

NATURE AND CAUSES OF CONTEMPORARY INFLATION

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I. INFLATION AFTER WORLD WAR II

A. *General Trend*

THE WARTIME INFLATION in Japan had turned virulent in the immediate postwar period, but was momentarily halted by the Dodge deflationary policy. However, the Korean War boom, commencing in 1950, revived inflation, which was followed by a severe deflation after the Korean truce; this in turn was followed by a period of relative stability in the latter part of the 1950s.

By the year 1955, Japan's economy had completed its postwar recovery and was headed towards growth. From the second half of 1959, a boom in capital investment began, which was further accelerated by the "income doubling" plan and low interest policies of the Ikeda cabinet. As a result, consumer prices began an unremitting rise from 1961. The nature of this inflation differed from the earlier inflations before the war, in the immediate postwar period and during the Korean War. The enduring nature of this inflation, continuing in spite of fluctuations in the business cycle, and the distinguishing higher rate of rise in consumer prices as compared with wholesale prices, identified this phenomenon as being similar to the "contemporary inflation" which has been prevailing in the United States and Western Europe since the 1950s.

As the data of Table I indicate, not only during the 1947-50 period, but also during the inflation of the first half of the 1950s, the rise of the wholesale price index outpaced that of the consumer price index. In the latter part of the 1950s the rate of increase of both was blunted, though the increase of consumer prices began to exceed that of wholesale prices slightly. In the first half of the 1960s, the rate of increase of the consumer price index was 1.323 times that of the wholesale price index; in the latter half of the 1960s, it was 1.257.

Since the 1950s, in the United States and Western Europe, the increasing gap between the rapidly rising consumer price index and the slower rising wholesale price index had become a matter of concern; but as shown in Table I, this gap has not exceeded the neighborhood of 10 per cent. Consequently, the gap ranging around 28 and 33 per cent in Japan during the 1960s must be considered abnormal. In the United States and West Germany, where the rises of both wholesale prices and consumer prices were relatively low, as well as in France and Sweden where the increases of both were relatively high, the relative gaps between wholesale price and consumer price indices have remained relatively

TABLE I
RATES OF PRICE RISES IN SELECTED INDUSTRIAL NATIONS

	Japan	U.S.A.	U.K.	West Germany	France	Italy	Sweden	
WPI for period:	1947-50	5.124	1.068	1.458	—	2.099	0.949	1.134
	1950-55	1.530	1.073	1.215	1.184	1.254	1.071	1.318
	1955-60	1.026	1.080	1.094	1.033	1.322	0.989	1.069
	1960-65	1.021	1.018	1.121	1.066	1.134	1.140	1.204
	1965-71	1.105	1.179	1.274	1.081	1.217	1.172	1.192
	(1950-71)	(1.771)	(1.391)	(1.897)	(1.410)	(2.288)	(1.415)	(2.022)
CPI for period:	1947-50	2.018	1.077	1.096	1.148	—	1.062	1.068
	1950-55	1.352	1.113	1.315	1.099	1.315	1.221	1.316
	1955-60	1.103	1.105	1.139	1.095	1.139	1.099	1.228
	1960-65	1.351	1.066	1.190	1.147	1.190	1.270	1.198
	1965-71	1.389	1.283	1.369	1.200	1.369	1.215	1.330
	(1950-71)	(2.798)	(1.682)	(2.440)	(1.657)	(2.441)	(2.071)	(2.574)
CPI/WPI for period:	1947-50	0.394	1.008	0.752	—	—	1.119	0.942
	1950-55	0.884	1.037	1.082	0.928	1.049	1.140	0.998
	1955-60	1.075	1.023	1.041	1.066	0.992	1.111	1.149
	1960-65	1.323	1.047	1.062	1.076	1.060	1.114	0.995
	1965-71	1.257	1.088	1.075	1.110	1.071	1.037	1.116
	(1950-71)	(1.580)	(1.209)	(1.286)	(1.175)	(1.067)	(1.464)	(1.273)

Sources: Each nation's statistical yearbook, monthly bulletin of statistics, etc.

Notes: WPI=wholesale price index; CPI=consumer price index.

narrow. In contrast, in the case of Japan, while the wholesale price index has remained relatively stable, the consumer price index has risen steeply, creating wide gap between the two.

In the 1950s the consumer price index of Japan recorded slight dips in the recession years of 1950, 1955, and 1958. But thereafter it has continued to rise even during periods of recession. In fact, during the recession of 1965, when plant and equipment investment expenditures hit the low point of the medium-term investment cycle, and in 1970, when financing was tightened, the rise of the consumer price index accelerated to a high of 7.2 per cent. In contrast, the wholesale price index dropped, though slightly, in 1962 and 1971, while in the recession years of 1964 and 1965, the rate of increase was retarded substantially to 0.2 and 0.8 per cent, respectively.

However, further analysis of the problem would indicate that the nature of the rise in wholesale prices changed during the middle of the 1960s. When the period 1960 to 1965 is regarded as the first half of the 1960s and 1965 to 1971 as the second half, the increase in consumer prices was nearly the same in both periods, 35 per cent in the first half and 39 per cent in the second. In contrast, whereas the wholesale price index was relatively stable with a rise of only 2.1 per cent during the former period, during the latter period its rise accelerated to 10.5 per cent.

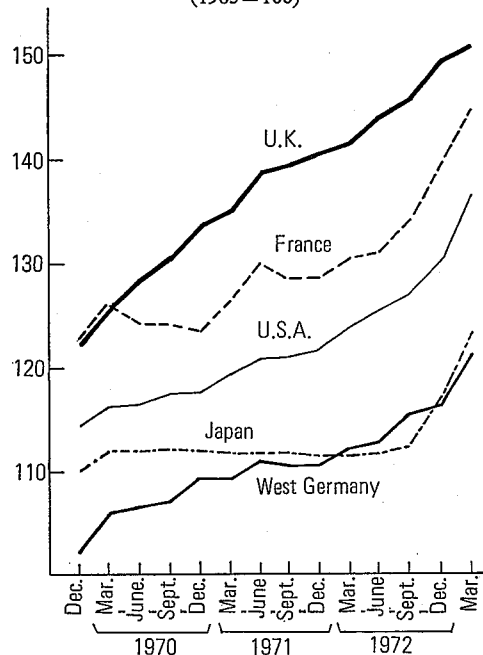
The cause of this change may in part be attributed to the effect of the inflation in the capitalist countries, especially the United States, resulting from the intensifi-

cation of the Vietnam War in the latter half of the 1960s. For instance, in the United States during the first part of the 1960s, the rise of the wholesale price index was 1.8 per cent, and 17.9 per cent during the latter part; in the United Kingdom, 12.1 per cent during the former and 27.4 per cent during the latter part; in France, 13.4 per cent during the former and 21.7 per cent during the latter part. The range of wholesale price increases was greatly widened in the latter part of the 1960s in each of these countries. This was also reflected in the fluctuation of Japan's import and export prices. The export price index decreased 3.7 per cent in the first half of the period, but increased 3.7 per cent in the latter, while the import price index, which decreased 1.9 per cent in the first half, rose 7.1 per cent in the second half.

B. After "Nixon Shock"

As a consequence of the dollar devaluation by President Nixon in August 1971 and the Smithsonian parity adjustment which followed, the Japanese economy was for a time cast under a deep gloom foreboding depression. Nevertheless, recovery commenced quicker than anticipated from the autumn of 1972, accompanied by an abnormal acceleration of the wholesale price index from about August of that year, which reached 2.6 per cent during August through October. This acute rise was second only to the 3.3 per cent rise recorded during the

Fig. 1. Wholesale Price Indices of Selected Industrial Nations
(1965=100)



Source: United Nations, *Monthly Bulletin of Statistics*.

three-month period July through September 1972, caused by the sharp rise in cost of overseas raw materials resulting from the Suez crisis. Furthermore, the wholesale price index rose 2.7 per cent during December of 1972, an 8.5 per cent rise compared with the same month of the previous year. As Figure 1 shows, the wholesale prices in Japan, which had remained relatively stable compared with those of other countries, started to increase, sharply accelerating from the second half of 1972—an indication that Japan's inflation was falling into the pattern of the advanced countries of the Western world, where inflation of the wholesale price and consumer price indices were running in parallel. However, because of the uncertainty which prevailed in the Japanese economy during the first half of 1972, the average of the wholesale price index for the year remained at 112.2, compared to 110.3 for 1971, or an increase of only 1.5 per cent, due to the deflationary effect experienced near the end of 1971.

The factors causing the jump in the wholesale price index after August 1972 were the influence of inflation overseas, the increase of domestic demand created by an increase in public investments, and the formation of cartels for counteracting the effects of depression in the steel, ethylene, and other major industries. One of the most conspicuous of factors was the 80 per cent rise in lumber prices in the three-month period of September through November, caused in part by rising lumber prices overseas due to shortage of supply, especially in the United States, and in part by the accelerating pace of new housing starts in Japan. However, it is suspected that speculative hoarding on the part of the major trading companies with a virtual monopoly on the import of logs may have been a major factor, since the greatly increased volume of log imports was not reflected by more than a minor increase in lumber shipments in the domestic market. Additionally, by the year's end, a speculative rise in the price of soya beans, a staple of Japanese diet, 95 per cent of which must be imported from the United States, had become a public issue. Though worldwide production of food crops, including soya beans, was reported to have been poor in 1971 causing an increase in the import price, the tonnage of beans imported in 1972 substantially increased over that of 1971. Hence, the shortage on the domestic market must be imputed to speculative hoarding by both the major trading companies and the big food oil processors, who have been withholding shipment, or processing, of the beans. They must be considered as the source of the wild price rise in the price of soya beans, which doubled in less than a month.

The hoarding and speculative manipulations of the major trading companies and processors cannot be ignored, but the rise of import prices of commodities in general must be recognized as the basic causative factor of the domestic price rise. In fact, the import price index for 1972 showed an increase of 6.2 per cent over the previous year (in 1971, it had dropped 3.8 per cent). In effect, the reduction in prices of import goods resulting from the yen revaluation at the end of 1971 had practically been offset by rising prices by the end of 1972. The price rise of lumber and wood products in the domestic market accounted for 51 per cent of the 8.5 per cent rise of the wholesale price index in 1972—indicative of the critically important role played by rising import prices in the

current rise of domestic wholesale prices. Since the high prices of imported commodities can be ascribed to inflation abroad, to the extent that wholesale prices are influenced by import prices, domestic causes cannot be assigned responsibility for the recent pattern of Japan's inflation.

Nevertheless, led by the 9 per cent rise of steel prices, almost every item, even many which were hardly affected by rising import prices, rose in varying degrees in 1972. This fact is important because the aggregate of increases in the prices of all these items produced the changing pattern of Japan's inflation. During the depression which ended in 1971, the formation of counter-depression cartels (not sanctioned in previous depressions) were permitted in the marketing of semi-processed goods, crude steel, and ethylene. Their existence was permitted to continue after the recovery of the economy, until the end of 1972, and must have had the effect of intensifying the oligopolistic control of the markets in these products. These cartels raised prices in rapid succession. The cartel members will undoubtedly continue their mutual cooperation even after the cartels are dissolved. It has generally been emphasized that the nature of the cartels formed during the course of Japan's rapid growth were "competitive oligopolies." However, henceforth, it is likely that most of the cartels will increasingly assume the nature of "collaborative oligopolies."

The third causative factor in the current rise of wholesale prices can be attributed to the change in the total demand structure of the Japanese economy, which is being reoriented from emphasis on heavy investment in plant and equipment toward greater investment in public works and housing construction. This shift in the demand structure has produced a distortion in the supply and demand mechanism which is reflected in the recent conspicuous rise of prices of construction-related goods, especially in the rise of lumber and cement prices. This factor also may account in part for the rise in the price of steel products, though the effect of production limitation imposed by the counter-depression cartel of the steel industry has been an important contributive factor.

Should this trend continue to prevail in the manufacturing industries, their future capital investments may decline in relation to total capital investment. In that case the acceleration of labor productivity, based in the past on investment in new plants and equipment, will be restricted, and consequently, the margin of wage raises which can be absorbed by increases in productivity will become narrower, further increasing inflationary pressures.

II. INFLATION AND GOVERNMENT POLICIES

A. *Emphasis on Wholesale Price Stability*

As explained above, the pattern of price fluctuations in the Japanese economy has gradually changed since the end of World War II. During the 1960s, a decade marked by the type of inflation characteristic of the so-called modern capitalism, the general indifference to inflation was based on the assumption that, as long as the rate of increase of income surpassed that of the consumer price

index, inflation was not a worrisome issue. The major concern of the government was thought to be maintenance of the stability of wholesale prices, since the rise in consumer prices was an inevitable cost of high economic growth and simultaneously a social cost factor, effective in levelling the wage differentials among workers under the dual-structure economy of Japan. There have been two types of proponents arguing for maintenance of stability in wholesale prices, basing their argument on differing assumptions. One group has held that for the purpose of increasing exports, stability of export prices was a necessary condition. From this standpoint, a rise in wholesale prices could not be sanctioned. The second point of view supporting stability of wholesale prices, has been based on the assumption that a drop in wholesale prices would be vexatious because it would lower the prices of export goods, causing excessive growth of exports and growing surpluses in the balance of payments, which, in turn, would necessitate revaluation of the yen. This latter attitude originated from a fear of undermining the parity-exchange system of the IMF. As a matter of fact, the wholesale prices of Japan remained consistently stable for a long period of time—as they had hoped for—while those of foreign countries rose steeply under inflation. This disparity, in effect, was instrumental in promoting an excessive increase in Japan's exports—as they had feared. This, ironically, has disrupted the IMF system.

From the former standpoint, the monetary authorities of Japan have been timing financial policy by using the margins of fluctuation of wholesale prices as one of the guideposts, among others, in seeking stabilization. The latter point of view has been favored by Osamu Shimomura, one of the acknowledged advocates of rapid growth policies, who has regarded the maintenance of the fixed IMF parities as a categorical imperative. The logical policy to be derived as a corollary of this viewpoint is that domestic wholesale prices should be raised in tandem with the rise in overseas prices. Hence, it could be considered a theory implicitly supporting "adjusting inflation." In effect, the former point of view has been supporting the policy of export expansion, while the latter has been endorsing maintenance of oligopolistic prices.

At the time the second point of view was being advocated, the productivity of labor was accelerating rapidly under heavy capital investments in innovative technology, so that productivity, on the whole, was staying ahead of the rise in wages. Hence, the maintenance of price levels which should have been reduced due to lower costs, supported oligopolistically administered prices. The reason why the monetary authorities held the first viewpoint was not entirely due to endorsement of the categorical imperative of favoring exports, but also because they clearly recognized the need for suppressing the excessive rise of consumer prices, which, after a time lag, invariably follows on the heels of a rise in wholesale prices. Nonetheless, the monetary policy, which allowed unrestrained fluctuation in consumer prices as long as wholesale prices remained stable, must be questioned. Both of these two viewpoints contain the common defect of neglecting rising consumer prices as the major issue of inflation affecting consumers in general.

The official policy of every postwar cabinet of Japan has been to be satisfied as long as the rise of income continued to exceed the increase of consumer prices.

However, the guidepost on which such a policy has been based has been the average increase in the incomes of the various income groups composing the nation. The incomes of some groups would rise faster than the average, but those for others would naturally rise more slowly. Consequently, despite the fact that the average increase of income did stay ahead of the rise in consumer prices, those in the below-average income groups actually suffered a relative reduction in their real income. Therefore, the real income of persons dependent on social security payments or fixed pensions, which do not increase proportionately with the increase in the cost of living, suffered some reduction in real income. It is generally recognized that the redistribution of income effected through inflation aggravates the injustice against these groups.

Another important aspect of the problem which cannot be overlooked is the progressively unfair effects inflationary redistribution of income has on assets and liabilities. This is a particularly grave issue for a country like Japan where the social security system is noticeably inadequate, the private cost of education excessively high, housing policy neglected by the government, and medicare for the physically handicapped and seriously ill is astoundingly inadequate. The responsibility for meeting these social needs is left, for the most part, to the individual citizens' private thrift in accumulating savings to provide for them. Most of the available forms of savings are of the "fixed nominal value assets" types; the loss of real value of these types of assets under rising consumer prices cannot be avoided. Furthermore, the "savings-objective price index" based on the composite prices of land, housing, and education, the chief objects of the motives for private savings, has increased at an annual rate of 7.5 per cent for the period 1960-71, far outrunning the rise of the consumer price index of 5.6 per cent [2]. When the real value of the principal plus compound interest of various forms of savings was calculated for the above period, the annual decrease in real value of the ordinary deposits was 5.3 per cent; one-year time deposits, 1.9 per cent; discount bank debentures, 1.2 per cent; even in the case of the five-year loan trust, the increase in real value was practically nil.

On the other hand, the real value of the loans the big corporations obtain from banks, financed by the savings of private citizens, also are substantially reduced by the time of their maturity, thus aggravating the unfair redistribution of the national income. Until recently, the prices of the goods manufactured by big corporations had not increased much as reflected in the relative stability of the wholesale price index. Nevertheless, aggregate corporate profits had grown because of the rapid rate of increase in productivity resulting from capital investments in plants and equipment financed by bank loans. Meanwhile, many corporations have been making speculative purchases of vast acreages of land, which have enabled them to profit substantially from the skyrocketing prices of land. Hence, though the prices of manufactured goods remained stable, the real rates of interest paid by the big corporations were declining steeply, probably even assuming negative values. With wholesale prices rising in recent times, the big corporations' advantage in financing their capital requirements by loans from banks becomes increasingly obvious.

The major assets of private citizens which suffer reduction in real value due to the redistribution effect of inflation are their old-age retirement pensions, funds for educating their offsprings, and savings for purchasing homes, assets for fulfilling their basic needs. Hence, the social evil of redistribution caused by inflation can be considered to constitute an issue of major proportion. The seriousness of this problem cannot be overemphasized in view of the fact that the age composition of the population of Japan is rapidly approaching that prevailing in Europe and America; longevity is increasing and the relative number of the aged in the total population is on the increase.

B. *Economic Growth and Consumer Prices*

One argument offered in support of the official policy, which emphasizes stabilization of wholesale prices while permitting rise in consumer prices, has been that control of consumer prices would blunt economic growth and depress the incomes of private citizens in general. The contention of this argument has been that without the rise in consumer prices, continuing growth of the capitalistic economy could not be expected. Ex post statistical correlations between the rates of economic growth, unemployment, wage rise and price rise have been discovered, such as the regression equation known as the Phillips curve. This type of statistical analysis only correlates the given data of the underlying factors constituting the structure of the economy; it explains nothing about the necessity of these correlations, nor whether they should be changed. Consequently, writers who argue, on the basis of these data, for the inevitability of rising consumer prices during the course of economic growth, are ignoring causative factors or, possibly, are discreetly advocating such an outcome.

In the course of economic growth, the rate of increase of labor productivity in personal services, agriculture, forestry, fishing, and small- and medium-sized manufacturing industries tends to lag far behind that of the large manufacturing industries. As a result, the relative prices of the former inevitably have to rise faster than those of the latter. On the basis of these facts, some writers have argued emphatically that the conspicuous rise of the consumer price index, which contains a greater number of items in the former category with lower rates of labor productivity than does the wholesale price index, was unavoidable. Thus, a steeper rise of the consumer price index has been justified by many writers on the grounds that it contributes to erasing the differentials between wage earners in different types of industries in the dual-structure economy of Japan; that it promotes the equalization of income distribution; and that it raises the "value of labor" which has heretofore been undervalued.

Regarding the first argument, that the rise of prices is inevitable under economic growth, one must point to the countervailing historical fact that in Great Britain, the United States, Germany, and France, during the nineteenth century when rapid industrialization and economic growth took place simultaneously, the level of prices actually dropped by a wide margin over the course of the century. Even during the twentieth century up to the beginning of World War II, the overall price level for the period tended to remain stable, despite the effects of business

cycles and World War I. The phenomenon of continuous inflation, despite fluctuations of the business cycle, clearly appeared in the post-World War II period, becoming a peculiar feature marking the economies of the 1950s and subsequent years. What could account for these differing behaviors of price levels for these two separate periods of economic growth under the capitalistic economic system? Perhaps the first step in comprehending the nature of the current inflation is to inquire into the common changes wrought in the economic structure of the capitalistic countries during the two periods, prior to and after World War II.

Regarding the second argument, that the differential in labor productivity between the two sectors of a dual-structure economy would inevitably create an increasing gap in their relative prices which would be reflected in a faster rise of consumer prices, this can be refuted by the fact that during the nineteenth century under conditions of long-term falling prices and during the early period of the twentieth century under conditions of long-term price stability, this type of gap in relative prices did occur without causing any rise in consumer prices. Increases in overall prices do not necessarily occur, as they have argued, because the prices of goods in the economic sector with a low increase in productivity go up while prices remain stable in the sector with high productivity. Price adjustment could also occur through a drop in the consumer price level which would occur when the prices of the products in the sector where productivity is low remain constant and those in the high-productivity sector decrease. Consequently, the writers arguing for the inevitability of rising consumer prices must bear the burden of clarifying the mechanism which supports their assertion that the relative price differential between the two sectors prevailing in the capitalistic countries since World War II can occur only through a rise in the consumer price level.

III. MECHANISM OF CONTEMPORARY INFLATION

A. *Financing Concentrated to Big Enterprises*

Here, the factors which caused the continuing rise of consumer prices in Japan during the 1960s will be briefly reviewed. The prime domestic factor to be pointed out should be the government's financial policy of assigning priority to supplying massive dosages of capital-investment credits to big enterprises in key industries during the postwar recovery and high-growth periods of the Japanese economy. This function was effected through the mechanism of financing concentrated to big enterprises, originally commenced by the Reconversion Finance Bank and continued by the city banks under the backing of the Bank of Japan. Columns A and B of Table II clearly indicate the fact that while expanding their loans to the big enterprises, the city banks have borrowed heavily from the Bank of Japan. For the purpose of placing the supply of money and credit under its control, the Bank of Japan since 1962 has attempted to provide the money supply for economic growth through the mechanism of open-market operations

TABLE II
RATIO OF BORROWINGS TO ASSETS OF CITY BANKS

Year	(%)				
	A Borrowings from the Bank of Japan	B ^a A+Securities Purchased by the Bank of Japan	C Borrowings from Other Financial Institutions and Call Money	D C+Financial Institutions' Deposits	E B+D
1955	0.9	—	4.0	8.0	8.9 ^b
56	2.7	—	4.0	8.5	11.2 ^b
57	10.2	—	3.1	7.3	17.5 ^b
58	5.9	—	4.3	8.4	14.3 ^b
59	4.5	—	5.4	9.7	14.2 ^b
60	5.5	—	4.6	9.5	15.0 ^b
61	12.3	—	2.9	7.5	19.8 ^b
62	10.5	11.3	4.9	10.1	21.4
63	7.5	10.9	5.4	10.4	21.3
64	5.6	7.9	9.3	14.4	22.3
65	6.0	6.6	7.0	11.6	18.2
66	6.6	8.2	5.5	10.1	18.3
67	5.1	9.7	6.4	10.5	20.2
68	5.1	10.7	5.5	9.9	20.6
69	5.4	11.0	6.4	10.4	21.4
70	5.8	12.7	6.9	10.9	23.6
71	1.2	5.9	4.3	8.8	14.7
72 ^c	1.8	4.3	3.4	9.3	13.6

Source: [1].

Note: The amount of securities purchased by the Bank of Japan from city banks (column B), which theoretically should not be added to the city banks' balance of borrowings, may indicate that despite the new monetary control measures adopted by the Bank of Japan since 1962, no basic change has been effected in the expansion of credits by the city banks, which continued to rely on credits supplied by the Bank of Japan.

^a (The Bank of Japan's lending to private banks+securities purchased by the Bank of Japan)÷lendings of the Bank of Japan×borrowings of city banks from the Bank of Japan÷assets of city banks.

^b A+D.

^c As of the end of November.

in bonds, adopted under the name of new monetary control, restricting the Bank's overloans to the city banks only to periods of temporary cash shortages resulting from seasonal or cyclical surges of monetary demand. However, this policy proved to be unenforceable as the city banks were able to continue their heavy borrowing from the Bank of Japan as before. Since 1971, most of the huge influx of foreign exchange earned by the big businesses, as part of the massive buildup of Japan's balance-of-payments surpluses, were deposited with the city banks. This has enabled the banks to gradually repay their borrowings from the Bank of Japan.

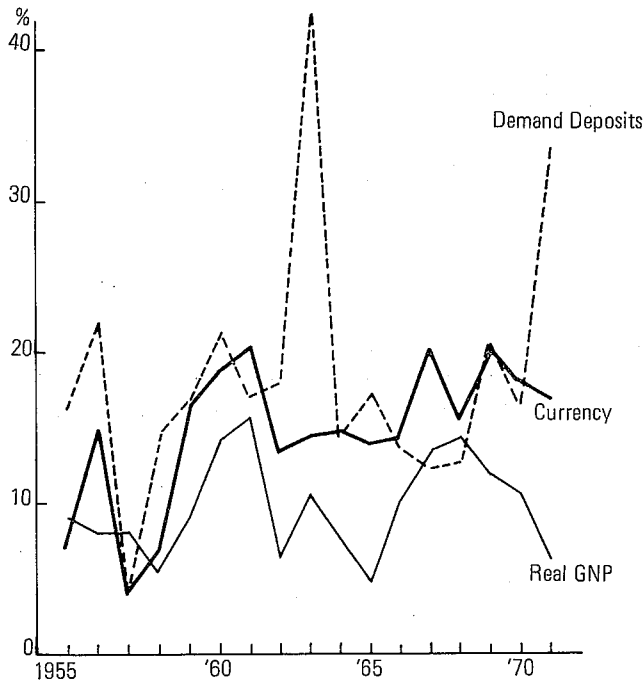
Columns C and D in Table II indicate that in addition to the credits obtained

from the Bank of Japan, the city banks also have assiduously sought funds from every other conceivable source. Borrowings have been scraped together from the local banks, financial institutions for small business, Central Cooperative Bank for Agriculture and Forestry, long-term credit institutions, etc. These represent funds which should have been used for financing the needs of local businesses and the special clientele of these financial institutions, but instead have been channeled to concentrated financing of the capital requirements of the big enterprises in key industries. The ample supply of funds thus provided has enabled the big enterprises to rapidly enlarge their productive capacities by massive investments in plants and equipment. The expansion of the productive capacities of the big enterprises has called for the corollary expansion of the capacities of the small business, acting as subcontractors and distributors for the large firms and constituting a necessary linkage in their production and distribution processes. This expansion has, in turn, increased the demands for capital of these small firms. However, the mechanism of concentrated financing of the capital requirements of the big enterprises has tended to preclude the fulfillment of the capital demands of these small firms. This accounts for a part of the widening gap between the labor productivity of the big enterprises and of the small- and medium-sized firms.

The expanding credits of the Bank of Japan, used to back up the loans of the city banks to big enterprises, have produced a concomitant increase in the outstanding amount of Bank of Japan notes. In anticipation of expanding credit supply from the Bank of Japan, the city banks have expanded their loans, exceeding the total of their primary deposits, which inevitably created an even larger aggregate of demand deposits. This was followed by the expansion of Bank of Japan notes, which further spurred a record expansion of the money supply in 1959-61. Consequently, as indicated in Figure 2, the rate of increase of money and demand deposits has expanded yearly, in many years outrunning the increase of real GNP by a considerable margin. The increase of the money supply, mainly channeled to capital investments of big enterprises, has created cumulatively increasing demands for the capital goods manufactured by big enterprises. Consequently, this process has prevented the lowering of the prices of capital goods, though their supply was being increased due to the additional production facilities coming on-stream from past investments.

This situation has concomitantly prepared the way toward further expansion of the productive capacities and further increase of the productivity of labor in the big enterprises. Part of the proceeds of sales of capital goods have been distributed as profits and wages of the big enterprises. The balance has been passed on as payments for goods and services received to the affiliated small firms as their share of the profits and wages, which, in turn, have created demands on other businesses. The incomes created by this chain of processes have produced multiplier effects in increasing consumer expenditures, which have acted to raise the prices of consumer products and services, agriculture, forestry, and fishery goods, mainly supplied by the small firms.

Fig. 2. Rate of Increase of Money Supply and GNP: Japan



Source: [1].

The expansion of the money supply has not resulted from a demand-pull type of inflation (which typically occurs under wartime conditions where elasticity of total supply is nil while demand for finished products rises to pull up prices in general), nor has it resulted from a supportive inflation (wherein the money supply was expanded to sustain the quantitative demand for goods and the increasing costs are incorporated in the prices of goods) for the purpose of forestalling an imminent shrinkage of production and employment. The cause of the expansion of the money supply has been intrinsically different from the passive absorption of the increasing costs of a supportive inflation, rather, it originated as one of the measures for further promoting the expansion of productivity of key industries. Also, it differed from the case of a simple demand-pull inflation in that it was not a response to a direct increase in demand which immediately raised prices. Its mechanism of intricate effects will be considered later. Here, the writer wishes to stress that the importance of this expansion of the money supply should not be belittled in comprehending the inflation of Japan in the 1960s.

As indicated in Table III, the Bank of Japan played a most significant role in expanding credit from the latter half of the 1950s through the first half of the 1960s. During the period of stagnation caused by the retrenchment and adjustment of the capital investment expenditures from 1964 through 1966, the government's financial policy played an increasingly important role in expanding the

TABLE III
 PERCENTAGE SHARES OF THE CAUSATIVE FACTORS FOR FLUCTUATION
 IN BANK OF JAPAN NOTES ISSUED

Period	Foreign Exchange Fund	Treasury Funds Excluding Foreign Exchange	Bank of Japan Credit to Private Sector	Of Which:			Increase of Bank of Japan Notes
				Bank of Japan Lendings	Open Market Operations	Others	
1956-61	27.1	-102.3	201.0	181.4	19.6	-25.9	100.0
1962-65	19.8	77.7 ^a	43.9	29.4	14.5	-42.3	100.0
1966-71	115.1	-66.4 ^a	83.3	5.5	89.2	-40.9	100.0

Source: [1].

^a If the absorption of Bank of Japan notes resulting from the issuance of long-term government bonds is disregarded, then the figures for 1962-65 would show a deficit of 88.6 per cent and for 1966-71, a deficit of 30.6 per cent, respectively.

money supply by the issuance of a large amount of government bonds. From the late 1960s through 1971, the increasing foreign exchange reserves built up through the large balance-of-payments surpluses played the major role in expanding the supply of money. Also, rapid growth and inflation were promoted by the government's financial policies, such as special tax reductions and exemptions for stimulating capital investment of big enterprises in key industries and for promoting exports, vast industrial infrastructure investments in highways, harbors, railways, and similar projects. In the latter part of the 1960s, the government's financial policy was directed toward expanding budgetary appropriations to increase overall demand to absorb the stress of oversupply created by the excessive productive capacities coming on-stream. This has had the effect of producing strong signs of the so-called supportive inflation.

B. *Growing Differentials of Productivity*

A second point needs elucidation regarding the mechanism by which the inflation of Japan originated. This concerns the growing differential in the rates of increase of labor productivity which developed between the big manufacturing enterprises in key industries and other less favored types of industries. Those in the latter category inevitably showed slower increases of labor productivity than the former. For instance, agriculture, with its dependence on the whims of nature as well as its tendency to lag in technological development, and small-sized manufacturers, unable to enjoy the advantages provided by large-scale facilities, could not match the productivity gains of big firms in key industries. Additionally, the less favored sectors were restrained not only by historical and social, but also by institutional, handicaps. Among these restraints was credit rationing, an important limitation imposed by the government's policy of giving priority to concentrated financing of the needs of the big enterprises in key industries. Under this special dispensation, the big enterprises rapidly increased their labor productivity by vast investments in innovative technologies, thus producing an ever

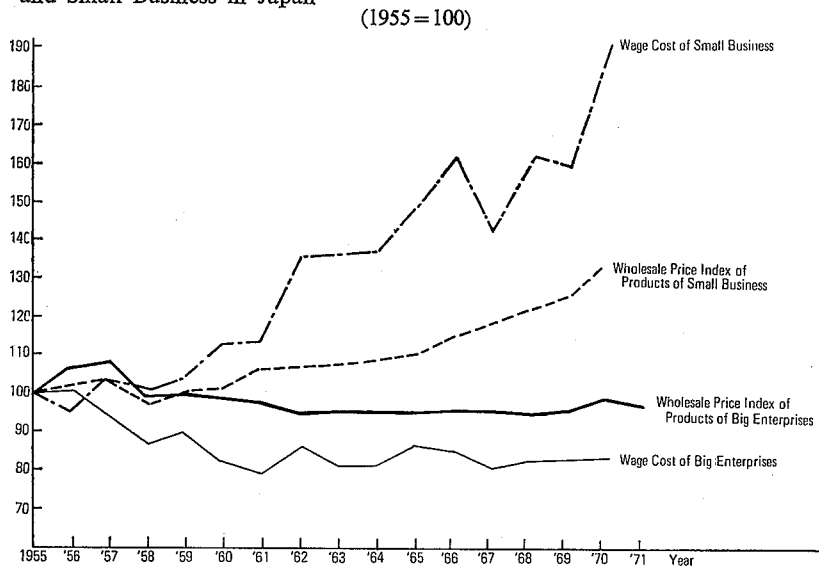
widening gap in productivity separating them from the less favored industrial sectors.

Furthermore, from the early 1960s, the economy of Japan has begun to experience a relative shortage of young workers (middle- and high-school graduates). As the big enterprises have accelerated expansion of productive facilities they have increased their hiring of young workers, whose wages are relatively low, and who are highly adaptable to work in the fields of new technology. This has created a relative scarcity of young workers and, consequently, has brought about a rise in their wages. The relative scarcity of young workers naturally has hit the small firms adversely by pushing up their wages at a rate exceeding the improvement of their productivity. Since the profit margins of the small firms have been usually much lower than those of the big enterprises, the increase of wage costs has squeezed their profit margins to near the vanishing point. The result has been that whenever feasible the increasing wage costs have been incorporated in the prices of products, producing a cost-push or wage-push inflation effect.

A similar phenomenon has been occurring in agriculture, where the average landholdings of farmers are small and income from farm products has been low. Witnessing the rise in industrial wages and expansion of demand for young workers, it was natural that those engaged in farming should begin to demand income comparable to their counterparts' in industry. In order to meet this demand in agriculture, where increases of productivity have lagged far behind industry, the prices of agricultural products have had to be raised. Many of agricultural products, as well as personal services and consumer products manufactured by small firms, are more or less necessities of life and their price elasticity of demand is small. Consequently, the increases of their costs could readily be incorporated in their prices without suffering decreases in sales. Among these products are rice, which is supported by a government price support mechanism, and many manufactured products of small firms whose prices are maintained artificially high through their trade associations. Consequently, for these products, cost-push inflation effects have been readily maintainable.

Nevertheless, in general, the control the farmers and small firms can exercise over the prices of their products has been weak. Hence, except where demand has been relatively greater than supply, it has not been feasible to increase prices while simultaneously expanding supply. Therefore, the cost-push of wages alone cannot fully account for the fact that the prices of many of these goods had been raised along with an increase in their supply since the 1960s. A necessary condition, which has rendered the cost-push increase of prices of consumer goods possible, has been the multiplier effect caused by the vast funds supplied to big enterprises for capital investment, which created an excessive overall demand on consumer goods. As Figure 3 indicates, during the 1960s the small- and medium-sized firms were able to incorporate only a portion of their costs of wage increases into the prices of their products. It is a simplistic error to consider that the total increase in costs of wages were directly translated into increased prices of products.

Fig. 3. Fluctuations of Wholesale Prices and Wage Costs of Big Enterprises and Small Business in Japan



Source: Economic Planning Agency, Planning Bureau, *Gendai infure to shotoku seisaku* [Contemporary inflation and income policies], Tokyo, Keizai kikaku kyōkai, 1972, p. 119.

Though the general rise in wages had its origin in the big enterprises' growing demand for labor, after they had realized a great increase in labor productivity, their relative cost of wages began to show a decreasing trend in the 1960s; and the cost-push effect evident in other sectors of the economy was not operative here. In fact, price reduction was feasible. Nevertheless, it is evident from Figure 3 that the big enterprises, in spite of the relative decrease of their labor costs, reduced their prices only slightly. This reflects the power exercised over prices by the oligopolistic big enterprises. But when the great increase in production during the period is taken into consideration, the oligopolistic control over prices by itself does not offer sufficient explanation for this phenomenon. A necessary condition for making this feasible was the expanded demand for products of big enterprises, sparked by the vast investments in plants and equipment and sustained by the financial and monetary policies of the government. In the economic sector comprising the small-sized firms, the power of organized labor has been extremely weak. Hence, it is clear that the wage-push effect on prices of goods in this sector cannot be attributed to the power of the labor unions. On the other hand, in the sector of the big enterprises, the labor unions have been well organized and affiliated into national federations. Annually they engage in so-called spring offensive, demanding wage increases. Nevertheless, the major factor during the 1960s pushing the increase of wages was not the periodical spring offensive, but the overheated demand for young workers. Hence, from this viewpoint, the inflation of Japan of the 1960s cannot be said to have been caused by the wage-push factor.

The lag in the increase of labor productivity in the less favored sectors has simultaneously caused a lag in the general expansion of productivity. The lag in the expansion of productivity in consumer goods manufactured by the small firms and services provided by personal-service industries was caused by limitations on their capability for obtaining capital-investment funds, lack of manpower, and lack of managerial talents. The deleterious effect on agricultural land produced by the rapid sprawling of big enterprises into the countryside, destruction of offshore fishing grounds through industrial pollution, the inadequacy of price-stabilization policy for coping with both overproduction and failure of agricultural harvests or catches of fish, and the adverse effects of liberalization of imports of agricultural, forestry, and fishery products, were all detrimental to raising labor productivity in these industries. Especially in the case of agricultural products, wildly fluctuating prices of vegetables due to overproduction or crop failures caused by the whims of the weather, have substantially hampered the farmers' incentive for increasing their productivity. The price-support system for rice, provided by the Staple-Food Management Law, has been guaranteeing an acceptable level of income for the farmers. But, on the other hand, since no price-stabilization measures guaranteeing farm income has been provided for the products of animal husbandry, vegetables and fruits, farmers, even though aware of the irrationality of their actions, had to concentrate their efforts on growing rice, thus causing chronic overproduction of this commodity. Consequently, the government's policy of promoting the modernization of agriculture by selective expansion of agricultural products of greater profitability has turned out to be a meaningless slogan. Thus, in sectors of the economy where supply has been lagging in meeting the increase in demand, these production bottlenecks have produced conditions where increases in production costs could relatively and easily be incorporated into higher prices of products.

Next, attention must be given to the typical pricing practices of the oligopolistic big enterprises in the field of home electric appliances, transportation machinery, fertilizer, and steel. These firms have been maintaining a sort of discriminatory monopolistic pricing policy whereby domestic prices have been kept artificially high, while export prices were held low to promote expansion of exports in order to operate their vast production facilities at the optimum level. These practices prevented the reduction of domestic prices of these big enterprises though their productivity has vastly increased while the abnormal expansion of their export drives have produced conditions which were reflected in the pressures from abroad to revalue the yen. The domestic inflation has been fed, especially since 1968, by the rapid expansion of exports, which in turn has been sustained by the inflation in progress overseas, the reinforced competitive powers of the big enterprises resulting from their increasing adoption of innovative production technologies, and the long prevailing stability of the yen at the exchange rate of ¥360 to the dollar.

Finally, another important factor in promoting inflation has been the government's public utilities policy, which has imposed an independent accounting system on the utilities with the intent of reducing the government's subsidies.

Under the principle of beneficiary responsibility, the users of the utilities have been burdened, not only with the current operating costs, but also with a portion of the utilities' capital investment costs. As a result utilities have been raising their fees every two or three years.

IV. MEASURES AGAINST CONTEMPORARY INFLATION

A. *Regulations against Oligopolistic Pricing and Yen Revaluation*

In the rapidly growing economy of Japan, on the whole, the progress of inflation has proceeded according to the foregoing mechanism, where consumer prices have climbed unremittingly while wholesale prices have remained relatively stable. Inflation has been progressing under the financial and monetary policies of the government for promoting economic growth by providing big enterprises with the capital they require for expanding plants and equipment. At the beginning, Japan's high growth policy was plagued by deficits in the balance of payments. Consequently, to remedy the chronic balance-of-payment deficits, the government's financial and monetary policies, oriented toward rapid growth, were simultaneously directed toward promoting exports. Since the international income elasticity of demand for products of heavy and chemical industries has been high, the government's policies have been to promote the expansion of these industries whose products would find a widening market abroad and whose export proceeds would help improve the nation's balance of payments. For fully implementing this policy, the production facilities of the heavy and chemical industries had to be expanded to the point where the economies of scale could be assured. To this end, the regulations of the Antimonopoly Law were relaxed and even mergers in these industries were officially sanctioned. Together with the policy of protecting the domestic market from competition from foreign interests, which seriously hampered trade and capital liberalization, within a short period of time, this policy permitted the buildup of the heavy and chemical industries on a vast and spectacular scale, dominated by enterprises of gigantic proportions.

This policy caused a growing gap between the productivity of these favored industries and those neglected, and also reinforced the big enterprises' oligopolistic price control over the domestic markets, while their exports expanded rapidly. For the heavy and chemical industries to attain the optimum economies of scale in operating their gigantic facilities, equipped with the latest advanced technologies imported from abroad, the demands of the domestic markets were too limited. Consequently, while discreetly establishing discriminatory oligopolistic prices in the domestic markets, their main efforts were directed to expansion of their overseas markets. Hence, the domestic inflation and the excessive expansion in the export markets were the twin offspring of the high growth policy, which had aimed at developing the domestic heavy and chemical industries.

Nonetheless, one must not overlook the fact that another factor promoting Japan's rapid expansion of exports has been international inflation having its origin in the U.S. escalation of the Vietnam War. It was this "imported inflation"

which aggravated the domestic inflation of Japan, due to its effects on facilitating this country's growing excess of exports, its cost-push effect through rising prices of imported raw materials, and the excessive buildup of domestic liquidity. Furthermore, the fixed parity currency exchange system of the IMF was a factor in reinforcing the surplus in the balance of payments.

The Smithsonian agreement at the end of 1971 revalued the yen 16.88 per cent in relation to the dollar, causing Japan's export prices to rise 16.88 per cent and import prices to drop 14.4 per cent in terms of the U.S. currency. The expectation was that this would (1) shrink Japan's excessive trade surplus through reduction of exports and increase of imports; (2) reduce the prices of imported consumer goods as well as of domestically manufactured goods through reduction of the prices of imported raw materials; (3) redirect the productive capacities of industries made superfluous by reduction of exports to the supply of domestic demands, with the effect of reducing domestic prices; (4) inhibit domestic inflation through reduction of the balance-of-payment surplus, which would shrink the excessive domestic liquidity. However, subsequent developments have not lived up to original expectations. The balance-of-trade surplus has continued to increase while capital inflows have refused to shrink as desired. In the meanwhile domestic prices are still rising and the rapid rise of wholesale prices is becoming a serious issue.

Still, it cannot be denied that the yen revaluation has produced some desirable results. The export figures for the period January through September 1972, compared with those of the same period of the previous year, reveal that the increase in exports in terms of dollar value was 17.7 per cent, but in terms of quantity of goods, 3.4 per cent, and in terms of yen value, only 1.2 per cent. It is evident that the increase in the quantity of goods exported during this period greatly slowed down, when compared with the increases of 24.1 per cent, 18.0 per cent, 14.5 per cent, and 17.5 per cent, respectively, for each of the preceding four years. However, since the yen revaluation, the average unit price of export goods, expressed in terms of the dollar, has increased 12.3 per cent—less than the 16.88 per cent revaluation of the yen—while it has dropped 3.4 per cent in terms of the yen. Though the increased dollar value of Japan's export goods has been somewhat offset by the ongoing inflation abroad and the prices of export goods in terms of yen has been reduced, the volume of exports has registered a mere 3.4 per cent increase. This indicates that the price elasticity of demand for export goods is not necessarily small.

On the other hand, from the revaluation up to August 1972, import prices expressed in terms of yen have dropped only 1.4 per cent and the volume of imports has decreased somewhat, instead of increasing. Nevertheless, the prices of high-class consumer goods have dropped drastically since October, due to the fact that import of high-class brand-name goods, which had heretofore been imported under the monopolistic control of authorized general agents, was liberalized under the so-called parallel import dispensation of the government. As a result, the domestic prices of some of these items have been halved. In general, the big import houses, with a virtual monopoly on the distribution of

general import goods, have held on to the increase of profits earned by the reduction of import prices and, thus, prevented or limited the reduction of domestic resale prices. Likewise, manufacturers generally have not passed on the benefits of the reduced import prices of raw materials to their domestic customers. Thus, the increase of imports expected from the revaluation of the yen has been inhibited. In the case of some items, such as natural fibers and logs, the worldwide inflation has boosted their import prices, which in turn increased their prices in Japan, as mentioned previously.

On further analysis, it can be stated that the effects of the yen revaluation on exports have been greater than appear on the surface, but on imports less than anticipated due to the aforementioned factors which involve issues separate from the yen revaluation. The export-oriented industries have reduced their export prices for the purpose of maintaining their export volume. The oligopolistic heavy and chemical industries have been capable of maintaining their high domestic prices, which enables them to reduce their export prices. Among the small-sized manufacturers, especially the dinnerware and synthetic shoe makers, which are almost totally dependent on the overseas markets, have had to keep up their export volume, despite the necessity of sacrificial price reduction. This has had the effect of requiring their labor forces to accept cuts in wages. In any event, the slowdown in the growth of exports resulting from the yen revaluation was interpreted by the industries as a recession of temporary nature. Unless the yen revaluation is accompanied by a definite government policy to redirect the sales efforts heretofore oriented to the export markets towards the domestic marketplaces, the export-inhibiting effects of the yen revaluation cannot become sufficiently operative.

B. Excess Liquidity and Industrial Structure

These events indicate that the yen revaluation alone will not be effective in curving the abnormal balance-of-payments surplus, nor in inhibiting inflation. In seeking the needed remedy consideration also should be given to redirecting the government-sponsored high growth industrial structure and export-promoting mechanism towards fulfilling domestic welfare goals and the needs of the domestic markets. Though revaluation of the yen has reduced import prices, the oligopolistic control exercised by the distributors of import goods and by the processors of imported raw materials has been preventing any real reduction of the prices of import goods in the domestic markets. The government must take relevant measures to remedy this situation. If these measures are combined simultaneously with yen revaluation, they should serve effectively to restrain domestic inflation. Establishment of an effective policy for reducing domestic oligopolistic prices would call for the discontinuance of the long-established policy which has condoned the oligopolistic and discriminatory dual-pricing system (the maintenance of high domestic prices together with low export prices). The reversal of this system would permit the loss of profits resulting from the lowering of domestic prices to be recovered by raising export prices.

The anti-inflation measures taken after the revaluation were insufficient with

some lagging in terms of appropriateness of timing, while oligopolistic pricing practices were actually sanctioned rather than suppressed in the name of anti-recession measures. Moreover, the excessive liquidity held by the big enterprises, produced by Japan's excessive surplus of balance of payments, was left unregulated and allowed to be used for land and stock market speculations. The result was that the inflationary mood was excessively inflamed by the conspicuous rise of land and stock prices. Under these circumstances, since effective results of the first yen revaluation, intended for correcting the excess of balance-of-payments surplus and control of inflation, have not yet appeared, Japan has again been forced into virtual revaluation of the yen for the second time by the dollar devaluation of February 1973, and the subsequent yen floatation.

In any serious policy consideration for controlling inflation, thoughts must be given to reduction of the excessive surplus in the balance of payments, the source of the redundant liquidity plaguing the economy. To attain this end, long-term measures must be taken to change the current structure of industry and the foreign-trade mechanism, while policies in the area of foreign trade and tariffs for producing quick short-term results should also be considered. Of course, the measures which could produce an immediate remedy are revaluation of the yen and the maintenance of the yen float for the time being. For these measures to remain effective over the long term, above all, the prevailing domestic oligopolistic prices must be reduced in both the distribution and manufacturing stages. The policy for changing the industrial structure must be oriented towards increasing social welfare and raising the level of consumption. It should not only be directed towards changing the demand structure of the economy through financial and monetary policies, but also be accompanied by a policy for changing the supply structure by modernizing and expanding the productivity of agriculture and of small firms, while turning the productive capacity of the big enterprises toward fulfilling domestic demands. As a result of these changes the productivity of labor in the consumer goods industries will rise and the differential of labor productivity which has been existing between them and the capital goods industries will be reduced. Also, the cost-push inflationary effect originating in the consumer goods industries due to rising wage costs will be mitigated.

Nevertheless, it should take a considerable length of time for these changes in the industrial structure to adequately produce the desired results. During the transitional period, the shift towards demand pressure on the prices of consumer goods should proceed ahead of the shift towards a reformed supply structure. Therefore, in order to counteract this situation, first, the oligopolistic enterprises, engaged in producing consumer goods, e.g., household electric appliances, automobiles, and so forth, must be required to reduce their prices in order to offset the rise in the prices of products of agriculture, forestry, fishery, personal services industries, and small- and medium-sized manufacturers. The averaging of these two sets of price trends to mitigate the effects of the rising consumer prices is a prime necessity. Second, the cost-push impact on consumer goods could be restrained by requiring price cuts by the oligopolistic enterprises trading in raw materials or producing machinery needed by the consumer goods industries.

Third, a policy of strict government intervention in reducing oligopolistic prices at each stage of the distribution system should be adopted. For instance, the practices of maintaining artificially high retail prices through affiliated retail stores should be abolished. Moreover, price manipulations by big wholesalers at central wholesale markets, as well as the administered prices and speculative operations exercised over imported consumer goods by the big trading houses, must be strictly regulated.

Also, the Bank of Japan should seek by further relevant policies to absorb the excessive liquidity flooding the economy, and also make clear its firm stand to restrict its credit extension to city banks, not only for freezing the supply of speculative funds, but also for establishing regulatory standards for checking the bank loans to big enterprises. The excessive expansion of the national budget must be halted, though appropriations for ameliorating social welfare should be boosted substantially. Special tax dispensations granted big enterprises and investments in industrial infrastructures should be stopped, and excessive expansion of the military establishment under the Fourth Defense Plan should also cease.

When the cost factors of the heavy and chemical industries of the advanced countries of the world are compared, it is evident that the ratio of wages to added value, and the labor cost of products in Japan are still relatively low. This indicates the comparatively low wage level of Japanese workers. Consequently, Japanese workers have sufficient grounds for demanding wage raises exceeding their productivity increases, at least for the present. The important point is for the workers to win wage raises exceeding their increase of productivity, while demanding that the oligopolistic enterprises desist from incorporating the increase in wage cost into higher prices. If the increase in wage cost is incorporated into prices, the income share of the Japanese workers, now at a low international level, would not be improved.

Increasing the income share of workers will check the profitability of big businesses, inhibiting their incentive for expanding their productive capacities, which should in the long run work to correct the current imbalance in the balance of payments. Should the increase in wage cost be incorporated in export prices, heretofore artificially maintained at a relatively low level, it would materially help to reduce immediately the surplus in the balance of payments. However, if, in accordance with the arguments of the proponents of "adjusting inflation," normalization of the imbalance in the balance of payments were to be sought by allowing wage increases to push up domestic wholesale prices, which in turn would raise export prices, then the income share of the workers would be left at its current low level, while the cost-push price raising by the oligopolistic enterprises would be sanctioned. This would contain the danger of accelerating the domestic inflation. Therefore, this writer can not agree to their proposal.

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