Japan's Economic Outlook after the Great Earthquake

Author
Hidetaka Yoneyama

By Hidetaka YONEYAMA

Economic Recovery Expected to Begin by Early Autumn

Athough the Great East Japan earthquake resulted in a precipitous drop in industrial production and consumer spending, both are now on the rebound. Shattered supply chains have been restored more quickly than initially expected. Normalization by early fall should drive a recovery in exports. It is also likely that over time, depressed consumption will revert to normal patterns. The prediction is that economic recovery will become increasingly evident in the fall, when power shortages are no longer a concern and reconstruction needs will become clear. Negative growth will continue through April to June in fiscal 2011, however, it will be followed by a pick-up in fiscal 2012, with growth projected to reach 2% in the second half.

Meanwhile, the Great East Japan earthquake disrupted supply chains, causing ripple effects on Asian countries that procured parts from Japan and assembled them into finished products for export. In the West, countries were forced to make production adjustments because Japanese manufacturers of autos and other products had their parts supplies cut off. These effects, however, are not far-reaching enough to undermine the global economic expansion trend, since they are temporary and limited to certain countries and specific industries. By early fall, Japanese production is expected to return to normal, and some adverse effects that have become apparent will be gradually resolved.

March Economic Indicators Worsened Significantly

Feeling the impact of the Great East Earthquake, the Japanese economy for the January to March quarter continued to show negative growth (-3.7% per annum year over year). The economy had been on a steady upward trend before the earthquake, showing a slight rise in exports, but economic indicators in March deteriorated significantly across the board after the earthquake.

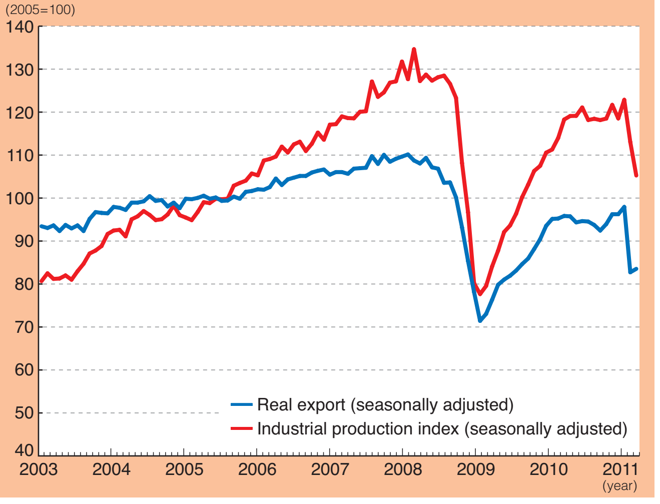
March output (industrial production index) fell -15.5% month over month, which for a single month far surpasses the steepest month over month drop seen during the collapse of Lehman Brothers (-8.6%, February 2009), or after the Great Hanshin (Kobe) Earthquake (-2.6%, January 1995) *(Chart 1)*. 80% of the production decline is seen mostly outside the disaster area, indicating the enormous impact on production of supply chain disruption and electric power shortage.

Japanese wage earners' total cash earnings dropped 0.1% in March, the first decline in 13 months. Due to increased overtime, wages had been steadily climbing prior to March. The wage decline is due to shorter working hours resulting from stalled production immediately following the temblor.

The composite index of consumer spending fell drastically, dropping by -3.1% month over month in March. *(Chart 2)* Commercial sales statistics for March show declines of -1.2% for supermarkets and -15.4% for department stores, and an increase of 9.1% for convenience stores. This indicates that while consumers

CHART 1

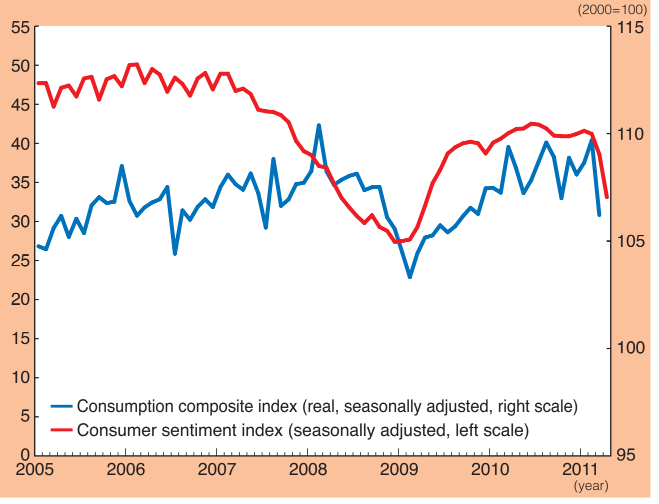
Changes in real exports & industrial production index



Source: The Bank of Japan "Real Exports and Imports" & Ministry of Economy, Trade and Industry (METI) "Industrial Index Statistics"

CHART 2

Changes in consumer sentiment index & consumption composite index



Source: Cabinet Office "Consumption Composite Index" & "Consumption Survey" are curtailing spending on non-emergency and non-essential goods and services such as cars, dining out, and travel, they are shopping more at local stores for daily necessities such as food to meet their immediate post-quake needs. The March consumer confidence index fell -2.6 points and the April index fell -5.5 points. The plunge in consumer confidence lingered until April, sapping real consumption.

Due to a drop in housing starts in the quake-devastated Tohoku and Kanto areas, construction companies broke ground on 2.4% fewer houses in March from a year earlier. In many cases, construction was stalled because the earthquake damaged building material manufacturers, causing shortages in necessary materials.

Real exports in March (based on BOJ) fell by -8.0% from February, causing March trade surplus to fall dramatically by -79.7% year over year. After April, in addition to the slump in exports, increased imports forced by substitution of crude oil and LNG energy resources in lieu of thermal power generation may cause a temporarily greater trade deficit. The number of tourists from abroad also plummeted, declining -50.3% in March and -62.5% in April (per annum, year over year), as the result of numerous cancellations by foreign tourists after the earthquake and subsequent nuclear crisis.

The diffusion index for March reflects the deterioration in these various economic indicators. The coincident economic indicators fell -3.2 points and the index of leading economic indicators fell -4.5 points in March compared to February, the largest historical drop in both indices.

Signs of Economic Recovery

Although economic activity fell sharply in March, there are some encouraging signs on the horizon. Production rose only 1% in April compared to March, but the industrial production forecast index (specifically focused on the manufacturing industry sectors included in the Industrial Production Indices) is expected to show a large growth of 8.0% in May month over month, and 7.7 % in June month over month.

As mentioned above, the industrial output plunge in March was huge for a single month drop, but if the forecast indices are accurate, the drop will be limited to just one month. The decline is much smaller than the decline observed during the Lehman Shock (the collapse of Lehman Brothers in February 2009) when production fell by 30% for 5 months straight. During the time of the Lehman Shock, there was a global contraction in demand, causing production to continue shrinking. The difference this time is that global demand remains firm while Japan's decrease in production capacity is a temporary result of earthquake damage to factories. Since the demand still exists, productivity can be immediately increased as soon as production capacity is restored.

More good news: Economy Watchers Survey (based on occupations that are sensitive to economic conditions, chosen surveyors report on current economic status and future outlook) has completely reversed itself on D1 (the index looking ahead 2 to 3 months) from its largest historical drop in March (-20.6 points from February) to its largest historical increase in April (+11.8 points from March). This index may have reversed itself because of the boost in Japanese consumer confidence and the prospect that reconstruction efforts will bolster demand.

Quickening Pace of Production Recovery

The earthquake's after-effects fall into two main categories. One is the productivity slump due to damage to plants in the Kanto region, which crippled supply chains for Japan's key automotive and electronics industries. The other is the erosion in consumer confidence brought on not only by the ravages of the earthquake and subsequent tsunami, but also by electric power shortages in the wake of the nuclear accident. In other words, demand-side and supply-side shocks knocked the economy downward. These two effects, however, are temporary and the economy is well-positioned to recover.

Manufacturers that are receiving parts and components are normalizing their supply chains in a relatively short time. According to an investigation by the Ministry of Economy, Trade and Industry (April 8-15th survey), of the 70 major materials and manufacturing production sites, 60% have already recovered, and a further 30% are expected to resume production by July. The survey shows, however, that not more than 54% of the materials industry say that they will be able to secure an adequate supply of parts and components by July, and 85% indicated that they could do so by October. For the manufacturing industry, the *Charts* are still lower; only 29% suggested that they could procure adequate supplies by July, and 71% believed that it would be possible by October.

In the manufacturing industry in particular, normalization was shackled by the automotive industry's inability to procure microcomputers. Even so, the speed of recovery is increasing at a steadier clip than originally anticipated. Toyota, which was slammed the hardest, had announced on March 22 that production would be back to normal by November. But as of May 11, thanks to the resumption of operation of parts and components manufacturers, Toyota anticipates that they may be able to resume normal production 2 to 3 months ahead of schedule, and are currently striving to accomplish that even sooner. Immediately after the earthquake, the number of parts Toyota was unable to obtain climbed to 500. But by April 22, that figure had dropped to 150; by May 11, to 30.

As the pace of recovery gradually accelerates and continues along a smooth path, it may be quite likely that production will come back to normal levels by early fall. The overseas economy had been robust, with strong demand for Japanese products, and exports had been rising until disaster struck. Therefore, as soon as production returns to normal, exports should improve rapidly.

Power Supply on Thin Ice

If the plummeting of production after the earthquake was in large part due to the power shortage caused by the nuclear accident, then the end of rolling blackouts after April helped boost production recovery. At issue is whether Tokyo Electric Power (TEPCO) can secure enough output capacity to meet summer peak demand. On the premise that power consumption restrictions will be implemented, TEPCO increased their output capacity to 5,620 kilowatts, which is slightly more than the estimated peak summer demand of 5,500 kilowatts, assuming an average summer temperature. The utilities can no longer have electricity transferred from Chubu Electric Power due to the shutdown of Chubu's Hamaoka nuclear facility, which is at high risk for earthquakes. Their strategy instead is to secure more power from regional providers such as Kansai Electric Power, a move that Chubu Electric Power plans to share. Nationwide, utilities will cooperate to transfer electricity to meet summer demand. But the risk of power shortage remains if temperatures become hotter or the sharing of power does not go as planned.

Each company is planning a variety of measures to meet the power shortage such as the introduction of private power generation equipment, extra production of electricity before the summer while there is still some surplus, or the transfer of production to China or to places like Kyushu in western Japan. In addition, the automotive industry (Japan Automobile Manufacturers Association) plans to shift factory days off from Saturday and Sunday to Thursday and Friday. Corporations that had been planning on transferring production to the central region were forced to review their plans once again because of the Hamaoka nuclear facility's suspension of operations. But with each corporation implementing a strategy to deal with potential power supply disruption, it is likely that companies will be able to avoid summer blackouts, which would once again stall production.

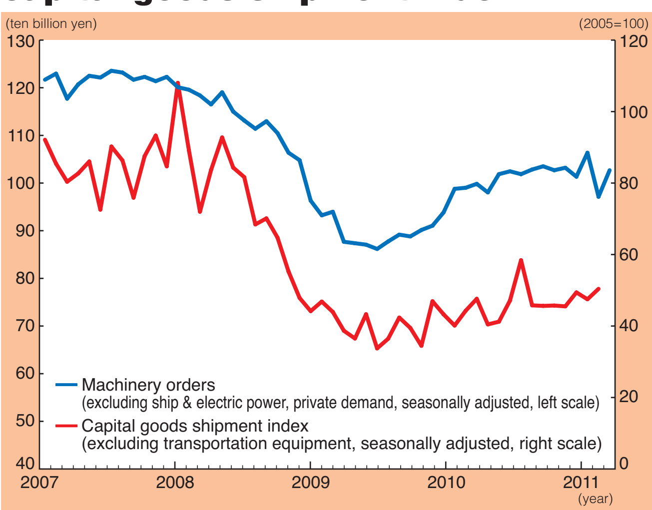
Significantly Increased Public Investment

It is believed that economic expansion will strengthen after early autumn, as fears of a power shortage give way to increased expectations of production rising to meet reconstruction demand. At the time of the Great Hanshin Earthquake, the government made three supplementary budgets totaling 3.2 trillion yen. In the 10 years since that disaster, a total of 16 trillion yen was budgeted for reconstruction. Assuming that losses and damage to housing, roads, and ports, are double those incurred during the Great Hanshin Earthquake, then the final reconstruction budget should be twice as much. Based on this prediction, the supplementary budget, or the principal budget for fiscal 2011 and fiscal 2012, should be 5 trillion yen each, and will be included in the calculated cost of recovery and reconstruction-related public works.

In March, machinery orders (private demand excluding ships and electric power), the leading indicator of capital spending, rose 2.9%

CHART 3

Changes in machinery orders & capital goods shipment index



Source: Cabinet Office "Machinery Order Statistics" & METI "Industrial Index Statistics"

CHART 4

Japan's economic outlook

(per annum year over year, %)

	Fiscal year 2010 Actual Performance	Fiscal year 2011 Predicted	Fiscal year 2012 Predicted
Real GDP	2.3	0.5	2.8
Private consumption	0.8	-0.5	1.0
Housing Investment	-0.2	4.8	6.0
Capital Spending	4.5	2.3	6.6
Inventory Investment (contribution)	0.4	0.4	0.2
Government Consumption	2.3	2.0	0.7
Public Investment	-10.0	5.6	5.5
Exports	17.0	0.6	8.4
Imports	10.9	7.4	5.8
Nominal GDP	0.4	-0.3	3.0
GDP Deflator	-1.9	-0.7	0.2

Source: Fujitsu Research Institute

over the previous month, contradicting all expectations that the indicators would become negative because of continual cancellation in the aftermath of the earthquake *(Chart 3).* The simultaneously announced outlook for the April to June quarter showed strong growth at 10.0% higher than the previous quarter. Behind the increase in investment may lie demand for restoration of the affected plants. The future will depend on which gains the upper hand: the postponement of immediate investment other than recovery needs, or the gradual emergence of reconstruction demands. If machine orders for the April to June quarter go according to forecast, then capital spending will not drop. The March capital goods shipment index (excluding transport equipment), the coincident indicator of capital spending, dropped as much as -13.9% compared to February, but recovered by 9.7% month over month in April.

Another concern is that the unresolved nuclear crisis may prevent the return of tourists from abroad. Because of this, the hotel and tourism industries may continue to experience a severe economic downturn.

2% Growth in the Second Half of Next Year

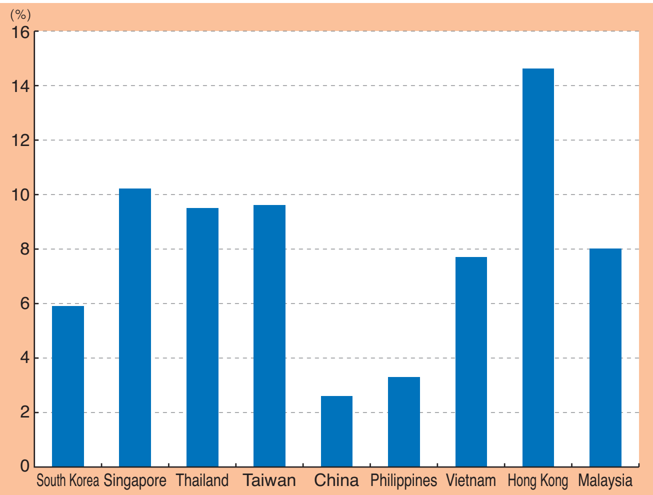
Given the above, the real GDP growth rate for fiscal year 2011 will be 0.5%, and in fiscal 2012 is expected to be 2.8% *(Chart 4)*. It is believed that fiscal 2011 will experience positive growth from early fall from sharpening recovery, and that in fiscal 2012 reconstruction needs will appear in earnest, leading to still higher growth.

Due partly to the influence of rising international commodity prices, Japanese consumer prices (excluding fresh food prices) slowed their decline from last year. Consumer prices are expected to rise, partly due to the government's halting, after April this year, of payments for high school tuition fees from a year ago. Free high school tuition and other factors were driving down the cost of living. Demand-side and supply-side shocks triggered by the earthquake led to prices rising and falling, respectively. As these shocks disappear and the economy returns to an uptrend, consumer prices will stabilize and shift to a rise relative to last year. It is forecast that consumer prices (excluding fresh food) will increase 0.4% in fiscal year 2011 and 0.5% in fiscal year 2012.

However, with the August 2011 scheduled revision of standards from 2005 to 2010, there is a high probability that consumer price inflation will be revised downward, and is likely to become negative again in fiscal year 2011. It may still take more time to break out of deflation.

CHART 5

Asian nations' imports from Japan, proportion of GDP (2009)



Source: National Statistics

Impact on the World Economy

The Great East Japan Earthquake bore a huge impact on the global economy. The earthquake's main effect on the U.S. economy was lost productivity caused by local Japanese auto and manufacturing supply chain disruption. Although sales slowed for Japanese manufacturers whose ability to provide parts and supplies had been undermined, other manufacturers made up for the shortfall, so the US economy as a whole was not negatively impacted. Thus, it is believed that the earthquake had a limited overall impact on the US economy.

Because Japan has a more closely interdependent relationship with East Asia than with Europe, the deleterious effect on Asian countries is much more clearly apparent. In Asia, both exports and imports were impacted. If Japan's economy stagnates, there will be a decrease in exports to Japan. But, with the exception of a few countries, the ratio of exports to Japan is only about 5%. Thus, economic stagnation in Japan is likely to have limited influence. In fact, shortly after the earthquake, a shortage of food and water led to increased exports of these items to Japan.

Rather, the greatest adverse effect was felt on imports from Japan. The halt in industry production led to a suspension of the purchasing of parts and materials and manufacturing equipment from Japan. Many countries in Asia procure intermediate goods from Japan, which they then assemble into finished products for export. Countries such as Taiwan, Thailand, and Malaysia were strongly negatively impacted. *(Chart 5)* These countries have industrial infrastructures which rely on imports from Japan to support a relatively high percentage of GDP. As already mentioned, however, Japanese production will likely return to normalcy by early fall; detrimental effects in East Asia should then gradually diminish. JS

Hidetaka Yoneyama is senior research fellow at Economic Research Center, Fujitsu Research Institute.