

16th March 2011

Urgent Need for ¥5 Trillion Disaster Recovery Package

The government should act quickly to assemble a ¥5 trillion disaster recovery package to be financed by freezing proposed government programs, including the child allowance and other programs, while imposing a temporary “reconstruction tax” from the April 2012.

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The Tohoku-Pacific Ocean Earthquake of March 11 caused at least 12,000 deaths, with some 17,000 still missing, while wreaking lethal damage to the Fukushima I nuclear power plant operated by Tokyo Electric Power Company (TEPCO). It is now seen as virtually certain that the damage and economic impact will exceed that of the Great Hanshin Earthquake. The Japanese government must therefore act urgently on measures not only to provide relief to the victims but to minimize the impact on economic activity in the Tokyo area and other regions.

Specifically, the government should assemble a ¥5 trillion earthquake recovery package and then implement it. Such a package could be financed by mobilizing contingency reserves for fiscal years 2010 (April 2010-March 2011) and 2011 (April 2011-March 2012) and freezing several new policy measures promised by the Democratic Party of Japan, including the child allowance, the partial waiver of expressway tolls, and cuts in the corporation tax.

Any proposed major increase in the issuance of government treasury securities would exacerbate government finances and risk wasting valuable time if the government and opposition parties fail to agree. In addition to aid needed to recover from the earthquake, permanent source of funding will also be required from and after FY2012 in order to ensure stable sources of electricity and to reassess and rebuild infrastructure against future earthquakes and disasters. For example, the government should consider imposing new

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taxes on energy consumption in the form of a “Tohoku-Pacific Ocean Earthquake Reconstruction Tax.”

Policy proposals:

- (1) Establish a ¥5 trillion disaster recovery package within March
- (2) Finance it by freezing the child allowance and other programs
- (3) Adopt a ¥5 trillion “recovery tax” from FY2012
- (4) Review safety measures at existing nuclear power plants
- (5) Boost energy “creation” which does not rely on nuclear power

Damage and Impact to Exceed that of Great Hanshin Earthquake

The size of the economies of the three prefectures which suffered massive damage in the Tohoku-Pacific Ocean Earthquake, namely Iwate, Miyagi and Fukushima, is equal to that of Hyogo Prefecture, which incurred massive damage in the Great Hanshin Earthquake.

Expectations are that, if the damage suffered by parts of Ibaraki and Aomori Prefectures are included, just the direct economic damage from the earthquake would equal or exceed the ¥10 trillion cost of the Great Hanshin Earthquake.

Figure 1. Direct Damage from Major Natural Disasters

Disaster	Year	Amount of Damage (\$ Billions)	Percent of GDP	Fatalities
Great Hanshin Earthquake	1995	95-147	2.5	6,437
Great Kanto Earthquake	1923	32.6	43.6	143,000
Hurricane Katrina (U.S.)	2005	125	1.7	5,336
Indonesia Tsunami	2004	4.45	2.1	165,708

Source: Compiled by Associate Professor Yasuyuki Sawada of the Faculty of Economics, University of Tokyo, based on the *International Disaster Database* of the Center for Research on the Epidemiology of Disasters.

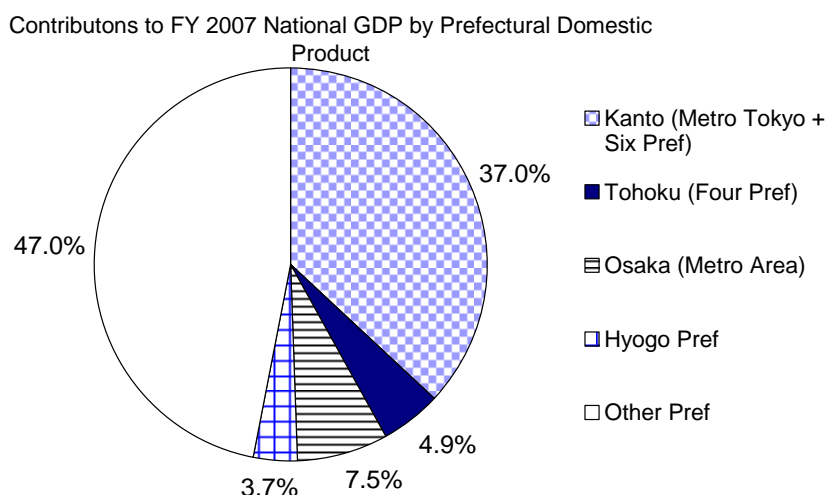
This recent disaster, however, also includes indirect economic consequences outside of the disaster area, which is no longer able to supply electric power to the Tokyo area. Power shortages (of about 25%) have already forced TEPCO to impose rolling blackouts, causing a drastic decline in distribution and factory operation in the Kanto area including Tokyo.

Given the present condition of the Fukushima I nuclear power plant following the devastating damage it incurred, chances are very strong that these conditions will persist

over the long term. The economy of the Kanto region accounts for more than one third of Japan’s gross domestic product (GDP) as a whole, and the decline in economic activity will undeniably cast a shadow over the Japanese economy for a much longer time than the immediate damage will.

The cleanup costs that will be required in the wake of the nuclear power plant accident, the costs are bound to skyrocket. According to the World Nuclear Association, the amounts required to clean up after the U.S. Three Mile Island and Ukrainian Chernobyl nuclear accidents exceeded an estimated \$1 billion and \$200 billion, respectively. Accordingly, if the cost required to deal with the Fukushima I accident is included, the cost of recovering from the present disaster will not be comparable to that required in the case of the Great Hanshin Earthquake.

Figure 2. Kanto and Tohoku Account for Over 40% of Japan’s GDP



Finance by Freezing Child Allowance and other Programs

In the case of the Great Hanshin Earthquake, the government appropriated over ¥3 trillion in order to fund reconstruction measures, but the present disaster is likely to require an even greater amount. The FY2011 budget currently being deliberated in the House of Councilors provides for various measures which include ¥2.2 trillion for a child allowance and ¥600 billion for farmer income subsidies. These proposals by the Democratic Party of Japan have given rise to conflict between the ruling and opposition parties, in turn delaying enactment of budget-related bills. The Liberal Democratic Party has raised charges of wasteful

distribution of subsidies with regard particularly to the proposed increase in issuance of government securities to cover the deficit.

The proposed issuance would exceed tax revenues, lifting combined total of outstanding national and local government debt issuance to over ¥800 trillion, more than 1.5 times GDP. In light of this reality, additional issuance would render it more difficult to rebuild government finances over the medium term.

However, there is an urgent need for an earthquake recovery package. The ruling and opposition parties at this time should therefore set aside their political differences and work together to suspend such programs as the child allowance and farmer income subsidies, and instead use the funds for earthquake response measures. Including contingency reserves for FY2011, various funds together amounting to about ¥1.2 trillion are available, and if necessary, a postponement of corporation tax cuts could make available another ¥600 billion. This means a disaster recovery package of over ¥5 trillion would be possible even without boosting issuance of government debt securities.

Figure 3. Funding Sources for ¥5 Trillion Earthquake Recovery Package

Type of Expenditure	¥ Trillions
FY2010 Contingency Reserve	0.2
FY2011 Budget	
Child allowance	2.2
Farmer income subsidy system	0.6
Free high school education plan	0.4
Other (expressway toll waiver, etc.)	0.4
Economic crisis/local revitalization contingency reserve	0.8
Contingency reserve	0.4
Total:	5.0

Source: JCER, based on Ministry of Finance data.

Impose Reconstruction Tax on All Fossil Fuels

From and after FY2012, a disaster recovery fund should be financed from permanent sources. In addition to reconstruction of roads, railways and houses, reducing energy consumption and securing new and stable sources of electric power will also be important issues, given the significant damage incurred at the nuclear power plant. At least ¥5 trillion should be raised through imposition of a recovery tax on all fossil fuels, including those such as coal which are taxed at low rates. The revenues should then be used to fund recovery measures. The reconstruction tax would be imposed broadly on fossil fuels and

would raise the price of gasoline, for example, by about ¥15 per liter. It would increase the burden on residents and companies in the disaster affected areas as well, but that would be offset by the various support measures given separately to these areas. By using all of the tax revenue for expenditures, it would likely be possible to prevent the disaster from impacting the economy as a whole.

Build a Green Society and Review Nuclear Plant Safety

The impact of the recent disaster over the longer term will be even greater.

First, a thoroughgoing review should be made of the safety measures of existing nuclear power plants. Nuclear energy accounts for 10% Japan's total energy supply (and 30% of electric power). Considering the confusion in the metro Tokyo area as seen the form of rolling blackouts, it would be unrealistic to abandon nuclear power immediately, however one may feel fears about nuclear power plants.

Continued operation of existing nuclear power plants will require that authorities quickly establish safety standards which take into consideration the kind of massive earthquakes and tsunami that have not been anticipated in the past. This recent disaster also shows that, although a nuclear reactor itself may initially be undamaged, grievous consequences which would be unthinkable under normal circumstances can cascade from damage to the surrounding infrastructure. New measures are therefore critical.

It will also be necessary to keep existing power plants in operation in order to buy time until alternative energy can be secured. The costs, however, will be high. In Japan, Chubu Electric Power Company ultimately decided to decommission the No. 1 and No. 2 reactors at the Hamaoka nuclear power plant after determining that the expense required to make them viable against a possible earthquake in the Tokai region would amount to some ¥300 billion.

Another issue is securing energy that does not rely on nuclear power. As a result of the recent reactor accident, construction of any new power plants is bound to be extremely difficult. There are one hundred nuclear power plants in the United States, but no new ones have been built since the accident at Three Mile Island in 1979. And in Europe, the shift away from nuclear energy has been gaining momentum since the accident at Chernobyl.

It will be of critical importance to build new thermal power plants and to expand the use of new forms of energy. Long-term use of thermal power faces restrictions owing to global

environmental problems. The only option is to further the use of wind power, geothermal power and solar power generation, even though the latter has not been seen as commercially feasible owing to its high costs. The need is to shift to a course of boosting energy efficiency while mobilizing all sources of energy.

Given the possibility of an earthquake striking the Tokyo area directly, it would also seem necessary to review not just power plants but the existing urban infrastructure. Thus revenues from a recovery tax should be utilized not just to promote the development of alternative energy but to rebuild infrastructure. The time to dismantle the recovery tax could then be determined after a careful examination of the costs required for such purposes as improving the safety of nuclear power plants, pursuing energy efficiency and green energy creation, and rebuilding infrastructure.

The people directly affected by the disaster continue to live under very severe conditions, while the situation at the Fukushima I reactor remains dire. It is incumbent on the government and all political parties move toward implementing a robust earthquake recovery package as soon as possible.

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