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CHANGES IN THE JAPANESE ECONOMY AND JAPAN'S TRADE WITH NORTH AMERICA

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ABSTRACT

This paper aims at responding to two questions posed by the changes of the Japanese economy since the mid-1980's: how did the Japanese economy reorient itself with the yen appreciation from export-led growth to growth based upon domestic demand? What changes occurred in trade between Japan and her major trading partner, North America, in the process of this reorientation?

The paper first discusses how the Japanese economy shifted its emphasis with the yen appreciation from export-led growth to growth led by domestic demand, and how this reorientation enabled the economy to weather a severe recession caused by the yen appreciation and attain wide-spread prosperity. The necessity of the reorientation, the process of reorientation and the mechanism behind the reorientation are explained.

Next, an overview of changes in Japan's trade during the process of the yen appreciation and the economy's reorientation is provided. Japan's overall trade surplus peaked in 1986 and has since been steadily shrinking. With regard to the contents of Japan's trade, high value-added products are accounting for a larger share of total exports, while the ratio of manufactured imports to total imports is rising.

In light of this overview, the changes in Japan's trade with North America during this period are analyzed. Japan's trade surplus with North America has shrunk much faster than her overall trade surplus. As in the case in overall trade, a shift to higher value-added exports and a rising ratio of manufactured imports can be seen in the trade with North America.

Finally, the findings of this analysis are summerized.

CHANGES IN THE JAPANESE ECONOMY*
AND JAPAN'S TRADE WITH NORTH AMERICA

by

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CONTENTS

INTRODUCTION

As we look back at the end of the 1980's, how can we describe the Japanese economy during this decade? The preceding decade, 1970's, was one of turbulence caused by the two oil crises. Nobody will call the 1980's the decade of tranquillity in the aftermath of the 1970's. On the contrary, most will find that the 1980's has been a time of turbulence just as the 1970's were. In fact, the Japanese economy in the 1980's, which began in the wake of the Second Oil Crisis in 1979, witnessed drastic changes from a worldwide recession to an export boom to the brisk U.S. market. Then, since the mid-1980's the economy experienced the rapid yen appreciation, resultant recession, shift toward growth led by domestic-demand and finally buoyant prosperity. Though these changes have been studied by many economists and analysts, it seems that there is no common understanding of them.

This paper aims at responding to two questions posed by the changes of the Japanese economy since the mid-1980's: how did the Japanese economy reorient itself with the yen appreciation from export-led growth to growth based upon domestic demand? What changes occurred in trade between Japan and her major trading partner, North America, in the process of this reorientation?

Section I explains how the Japanese economy shifted its emphasis with the yen appreciation from export-led growth to growth led by domestic demand, and how this domestic-shift enabled the economy to weather through a severe recession caused by the yen appreciation and attain wide-spread prosperity. Section II provides an overview of changes in Japan's trade in the process of the yen appreciation and the economy's reorientation. In light of this overview, section III analyzes how trade between Japan and North America changed during this period. The final section summarizes the findings of these analyses.

I. REORIENTATION TOWARD GROWTH LED BY DOMESTIC DEMAND

(1) Necessity of Growth led by Domestic Demand

Japan's export-led growth pattern was established after the First Oil Crisis in 1973 and strengthened during the export boom to the U.S. market in the first half of the 1980's. What factors necessitated this shift toward a domestic-demand-oriented growth? There are three factors to be enumerated: requests from foreign countries to reduce external imbalances, serious domestic problems created by an export-led growth, and maturation of Japan's major export commodities.[1)]

First, external imbalances among major developed countries had become one of the serious issues in the world economy. Trade surpluses of Japan and West Germany had accumulated by the mid-1980's, while the trade deficit of the U.S. had increased. In order to correct these imbalances, currency adjustment policies were first enforced. However, the U.S. dollar depreciation as a result of currency adjustments overshot and created dangers of inflation and shrinking capital inflows to the U.S. on the one hand, and brought about recessions in Japan and West European countries through sluggish exports on the other hand. Nevertheless, currency adjustments, in the end, failed in correcting the imbalances and rather fueled trade disputes and protectionism. Thus, in order to reduce her trade surplus, Japan had to pursue economic growth that was less dependent upon exports.[2)]

Second, serious domestic problems posed by export-led growth were looming ahead. In past export-led growth, differentials in productivity increased between tradable goods industries and non-tradable goods industries, since the former faced severe competition in the world market while the latter was protected in the domestic market. As a result, real living standards of the Japanese, including consumption of non-tradable goods, was far below the nominal income level calculated by the prevailing exchange rate which was over-valued due to the high competitiveness of tradable goods industries. If the export-led growth had continued, the value of the yen would have been further over-valued and the gap between the real living standard and the nominal income level would have expanded. Furthermore, such a growth would have brought deflationary effects to the economy in general, and difficulties in structural adjustment of industries facing comparative disadvantage, in particular.[3)]

Thirdly, it was believed at that time that Japan's major export commodities were entering a maturation period or a late growth period in their product cycle. Hence it was predicted that Japan's growth rate would be inevitably lowered in the near future even if Japan tried to pursue export-led growth.[4)]

To conclude, the Japanese economy was required to shift from export-led growth to domestic-demand-oriented growth, in order to correct its external imbalances, to mitigate serious domestic problems, and to realize long-term stable growth. In such a domestic-shift, a beneficial cycle of consumption and investment was anticipated: domestic consumption would stimulate domestic investment, and the latter would in turn invite increases in domestic income and consumption.

(2) Progress of the Reorientation toward Growth led by Domestic Demand

How did the Japanese economy reorient itself from export-led growth to growth based on domestic demand? In short, although the reorientation initially encountered difficulties, it has progressed unexpectedly well (see Table 1).[5)]

The Plaza Accord concluded by the finance ministers and chairmen of the central banks of the Group of Five in September 1985 initiated the movement toward the reorientation. The accord admitted that the U.S. dollar had been overvalued and urged major countries to intervene cooperatively in foreign exchange markets. It fundamentally changed expectations in the markets and thereby accelerated the depreciation of the dollar which had already started.

The yen's value rapidly increased by 118% against the dollar from a bottom of ¥263.4 on February 13, 1985, to a peak of ¥120.8 on November 25, 1988. The yen appreciation severely hit Japan's exporting sector. Though exporting companies were forced to lower the prices of exports in yen terms, their export sales shrank and so did their profits.[6)] The collapse of the exporting sector spread throughout the national economy; the Japanese economy was alarmed by the recession caused by the yen appreciation (Yendaka), that is, "the yen appreciation recession" ("Yendaka Fukyo").

In fact, the economic growth rate (real basis, same hereafter) in Fiscal Year (FY) 1985 (April 1985 - March 1986) was 4.2%, 0.8% lower than the previous year. Especially, the fourth quarter of FY 1985 (January 1986 - March 1986) recorded a negative growth at the rate of -0.5% against the preceding quarter.[7)]

Recession continued in FY 1986. Through the business cycle bottomed out in November 1986, the economic growth rate of FY 1986 ended up 2.6%, the lowest since FY 1975. Negative contribution by external demand (-1.5%), caused by a large decline in real demand because of a decrease in export quantity and an increase in imports, affected the low growth rate. To cope with Yendaka Fukyo, the Japanese government took remedial monetary and fiscal measures. As for monetary measures, the official discount rate was lowered five times starting January 1986, easing the money market, and reached a post-war record of 2.5% on February 1987. In fiscal policy, the Emergency Economic Measures totaling ¥6 trillion ($43.4 billion) was announced in May 1987 in order to stimulate domestic demand. This package of measures consisted of three components: public works spending totaling ¥ 4.3 trillion ($31.1 billion), additional housing loans amounting ¥700 billion ($5.1 billion), and tax reductions of ¥1 trillion ($7.2 billion). The total amount of the measures represented as much as 18.4% of total government final consumption expenditures in the previous fiscal year.

Partly with these government measures, the economy took a favorable turn in the latter half of 1987 after prolonged stagnation starting in late 1985. The quarterly growth rate vis-a-vis the previous quarter buoyantly recovered to 2.0% for July to September, and 1.8% for October to December 1987. It is noteworthy that the contribution of domestic demand was as high as 6.0% while that of external demand continued to be negative at -1.1%. The contribution of domestic demand in the 1980's had been

2 to 4% until FY 1986, achieving 3 to 5% economic growth until FY 1985, only in conjunction with the around 1% contribution of external demand. Unlike this pattern, the economy in FY 1987 achieved 5% growth by high contribution of domestic demand even with negative contribution of external demand. This achievement shows that the Japanese economy finally succeeded in reorientating itself toward domestic-demand-led growth in that year.[9)]

Economic prosperity proceeded in FY 1988, achieving 5.1% growth, nearly the same level as FY 1987. The contribution of domestic demand reached 6.8%, even higher than that of the previous year. In the details of contribution of domestic demand, contribution of private final consumption expenditure (2.6%), and that of plant investment by the private sector (3.5%) were particularly high. These high figures show that the beneficial cycle of personal spending and plant investment by the private sector, which stimulate each other and expand the economy, had started. This cycle is called "an autonomous expansion".[10)]

The autonomous expansion continued in 1989, and the economy has now been expanding for nearly 40 months. This expansion is the longest only second to "Izanagi Boom" in the first half of the 1960's. According to the Japanese custom of naming each economic boom, the "Izanagi Boom" was named after the God Izanagi, the creator of the Japanese Archipelago, because the boom was thought the longest since the beginning of Japan. There is no consensus in naming the current long prosperity; some call it the "Yendaka (the yen appreciation) Boom" because of Yendaka's role as an initial impetus; some named it the "Heisei Boom" for the name of the new era started on January 1989. The most interesting name is the "Izanami Boom" after the Goddess Izanami, the wife of God Izanagi and the co-creator of the Japanese Archipelago. The reason why the Goddess' name is chosen is that the current boom is led by personal spending which are mainly controlled by housewives and female workers.[11)] As a symbol of the shift of the Japanese economy toward an emphasis on domestic personal spending and domestic private investment, the name "Izanami Boom" might be appropriate.

(3) Mechanisms of the Reorientation toward Growth led by Domestic Demand

There are five factors which enabled the Japanese economy to reorientate itself toward domestic-demand-led growth: improving terms of trade, a just completed adjustment in inventory and capacity, easy money policy, the government's Emergency Economic Measures, and the adaptability of the private sector.

The first factor was improvement in terms of trade. This improvement occurred in two ways. One is lower prices of imported commodities due to the yen appreciation itself. The yen appreciation hit the exporting sector in the

Japanese economy. However, at the same time, it benefited the economy through the importing sector, since the economy was also dependent on imports. In retrospect, these benefits through imports might have been underestimated, so that the negative impact of the yen appreciation had been excessively feared. On the contrary, the appreciated yen lowered import prices, since Japan's import transactions had been mainly carried in terms of U.S. dollar. As a result, the appreciation increased profits of manufacturers and distributors who use imported materials or deal in imported products. Furthermore, lower import prices gradually influenced retail prices so that the real income of Japanese consumers increased.[12] In addition, lower prices of imported commodities expanded the scope of choices for consumers, and thus stimulated their spending.[13]

Declining prices of oil and of other commodities also contributed to improving Japan's terms of trade. Price hikes of petroleum and other primary products in the 1970's gave incentives to producers to increase their supply in the 1980's, while at the same time encouraging users to reduce consumption through energy-saving measures. By the mid-1980's, the world markets for primary products was glutted, and prices declined. The typical and most influential case of this phenomena was petroleum; the Organization of Petroleum Exporting Countries (OPEC) was forced to change its strategy from emphasis on prices to emphasis on market share in December 1985. Consequently, petroleum prices sharply dropped during the end of 1985 to early 1986, benefiting the Japanese economy which is heavily dependent on imported petroleum.[14] Therefore, this price decline, in conjunction with the appreciated yen, helped the Japanese economy reduce payments for imported primary products.

The second factor was related to the business cycle. By mid-1987, Japan's private sector had completed an adjustment process in inventory and equipment investments. In other words, there were no longer excessive inventory nor excessive equipment. Thus, any increase in final consumption expenditures became able to trigger an additional investment in inventory and equipment.[15]

The third factor, afore-mentioned easy monetary policy, worked to revive the economy. Starting in January 1986, low interest rates encouraged investment, especially in construction of houses for rent and in equipment of non-manufacturing industries. Moreover, easy money led to speculation in stocks and land, thus providing stockholders and landlords with huge capital gains. It is argued that rises in asset prices gave an impetus to consumption through "asset effect".[16]

Fourthly, the government's Emergency Economic Measures in May 1987 also contributed to the upturn of the economy, as mentioned above. It created effective demand for the economy with oversupply capacity, and triggered multiplier effects of investment. It is also notable that effects of the measures included were not only real, through changes in supply and demand, but also psychological, brightening expectations of Japan's business people and thereby promoted economic activity in the private sector.[17)]

Last but not least, it should be noted that Japanese firms and households aggressively and flexibly adapted to above-mentioned beneficial conditions and policies, and activated their economic transactions. Without this "positive adaptation factor" so named by the Economic White Paper FY 1988, it is questionable whether smooth reorientation of the economy would have happened even under above-mentioned favorable conditions and policies. When the oil crises erupted in the 1970's, further growth potential of the Japanese economy was believed to be lost because of its heavy dependence on cheap oil. However, Japanese firms and households vigorously pursued energy conservation and conversion from oil into alternative energy. As a result, Japan rode both oil crises most skillfully among developed countries, and showed better economic performance than others. Such an excellent adaptability of the Japanese private sector was also fully demonstrated under the yen appreciation in the 1980's.[18)]

Various examples demonstrate this adaptability: Japanese firms developed new products and fortified domestic sales networks in order to find new domestic markets; they ventured into plant investment to make good use of low interest rates; they increased foreign direct investment and outsourcing of parts in order to recover price competitiveness against imported products; they maintained certain amounts of exports, securing profits by rigorous rationalization. Examples of households' adaptability are as follows. Japanese households unexpectedly used additional real income to quickly expand consumption including purchase of imported goods; they also largely increased housing investment to realize good opportunity offered by low interest rates.

II. TRENDS IN JAPANESE TRADE

(1) The Trade Balance

Requests for correcting external imbalances, the first reason which necessitated Japan's economic reorientation toward domestic-demand-led growth, meant reducing Japan's large-scale trade surplus. Though the trade surplus did not shrink as fast as initially expected, it peaked out in 1986 and has steadily shrunk up to now. In addition, contents of Japan's exports and imports have significantly changed during this process.

Here we will look over the trend of Japan's trade balance (custom clearance basis) after the yen appreciation.[19] In order to relate this trend with changes in the Japanese economy, we are required to follow the trade balance in terms of Japan's domestic currency, namely the yen (see Table 2).[20]

In 1984, the year before the yen appreciation, Japan's exports were ¥ 40.3253 trillion and imports were ¥ 32.3211 trillion respectively, giving Japan a trade surplus of ¥ 8.0042 trillion. This trade surplus was more than 60% larger than that of the previous year (¥ 4.8945 trillion), and equivalent to 2.7% of the Gross National Product (GNP) of 1984. With the fact that Japan's trade balance in 1980 had a deficit of ¥ 2.6129 trillion in mind, it can be realized how drastic the accumulation of Japan's trade surplus had been in the first half of the 1980's.

In 1985, when the yen appreciation started in February and accelerated after the Plaza Accord in September, exports increased by only 4.0% in comparison with the previous year, reaching ¥ 41.9557 trillion. However, imports declined to ¥ 31.0849 trillion, 3.8% lower than in 1984. Thus, the trade surplus increased by ¥ 2.8665 trillion to reach ¥ 10.8707 trillion, equivalent to 3.4% of that year's GNP.

In 1986, the effects of the appreciating yen were fully felt and reduced Japan's exports in that year to ¥ 35.2897 trillion, 15.9% lower than in 1985. Nonetheless, the trade surplus continued to grow to ¥ 13.7390 trillion, equivalent to 4.1% of GNP, since imports further decreased by as large as 30.7% in comparison with 1985, and amounted only to ¥ 21.5507 trillion.

However, the expansion of trade surplus finally ended in 1987, when exports continuously declined to ¥ 33.3152 trillion, 5.6% less than in 1986, and imports slightly increased to ¥ 21.7369 trillion, 0.9% more than in 1986. The surplus dropped by ¥ 2.1607 trillion to ¥ 11.5783 trillion. The ratio of surplus to GNP also dropped to the 1985 level, 3.4%.

In 1988, the expansionary trend of imports accelerated, reaching ¥ 24.0068 trillion. The trade surplus continued to shrink to ¥ 9.9329 trillion, equivalent to 2.7% of GNP, though exports again showed an upturn to ¥ 33.9392 trillion showing an annual growth rate of 1.9%.

Since the beginning of 1989, exports have picked up speed. According to latest statistics, exports from January to November in 1989 increased by 11.5% compared to the same period in 1988. However, imports have continued to grow at the rate of 19.7%, well above the growth rate of exports, making the trade surplus continue to shrink. If computed using straight-line assumptions, the trade surplus in 1989 will remain as low as ¥ 9.1 trillion, equivalent to only 2.3% of the estimated GNP.[21)]

In sum, the trend in trade balance clearly shows that Japan's trade surplus started to decline since 1987 with exports decreasing since 1986 and imports expanding rapidly since 1987, following an initial drop in 1986. The decrease in Japan's exports was because of the lower price competitiveness of Japanese exports due to the appreciated yen. The initial downturn of imports was partly due to lower prices for primary products, especially pretroleum. In combination with sluggish demand from the Japanese manufacturing industries, lower prices for primary products decreased Japan's import payments, since her demand of raw materials and energy has been largely dependent on imports.

In addition, the yen appreciation caused import prices to fall heavily, temporarily decreasing imports in value terms even after import volume started to increase. In fact, total import volume has increased since 1986, as shown in import quantum indexes which rose from 109.5 in 1985 to 123.2 in 1986, then to 133.4 in 1987 (1980=100). However, a slow increase in import volume of raw materials and mineral fuels impeded a rapid increase in total import volume. As a result, drops in import prices in terms of yen offset an increase in import volume, and imports in value terms (in terms of yen) were slow to increase around 1986.[22)]

However, the yen appreciation and the decline of primary product prices, in conjunction with other factors, contributed to the rapid recovery of the Japanese economy since the latter half of 1987, and accelerated the expansion of her import volume, finally reversing the downturn in her imports in value terms. Furthermore, thanks to the appreciated yen, improved price competitiveness of imported goods enabled imports, especially manufactured imports, to grow at a greater rate than the growth rate of the whole economy.

(2) Changes in Contents of Japan's Trade

Due to the yen appreciation and the shift of the Japanese economy towards emphasis on domestic demand, Japan's exports, imports and trade balance have experienced substantial changes in terms of amounts. At the same time, the contents of exports and imports have also changed significantly. Changes in contents of exports are a shift to higher value-added products, and changes in contents of imports show a rapid increase in the share of manufactured products (see Table 4).

Concerning Japan's exports, the share of heavy and chemical industry products, especially machinery products which are relatively high value-added, had been large. The yen appreciation deprived Japan's exports of their price competitiveness, and disadvantaged low-technology products for which price competitiveness is vital. Therefore, Japanese industry had to further shift emphasis to high-technology products for sales of which quality and other non-price factors play a more important role than price factors.

Thus, as exported commodities, the weight of light industry products such as textiles has dropped on the one hand, and that of heavy and chemical industry products has further increased on the other hand. In heavy and chemical industry products, metal products such as steel have lost their share, while machinery has gained instead. Moreover, even in machinery, the share of ships has dropped and those of general machines, electric equipments and precision machines have increased.

Specifically, in electric equipments for instance, relatively simple domestic electrical appliances, radio and television sets are diminishing their role as electric equipment exports. In contrast, the importance of high-technology products such as semiconductors or video-cameras is growing.

Likewise, exports of simple steel bar and plate ares shrinking while that of sophisticated ferroalloys, tin plate and steel pipe are stable, even though metal products as a whole have decreased their weight as export commodities. These changes can be summarized as "high-value-added orientation".

On the other hand, the amount of manufactured products has been expanding in Japan's imports. In the past, the ratio of manufactured imports (manufactured products plus re-imports, etc.) to total imports had been lower than those in other industrialized countries. The reasons are as follows;

1) Due to her poor natural resources, Japan had to import large amounts of mineral fuels and raw materials;

2) Japanese manufacturing industries have been highly competitive in producing machinery, metal products and other manufactured products;

3) Unlike West European countries, Japan did not have neighboring industrialized countries with similar income levels, and could not depend on those neighbors for supplying manufactured products;

4) Affected by their geographical environment (limited amount of space), culture and practices, Japanese consumers have had different tastes and needs from those of other industrialized countries. However, most of exporters to Japan neglected to supply products suited to the tastes of Japanese consumers.

However, the yen appreciation deprived domestic producers of their price competitiveness in relatively simple and low-value-added manufactured products. In addition, newly industrialized economies (NIES) such as Taiwan and Korea have emerged among Japan's neighboring countries, and some of ASEAN countries have also accelerated their industrialization. Now those countries can supply low-value-added manufactured products to Japan.

Furthermore, the yen appreciation has increased real incomes of Japanese consumers and lowered relative prices of foreign goods and pushed foreign exporters to start making serious efforts to sell in the Japanese market. Thus, Japanese consumers began to increase their purchase of high-quality foreign goods, which had been "a prize beyond their reach".

These factors have contributed to the expansion of manufactured imports, raising the ratio of manufactured imports to total imports from 31.0% in 1985 to 49.0% in 1988, nearly a 20% point increase within only three years.

Admittedly, a decline in the price of petroleum and resultant decreases in Japan's mineral fuel imports affected the rise of this manufactured imports ratio. However, even if the ratio of manufactured imports to GNP is observed in order to exclude the above-mentioned effects, manufactured imports have been expanding; though the ratio temporally dropped from 3.0% in 1985 to 2.7% in 1986, it picked up thereafter to reach 3.2% in 1988. The drop in 1986 should be taken for granted, since there was a drastic improvement of terms of trade through the yen appreciation. And a 0.5% point increase in two years after 1986 can be evaluated as a significant upturn, if the continued improvement of terms of trade is taken into account.

In short, contents of Japan's trade, in which the importance of high value-added exports is increasing and the ratio of manufactured imports is rising shows that Japan's trade is in a transition phase from a processing trade with imports of raw materials and fuels and exports of finished products, or a vertical division of labor with other countries, toward a horizontal division of labor with other countries.

III. TRENDS IN JAPAN'S TRADE WITH NORTH AMERICA

(1) Japan's Trade Balance with North America

The previous section provided an overview of trends in Japan's trade balance and changes in the contents of her overall exports and imports. This section focuses on Japan's trade with the North American region, which accounted for the largest share of Japanese exports (37.8% in 1984), and with which Japan accumulated the bulk of its huge trade surplus. This section analyzes how Japan's trade balance and the contents of her export and import trade with North America has changed. In short, in the process of yen appreciation and shift of the economy to domestic-demand-led growth, Japan's trade surplus has been shrinking more rapidly with North America compared to its overall surplus. The size of her surplus with North America has is smaller now than it was before the appreciation of the yen (see Table 2).

Since Japan's trading partners in North America are mainly Canada and the U.S., the analysis of trade concentrates on these two countries. Canada, which is rich in mineral and forest resources, was an important supplier of those products to Japan. Japan has imported large quantities of Canadian coking coal, rapeseed, wood, pulp, and copper ore. Although Japan has been exporting machinery and other industrial products, Japan's imports from Canada have consistently outweighed her exports, resulting in a bilateral trade deficit for Japan.

The U.S. is also rich in natural resources and is a large agricultural producer in addition to being an advanced industrialized country. Therefore, Japan has imported various products from the U.S., including raw materials such as coking coal, heavy industrial products including office equipment and airplanes, and grains and other food products. Japan's exports to the U.S. have been predominantly heavy industrial products: automobiles, communication equipment, and other machinery, and metal products such as steel. Since the mid-1960's Japan has enjoyed consistent surpluses in the U.S.-Japan trade.

How have these trade balances changed after the appreciation of the yen? In 1984, the year prior to yen appreciation, Japan's exports to Canada totalled ¥ 1.0184 trillion and her imports from Canada amounted to ¥ 1.1720 trillion, resulting in a Japanese deficit with Canada of ¥ 153.6 billion. Although the higher valued yen led to a decrease in Japan's exports after 1986, Japanese imports also began to decline in 1985 and dropped sharply in 1986. As a result, Japan's bilateral deficit shrank in 1985 and shifted into a surplus of ¥ 104.3 billion in 1986.[23)] However, imports started to expand in 1987, while exports continued to decrease, resulting in the balance turning to deficit again. In 1988, imports expanded further and the deficit reached ¥ 242.2 billion, which is greater than the level recorded in 1984.

As for the trade balance with the U.S., Japan recorded a surplus of ¥ 7.8576 trillion in 1984, with exports of ¥ 14.2212 trillion far outstripping imports of ¥ 6.3636 trillion. This trade surplus exceeded the surplus recorded in the previous year, 1983, by more than ¥ 3.500 trillion, and was five times higher than the surplus in 1980; these figures indicate that the bulk of Japan's trade surplus was accumulated in her trade with the U.S. With yen appreciation, Japan's exports to the U.S. started to decline in 1986. Although her imports from the U.S. also dropped in 1986, the decline in exports was more significant, resulting in a decline in the trade surplus from its 1985 peak of ¥ 9.3633 trillion.[24] Subsequently, exports continued to decrease and imports began to expand in 1988, cutting the trade surplus substantially. The surplus in 1988 was down to ¥ 6.0991 trillion, a level considerably lower than in 1984.

Changes in Japan's trade balance with North America generally parallel changes in Japan's overall trade balance. However, there are a few important differences. First, exports to North America have decreased more precipitously than Japan's total exports since 1987. While total exports decreased from 1985 to 1988 by 19.1%, exports to Canada and the U.S. declined during same period by 23.7% and 26.3%, respectively. The bilateral decreases were thus between

4 and 7 % larger than the overall decrease. Among Japan's major trading partners, namely North America, West Europe and East Asia, Japan increased its exports to West Europe and East Asia at a greater pace than to North America after 1986, and especially after 1987. This trend suggests that Japan has diversified the destinations of its exports as the result of appreciation of the yen.

The second difference is that Japan's imports from North America have been relatively stable in comparison with her overall imports. Excluding a temporary inflow of gold from the U.S. in 1986, the drop in imports from North America was smaller than the decline of total imports. From 1987, increases in imports from North America hane been greater than the increase in overall imports. Thus, while total imports declined by 22.8% between 1985 and 1988, imports from Canada and the U.S. decreased during the same period by only 7.1% and 13.3%, respectively. These decreases are about 10 % lower than the decrease in total imports.

Thirdly, as a result of the first two trends Japan's trade surplus with North America has shrunk much faster than the overall trade surplus. Between 1985 and 1988, Japan's trade deficit with Canada has expanded nearly three times, while her surplus with the U.S. has shrunk more than one-third, compared to an 8.6% decrease in Japan's overall trade surplus during the same period.

(2) Changes in Contents of Japan's Trade with North America

The contents of Japan's exports and imports have changed significantly due to yen appreciation and the shift of the Japanese economy to domestic-demand-led growth. Exports have shifted more toward high value-added products, while on the import side manufactured imports have expanded rapidly. The contents of Japan's trade with North America have undergone similar changes (see Table 4).

In Japan's exports to North America, the share of heavy industrial products is high, similar to their share of total exports. In particular, the share of machinery product exports to North America has been much larger than their share of Japan's exports as a whole. These tendencies were strengthened in the process of the yen appreciation; the weight of machinery in Japan's export composition rose by 2.5 percentage points overall, and by 2.6 percentage points with Canada and 2.1 percentage points with the U.S. Breaking down machinery exports by products reveals that exports of high value-added machinery such as automatic data processors, semiconductors, and television cameras increased, while exports of televisions, radios, video tape recorders and other machinery products, which are now produced even in Asian NIES, decreased significantly.

On the other hand, the ratio of manufactured imports relative to total imports from North America has been expanding. Among Japan's imports from Canada, the share of raw materials and fuels had been predominant due to abundant natural resources of that country. The ratio of manufactured imports has been low, for instance reaching 17.2% in 1985, but this figure increased to 24.6% by 1988. The ratio of manufactured imports among Japan's imports from the U.S. has been substantially greater compared to Japan's overall imports, and is continuing to rise; the ratio of manufactured imports to total imports from the U.S. was 55.2% in 1985 and reached 56.0% in 1988.

Compared with the steep rise in the ratio of manufactured imports to Japan's overall imports, from 31.0% in 1985 to 49.0% in 1988, the growth of manufactured imports from North America has been relatively slow. Manufactured products from North America have evidently experienced several disadvantages in Japan's rapidly expanding market for foreign goods. For instance, North American products have been less price competitive than Asian NIES products, due to differentials in labor costs. Furthermore, North American exporters have not been able to establish the reputation of their products in the Japanese market as skillfully as their West European counterparts have. Even in the future, it will be difficult for North American exporters to be price competitive with the Asian NIES exporters.

To expand manufactured exports to Japan, North American exporters must make the same efforts to export high value-added, high quality products that the West European exporters have made. For example, West German automobile firms designed and built cars with the steering wheel on the right-hand side exclusively for the Japanese market and established sales subsidiaries in Japan. Similarly, there are any things North American exporters can do to improve their position in the Japanese market, such as developing products targeted to the Japanese consumers, or establishing a local sales network. The Japanese market, which has lower import barriers than other developed countries, and is growing rapidly due to buoyant domestic demand, offers golden opportunities to North American exporters.

IV. CONCLUSION

The analysis of how the Japanese economy has reoriented itself from export-led growth to growth based on domestic demand after the mid-1980's, and the changes that occurred in trade between Japan and her major trading partner, North America, during the process of this reorientation, leads to the following conclusions.

Three conclusions can be drawn regarding the domestic shift of the Japanese economy.

First, there were three reasons the Japanese economy was forced to shift to domestic-demand-oriented growth in the mid-1980's: requests from foreign countries to reduce the trade imbalance, serious domestic problems created by export-led growth, and the maturation of many of Japan's major export commodities.

Second, the reorientation to domestic-demand-led growth, which was triggered by rapid yen appreciation starting in September 1985, has progressed much better than anticipated, althrough it initially faced difficulties.

Third, there are five factors which enabled the reorientation of the Japanese economy toward domestic-demand-led growth: improving terms of trade, completed adjustment of inventory and capital facilities, easy money policy, the government's Emergency Economic Measures, and the adaptability of the private sector.

Next, findings concerning changes in Japan's trade with North America are as follows.

First, Japan's overall trade surplus (custom clearance basis in yen terms) peaked in 1986. In that year her exports started to decrease due to the higher-valued yen. Meanwhile, after a temporary decline in 1986 due to drops in yen-based import prices and lowered prices of petroleum, her imports began to increase in 1987.

Second, regarding the contents of Japan's trade in general, high value-added products are accounting for a larger share of total exports, while the ratio of manufactured imports to total imports is rising, transforming Japan's trade to a structure based on a horizontal division of labor with other countries.

Third, Japan's trade surplus with North America has shrunk much faster than her overall trade surplus, since Japan decreased exports more and imports less with North America relative to overall trade. Japan's trade imbalance with North America has thus been corrected much faster than her trade imbalance as a whole.

Fourth, the contents of Japan's trade with North America has seen an increasing shift to higher value-added exports, while her manufactured imports have also been increasing. However, compared with Japan's imports as a whole, the growth of the manufactured imports share of total imports from North America has been relatively slow. North American products have faced a number of disadvantages in comparison with Asian NIES products due to differentials in labor costs, and with West European products due to a perceived quality gap. There is much that North American exporters can do to increase their efforts to export high value-added products to the Japanese market.

ENDNOTES

1) The Economic White Paper FY 1987, pp.155.

2) The Economic White Paper FY 1987, pp.155-60. Needless to say, there were domestic macroeconomic imbalances in industrialized countries behind their external imbalances. In the case of Japan, a surplus of savings in the private sector (surplus in goods and services trade), even after financing deficits in the government sector. Therefore, in macroeconomic terms, Japan was required to decrease savings (that is, to increase consumption) and increase investments through economic growth that would not depend on exports, in order to shrink surplus of savings in the private sector.

3) The Economic White Paper FY 1987, pp.160-63.

4) The Economic White Paper FY 1986, pp.193-95.

5) Economic growth rates and other data for each fiscal year in the subsequent analysis are based upon those in each fiscal year's economic white papers. Therefore, those figures are not always the same as the figures in Table 1, which is based on recalculated data in The Economic White Paper FY 1989.

6) In 1986, Japan's export-oriented manufacturing industries, including the electric equipment, transportation, and steel industries recorded sharp declines in corporate profits (down 42.6% vis-a-vis 1985) (The Economic White Paper FY 1987, pp.71.)

7) The Economic White Paper FY 1986, pp.6-7.

8) The Economic White Paper FY 1988, pp.10. Budget figures

are converted to U.S. dollars at the average exchange rate prevailing in FY 1987, 138.32.¥/$.

9) The Economic White Paper FY 1988, pp.5-6.

10) The Economic White Paper FY 1989, pp.7-9.

11) Hideo Tsuchiya, "'Izanami Keiki' Josei ga Shudou" "'Izanami Boom' Led by Women") Nihon Keizai Shimbun (Evening edition, July 6, 1989).

12) The Economic White Paper FY 1988, pp.9-10.

13) Takao Komine, Nihon Keizai no Kozo Tenkan (Structural Change in the Japanese Economy), Kodansha Modern Books, pp.48-49.

14) White Paper on International Trade 1987, pp.41-51.

15) The Economic White Paper FY 1988, pp.10.

16) The Economic White Paper FY 1988, pp.10.

17) The Economic White Paper FY 1988, pp.10-12.

18) The Economic White Paper FY 1988, pp.12-13.

19) Japan's total trade balance figures are usually presented in international-account basis, which is compiled by the Bank of Japan. However, for the sake of comparison with Japan's trade balances with North America in the next section, this paper refers to trade balance figures on a customs-clearance basis.

20) See Table 3 for trade balances in U.S. dollar terms, which are usually used in international comparisons. In U.S. dollar terms, Japan's exports and imports after yen appreciation are valued higher than those before yen appreciation. Therefore, Japan's exports and imports in U.S. dollar terms increased after yen appreciation, while those in yen terms decreased.

21) The trade surplus for 1989 is calculated using the assumption that the rate by which the trade surplus is decreasing, seen during January and November 1989, will remain constant for the rest of the year. The ratio to GNP is calculated using the assumption that the nominal GNP in 1989 will grow at the same rate as in 1988 (6.2%).

22) When the domestic currency is appreciated, exports in value term do not decrease immediately, since export volume does not decrease immediately in spite of higher export prices abroad. On the other hand, imports in value terms decrease temporarily, since import volume does not increase immediately, regardless of drops in import prices. This phenomenon, called a "J-curve effect," could be seen around 1985 and 1986 both in Japan's overall trade balance and her bilateral trade balances with each country.

23) See 22).

24) See 22).

Table 1

Trends in Japan's Main Economic Indicators

(unit: %)

	FY1984	FY1985	FY1986	FY1987	FY1988	FY1989 Apr-Jun
[GNP]						
GNP	5.1	4.5	2.7	5.2	5.1	
CDD	3.9	3.7	4.1	6.2	6.8	
CED	1.2	0.8	-1.4	-1.0	-1.7	
[Production]						
IIP	8.4	2.5	-0.2	5.9	8.8	P -0.2
IIS	6.9	2.7	0.8	5.6	8.4	P -0.2
[Price]						
WPI	0.4	-3.3	-9.4	-2.0	-0.7	3.2
CPI	2.2	1.9	0.0	0.5	0.8	2.8
[Private Demand]						
PFCE	2.6	2.8	3.4	4.5	4.7	
FCFPSD	0.5	2.8	11.0	25.6	7.0	P 2.9
FCFPSME	11.5	13.2	4.3	10.0	17.9	
[Public Finance]						
FCFPS	-2.9	-6.3	7.0	10.0	2.1	
[Labor]						
REJOEA	0.66	0.67	0.62	0.76	1.08	
RTU (ratio)	2.7	2.6	2.8	2.8	2.4	

Notes: 1.Abbreviations;
GNP: Gross National Product
CDD: Contribution of Domestic Demand
CED: Contribution of External Demand
IIP: Index of Industrial Production
IIS: Index of Industrial Shipments
WPI: Wholesale Price Index
CPI: Consumer Price Index
PFCE: Private Final Consumption Expenditures
FCFPSD: Fixed Capital Formation by Private Sector for Dwellings
FCFPSME: Fixed Capital Formation by Private Sector for Machinery and Equipment
FCFPS: Fixed Capital Formation by Public Sector
REJOEA: Ratio of Effective Job Offers to Effective Applicants
RTU: Ratio of Totally Unemployed

2.GNP, PFCE, FCFPSD, FCFPSME, and FCFPS figures are in real terms.

3.Figures for GNP, IIP, IIS, WPI, CPI, PFCE, FCFPSD, FCFPSME, and FCFPS are seasonally-adjusted rates of change from the previous fiscal year or the same quarter of the previous year, as applicable (unit: %). Figures for WPI and CPI for Apr-Jun 1989 are not seasonally adjusted.

4.Figures for REJOEA and RTU are unadjusted data (units: percent and ratio, respectively).

5."P" indicates provisional figures.

Source: The Economic White Paper FY 1989, pp.6.

Table 2

Trade Balance Trends (Customs-Clearance Basis, Yen Terms)

(unit: ¥ billion, %)

	CY1980	CY1984	CY1985	CY1986	CY1987	CY1988	CY1989 Jan-Nov
Export Total	29382.5	40325.3 (15.5)	41955.7 (4.0)	35289.7 (-15.9)	33315.2 (-5.6)	33939.2 (1.9)	34282.8 (11.5)
U.S.	7118.1	14221.2 (39.7)	15582.7 (9.6)	13563.7 (-13.0)	12148.1 (-10.4)	11487.4 (-5.4)	11699.5 (12.2)
Canada	549.8	1018.4 (18.2)	1078.4 (5.9)	933.8 (-13.4)	816.7 (-12.5)	823.3 (0.8)	857.0 (14.1)
Import Total	31995.3	32321.1 (7.7)	31084.9 (-3.8)	21550.7 (-30.7)	21736.9 (0.9)	24006.3 (10.4)	26317.2 (19.7)
U.S.	5558.1	6363.6 (8.7)	6213.4 (-2.4)	4917.8 (-20.9) [4473.4] [(-28.0)]	4582.0 (-6.8) [(2.4)]	5388.3 (17.6)	6059.6 (22.6)
Canada	1074.0	1172.0 (11.3)	1147.4 (-2.1)	829.5 (-27.7)	882.9 (6.4)	1065.5 (20.7)	1092.2 (11.4)
Balance Total	-2612.9	8004.2 (3109.7)	10870.7 (2866.5)	13739.0 (2868.3)	11578.3 (-2160.7)	9932.9 (-1645.4)	7965.6 (-776.5)
U.S.	1560.0	7857.6 (3534.4)	9363.3 (1511.7)	8645.8 (-732.5)	7566.1 (-1079.7)	6099.1 (-1467.0)	5639.9 (158.0)
Canada	-524.1	-153.6 (38.1)	-68.9 (84.6)	104.3 (173.2)	-66.2 (-170.5)	-242.2 (-176.0)	-235.1 (-5.4)

Notes: 1.Figures in ( ) for exports and imports indicate percent change compared to the previous year, or the same period of the previous year for Jan-Nov 1989 (unit: %). Figures in ( ) in the Balance column indicate absolute change from the previous year (or period) in ¥ billion.

2.Figures in [ ] indicate import values and rates of change from the previous year when non-currency gold imports in 1986 are excluded.

Source: White Paper on International Trade, various years. Figures for Jan-Nov 1989 were computed directly from Monthly Trade Statistics.

Table 3

Trade Balance Trends (Customs-Clearance Basis, U.S. Dollar Terms)

(unit: $ million, %)

	CY1980	CY1984	CY1985	CY1986	CY1987	CY1988	CY1989 Jan-Nov
Export Total	129807	170114 (15.8)	175638 (3.2)	209151 (19.1)	229221 (9.6)	264917 (15.6)	250581 (5.0)
U.S.	31367	59937 (39.9)	65278 (8.9)	80456 (23.3)	83580 (3.9)	89634 (7.2)	85430 (5.5)
Canada	2437	4297 (18.5)	4520 (5.2)	5526 (22.3)	5611 (1.5)	6424 (14.5)	6264 (7.4)
Import Total	140528	136503 (8.0)	129539 (-5.1)	126408 (-2.4)	149515 (18.3)	187354 (25.3)	192341 (12.5)
U.S.	24408	26862 (9.0)	25793 (-4.0)	29054 (12.6) [26377] [(2.3)]	31490 (8.4) [(19.4)]	42037 (33.5)	44259 (15.3)
Canada	4724	4945 (11.6)	4773 (-3.5)	4895 (2.6)	6073 (24.1)	8308 (36.8)	7992 (5.0)
Balance Total	-10721	33611 (13076)	46099 (12488)	82743 (36644)	79706 (-3037)	77563 (-2143)	58240 (-9607)
U.S.	6959	33075 (14894)	39485 (6410)	51401 (11917)	52089 (688)	47597 (-4493)	41171 (-1385)
Canada	-2288	-648 (157)	-253 (395)	631 (883)	-462 (-1093)	-1884 (-1422)	-1728 (53)

Notes: see Table 2

Source: White Paper on International Trade, various years. Figures for Jan-Nov 1989 were computed directly from Monthly Trade Statistics.

Table 4

Changes in the Contents of Exports and Imports

(unit: %)

	1985			1988		
	Total	U.S.	Canada	Total	U.S.	Canada
Exports	100.0	100.0	100.0	100.0	100.0	100.0
Foodstuffs	0.7	0.6	1.2	0.6	0.4	0.9
Crude Materials & Fuels	0.7	0.2	0.1	0.6	0.2	0.1
Light-industry Products	10.8	8.6	11.4	9.5	7.7	10.1
Textiles	3.6	1.6	2.4	2.6	1.0	1.5
Non-metal mineral products	1.2	1.2	1.6	1.1	1.0	1.3
Heavy-Industry Products	86.8	89.6	87.1	87.8	90.2	88.4
Chemicals	4.4	2.2	2.8	5.3	2.6	2.1
Metals	10.5	7.1	6.6	8.2	5.2	5.9
Machinery	71.8	80.4	77.7	74.3	82.5	80.3
Re-exports,etc.	1.0	1.0	0.2	1.4	1.5	0.5
Imports	100.0	100.0	100.0	100.0	100.0	100.0
Foodstuffs	12.0	19.7	18.6	15.5	22.7	17.9
Crude Materials	13.9	17.5	39.0	15.0	17.4	40.5
Mineral Fuels	43.1	7.6	25.1	20.5	3.9	17.0
Manufactured Products(A)	28.1	52.7	15.6	45.7	54.2	18.0
Light-industry Products						
Textiles	3.0	0.7	0.1	5.7	1.1	0.2
Heavy-Industry Products						
Chemicals	6.2	13.2	5.7	7.9	11.0	5.2
Metals	4.7	4.0	4.6	8.1	4.0	6.1
Machinery	9.6	29.3	2.1	14.2	29.7	2.6
Re-imports,etc. (B)	2.9	2.6	1.6	3.3	1.8	6.6
[Manufactured Imports](A+B)	[31.0]	[55.2]	[17.2]	[49.0]	[56.0]	[24.6]

Notes: Figures are shares in value terms, based on U.S. dollar figures.
Source: White Paper on International Trade, 1986 and 1989.

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