

What the Tohoku Earthquake Means for Japan & the World

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The catastrophe that struck northern Japan on March 11, 2011 will overshadow the country well into the future. The harm caused by the earthquake itself was not overwhelming, but the ensuing tsunami devastated cities and towns and crippled several nuclear reactors, which then spewed radiation into the air and sea. The human cost of these events was immense, and residual effects will persist for decades. There was, however, a silver lining to this very dark cloud, for a crisis of such magnitude can sometimes stimulate a long period of strong GDP growth and galvanize a national political system. The purpose of this paper is to ask whether Japan, which would benefit greatly from such developments, will succeed in taking advantage of that opportunity or succumb once again to the economic and political malaise that has afflicted it for most of the last 20 years.

The Status Quo Ante

To see the positive possibilities presented by the Tohoku Earthquake one must first recall Japan's situation before the disaster. For two decades the country had been mired in economic stagnation, with chronically inadequate domestic demand, an apparently permanent problem of price deflation, and constant danger of recession. The Ministry of Finance and the Bank of Japan might have alleviated this situation by intervening directly in currency markets to drive the yen down to a level that engendered some inflationary pressure while also enabling the country to increase its exports – essentially substituting foreign demand for lackluster domestic spending – and thereby keeping the economy growing at a reasonable speed. But Tokyo chose not to pursue that option. Foreign pressure, official Japan's determination to retain the prestige that comes with a strong currency, and the monetary authorities' curious conviction that high real interest rates were good for the economy combined to preclude the required adjustment in the exchange rate. The only means left to prevent a sharp contraction in GDP was therefore a big and constantly expanding government budget deficit. But while that expedient succeeded in forestalling a depression, it also pushed the gross national debt gradually upward until it reached today's level of some 200% of annual economic outlook. That this is unsustainable should be evident in the fact that Japan's outstanding obligations far exceed the burden that is presently crushing Greece, Ireland and other European countries. Meanwhile, and ultimately more important, the "lost decades" and the concomitant popular frustration eroded the public's trust in their government, business community and social institutions. The country was thus uncertain about its future and ill-prepared to address such international challenges as the economic rise of China and North Korea's frequent military provocations.

The Hanshin Episode as Positive Precedent

Japan's last truly devastating earthquake occurred in the Hanshin area around Kobe City in 1995. The recovery from that shock sheds considerable light on both the economic and the political

implications of what just happened in Tohoku. Economically, the strongest point of resemblance between the two events was an initial collapse in demand and GDP. Both natural disasters destroyed swathes of residential, commercial and industrial real estate, rendered hundreds of thousands of people homeless, and damaged numerous factories and other commercial facilities. The Hanshin area was more densely populated and industrialized, but the magnitude of the 2011 Tohoku Earthquake was larger and the resulting tsunami interrupted numerous supply chains as well as compromising the national energy grid. In both cases, though, the downturns were limited in temporal duration and soon transformed into strong economic recoveries. Within a couple of quarters of the 1995 setback, for instance, Japan had embarked on a program of reconstruction that would ultimately cost some \$100 billion. The upshot of this extraordinary expenditure was a remarkable improvement in the performance of the national economy, whose growth rate rose from an average of just under 1.0% in 1993 and 1994 to 2.0% in 1995 and then to 2.6% in 1996.

There were several anomalous factors that made the Hanshin Earthquake's contribution to this upturn look larger than it actually was, but it nevertheless remains true that the reconstruction boom helped the country considerably. That precedent, in turn, augers well for today's Japan because the destruction wrought by the Tohoku crisis will necessitate additional spending of more than \$300 billion – thrice the Hanshin amount – and thus produce a strong surge in GDP growth from late 2011 through perhaps early 2013. Politically, in the meantime, the 1995 disaster also benefitted Japan's government. It gave Prime Minister Ryutaro Hashimoto an opportunity to assert leadership in organizing the immediate relief effort and then to expand fiscal spending dramatically, both of which gratified the electorate. This enhanced his reputation, lengthened his tenure in office, and enabled him to embark on some important new policy initiatives. The Tohoku Earthquake that struck this March has had a similar effect, offering a chance for Prime Minister Naoto Kan and his ruling DPJ to demonstrate a new competence and determination and hence to gain more time and power than they had previously enjoyed.

The Hanshin Episode as Negative Precedent

The 1995 earthquake also teaches a complex lesson in political overconfidence and misjudgment. For after a few quarters of strong GDP growth, the government, the Ministry of Finance, and a number of private-sector analysts concluded that Japan had overcome the stagnation of the early 1990s and would now grow as robustly as it had in previous decades. Unfortunately, subsequent developments belied this optimism. In the second quarter of 1997 the economy fell back into a recession that discredited the Hashimoto Cabinet and vitiated the public's renewed faith in the nation and its institutions.

The dominant theory among economists attributes the sudden deceleration in commercial activity to policy errors. According to that reasoning, Hashimoto committed a fundamental mistake by following the MOF's advice and hiking the consumption tax on April 1, 1997, an event that depressed household spending and doomed the country to years of even slower growth than in the early 1990s. There is some truth in this explanation, for fiscal retrenchment was assuredly inappropriate at a time when the economy had only been performing well for several months. But it is easy – and in fact common – to overstate the Hashimoto Cabinet's responsibility because the recovery was never as robust as people thought and a measurable downturn would have occurred even without the change in tax policy.

This conclusion arises from consideration of investment and consumption. It must be recalled, for example, that most of the additional capital spending undertaken in 1995 and 1996 was for the repair and reconstruction of damaged infrastructure and productive capital. Once the earthquake-induced deficiencies were remedied, the volume of corporate and government investment would inevitably have subsided towards the more normal rate that had prevailed before the earthquake. Machinery orders, construction starts, and other leading indicators for private non-residential investment bear this out, showing that in late 1996 an economic slowdown was already on the horizon. The second factor that made the recovery seem artificially vigorous was the positive influence of the approaching tax hike on household expectations, a factor to which most economists do not attach sufficient weight. In short, people knew that higher taxes were coming and sought to avoid them by accelerating their purchases of cars, refrigerators, and other big-ticket items that they would otherwise have made in late 1997 or 1998 into the quarters before April 1997. Since households only buy such durable goods once every several years, this represented an inter-temporal shift in demand and not an increase in the long-term trend. The tax hike thus made consumption look substantially stronger than it actually was before April 1997 and much weaker after that date. In the absence of that distortion, household spending would have remained more stable and the contraction in government

and corporate investment would have caused GDP growth to slow measurably. So while Prime Minister Hashimoto's ill-advised fiscal tightening certainly intensified the recession, he was not wholly responsible for it.

These observations are directly applicable to Japan's situation in the aftermath of the Tohoku Earthquake. The country is now entering a period in which aggressive fiscal and corporate expenditures will lift the national growth rate to what are, by the standards of recent decades, impressive levels. But this upturn will prove of limited duration unless something fundamental changes in the underlying economy – a marked loosening in monetary policy, for instance, that would encourage dissaving by the household and corporate sectors while also driving the yen down enough to produce significantly greater exports. Without such change, the pace of GDP growth will begin to decline in 2013 and the country will likely return to the lackluster pattern that prevailed in the months before the earthquake. The other implication of the Hanshin precedent is that Tokyo must be careful not to adopt policies that exacerbate the eventual slowdown. The DPJ's recent talk of raising the consumption tax is an obvious danger here, though modest fiscal tightening implemented over a long timeframe may not be too harmful. More worrisome is Prime Minister Naoto Kan's new skepticism regarding nuclear power, which admits the possibility that Japan may reduce its reliance on that form of energy. This matters because anything that raises the cost of electricity would have the same effect on companies and households as a big tax hike and could therefore retard GDP growth during the incipient boom and intensify the subsequent moderation.

The Nuclear Dimension

The most salient difference between the 1995 and 2011 catastrophes is the latter's impact on Japan's nuclear energy program. The destruction by the tsunami of the Fukushima reactors not only imposed additional human costs and reduced the volume of electricity available in Tohoku and Tokyo, it also introduced at least three new complexities into Japanese politics.

First, the nuclear debacle vitiated the opportunity for Naoto Kan to establish his credentials as a competent leader. A "simple" natural disaster generally presents a compelling case for greater fiscal spending in order to resuscitate a wrecked regional economy and collaterally engenders better national GDP growth. Nuclear accidents, however, are less amenable to solution because they trigger profound public anxiety and take years to overcome. In the present instance the swamping of the Fukushima plant disrupted monitoring equipment, which meant that TEPCO and the relevant ministries lacked complete information about what was happening in the reactors. The power company and regulators may also have concealed important data from their political bosses. As a

consequence Kan and his cabinet colleagues could not formulate appropriate policies and then announce them to the Japanese people but were forced, in their media appearances, to make statements that sounded hesitant and obfuscatory and inspired more distrust than approval. Although there is reason to believe that the Kan government made significant mistakes in the wake of the earthquake, it is difficult to see how even a truly powerful prime minister could have gained as much from the Tohoku crisis as Ryutaro Hashimoto and his cabinet did in 1995 and 1996. The net result of the Fukushima episode was therefore not greater national cohesion and a new sense of direction but rather a further diminution in the power of the prime minister, the ruling party, and the civil service.

Secondly, the Tohoku Earthquake invalidated Tokyo's fundamental economic and diplomatic strategy. Lacking rich endowments of natural resources, Japan has long imported the vast majority of its fuels in the form of oil and other hydrocarbons. In order to obviate the resulting dependency on unstable parts of the world and to curtail its reliance on domestic coal mines, over the last several decades Tokyo invested heavily in nuclear reactors as a relatively safe and environmentally conservative alternative. At the beginning of 2011 Japan boasted 54 commercial reactors from which it drew 26% of its electricity, and the national energy strategy envisaged building enough new plants to double that ratio by the early 2020s. Making a virtue of necessity, Tokyo trumpeted its use of "clean" atomic power as one of the reasons it was best suited to lead the global campaign to reduce the emission of greenhouse gases. This assertion was critically important to Japan's international stature; it was one of the two or three pillars on which the country's foreign policy reposed.

Sadly the tsunami that destroyed the Fukushima complex also roiled the national consensus behind the advocacy of nuclear technology. Public anxiety is now so intense that there is no longer any possibility of building new reactors; the question is how many of Japan's existing plants will continue to operate. Most of the country's 54 reactors were already shut down for routine inspection and maintenance when the earthquake struck on March 11. The loss of the six Fukushima reactors and the subsequent precautionary closure of the similarly designed Hamaoka plants brought the total number of working facilities down to just 18. Over the next year these too are scheduled to close for mandatory examination and reconditioning. The problem is that legally none of the reactors may be restarted without authorization from both Tokyo and the local prefectural governments. Hesitation at either level could prevent the resumption of power generation at many of these locations, which means that at least some of the country's existing capacity will probably be lost forever and its need to draw energy from coal and imported hydrocarbons grow more profound.

The third, and perhaps greatest, challenge entailed by the nuclear disaster is the temptation it offers to the prime minister to act in ways that may contradict Japan's long-term interests. Due partly to the insolubility of the Fukushima problem but also to his history of political blunders, Kan's position atop the DPJ and the national government remained tenuous through the early summer. In June he survived a parliamentary motion of no confidence only by pledging to step down in the near future. Yet since then he has refused to

fulfill that promise any time soon, seeking instead to rally popular opinion and sustain his premiership for several additional months. The most striking evidence that he might use energy policy to do this was his intervention in negotiations between the minister of economy, trade and industry, Banri Kaieda, and the local authorities in Saga Prefecture. In late June Kaieda personally asked the governor of that prefecture and the relevant municipal officials to approve the reopening of the nuclear power plants in their territories as a first step towards persuading other regions to do likewise. At considerable personal risk, the Saga authorities pledged to do so. At the beginning of July, however, Prime Minister Kan overturned that agreement and humiliated its adherents by declaring that Japan's reactors should all be "stress tested" and that perhaps the country should abjure nuclear energy altogether. Embarrassed by what they perceived as a political betrayal, the Saga leaders immediately reversed themselves while Kaieda reportedly contemplated resigning from his METI post in protest. Meanwhile local rulers elsewhere made it clear that they would not contemplate a resumption of nuclear power generation in their bailiwicks any time in the foreseeable future. Thus, in order to secure a personal advantage, Kan has strained the relations between Japan's various power centers, sowed discord in the body politic, and enhanced the likelihood that the country will lose much of its domestic power supply. Since higher energy costs are the equivalent of a tax hike, the medium- and long-term effect on the national economy could prove quite negative.

Politics, Geopolitics & National Identity

The Tohoku catastrophe has marginally but significantly eroded Japan's sense of national identity. The country had for half a century defined itself as a peaceful state that, secured by a close alliance with the United States, was dedicated to international cooperation and economic development. This approach worked well until the 2000s, by which point China's rapidly growing power had begun to eclipse the regional and global prestige of a Japan that had now entered a second "lost decade." But that was only the external manifestation of the malaise. Within Japan a large proportion of the population had grown so frustrated that they accepted the prospect of diminishing national power and wanted only to maintain their existing standard of living. They wanted, in short, to become the Switzerland of East Asia – a prosperous and stable country with few international ambitions. Nor did Tokyo provide much leadership during this difficult period, for with the partial exception of the Koizumi era Japan's governments were by international standards ineffectual. That is why Tokyo's diplomatic strategy remained conservative: a progressively greater espousal of "clean" energy and other ways of protecting the global environment in addition to the earlier emphases on international cooperation and the peaceful resolution of disputes.

The events of March 2011, however, undermined even that modest agenda. The prime minister, the political parties, the main ministries and regulatory agencies, and TEPCO and other prominent economic institutions all emerged from the debacle with their reputations tarnished and with less credibility in the eyes of the public. Tokyo's

prominence in the global green movement has also been cast in doubt now that Japan is reopening old coal mines and expanding its hydrocarbon imports. This need not be a permanent setback – the country may ultimately succeed in pioneering and exporting enough environmental technology to recoup some of its lost influence – but that will probably not happen within the next few years.

The new, slightly greater popular skepticism likewise implies a lower geopolitical profile. One of the most beneficial consequences of the Tohoku Earthquake was a closer and warmer relationship between Japan and the US. In the 1995 Hanshin episode the American armed forces were not able to help very much because there were no plans to facilitate massive intervention by what was, after all, a foreign power. Chastened by that failure, the Ministry of Foreign Affairs and its interlocutors in Washington subsequently expended considerable energy devising contingency agreements that made it possible for American troops to provide copious logistical and human assistance when the 2011 disaster occurred. Both nations viewed this cooperation as successful, and Japanese doubts about the utility of the bilateral alliance accordingly diminished. But while Tokyo and Washington were happy to put the old Futenma quarrel behind them, they paid a price for the new intimacy. For a Japan that is both preoccupied with the earthquake recovery and more comfortable relying on the US is somewhat less likely to assert its power and values in East Asia and around the world. Given that Washington and Tokyo share many geopolitical interests, the marginal decrease in Japanese ambition is unfortunate for both countries. In essence, it accelerates the decline of American and Japanese leadership relative to that of China and other rapidly developing nations.

Global Finances & Economics

Although improving the world's prospects in 2012 and 2103 by adding demand at a time when the US and Chinese economies are slowing and Europe is stumbling from crisis to crisis, the Tohoku Earthquake has also raised the likelihood that Japan will eventually provoke its own round of global financial trouble. Prime Minister Hashimoto and his colleagues were correct to worry about the country's fiscal trajectory back in 1995 and 1996 even if their attempt at budgetary retrenchment was ill-timed. In the sequel, the gross national debt grew steadily through the 1990s and the 2000s before reaching today's level of roughly two years' GDP. That is a substantially higher level of indebtedness than Greece's, and it seems probable that Tokyo will ultimately default on at least some of it. Markets have tolerated Tokyo's profligacy for several reasons, including the fact that almost all of the debt is owed to Japanese investors who are willing to keep their money at home because price deflation translates into significant real rates of return. But it is easy to overstate these advantages, for one day soon Tokyo will have exhausted the pool of domestic savings and must turn to relatively fickle foreign capitalists to satiate its immense appetite for credit. Recognition of this fact explains why Japan's main political parties were discussing the possibility of fiscal tightening in the months before the March earthquake.

The financial effect of the Tohoku tragedy, unfortunately, was to push Japan slightly farther along the path towards fiscal unsustainability. The government now has no choice but to spend an extra 3-5 percentage points of GDP on relief, reconstruction and social services. Although the electorate may be ready to "share the pain" by accepting new taxes to help pay for that additional increment, Tokyo would be wise to remember the danger that premature fiscal tightening might exacerbate the slowdown that will occur in 2013 and 2014. Prudence thus dictates the same course of action as the prime minister's frailty and the stalemate in the Diet: postponing anything more than token tax hikes for another two or three years. What this means for the long-term outlook is that the national debt will be measurably larger, and the chances of avoiding a future default commensurately smaller, when the political authorities return seriously to the task of budgetary retrenchment. The risk that this greater Japanese indebtedness poses for the world economy over the next decade should be obvious in light of the stresses produced by financial problems in the relatively minor economies of peripheral Europe.

The Risks Ahead

The broad outlines of the recovery process are clear. GDP contracted in the spring and early summer of 2011 due to the immediate damage to real estate, factories, and energy and supply networks. In the latter half of this year, however, the rate of economic growth should accelerate sharply due to a surge in infrastructure expenditures and corporate investment that, in turn, will also have a positive effect on employment and wages. So 2012 and 2013 will look quite good, albeit perhaps not as impressive as the years that followed the 1995 Hanshin Earthquake. More uncertain, and in fact worrisome, is what happens after the nascent burst in spending reaches its conclusion. If the political situation has not clarified and a more visionary and capable prime minister assumed power, Japan could easily fall back into its pattern of economic stagnation, feckless governance, and decreasing international relevance. The renunciation of nuclear power before the country has developed large-scale, commercially viable alternatives would exacerbate such risks. Yet even if Tokyo successfully navigates those shoals, it must still deal with the rising probability of an eventual financial crisis and with the marginal loss of international stature implied by the understandable preoccupation with the Tohoku reconstruction. To the extent that Japan has played a positive role in global affairs, therefore, the March catastrophe represents a setback not just for that country but also for the West and in some ways for the entire world. **JS**

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