

# Japan economics

## Earthquake aftermath

- We believe it is becoming increasingly clear that the Tohoku Pacific Earthquake and the subsequent tsunami are likely to have a similar economic impact as the Kobe earthquake in 1995. This assessment does not include a further deterioration of some nuclear power plant facilities.
- In the short run, a contraction of industrial activity by 2-3% during March and April is likely.
- That said, we are looking for a recovery in the second half of this year, similar to after the Kobe earthquake. The net GDP impact on the 2011 fiscal year should therefore not surpass -0.5ppt, in our view.

### Summary

Over the weekend, the damage caused by the worst earthquake on record in Japan became increasingly clear. The total number of victims is still unknown, but it could be much larger than the Hanshin (Kobe) Earthquake in 1995, which killed 6,400. The economic damage from the strongest earthquake on record in Japan, however, should be limited as it is concentrated on the northeast coast of the country, far from major business centers. In addition, the government's fiscal support should help minimize the economic pain.

### Significant blow to Japan's growth unlikely

A 9.0-magnitude earthquake, the most powerful ever recorded in Japan, hit Friday afternoon, with the subsequent tsunami multiplying the damage and aftershocks still underway. Uncertainty about the final damage still lingers. Despite the heart-breaking loss of many lives, we believe this catastrophe is unlikely to inflict a significant blow to Japan's growth outlook for this year due to the following three reasons. First, the major business centers (including Tokyo, Aichi, and Osaka), suffered only limited damage as most of the destruction was concentrated on the northeast coast, which accounts for about 7.0% of Japan's industrial output. Second, outside of the worst-affected areas, business activity moved toward normalization over the weekend. Third, reconstruction demand should boost economic activity in 2H 2011, supported by the government's supplementary budget.

**Dominic Schnider**, analyst, UBS AG

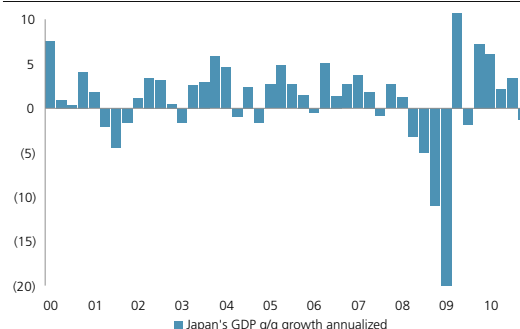
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### Significant blow to Japan's growth unlikely

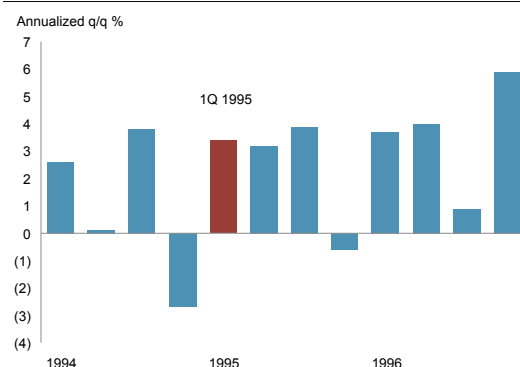
Japan's GDP q/q growth annualized



Source: Bloomberg, UBS WMR

### Real GDP growth at time of Hanshin (Kobe) Earthquake in 1995

Japan's GDP q/q growth annualized



Source: Cabinet Office

## Comparing with the Hanshin (Kobe) earthquake

If the Hanshin (Kobe) earthquake in January 1995, which struck the western business center of Japan with a magnitude of 7.3 and caused 6,400 deaths, can offer any guidance, we note that its economic impact was quite limited. Nationwide industrial production showed only a 2.6% pullback for the month, and the negative impact was short-lived. Indeed, economic output rebounded sharply in February, up by 2.2%. Even on a GDP level, there was little meaningful impact from the trembler, as real GDP grew an annualized 3.4% q/q in 1Q 1995, followed by a gain of 3.2% in 2Q, after a temporary dip of 2.7% in 4Q 1994.

In comparison, the affected industries in northeast Japan should account for less economic output than the Kobe region. The Tohoku earthquake affected mostly rural areas. That said, it had a wider range of impact as broader areas were affected. This also relates to infrastructure impact. In Kobe, mostly roads, bridges, and the Kobe port were damaged. This time, there was extensive damage to roads, several ports, and electricity production facilities. Meanwhile, the government has announced it will implement additional fiscal spending, totaling JPY3 trillion (0.6% of GDP), to help support reconstruction demand later in the year. The impact of monetary policies is likely to be considerably less today than in 1995. Back then, interest rates dropped more than 200 basis points across the yield curve, helping to stimulate the economy. From current rates levels, such a change in rates is not feasible anymore. Nevertheless, taking the mentioned similarities and differences into consideration, we expect a similar economic development as in 1995. That said, the recovery in the economy during the second half should be less pronounced compared to 1995.

Risk factors to our current economic assessment could come from long-lasting power outages affecting the greater region of Tokyo. This also relates to potential deterioration at TEPCO's nuclear electric production facilities (reactor meltdown) and subsequent consequences for the entire country and beyond.

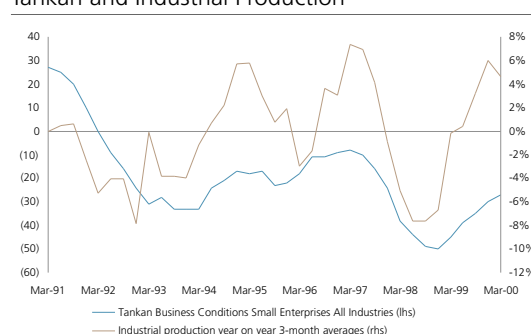
## Monetary policy responses

We expect the Kan administration to take immediate action to increase fiscal spending by JPY3-5 trillion to help alleviate the pain of the ongoing disaster. The Bank of Japan (BoJ) has already decided to shorten its two-day policy board meeting (originally scheduled for 14-15 March) to just a one-day meeting on 14 March. The BoJ announced today that it would inject a record JPY 12 trillion (USD146 billion) into the economy, and to buy JPY 3 trillion (USD 37 billion) of government bonds from lenders in repurchase agreements. We think these are appropriate moves to underpin market sentiment and thereby minimize the temporary negative shock to Japan's equity, bond and currency markets.

## Short- and medium-term impacts on Japanese Government Bonds (JGB)

After the catastrophic earthquake in Japan last Friday, JGB bond prices were temporarily supported due to demand for the refuge of government debt and concerns that damage from the earthquake will impair the economic recovery. Yields on benchmark 10-year JGB bonds lowered to 1.21% on Friday, 11 March from the previous closing level of 1.30% and are likely to remain at suppressed levels for an extended time.

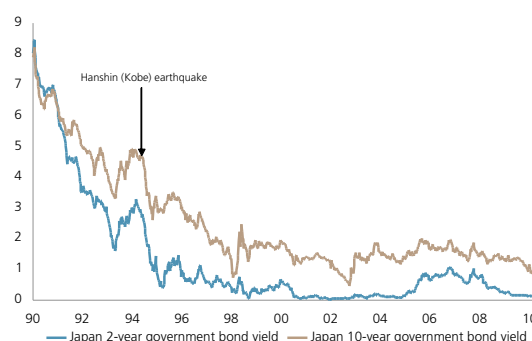
## Short-lived negative impacts on production



Source: Bloomberg, UBS WMR

## Limited interest rate stimulus

Japan 2-year and 10-year government bond yields in perspective



Source: Bloomberg, UBS WMR

However, assessing medium to long-term impacts of the earthquake, we are not so optimistic about JGBs. Our Japan economist estimates that government expenses will increase by JPY 3-5 trillion due to rescue efforts, which amounts to 0.6% to 1% of Japanese GDP. This will send an already high over 200% debt-to-GDP ratio of Japan slightly higher. Moody's currently has a negative rating outlook on the Government of Japan's Aa2 rating given the country's high debt levels, and we do not see much room for the government to improve its public finance due to the necessity of rescue and reconstruction activities. The cost of protecting Japanese sovereign bonds from default has surged since Friday, as the credit-default swap (CDS) spread rose 7.5 basis points to 86 basis points as of Monday morning (14 March), showing concerns on Japan's long-term sovereign debt situation.

We also do not have sufficient confidence in the argument that the dampened growth picture in Japan can justify a lower JGB yield. Since we believe Japan's recovery remains largely intact, JGB yields should trend higher. We are therefore not so optimistic on the medium-term future of JGB bond prices from a credit-fundamental perspective, and we do not recommend investors to increase their overall allocation to JGBs.

### Potential impacts on the Japanese equity market

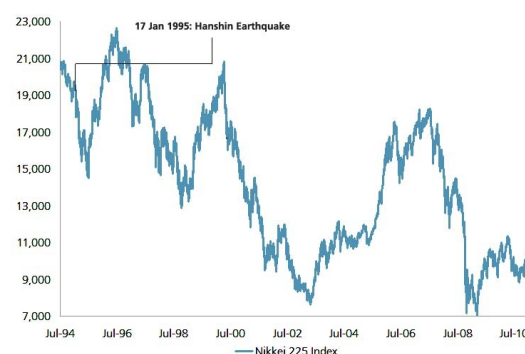
We believe the impact on Japanese equities is likely to be limited over the medium term. We note the performance of Japan's stock market following the Hanshin earthquake: TOPIX dropped 8% in the five days following the earthquake but rebounded 5% during the subsequent 10 days, leaving TOPIX down only 3% 15 days after the trembler. If this performance were to repeat this time, TOPIX would drop to 850-900 and the Nikkei 225 would end up around 9,500-10,000.

However, we believe the increase in foreign ownership has left the Japanese equity market more vulnerable than in 1995; the ownership stake of foreign investors reached 26% in 2010, up from only 10% in 1995. Therefore, although we do not expect significant damage to overall corporate earnings, Japanese equities are likely to sell off in the short term.

It may be too early to quantify the exact impact on corporate earnings in 2011. However, in terms of operating profit for listed Japanese companies, we expect the earthquake and its aftermath to reduce earnings for the March 2011 fiscal year by 5%-10% but increase March 2012 fiscal year earnings by 5%-10%. Some major companies have suffered significant damage to their businesses, but we expect most Japanese firms to overcome this crisis with only a moderate impact.

### After Hanshin (Kobe) earthquake, Nikkei 225 plunged then rebounded

Nikkei 225 index

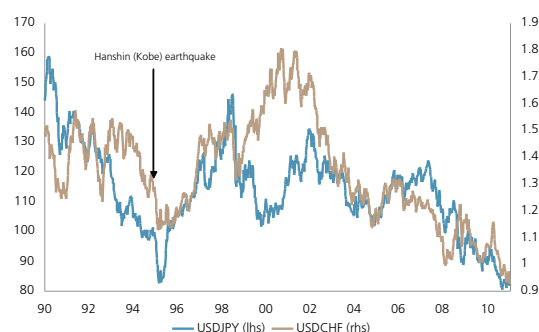


Source: Bloomberg, UBS WMR

### Yen is set to weaken

Initial signs of JPY strength are unlikely to persist, in our view. Mounting risk aversion and repatriation of foreign investments should not last. Corporates already hold a significant amount of liquidity domestically. The need to repatriate is therefore rather limited. Moreover, we cannot expect the same type of bond rally that happened in 1995. Interest rates at the short end of the curve are already close to zero and long rates are unlikely to stay close to 1% for an extended period. With a deteriorating of the country's credit rating, we think USDJPY should bottom out at 80 and trend toward USDJPY 85-90. Hence, we believe the yen is a candidate to go short over the next 6-12 months. The strength of the JPY in 1995 should not be used as guidance. A large part of the performance in 1995 can be attributed to external factors like a weaker USD and the Tequila Crisis in Mexico. The strong CHF performance versus the USD during the same time reflects this nicely.

### 1995 not good guidance for the JPY USDJPY and USDCHF



Source: Bloomberg, UBS WMR

## Appendix

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