



Economic Commentary

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Two Factors Affecting Future Developments in Exportsⁱ⁾ —inventory adjustments in IT-related goods and the impact of the terrorist attacks in the U.S.—

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Prospect of exports taking into account the terrorist attacks in the U.S.

Japan's economy continues to be in a severe adjustment phase from the effects of the substantial decline in exports since the beginning of this year. The continuing decline of exports to date is due not only to the rapid deceleration in the world economy lead by the U.S., but also to inventory adjustments in IT-related goods worldwide along with the contraction of final demand in the IT-related sector.

In the following, we will discuss prospects of the Japanese economy, especially from the viewpoint of Japan's exports, taking into account the following two factors: (1) the severe adjustments in the IT-related sector and synchronized deceleration of the global economy and (2) the impact of the terrorist attacks of 11 September.

Impact from inventory adjustments in the IT sector on the global economy

As shown in table 1, exports recorded high growth in the first half of 2000 but started to slow down in the second half and furthermore has been decreasing significantly since the start of 2001.

Table 1: Developments in real exports

q/q % chg., s.a.

	Total exports	of which IT-related Goods	of which Capital goods / parts
1H of CY 2000	8.5	17.3	15.3
2H of CY 2000	3.0	3.0	2.4
01/Q1	-4.6	-5.7	-3.2
01/Q2	-4.9	-6.4	-10.2
01/Q3	-4.0	-9.5	-6.9

Sources; Ministry of Finance, "The Summary Report on Trade of Japan," etc.

Such a considerable swing recorded in Japan's exports was mainly because of the fluctuations in exports of IT-related goods (semiconductor electronic parts) and capital goods (semiconductor fabrication machines and equipment). As indicated in Chart 1(1), inventory adjustments occurred concurrently worldwide in the IT-related sector triggered by the plunge in the global shipments of semiconductors which was beyond the decrease projected by the industry.ⁱⁱ⁾ This in turn caused a substantial decrease in IT-related exports of Japan.

One feature of the IT-related sector is that in the process of producing final goods, materials and parts are supplied among various firms on a transnational basis. Hence, as observed in

Chart 1(2), the concurrent inventory adjustments worldwide, has had a large impact not only on Japanese exports but also on those of the NIEs economies (South Korea, Taiwan, and Singapore). However, Chart 1(2) shows that the pace of decline in exports of the NIEs economies is much faster than that of Japan.ⁱⁱⁱ⁾ Why is there such a difference among countries and region amid such worldwide shock as severe inventory adjustments in IT-related goods?

Difference in the industrial structure between Japan/South Korea and Taiwan/Singapore

Let us now turn to table 2 as of below to consider the question mentioned above. Even among the NIEs economies, the rate of decline in exports differs substantially between South Korea and Taiwan/Singapore. We can see that the decrease in exports of South Korea and Japan is relatively slower than the other two economies.

Table 2: Developments in exports of Japan, South Korea, Taiwan, and Singapore

	y/y % chg.			
	Japan	South Korea	Taiwan	Singapore
CY2000	8.6	14.2	17.8	22.4
01/Q1	3.2	15.4	1.9	10.6
01/Q2	-3.4	3.4	-10.1	-2.5
01/Q3	-8.7	-7.8	-24.3	-18.7

Notes; 1. Figures are calculated by using data based on each currency (nominal basis).

2. Re-exports of Singapore excluded.

Sources: Ministry of Finance, "The Summary Report on Trade of Japan"; statistics of each country, etc.

As observed in Chart 1(3), this difference comes from the fact that the industrial structure of the Taiwanese and Singaporean economies are both relatively concentrated in the IT sector. In the case of Japan and South Korea, exports of automobile-related and shipbuilding sectors are increasing to date while these sectors have been maintaining a constant presence within the

two economies.

Underpinning effects of automobile-related exports

Chart 2(1) indicates that automobile-related exports continued to increase in the second and third quarters despite a continuous slump in total exports. As shown in Chart 2(2), automobile-related exports to the U.S. and other regions, mainly to the Middle East,^{iv)} are growing.

As shown in Chart 2(3), the increase in exports of automobiles to the U.S. basically owes to the enlargement in sales shares in the U.S. of overseas vehicle makers including those of Japan, while the U.S. sales market remains firm despite the deceleration compared to the first half of 2000.

Impact of U.S. terrorist attacks on exports

The subsequent developments of the terrorist attacks and its impact on the global economy are still difficult to estimate. Meanwhile, private research institutes have released projections that the growth rate of the global economy, especially in the U.S., would be lower than had been estimated before the tragic events. If the world economy follows these projections, the negative impacts on Japanese exports will of course be inevitable. How should we estimate the outcomes at this stage?

The U.S. economy has been decelerating rapidly since fall 2000. This is mainly because of adjustments in the corporate sector such as in business fixed investment. Meanwhile, in the household sector, both housing investment and private consumption remain firm on the whole despite a gradual slowdown. Hereafter, if spending of U.S. households becomes more cautious in the longer term due to mounting uncertainty over the future, accelerated by the terrorist attacks, the decrease in exports of Japanese consumer goods may cause another

round of downward pressure on exports. Especially, if automobile-related exports, which had been increasing in contrast to weak IT-related exports, will turn to decrease, then it would have a larger impact on Japan's economy as the industry has a greater spill-over effect on production activity compared to other industries.^{v)}

Two factors affecting future exports

As of above, we need to pay attention to the following two factors in terms of future exports.

First, the important point is when inventory adjustments of IT-related goods worldwide, which have affected the decline in exports since the start of this year, will be completed. Judged from available data at this stage, apart from the pace of recovery of final demand thereafter, the majority view is that inventory adjustments will come to an end by around next spring. In this case, the decline in exports of IT-related goods will eventually stop.

The other point, as described in this paper, would be future developments of U.S. private consumption taking the terrorist attacks into account. As for U.S. private consumption after the terrorist attacks, for instance, retail sales dropped in September. On the other hand, after a 3-percent decline in September on a monthly basis, sales of automobiles in the U.S. appeared to have surged in October due to the promotion of zero-percent financing launched by vehicle

makers. Nevertheless, the sustainability of buoyant sales is not necessarily clear. As for the future, close attention should be paid to the developments of U.S. private consumption including those of automobile sales.

i) This is an English translation of the full text of the Japanese original released on November 6, 2001. Opinions presented herein are based on data and information available when the original was written.

ii) The *WSTS* (World Semiconductor Trade Statistics) estimates and releases the forecasts of shipments in global semiconductors based on the projections of member companies worldwide. In Chart 1(1), the actual results of semiconductor shipments are calculated by deflating the U.S. Producer Price Index (electronic parts) and the outlook is directly plotted by using the nominal quarter-to-quarter growth rate released by the *WSTS*.

iii) Chart 1(2) shows that, ahead of Japanese exports, those of the NIEs economies started to drop from the fourth quarter of 2000. This is because the weight of production of multi-purpose goods such as DRAM is relatively high among exports of these economies. Also in relation to this, the weight of production contracts in Taiwan is high and thus sensitively reflects the changes of the global supply and demand conditions.

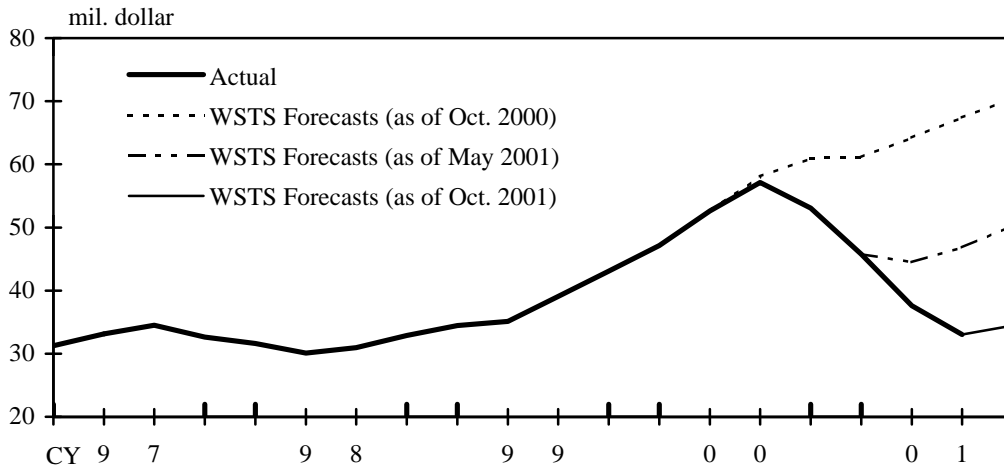
iv) The depreciation of the yen appeared to have contributed to the increase in exports.

v) Automobile production in Japan may possibly decline caused not only by decreases in exports but also the weakening domestic sales market.

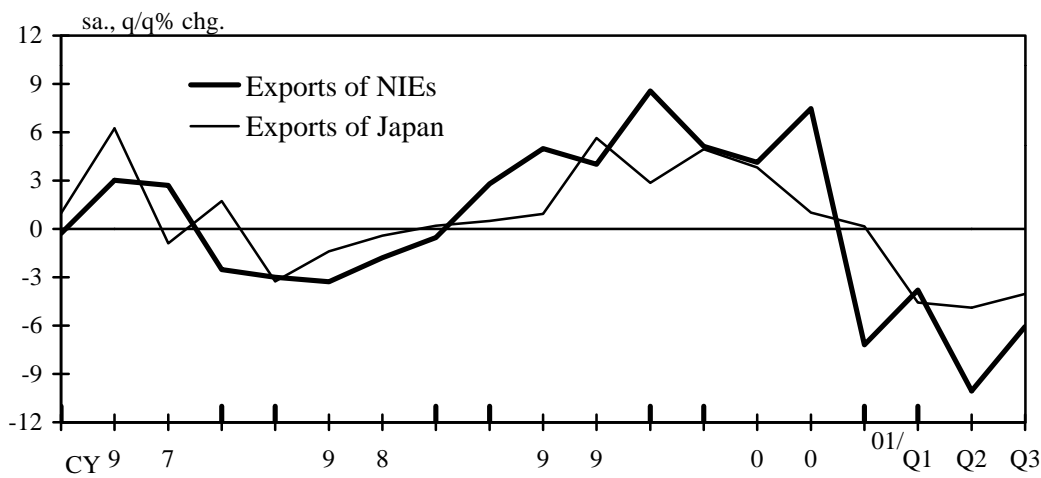
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Chart 1 Impacts of Worldwide IT Slowdown

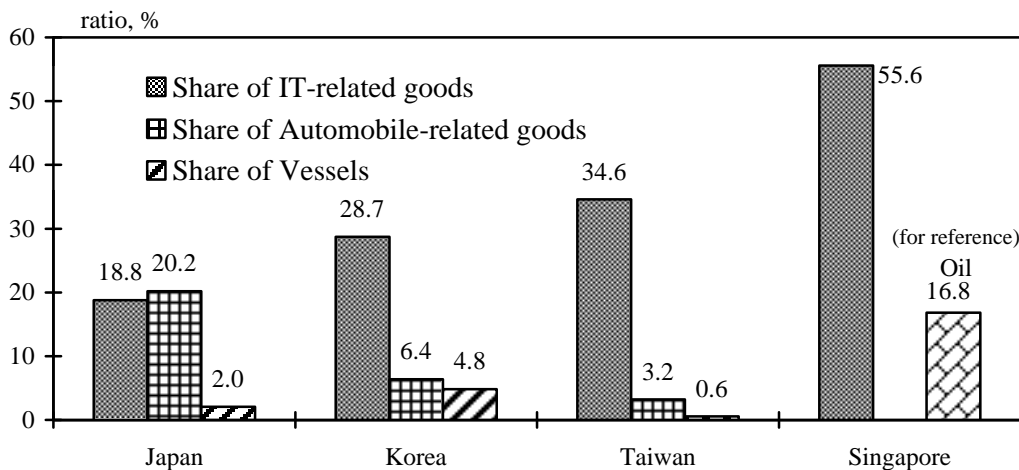
(1) World Semiconductor Shipments



(2) Exports - Japan and NIEs¹



(3) Shares of IT-related goods exports² in total exports of each country



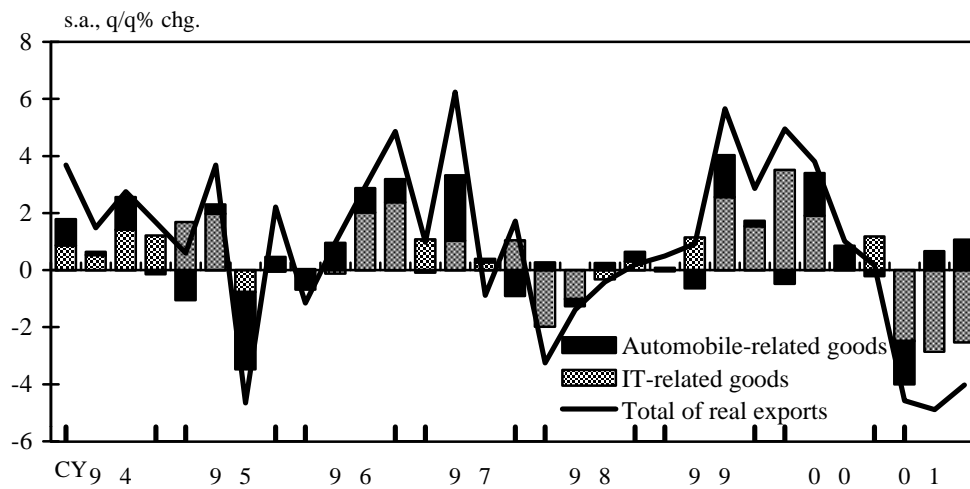
Notes: 1. NIEs exports are the weighted sum of Korea, Taiwan, and Singapore where weights come from real GDP. NIEs exports are in nominal (U.S. dollar) terms and seasonally adjusted by X-11.

2. For Singapore, re-exports are subtracted.

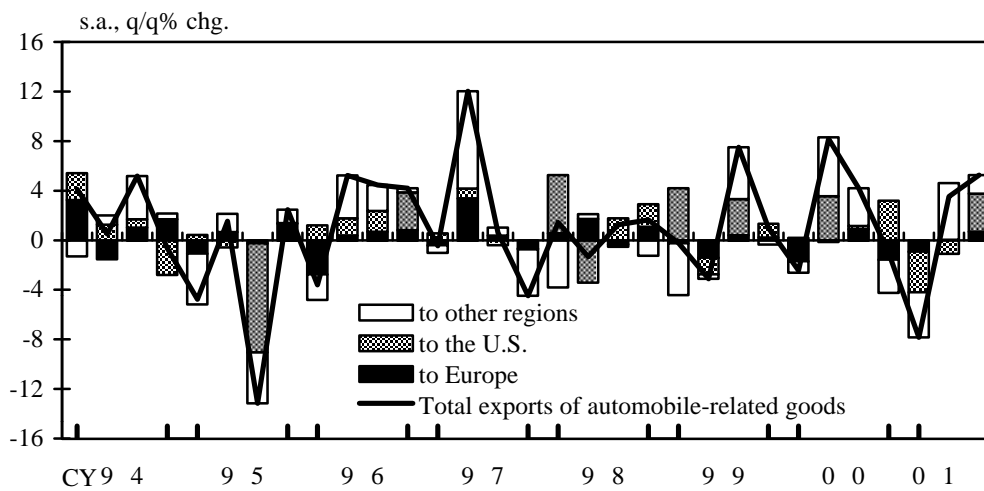
Sources: WSTS (World Semiconductor Trade Statistics), "Semiconductor Forecasts"; Ministry of Finance, "The Summary Report on Trade of Japan"; Bank of Japan, "Wholesale Price Indexes"; IMF, "Direction of Trade Statistics"; CEIC Data company.

Chart 2 Automobile-related Exports

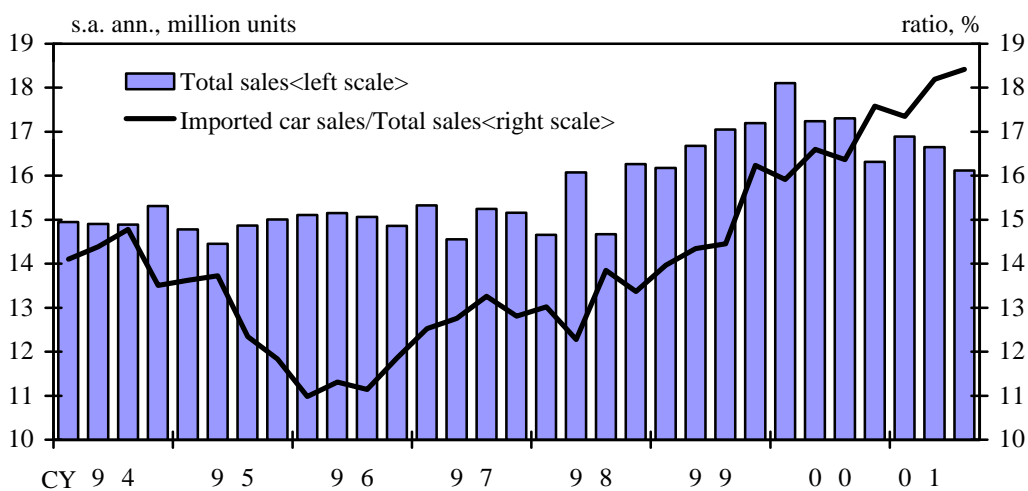
(1) Japanese exports, breakdown by type of goods



(2) Japanese Automobile-related exports, breakdown by region



(3) Sales of automobiles in the U.S.



Sources: Ministry of Finance, "The Summary Report on Trade of Japan"; Bank of Japan, "Wholesale Price Index"; WEFA; CEIC Data Company.