as advanced countries reduced imports from industrialized countries.

From 1973 to 1975 as a whole, out of the increase in imports from oil-producing countries (\$11.7 billion), \$5.1 billion or 43.8 per cent was covered

by more than trebling the exports to oil-producing countries. More importantly, Japan's trade account improved by \$7.9 billion with relation to oil-consuming countries, accounting for more than two-thirds of her oil deficits, i.e., the incremental imports from oil-producing countries. These two developments which more than offset Japan's oil deficits in 1974–75, resulted in an increase in overall trade surplus of \$1.3 billion during the same period. In regard to improvement in the trade account vis-à-vis oil-consuming countries, nearly two-thirds was made against nonoil developing countries, nearly a quarter against communist countries, and the remainder against advanced countries.

The price hikes of petroleum and other primary commodities imported caused the terms of trade (export price index divided by import price index) to deteriorate in Japan from about 100 in 1973 to about 70 in the middle of 1976. As indicated below, in 1976, Japan's current balance was in surplus on a firm basis. The achievement of the current account surplus, in spite of the deteriorated terms of trade means that real income produced in Japan was transferred abroad to make up for the substantial expansion of the nominal value of imports. Given the deteriorated terms of trade, the transfer of real resources to overseas countries was made possible by raising the export ratio to the real GNP. In fact, the export ratio increased from 12.5 per cent in the last quarter of 1973 to 17.4 per cent in the corresponding quarter of 1976. In other words, the deterioration of the terms of trade extracted from Japan nearly 5 per cent of the real GNP. But for such price hikes of primary commodities and deterioration of the terms of trade, the national welfare of the Japanese economy which is measured by domestic consumption and investment would have been higher by about 5 per cent of the real GNP in the fourth quarter of 1976. (For reference, see Table IV).

TABLE IV
CHANGES IN DEMAND DURING THE LAST RECESSION AND THE PRESENT RECOVERY

				(%)
	Recession: Percentage Changes from	Recovery: Percentage Changes from	Percentage Distribution of Real GNP	
	Peak (1973: IV) to Bottom (1975 : I)	Bottom (1975: I) to the Latest (1976: IV)*	1973 : IV	1976 : IV *
GNP	-0.8	9.1	100.0	100.0
Personal consumption	3.6	5.4	52.3	52,8
Private residential construction	-17.6	13.2	7.7	6.9
Private expenditures on plant and equipment	-23.0	1.1	21.3	15.0
Inventory investment	-58.6	82.3	1.6	0.2
Government expenditure on goods and service		6.0	16.9	17.9
Exports	24.8	22.1	12.5	17.4
Imports	-3.1	11.4	12.4	12.3

Source: Calculated from the Economic Planning Agency, Kokumin shotoku tōkei nempō, various issues.

* Figures for 1976: IV are preliminary.

III. FINANCING THE OVERALL BALANCE OF PAYMENTS DISEQUILIBRIA

During the period from the fourth quarter of 1973 to the second quarter of 1974, the overall balance of payments amounted to an \$11.1 billion deficit. Despite such a large deficit, external reserves declined only by \$1.4 billion. This is because commercial banks borrowed a short-term capital of \$9.7 billion from Eurocurrency markets and American banks in the United States (Table II). These borrowings were part of the so-called petrodollar recycling, because in 1974 more than half of the current surpluses (\$67.5 billion) of oil-producing countries were deposited in Eurocurrency markets and American banks, which relent petrodollar deposits to oil-consuming countries. Such borrowings were strongly recommended by the monetary authorities who feared a drain of external reserves. The competitive demand for Eurodollars after the oil crisis produced what is called "Japan premium," interest rates a few percentage points higher than then-prevailing rates in Eurocurrency markets.

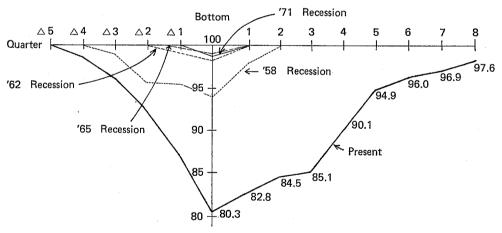
Two important consequences have developed from the massive foreign borrowings by commercial banks. One is a sharp deterioration of the net external position of the banking sector in Japan. Between September 1973 and June 1974, the net external position turned from a \$7.6 billion credit position into a \$3.5 billion debit position. Owing to the external borrowings, official external reserves were maintained virtually unchanged after the oil shock. The extremely deteriorated external position since then has made the financial position of the banking sector vulnerable to possible financial disturbances in the international short-term capital markets. Once the crisis of the drain on external reserves passed away, the impaired net external position has become the major concern to the monetary authorities, which have wished to rectify the net external position through internationalization of the yen, as well as improvement in the basic balance.

The other important consequence of the massive external borrowings was seen in the area of exchange rate movement of the yen. When the oil shock hit Japan, the yen, as the currency of the resource-poor country, was expected to float down considerably and, in contrast, the dollar, to float up. Between the fourth quarter of 1973 and the fourth quarter of 1974, the exchange rate of yen (period average) declined from \frac{\text{\$\text{\$Y}}}{274.6} \text{ per dollar to \frac{\text{\$\text{\$\text{\$Y}}}}{300.0} \text{ per dollar. In other words, the appreciation compared with the Smithsonian rate of \frac{\text{\$\text{\$\text{\$Y}}}}{308} \text{ per dollar declined from 11.2 per cent to only 2.7 per cent during the same period. Since then, the dollar rate of the yen remained in the range of \frac{\text{\$\text{\$\text{\$Y}}}}{295-305} \text{ throughout the second quarter of 1976. Effective exchange rate changes of yen showed more or less parallel movement to the dollar rates. Therefore, the large external borrowings by commercial banks minimized the depreciation of the yen which would have otherwise been much greater and might have promoted Japanese exports more vigorously.

IV. REPERCUSSION ON DEMAND MANAGEMENT POLICY: INFLATIONARY RECESSION

With the outbreak of the oil crisis in the fourth quarter of 1973, the Japanese economy fell into a recession which lasted until the first quarter of 1975. There are two outstanding features of the recession. One feature was that the recession was much deeper and longer than any other recession in the Japanese postwar history. Industrial production declined by 20 per cent in five consecutive quarters, as compared with a less than 10 per cent decline in industrial production during less than two consecutive quarters in the previous recession (Figure 2). The year 1974 witnessed a fall in real GNP for the first time in Japan since World War II. The other feature was that the recession started in the midst of the madly galloping price inflation and deepened while the rate of price inflation remained high by historical standards, despite a sharp deceleration of inflation in the course of the recession. The recession can be characterized as an inflationary recession in the sense that high inflation "caused" recession as explained below and that the rate of price increases remained relatively high during the

Fig. 2. Comparison in Industrial Production during Recession and Recovery: Present and Past



Source: Ministry of International Trade and Industry, *Tsūsan tōkei* [Industrial statistics monthly]; Economic Planning Agency, *Nenji keizai hōkoku 1975/76*, (1976). Note:

	Bottom Period	Industrial Production at Bottom (Preceding peak=100)
1958 recession	1958: II	94.1
1962 recession	1962: IV	98.4
1965 recession	1965: II	99.0
1971 recession	1971: II	98.8
Present recession	1975: I	80.3

recession. Why was this inflationary recession the most severe since World War II?

First, a large decline in inventory investments accounted for a fall in real GNP in FY1974. Such a change in inventory investments was a reaction to the huge stock piles undertaken during the period of overliquidity and, therefore, profoundly related to a considerable swing in the rate of inflation from acceleration to deceleration (1 per cent \rightarrow 30 per cent \rightarrow near zero).

Second, in the face of a two-digit inflation, the demand management poilcy introduced by the authorities was considerably restrictive, as reflected both in a decline in Marshallian k (M_2 /GNP) against its small increases in past recessions and in only 1.4 per cent increase in government fixed capital formation (at constant prices) in FY1974 against more expansionary counter-cyclical fiscal measurements taken in the past recoveries. It seemed unrealistic to take such demand management policy measures as accommodating price rises in imported primary commodities including petroleum, particularly in the face of already accelerating inflation due to excess liquidity at home.

Third, the accelerating inflation caused a drop in the propensity of households to consume far below its declining trend line. In the preceding ten years up to 1973, the average propensity to consume declined roughly by 0.5 percentage point per annum, but in FY1974, it declined by 2.3 percentage points to 76.0 per cent in just one year. The sudden drop in the propensity to consume is probably attributable to a noticeable decline in the real value of net financial assets held by households and, also, to their attempts to make up for such a decline by increasing savings from current income. The decline in the real value of net financial assets was caused by the rate of inflation which was much higher than interest rates on bank and postal savings, of which Japanese households' savings are mainly composed.

Fourthly, the massive net transfer of purchasing power from Japan to oil-producing countries through price hikes of petroleum exerted a deflationary impact on the economy. Our econometric macro model suggests that, but for the price hikes of crude oil, the growth of the real GNP would have been 2.1 per cent higher in FY1974 and 3.4 per cent higher in FY1975 (Table I).

Lastly, while the two-digit price inflation was the main "cause" of the latest recession as stated above, it was also true that the recession was aggravated by a decline in exports due to a downward spiral of world trade which was generated by the internationally synchronized business cycle. In past recessions which were seldom accompanied by the evident synchronization, the export pressure which generated through stagnant domestic markets played an effective role to boost Japanese exports. In the latest recession, however, our exports continued to decline until the third quarter of calendar year (CY) 1975. The international synchronization of the business cycle was generated by the worldwide inflation under excess international liquidity and the simultaneous outbreak of the oil crisis in all parts of the oil-consuming world.

V. MAIN CHARACTERISTICS OF THE RESTRICTIVE DEMAND MANAGEMENT POLICY AND THE CAUTIOUS REFLATIONARY POLICY MEASURES

Many economists in Japan have criticized that the restrictive demand management policies were held in effect too long. They maintained that the government should have taken reflationary policy measures much earlier than in September 1975, when the government indicated a clear turnabout as to the demand management policies through proposing the reflationary supplementary budget.

The main target of government economic policies for FY1975 was to contain the rate of inflation of the consumer price index (CPI) within 10 per cent by March 1976. The target was just achieved, but the economic cost paid for it was great. Industrial production fell by more than 20 per cent during the latest recession, and the recovery in production which had started in the second quarter of CY1975 was in danger of fading toward the end of the year. Labor markets deteriorated considerably: the effective ratio of job offers to seekers, which had constantly been above unity from 1967 to 1974, declined to only a half toward the end of 1975. Net profit ratio to total proceeds registered the worst record of only 0.76 for manufacturing in the first half of FY1975, as compared with the average ratio of 5.1 in the preceding ten years, or the hitherto lowest ratio of 3.6 during the 1965 recession. Under the circumstances, private fixed capital formation continued to decline by 28.0 per cent in real terms between the fourth quarter of CY1973 and the first quarter of CY1976. Private orders for machinery, excluding vessels, declined by 50 per cent, too. These are not necessarily attributable just to the prolonged restrictive demand management policy. However, it is true that the government placed the highest priority on inflation control as previously mentioned.

Should reflationary policy measures have been introduced earlier while coping with possible wage cost push inflation by income policies, as strongly suggested by many economists in Japan? A difficulty of this approach lies in the basic fact that nominal wages are determined in Japan through the market mechanism, i.e., not through powerful labor unions. The determinants of the rate of increase in nominal wages are (1) the rate of increase in the CPI, (2) companies' capacity to pay, as indicated by the net profit ratio to total proceeds, and (3) the labor market conditions reflected in the job offers to seekers ratio, as analyzed in many a wage determinant equation for Japan.

In other words, the introduction of an incomes policy to Japan would not be realistic. To shift down the Phillips curve, restrictive demand management policies can be utilized, at the cost of the private companies' capacity to pay, but not necessarily at the cost of employment due to the life time employment custom in Japan. Demand policies can be held restrictive until it becomes apparent that the rate of increase in nominal wages will be moderate enough to approximate the productivity gains in the manufacturing sector during the forthcoming economic recovery. Consequently, the demand management policies make it possible to prevent the upward spiral of price and wage inflation or wage cost push

inflation induced by excess demand or imported inflation.

The labor offensive in the spring of 1974 in the midst of galloping inflation resulted in about 33 per cent increase in nominal regular wage payments, but in the following two years of the prolonged restrictive demand management policies, the rate of increase in such wage payments declined to about 13 per cent for FY1975 and to 9 per cent for FY1976. The restrictive demand management policy has, therefore, succeeded in restoring a reasonable relationship between increases in nominal wages and gains in industrial productivity. If the restrictive demand management policies had been abandoned before restoring such a reasonable relationship, our economy would continue to be inflation-prone and, therefore, frequently be subject to "stop and go" policies, resulting in a W-shaped unstable economy with greater uncertainty. This is particularly so under the floating exchange rate regime because a rate of inflation higher than the world average tends to be exacerbated by floating down of exchange rates, resulting in a vicious circle between high inflation and depreciation of currency.

Once such a reasonable relationship is established between wages and productivity, the government will theoretically be in a position to take the reflationary policy measures vigorously enough to quicken the pace of economic recovery, whereby fixed cost pressure upon business returns will quickly be reduced. If this is true, the economists' criticism should have aimed not so much at the prolonged restrictive demand management policy, but at the modest reflationary policy measures taken by the government.

The reflationary policy measures, which were included in the supplementary budget, consisted mainly of the expansion of public work expenditures and increases in government loans which were to be extended to private residential construction and large machinery exporting industries. The official discount rate was reduced four times in six months after April 1975, from the highest ever 9 per cent down to 6.5 per cent in October 1975. In FY1975, government fixed capital formation in real terms increased by 7.6 per cent, as against 2.2 per cent in the previous year. Likewise, private residential construction rose by 13.4 per cent, compared with a 14.4 per cent decline in FY1974. However, the rate of increase in government fixed investment was much smaller than in previous recovery phases (a 15.1 per cent increase for FY1965 and 25.5 per cent for FY1971). The level of private housing construction reached in FY1975 was still lower than in FY1973. Thus, the modest reflationary policy measures were not sufficient to revive the economy, because they could not counteract the still declining private capital formation and the rather stagnant personal consumption expenditure. There was an increasing possibility that the recovery would soon vanish in 1975 unless final demand expanded to support it.

Nonetheless, the budget for FY1976 did not envisage a government-led recovery. It did not include any tax-cut, and, therefore, even implied increases in tax burden on consumers, since progressive tax rates apply to expanding nominal personal income under price inflation. The FY1976 budget planned about the same rate of increase in the fixed capital formation by the government sector as the expected rate of growth of the nominal GNP. Furthermore, the government

has aimed at reducing the year-to-year rate of increase in the CPI to 8.8 per cent by March 1977.

The government's modesty in taking reflationary policy measures is attributable to its fear both of huge budgetary deficits incurred by the adoption of more expansionary fiscal policies and of the rekindling of price inflation. National bonds newly issued to finance the central government's budgetary deficits amounted to nearly 5.5 trillion yen in FY1975, and will have amounted to about 7.4 trillion yen in FY1976, which is nearly 4.5 per cent of the nominal GNP of 1975. Some problems related to large fiscal deficits will be discussed later.

VI. THE EXPORT-LED RECOVERY ONCE AGAIN

While domestic demand remained stagnant throughout CY1975, foreign demand for Japanese products started to rise towards the end of the year. In terms of quarterly changes, Japan's exports (on a GNP basis), which had continued to decline up to the third quarter of CY1975, registered an increase of 3.9 per cent in the fourth quarter of CY1975 and accelerated to 8.8 per cent and 4.9 per cent in the first and second quarters of 1976, respectively. This tempo of increase in exports during the three quarters was equivalent to an annual rate of 25 per cent. Exports destined to the United States and Western Europe increased more rapidly among all areas. The export expansion was led by automobiles, electrical appliances, and some textiles, with increases also in iron and steel and nonferrous metal and related products.

Accordingly, industrial shipment stepped up from a quarterly increase of only 0.8 per cent in the third quarter of CY1975 to 2.1 per cent in the fourth quarter of CY1975 and further to 5.8 per cent in the first quarter of CY1976. Between the third quarter of CY1975 and the second quarter of CY1976, exports accounted for a half of the GNP growth, and export surpluses for 40 per cent, since Japanese imports increased only modestly, reflecting weak domestic demand. After early 1976, both the current and long-term capital account have been in surplus and exchange rates of the Japanese yen did not appreciate much until the middle of 1976, so that external reserves increased by \$3.1 billion in the first six months of CY1976. In addition, government capital formation even declined in the last half of CY1976 due to expenditure cuts by two public enterprises (Japan National Railway and Nippon Telegraph and Telephone) which suffered from revenue shortages since the Lockheed affairs caused the Diet to delay passage of the bill for increases in charges by the enterprises.

Against the background of the continuing stagnant private consumption due to modest increases in real wages, the above mentioned deceleration of exports and decline in government capital formation caused the Japanese economy to fall into a pause in the recovery course. Real GNP increased by only 0.4 and 0.6 per cent per quarter in the third and fourth quarters of CY1976, respectively. The pause of aggregate demand generated unwanted accumulation of inventory stocks, inducing industrial production cuts and adjustments. During the second half of CY1976, industrial production increased very slowly and then slightly

declined in the first quarter of 1977, resulting in a decline in the rate of capacity utilization from 89 to 86 (1970=100) during the same period.

Under such circumstances, the central government formulated a somewhat stimulative budget for FY1977, including nearly 10 per cent increase in government capital formation, and nearly \(\frac{\pmathbf{Y}}{2}\).7 trillion income tax reduction. In addition, the official discount rate was reduced by 1.5 per cent to 5.0 per cent in just two months (March and April 1977). Even with these policy measures, it is widely believed that the government's target of 6.7 per cent growth in GNP for FY1977 would be difficult to achieve.

Such a substantial expansion in exports was helped considerably by the intentional inventory stock accumulations undertaken in the United States and West Germany after the heavy inventory liquidations during the last recession. Japan's exports were also helped by an increase in private consumption stimulated by income tax reduction implemented by the U.S. government. Since such inventory investments and favorable impact of the tax reduction are temporal in nature, the rate of increase in Japan's exports declined to null in the third quarter of CY1976.

In CY1976 as a whole, however, Japan's trade balance improved most vis-à-vis advanced countries (Table III). Compared with nearly \$5 billion improvement in the trade balance vis-à-vis all areas, the increase in the trade balance with advanced countries amounted to \$6.1 billion. The trade balance with other oil-consuming areas improved too, but at a tempo much slower than with advanced countries, in contrast with 1973–75 during which the trade balance with oil-consuming countries improved most vis-à-vis nonoil developing and communist countries. The sharp increase in the trade balance with advanced countries has caused conflicts between EEC and the United States on the one hand and Japan on the other, particularly in such industries as automobiles, vessels, color T.V. sets, ball bearings, and iron and steel products.

VII. PECULIARITIES OF THE PRESENT RECOVERY

The present economic recovery is different in many respects from previous ones, and peculiarities of the present recovery are profoundly related to the following two factors. One is the aftermath of the largest inflationary recession caused by the two-digit rate of price inflation including the impact of the oil crisis. The other is the transition of the Japanese economy from high growth to an unknown growth path. What are the peculiarities of the present recovery?

First of all, the present recovery was the most prolonged among past recoveries. In the past, it took the economy at longest two quarters to regain the previous peak of industrial production, whereas in the present recovery, eight quarters (from the second quarter of 1975 to the first quarter of 1977) have already passed, but in the first quarter of 1977, the level of industrial production was still about 3 per cent lower than the previous peak achieved in November 1973, more than three years earlier (Figure 2). The slow tempo of the present recovery since the second quarter of 1975 is attributable both to the only modestly stimulative policy measures undertaken by the government in the face of the largest ever budgetary

deficits which could have caused acceleration of price inflation, and to the stagnant private capital formation due to the transition of the Japanese economy from high growth to an uncertain medium growth rate. These issues are related to the following second, third, and fourth peculiarities of the present recovery.

Second, despite the large deflationary gap and the easy labor market situation during the present recovery, the WPI increased most rapidly and for the longest period of any postwar recovery, except for the 1971-72 recovery period when the economy was revived under excess liquidity. It is indeed true that in the past recoveries, the WPI rose after the lower turning point of the business cycle also. However the rate of increase was much smaller and the duration was short. In the present recovery, by contrast, the rate of increase in the WPI accelerated from about 1 per cent in the third quarter of CY1975 to 6.8 per cent in the corresponding quarter of 1976 on a year-to-year basis.

The rise in the WPI has been concentrated in basic commodities such as iron and steel, nonferrous metals, petroleum products, electric power and gas, and so on. Assisted by an increasing final demand since the fall of 1975, basic commodity price increases were passed through to final prices. Profits of these industries were most seriously compressed due to the extensive use of imported raw materials whose prices rose most rapidly in the commodity boom of 1972-74. During the most severe recession since World War II, however, these industries were not in a position to pass through the cost push generated by price

TABLE V RATIOS OF NET PROFITS TO TOTAL PROCEEDS IN MANUFACTURING (Comparison of Actual with Theoretical Rates after Adjustments of the Capacity Utilization Rate)

Theoretical Pates under the

(%)

	Actual Rates	Assumption of the Same Rate of Capacity Utilization as in 1st Half of FY1970*
FY1970 1st half	6.0	6.0
2nd half	4.9	5.2
FY1971 1st half	3.8	5.1
2nd half	3.6	4.9
FY1972 1st half	4.0	5.5
2nd half	5.1	6.4
FY1973 1st half	6.3	7.5
2nd half	5.7	7.3
FY1974 1st half	4.4	6.1
2nd half	2.3	4.1
FY1975 1st half	0.9	2.8
2nd half	2.3	3.5
Average for the period of		
FY1964 2nd half through	5.2	5.9
FY1972 1st half		

Source: Economic Planning Agency, Nenji keizai hōkoku, 1975/76, [Economic survey of Japan, 1975/76] (1976).

^{*} The rate of capacity utilization in the 1st half of FY1970 was close to the full rate.

hikes of raw materials to a full extent, and therefore, part of the cost push was pent up. This can be proved by estimating the ratio of profits to total proceeds under the assumption of full capacity utilization. The actual rate of profits in relation to total proceeds was 0.9 per cent and 2.3 per cent in the second half of FY1975 and the first half of FY1976, respectively, as compared with the average of 5.1 per cent in the past (Table V). These low profit rates were, however, caused not only by the pent-up cost push, but also the low rate of capacity utilization which raised the fixed cost per unit of output. Therefore, the pent-up cost push pressure can be assessed only by making estimates of the rate of profits under the assumption of full capacity utilization. Such estimates show that the rate of profits in relation to total proceeds would remain only 2.8 per cent and 3.5 per cent in the second half of FY1975 and the first half of FY1976, respectively, despite full capacity utilization. These profit rates are still very low compared with the average 5.1 per cent in the past, indicating the existence of the pent-up cost pressure carried over from the last recession.

In addition, between November 1975 and July 1976, prices of raw materials in overseas markets rose by 32 per cent (London *Economist*'s dollar index). It is rather surprising that prices of primary commodities in overseas markets (in terms of dollars) have already started to rise despite both the large stocks held for most of these commodities [1] and the still relatively low level of production in the OECD member countries. It appears that the strong inflationary expectation generated by the worldwide excess liquidity in 1972–73 and the resultant galloping inflation has survived the worst recession since World War II. The possible sharp upswing of the internationally synchronized business cycle in major economies and the continued easy monetary conditions in the international financial markets also appear responsible for reviving such inflationary expectations.

Let us proceed to the third peculiarity of the present recovery. The budgetary deficit of the central government will be largest in FY1976 compared to the past recovery years. In FY1976, the amount of newly issued national bonds was \frac{\text{\forall}}{7.4} trillion, following a ¥5.5 trillion issue in FY1975, probably accounting for 4.5 per cent of GNP in FY1976, as already mentioned. Furthermore, budgetary deficits will remain large in the next several years including a proposed \\ \frac{\forall}{8}.5 trillion issue in FY1977. This is because tax receipts will not increase as fast as in the past due to a possible deceleration of the economic growth rate in the next several years, whereas government expenditures will continue to rise rapidly, particularly concerning welfare matters and interest payments on the outstanding national bonds. In other words, given the present budgetary structure, including heavy reliance on direct taxes, present tax rates and obligatory transfer payments, the budget will not be in equilibrium unless the Japanese economy returns to as high a growth rate as in the past, which would guarantee budgetary revenues sufficient to cover budgetary expenditures. Therefore, the present budgetary disequilibrium includes not only cyclical deficits due to the stagnant economic activities, but also structural deficits due to the transition of the economy from high growth to a medium growth path. This will account for the largest ratio

of fiscal deficit to total expenditures of the central government among industrial countries (nearly 30 per cent in Japan in FY1976 compared with about 13 per cent for the United States and 21 per cent for West Germany). In order to eliminate structural deficit, i.e., full employment deficit, taxes have to be raised substantially, or budgetary expenditures have to be cut down. The existence of full employment deficits will either crowd out private capital formation at the time of full employment through higher interest rates than otherwise, or generate a higher rate of inflation if the crowding out is to be avoided through larger supply of money. Thus, conflicting tasks have confronted the Japanese government. On the one hand, in order to revive the economy in the short run, the government needs to cut income taxes or increase expenditures with a resultant increase in budgetary deficits. On the other, in order to eliminate the full employment deficit in the medium run, tax revenues have to be raised beyond their autonomous increases during the prosperity phase of the business cycle, or expenditures have to be cut down. These policy measures, if introduced too early, would exert a deflationary impact on the economy. Under the circumstances, the Ministry of Finance tends to object to the stimulative fiscal policy measures, the adoption of which would further increase the already large budgetary deficit. The larger the full employment deficit, the more difficult its elimination in the medium run through raising taxes or reducing expenditures. On top of these fiscal problems, the massive issues of national bonds will cause difficulties in controlling the money supply, especially if the Ministry of Finance insists that prices of national bonds, or their yields, should not be freely determined by the market mechanism, and maintains that a higher yield on a national bond will impose larger budgetary burden on the government.

Fourth, the Japanese economy appears to be in transition from the period of the hitherto high growth to that of a medium growth. The rate of growth of the real GNP is expected to decline from about 11 per cent in the past down to about 6 per cent in the next ten years, though the latter figure is still high by international standards and is, more importantly, yet to be proved by the actual performance of the economy. There are various reasons, international as well as domestic, for the slowdown of the growth rate. Internationally, greater uncertainties have surrounded the world economy since the oil crisis, particularly as to whether natural resources will continue to be available without interruption and as to whether the worldwide balance of payments disequilibria caused by the price rises in petroleum and also by the diversification of price inflation among countries will be smoothly financed. The floating exchange rate regime may not promote Japanese exports on a continued basis as vigorously as the fixed exchange rate did in the past, and the terms of trade, which was only 70 in 1976 compared with 100 for 1970, may deteriorate further against Japan in the future. Domestically, the tempo of increase in the capital-labor ratio will be slower than in the past, the vintage of capital stock will become older and, therefore, less productive, and the total working hours of the labor force will decline, reflecting more leisure hours available for workers and a slower growth of total labor force (Table VI). In addition, the hitherto observed shift of capital and labor from low to high

TABLE VI
WHY GROWTH RATE WILL SLOW DOWN IN JAPAN IN THE NEXT TEN YEARS
(Percentage Point Contribution of Supply Factors to Growth Rates)

(%) 1975-85 1955-60 1960-65 1965-70 (Actual) (Actual) (Actual) (Forecast) 8.7 9.7 11.6 5.8-6.2 Growth rate of real GNP The number of employed 1.8 0.9 2.2 1.7 -0.5 -0.5Hours worked 0.0 -1.2Capital-labor ratio 2.9 3.2 2.2 - 2.41.1 0.0 - 0.2Quality of capital 1.0 1.8 1.9 Interindustry shift of capital 2.8 2.2 0.9 -0.4and labor Pollution prevention investments -0.1-0.1-0.1-0.3Neutral technological 1.7 2.4 4.4 3.9 progress, etc.

Source: [4].

Note: The above measurements are made by the use of the following production function expressed in logarithms:

$$V\!=\!L+h+\beta k+\beta q+\alpha \underset{i}{\sum} \frac{m_{Li}}{m_L} \frac{h_i\,L_i}{h_L}+\beta \underset{i}{\sum} \frac{m_{\mathit{K}i}}{m_{\mathit{K}}} \frac{q_i\,K_i}{q_{\mathit{K}}} + \underset{i}{\sum} \frac{V_i}{V} k_{\mathit{NPi}} + \underset{i}{\sum} \frac{V_i}{V} A_i\,.$$

where V: value added; L: the number of employed; h: hours worked; β : profit's share of the product; α : labor's share of the product $(\alpha + \beta = 1)$; K: capital stock; q: quality of capital (inverse of average age of capital); m_L : marginal productivity of labor; m_K : marginal productivity of capital; k_{NP} : ratio of productive to total capital $(k_{NP} = 1 - K_p/K; K$: capital stock; K_p : capital stock for pollution prevention); and subscript i: represents industry i. Absence of the subscript indicates the total for all industries.

productivity sectors (say, from the agricultural to the manufacturing sector) will be at an end and even reverse itself (say, from the manufacturing to the service sector) in the next years. Pollution-prevention investments will continuously increase in proportion to total productive capital formation.

During the transitional period from the high to medium growth rate, capital formation by the private sector will remain sluggish, because private enterprises have to adjust the rate of increase in productive capital stock to a possible slow-down of economic growth, through lowering the level of the flow of expenditures on plant and equipment. In the early part of the transitional period, private capital expenditures declined by 28 per cent in real terms from the fourth quarter of CY1973 to the fourth quarter of CY1975. As a result, the ratio of private capital formation to GNP (the investment ratio) declined from 21.3 per cent to 15.0 per cent during the same period. At this point, private enterprises might see that the downward adjustment of capital expenditures was completed, so that the adjusted low level of capital formation could be consistent with the medium growth path of the Japanese economy in the coming years. This is broadly supported by the new five-year plan which forecasts that the investment ratio consistent with 6 per cent growth of real GNP will be around 15 per cent in the

coming five to ten years.¹ Through the downward adjustment of private capital formation, however, a large deflationary gap was generated. The resultant low capacity utilization in turn tends to further discourage private capital formation, unless the economy strongly recovers so as to raise the expected profit rates. Only during the half year between the last quarter of CY1975 and the second quarter of CY1976, exports (on a GNP basis) increased by 17.5 per cent, or by ¥3.6 trillion at current prices. This large exogenous stimulus, however, did not encourage private capital formation. The existent large idle capacity combined with unknown future growth prospects accounts for the insensitivity of private capital formation to exogenous stimuli. Thus, the latest part of the transitional period has been characterized by stagnant private capital expenditures. As a result, moderate capital formation by the private sector is responsible for the lack of buoyancy in the present recovery. By contrast, in the past recoveries, it was private capital expenditures that revived the economy after recessions bottomed out.

In sum, the present recovery, in contrast to past ones, is not only slow but also erratic and shadowed by a fear of acceleration of the rate of inflation. The economy has taken the longest time for recovery and lacks in both strong revival of private capital expenditures and fiscal stimuli. The unstable and erratic character of the present recovery is vividly indicated by frequent ups and downs of the diffusion index of lagging series around the index of 50 in the present recovery.

VIII. NARROW COMPASS FOR THE SELECTION OF POLICY MIX

In face of the aforementioned peculiarities of the present recovery, the authorities' freedom appears very limited for the selection of policy mix. The policy objective is to reduce the deflationary gap through reviving the economy faster than the capital stock grows. Simultaneously, however, the rate of price inflation should not be permitted to accelerate, because such an acceleration itself will impede the economic growth. Since the basic rate of CPI increase is already high (around 9 per cent per annum), a slight acceleration will push the rate of inflation up to a two-digit rate, which may discourage personal consumption through reducing the real value of consumers' savings and generating uncertainties. In addition, private capital formation will also be discouraged by the acceleration of inflation. This is both because the acceleration of inflation raises inflationary expectations with a resultant rise in nominal interest rates, and because the acceleration of inflation induces an earlier introduction of the restrictive demand management policy with a consequent fall in the expected rate of profits. Therefore, in order to sustain recovery, the tempo of increase in aggregate demand should not be too fast, despite the existence of large idle capacity and the easy labor market conditions. At the same time, however, too slow a tempo of increase in demand will not reduce the deflationary gap, since the potential GNP grows by about 6 per cent per annum thanks to the present 15 per cent investment ratio. Thus,

¹ See reference materials No. 10 entitled "Outlook for the Economy in 1985" attached to [4].

only a narrow range is available for the government with regard to the selection of the rate of increase in demand, whereas in the past the faster the tempo of recovery, the better for the economy.

The much narrower compass for the selection of the tempo of recovery is more or less common to all advanced countries which have suffered from the aftermath of a two-digit rate of price inflation. On top of this problem, there is a problem unique to the present Japanese economy which has arisen from the transition of the economy from high to medium growth. This transition has caused the budget to incur not only cyclical, but also structural deficits. The cyclical deficits are generated by the recession which has reduced budgetary revenue through lower corporate and personal income taxes. In Japan, these direct taxes account for three quarters of total governmental revenues at present. If the Keynesian type of fiscal stimuli are undertaken, the cyclical deficits will get larger. As the economy recovers, the cyclical deficits will usually disappear if the budget was more or less balanced before the recession. However, even if the Japanese economy recovers and grows on the medium growth path of say 6 per cent per annum instead of the more than 10 per cent high growth path, the budget will continue to be in deficit, because the present budget structure was formulated during the high growth period and can consequently be kept in equilibrium only when the economy grows fast enough to generate high revenues to the government. In other words, the medium growth will keep the budget in deficit, even if the economy achieves full employment through a 6 per cent growth. This deficit can be characterized as the full employment deficit, which tends to crowd out private capital formation through competition for funds between the private and public sector druing the upturn of the economy. As a result, the productive capital stock grows only slowly, making the economy inflation prone in the medium run. To reduce the full employment deficit, taxes have to be raised or fiscal expenditures should be cut. At any rate, the effort to reduce the full employment deficit generates a deflationary impact on the economy.

In short, the government faces the two conflicting tasks. One is to stimulate the economy through fiscal measures with the resultant larger budgetary deficits. The other is to eliminate the structural deficits through raising taxes or reducing fiscal expenditures with the resultant deflationary impact. This budgetary problem has arisen basically from the transition of the economy from high to medium growth. Under such circumstances, the government will not dare to increase fiscal expenditure in order to stimulate the economy, since the larger deficits at present make it more difficult to keep the budget balance in equilibrium in the near future.

CONCLUSIONS

The low rate of return on capital caused by low capacity utilization and pent-up cost pressure and the transition from high to uncertain medium growth have caused private capital formation to lack buoyancy during the present recovery.

If the rate of return on capital improves to a certain minimum level through higher capacity utilization, then private capital expenditures may increase, but probably not at a pace much faster than real GNP. Unless private fixed investments do activate and the investment-led growth revives the economy, aggregate demand will not be sufficient to reduce the deflationary gap, given a relatively small increase in nominal wages consistent with CPI inflation below a two-digit rate. In the spring labor offensive of 1977, the rate of increase in regular wage payments has been settled at about 9 per cent, while CPI will rise by about 8 per cent in the coming one year. The rate of increase in real wages will, therefore, be small. It goes without saying that an export-led recovery of a large economy like Japan cannot continue for very long, because it is impossible for all countries simultaneously to rely on export-led growth.

Finally, the Japanese economy has not fully escaped from the trap of stagflation in the sense that while the deflationary gap will remain relatively large, there also remain a high possibility of the acceleration of the already high CPI inflation at a two-digit rate if the economy recovers at a rapid rate. At the time of writing this paper, however, the more urgent task is steadily to reduce the deflationary gap so as to play the role of an engine for leading the world economy to recovery on a firmer basis. If the Japanese economy plays this role as the second largest industrialized country, the world economy will be stimulated through exporting more to Japan and will, consequently, suffer less from the balance of payments disequilibria. For this purpose, it is most important to overcome the budgetary constraints arising from the transition of the Japanese economy from high to lower growth, through the timely introduction of fiscal stimuli and tax increases.

REFERENCES

- 1. Brown, G.I. "Price Increases for Most Metals This Year Follow Steep Decline," IMF Survey, October 4, 1976.
- 2. Development Assistance Committee. Flow of Resources to Developing Countries (Paris: OECD, 1976).
- Economic Planning Agency. "Sankō shiryō—kokusai shūshi" [Supplement on the balance of payments], in Nenji keizai hōkoku, 1974/75 [Economic survey of Japan, 1974/75].
- 4. ———. Shōwa-50-nendai zenki keizai keikaku—antei shita shakai o mezashite [Economic plan for the second half of the 1970s: toward a stable society] (1976).
- Heller, H. R. "International Reserves and World-Wide Inflation," IMF Staff Papers, Vol. 23, No. 1 (March 1976).