(Box 1) Environment Surrounding Japan's Exports

The baseline scenario of the July 2019 Outlook Report is that, despite being affected by the slowdown in overseas economies for the time being, Japan's exports will move out of the relatively weak phase and gradually return to their moderate increasing trend, with the growth rates overseas economies rising. However. uncertainties concerning this scenario remain considerably high, mainly regarding consequences of U.S.-China trade negotiations, the materialization of the effects of stimulus measures, such as in China, and the progress in global adjustments in IT-related goods. The Bank has constructed SCOPE (Surveillance Indices for Critical Overseas Perils to Exports) as an early warning indicator to detect any risk that Japan's exports could fall substantially, triggered by a slowdown in overseas economies. This box examines export conditions to date in Japan by using SCOPE (Chart B1-1).36

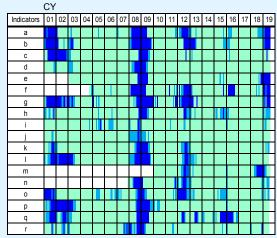
Looking at the 18 indicators employed in SCOPE, the number of indicators signaling a significant deterioration in export conditions increased to five through March this year, temporarily dropped to three in April, and then increased again to five in June (Chart B1-2). Specifically, the following indicators for business sentiment in the global manufacturing sector and capital goods-related indicators signaled a significant deterioration: (1) the New Export Orders Index of the Global Manufacturing PMI, (2) the OECD business confidence index, (3) world vehicle sales, (4) the

Chart B1-1: Monitoring Indicators

| | | Indicators |
|----------------------|---|---|
| World | | |
| Corporate | а | Global Manufacturing PMI: New Export Orders Index |
| | b | OECD business confidence index |
| | С | WSTS world semiconductor shipments |
| Household | d | OECD consumer confidence index |
| | е | World vehicle sales |
| Ja <u>pan</u> | | |
| Corporate | f | Jibun Bank Japan Manufacturing PMI: New Export Orders Index |
| | g | Machinery orders (from overseas): Electronic and communication equipment |
| U.S. | | |
| Corporate | h | ISM Manufacturing Index: New Export Orders Index |
| | i | Philadelphia Fed Manufacturing Business Outlook Survey: Future shipments |
| Household | j | University of Michigan Surveys of Consumers: Current Economic Conditions |
| Euro Area | | |
| Corporate | k | Business Climate Indicator: Industry, production expectations |
| | ı | Business Climate Indicator: Services sector, demand expectations |
| Asia | | |
| Corporate | m | Output of metal shaping machinery in Chin |
| | n | China Manufacturing PMI |
| Overall | 0 | Taiwan National Development Council's Monitoring Indicators: Total score |
| Financial Markets | р | MSCI World Index |
| | q | MSCI Emerging Markets Index |
| | r | VIX Index |

Note: The Global Manufacturing PMI is the "J.P. Morgan Global Manufacturing PMI."

Chart B1-2: SCOPE



Sources: Haver; Bloomberg; Cabinet Office; WSTS Inc.; Wards Intelligence; IHS Markit (© and database right IHS Markit Ltd 2019. All rights reserved.)

Notes: 1. This chart visualizes the possibility of a significant decrease in real exports by depicting indicator values relative to their respective threshold values. Based on staff calculations.

2. Shaded areas in the chart represent the following for an indicator relative to the

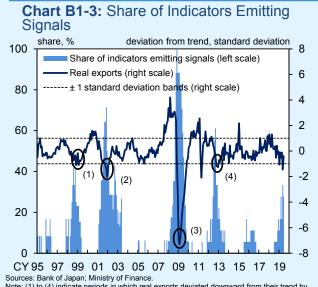
³⁶ For details of SCOPE, see Box 1 in the January 2019 Outlook Report.

^{2.} Shaded areas in the chart represent the following for an indicator relative to the threshold set for the indicator: (1) areas shaded in dark blue indicate that the indicator is above the threshold value; (2) areas in light blue indicate that the indicator lies between the threshold value and half of the threshold value; (3) areas in green indicate that the indicator lies below half of the threshold value; and (4) areas in white indicate that no data are available.

New Export Orders Index of the Jibun Bank Japan Manufacturing PMI, and (5) machinery orders (from overseas) for electronic communication equipment. On the other hand, the WSTS world semiconductor shipments, which in May signaled a significant deterioration, no longer did so in June, suggesting that the global cycle for IT-related goods has not continued to deteriorate.

Thus, the number of indicators signaling a deterioration in export conditions remains small compared to the past four periods when exports decreased substantially -- that is, the phases in which real exports showed a decline of more than one standard deviation from their trend over a certain period at the time of (1) the Asian financial crisis, (2) the collapse of the dot-com bubble, (3) the global financial crisis, and (4) the European debt crisis (Chart B1-3). However, over the past few months, the number of indicators signaling a deterioration has continued to exceed that during the period from the second half of 2015 through the first half of 2016, when emerging economies, particularly China, decelerated. Meanwhile, for the first time since January 2019, real exports for May dropped by more than one standard deviation from their trend.

According to interviews conducted by the Bank's Head Office, branches, and local offices, an increasing number of firms are concerned about the impact of the prolonged trade friction between the United States and China (Chart B1-4). In particular, a growing number of respondents, mainly manufacturers of capital goods and electronic parts, have pointed to the risk that



Sources: Bank of Japan; Ministry of Finance.

Note: (1) to (4) indicate periods in which real exports deviated downward from their trend by more than one standard deviation for two months or more in a four-month period.

moves to postpone business fixed investment will spread on a global basis with uncertainties over the trade policy increasing, and that the decline in orders for capital goods and electronic parts consequently will be protracted. Capital goods and IT-related goods, in which Japan has an advantage, comprise a large share of exports. Thus, the risk that some weakness in exports will last longer than expected and thereby lead to a decline in the growth rate of Japan's economy is judged as still significant.

Chart B1-4: Interview Responses by Firms (The Bank's Regional Economic Report)

- -- Orders for semiconductor-related goods have been falling since last summer and have dropped further since May, when it started looking like the trade friction between the United States and China would drag on for a while (a production machinery company; Matsue).
- -- In response to a sharp decline in orders from overseas, we switched from day-and-night two-shift production to daytime-only production in March and have also reduced operating hours. Moreover, since May, we have stopped operating on Fridays to further cut production (a general-purpose machinery company; Matsumoto).
- -- In April, it looked like orders for household electrical appliances and on-board equipment for motor vehicles would recover in the second half of fiscal 2019, but since May, in the wake of announcements by the United States that it would impose additional tariffs on imports from China, it has become more likely that the recovery will take more time (an electronic parts and devices company; Sendai).
- -- In order to avoid the impact of additional U.S. tariffs on imports from China, we have moved production to Japan for some products that were manufactured in China and shipped to the United States (a plastic products company; Okayama).
- -- Orders have continued to decline, partly due to the slowdown in the Chinese economy. Moreover, as uncertainties regarding overseas economies recently have increased further, it is becoming difficult to predict when orders will recover. Therefore, we have reduced investment intended for capacity expansion from the level initially planned (a production machinery company; Kanazawa).
- At the beginning of this fiscal year, our plans for fixed investment for fiscal 2019 were around the previous year's level, which was high, since we expected a recovery in demand for semiconductor parts in the period ahead. However, given the unpredictability of developments in the trade friction between the United States and China, we have decided to reduce our investment by about 20 percent from the initial plan (an electrical machinery company; Kofu).

Notes: 1. Extracted from the July 2019 Regional Economic Report.
2. The industry of the interviewee and the Bank's branch that conducted the interview are shown in parentheses.