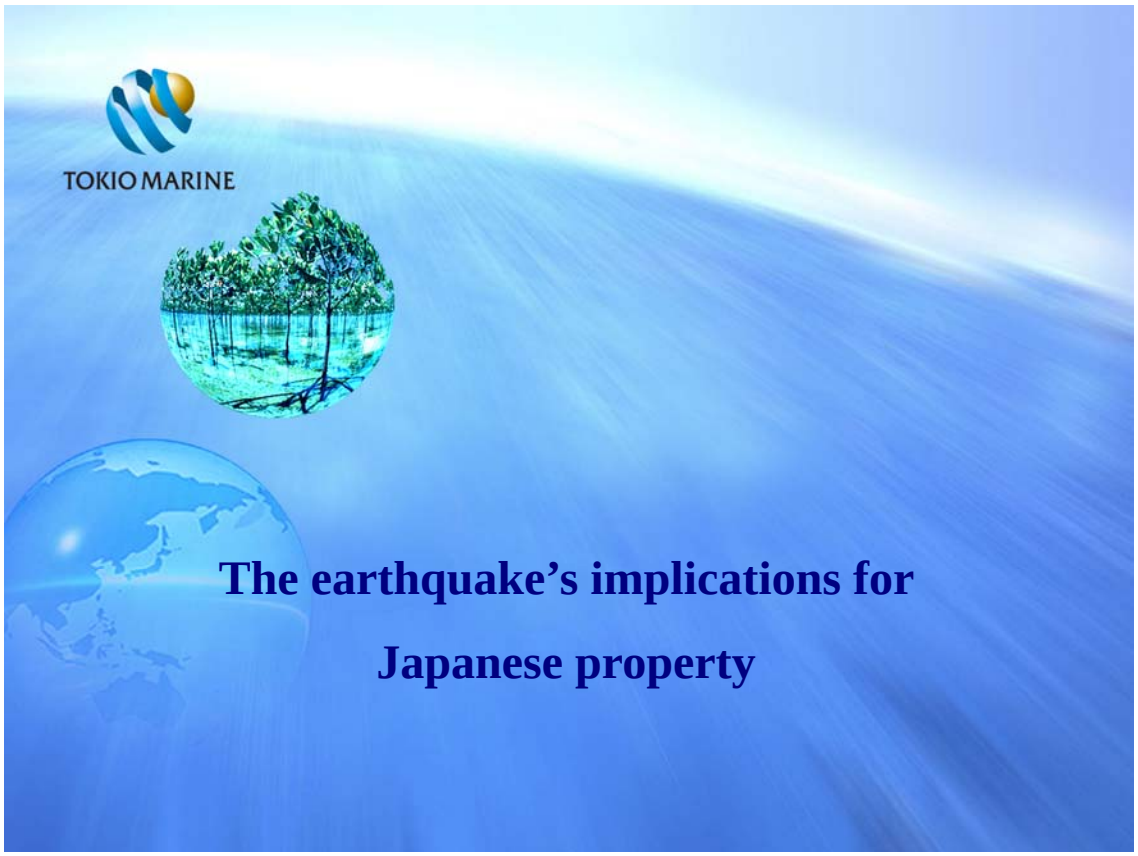

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The earthquake's implications for Japanese property

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Apparently, the long term impact of the earthquake on Japanese economy as well as on the property market is too early to tell amid great uncertainties Japan currently faces. Particularly, a prolonged electric power shortage and a sharp deterioration of consumer confidence could bring profound impacts on economic and investing activities going forward. Although direct damage to Japanese commercial property is minimal, we might see some shifts in the balance of supply and demand of each property sector in response to changing economic behavior of consumer and corporate sectors. Whether the aftermath of this earthquake will be only temporary or will bring a permanent structural change to the property market remains uncertain. Before we assess the economic impact through various data points in the next few months, we summarize the current situation and the potential implications for property markets in this report as follows. With regard to immediate prospects for the property market, we expect the following 3 points:

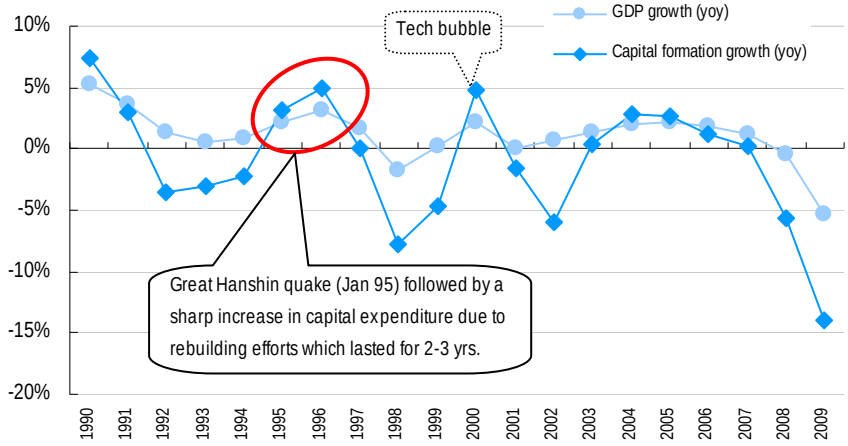
- Equity capital inflow from domestic as well as foreign investors to the property market will slowdown. Yet, we do not expect large price correction within this year given that bank's lending attitude to property has not changed at this moment
- Recovery cycle of office rental market will be delayed (previously assumed late 2010 and late 2011 for bottoms of vacancy and rent, respectively). Recovery of office demand will be pushed backward to at least 2012 or later
- Retail and hotel sectors will suffer for the time being while their demands are directly hit by the earthquake's aftermath. We expect some migration of demands by location or building specification for residential and office sectors

・Summary of economic impact

The regions directly hit by the earthquake (Iwate, Miyagi, and Fukushima prefectures) together account for around 4% of Japan's GDP. The aftermath of the earthquake and the following disaster in nuclear power plants is twofold: losses on capital stock and the net impact of the flow side which comes from an increase in industrial output for rebuilding efforts and a slowdown of overall economic activities. Whether the total net impact of all these factors turns to be negative or moderately positive for the coming years' GDP growth is still unclear. The followings are the further breakdown of these impacts:

1. **Loss on capital stock** (buildings and infrastructure such as road, seaport, and airport)
   According to the government's preliminary analysis released on March 23rd, the direct losses on the infrastructure and capital stock amount to approximately 16~25 trillion JPY.
2. **Decrease in industrial output due to disruptions in supply chain**
   Damages to production facilities in Tohoku region and disruptions in supply-chain are significantly restricting industrial production of some of the globally important manufacturing industries notably IT and auto sectors. According to Credit Suisse, "Japan makes 60% of world's silicon wafers, the building blocks of computer chips. The shutdown of two factories by the earthquake took out a quarter of the world's supply. Japan also makes 90% of a substance called BT resin used to make printed circuit boards." Major auto manufacturing companies such as Toyota, Honda, and Nissan all have more than 50% of their production capacity offshore; however, disruptions in supply chain due to shortage of parts produced in Tohoku region caused them to halt operations at a number of assembly factories
3. **Slowdown of economic activity due to a prolonged electric power shortage**
   As reported, the entire greater Tokyo area is facing significant power shortage caused by the disaster in nuclear power plant in Fukushima. Although TEPCO is now rebooting dormant thermal power plants to make up the lost the power supply, prospects for meeting the demand over the coming summer is still grim. On March 25th, TEPCO announced its forecast for electric consumption for this summer and said the capacity of power supply will fall short of demand by approximately 8.5 million kilowatt (4,650 mm kilowatt of supply vs 5,500 mm kilowatt of demand), which indicates the greater Tokyo area will continue to face power shortage for a prolonged period. Since electric consumption directly links to industrial output, a prolonged electric power shortage could weigh on the economic growth going forward. Mizuho Securities says we will probably see a sharp decline in industrial production output by around 10% mom for March.
4. **Boost in capital expenditure for rebuilding efforts**
   In the past case of Great Hanshin Earthquake, industrial output significantly increased due to the rebuilding efforts as indicated in the figure below (Figure-1). In Hanshin's case, 10 trillion JPY worth of lost capital stock was restored in 3 years. Assuming a same time span, an increase in industrial output from rebuilding efforts could reach 5 to 8 trillion JPY per year, which could be a significant boost for GDP growth over a medium term.

Figure-1 Growth rates of GDP and capital formation (yoy)



Source: Bloomberg, Cabinet office, TMPIM

5. Deterioration of consumer confidence

This is also very hard to quantify; however, the series of disasters is obviously casting dark shadow on consumer confidence at this moment. After the earthquake, the number of passengers of Tokyo Metro Subway plunged by 21% yoy. As the entire country is tinged with great sadness of the tragedy, many consumers are voluntarily restraining spending money on anything considered extravagant such as travels on vacations or shopping in Ginza. Many celebration or entertainment events are postponed or cancelled. Also, companies quickly started slashing employments of temporally workers and contractors. Since household consumption accounts for almost 60% of Japan's GDP, deteriorating consumer confidence could be a bigger concern than the direct damage of the earthquake in the long term.

・Implications for Japanese real estate market

The physical damage caused by the earthquake to commercial properties in greater Tokyo area is minimal. Some JREITs announced minor repairs for cracks or flaked paints; however, no material damage has been reported, which tells a lot about the quality of Japanese engineering for earthquake resistant building. That said, this earthquake could bring profound impacts on tenant activities and ultimately on the supply and demand of the real estate market. From the observation of the current market movements, we see the potential implications for Japan's property market as follows:

1. De-centralization or slowdown of centralization of businesses in Tokyo area

The consistent trend of Japanese economic activities has been the increasing centralization in Tokyo. Yet, the earthquake probably caused many companies to rethink the risk of consolidating operations in one location, and some of them might actually disperse a significant portion of office to other regional cities to reduce risk. Some foreign firms have temporarily moved their office from Tokyo to regional cities like Osaka or Fukuoka. We also hear some domestic firms started looking into the possibility of partially moving their operations from Tokyo. The reasonable candidate city is Osaka which is the second largest metropolitan area

in Japan with access to an international airport. Yet, many of these moves seem to be temporary or at least preliminary at this moment. Brokers say majority of inquires are foreign companies and they are looking for short-term leases for the time being.

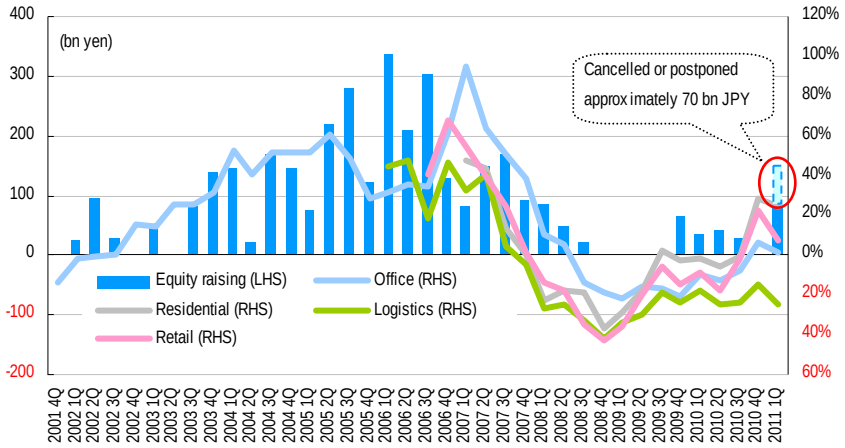
2. Shifts in demand in terms of locations and building specifications

With raised awareness for the risk of earthquake, demand for office could further shift to newer and more earthquake resistant buildings as tenants will move out of aged and obsolete offices. Also, in terms of locations, we might see some retreat of office as well as residential demand from coastal areas of Tokyo bay. Although there is supposedly limited risk for tsunami in these areas thanks to the shape of Tokyo bay, severe liquefaction was observed in the large part of the landfill which has been particularly popular as residential area with high-rise condominium towers. Although those towers themselves were little damaged with 20-30 meter deep underground supporting spiles, the liquefaction shredded water, sewer, and gas pipes in the surrounding area, which are causing numerous unpleasant consequences and inconvenience for the residents.

3. Slowdown of capital inflow to the property market

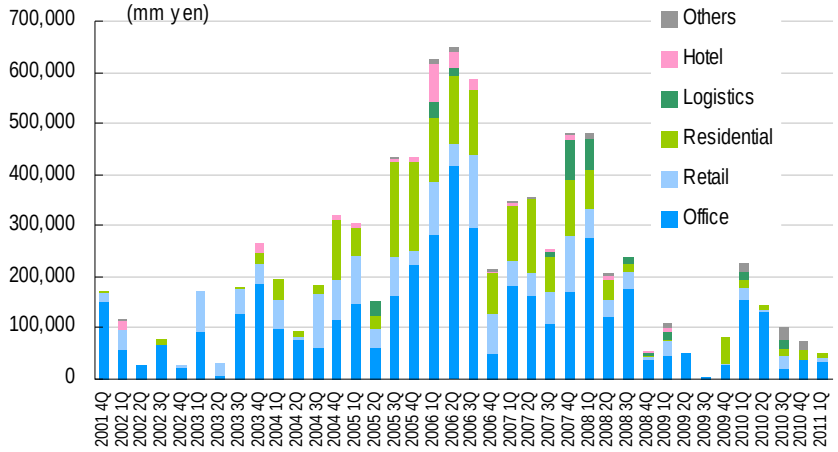
The capital market was also severely impacted by this incident and the share price of JREIT was no exception. As expected, a number of JREITs have announced public offerings in the first quarter and the total capital to be raised was expected to exceed 140 billion JPY a quarter for the first time in 4 years. However, due to the depressed share price and increased volatility of markets, significant amount of pubic offerings are postponed or cancelled (Figure-2). If we slash the assumption of over 100 billion JPY of JREITs' quarterly capital raising by half while maintaining 50% leverage, JREITs' potential acquisition amount for 2011 will decline from almost 1 trillion JPY to less than 500 billion JPY. Thus, this halt of capital raisings will subside JREITs' investment activities significantly.

Figure-2 JREIT's capital raising and premium/ discount to NAV



Source: Bloomberg, JREIT's management companies, TMPIM

Figure-3 JREIT's acquisition amount by sector



Source: Bloomberg, JREIT's management companies, TMPIM

In addition, potential deterioration of foreign investors' sentiment is a concern. Foreign investors, particularly the ones who place great importance on valuation including appraisal, will take more cautious views on Japanese property as they reconsider the risk premium. For example, Union Investment temporarily suspended redemption and issue of units while saying that "valuation (of properties in Tokyo) is not possible at the present time given the exceptional circumstances prevailing in the area. Consequently, proper calculation of the Unilmmo." Global unit price is currently not possible". Unilmmo's exposure to Japanese property is 14%.

4. Uneven impact by sectors

- Retail

With deteriorating consumer confidence, retail sector could particularly suffer for the time being. Department store sales (same store base) plunged by 10-20% yoy for March (Isetan ▲23.5%, Mitsukoshi ▲22.8%, Daimaru/Matsuzakaya ▲9.6%). New auto sales also plunged by 35.1% yoy for March. Given sluggish sales going forward, it is highly probable that those struggling retail tenants will ask for rent reduction or cancellation of leases. In the case of previous Great Hanshin Earthquake, household consumption decreased by 1.75 trillion JPY and took over a year to recover to the pre-earthquake level. Given the impacts of the earthquake far exceeding those of the previous one, recovery of the household consumption is likely to take even longer time.

- Hotel

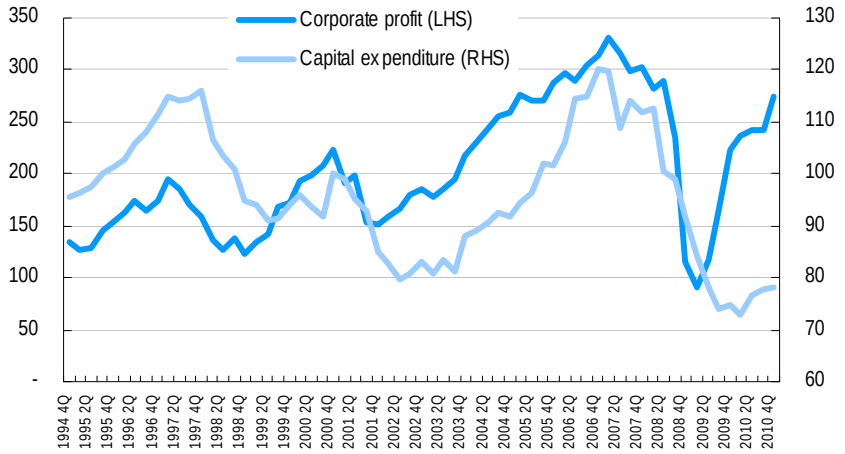
The hotel sector with heavy dependence on foreign tourists' demand will face great difficulties going forward. The number of foreign visitors plunged by 60% from March 11th to 22nd, and given the great concerns for ongoing nuclear disaster, it is difficult to expect a rebound in the number of foreign tourists any time soon.

- Office

With reported loss on assets and disruptions in economic activities, growth in corporate profits will probably go slack, delaying the recovery of office vacancy and the prospects for rental growth. In the past cycles, recovery of corporate profits brought about expansion of capital

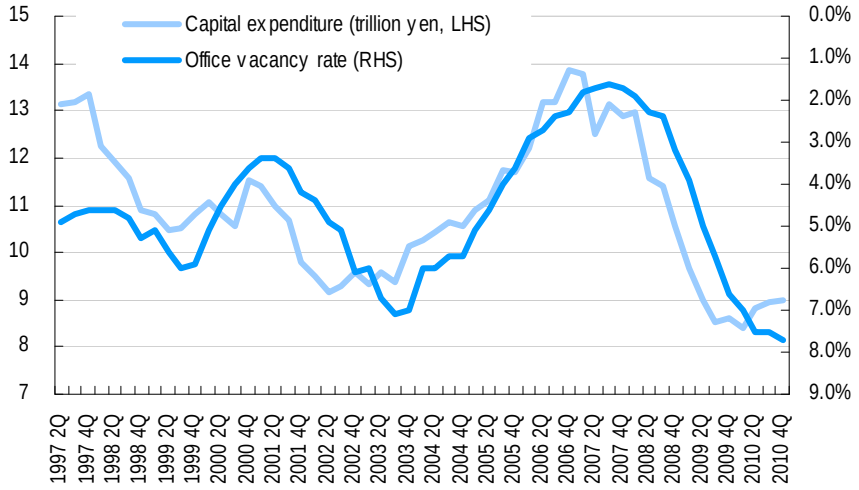
expenditure along with an increase in office demand followed by rental growth, and this whole cycle took 3 years. In fact, after rebound of corporate profits and capital expenditure in 2009 and 2010 respectively, prior to the earthquake, expansion of office demand was expected in 2011 and thereafter. Although solid external demands from healthy Asian economies and recovering US economy are likely to support corporate profits to some extent unlike the time of the previous financial crisis, it is highly likely that capital expenditures will be restrained for a while and we will not be able to see meaningful recovery in office demand until 2012 or later.

Figure-4 Corporate profits and capital expenditure (1993 4Q = 100)



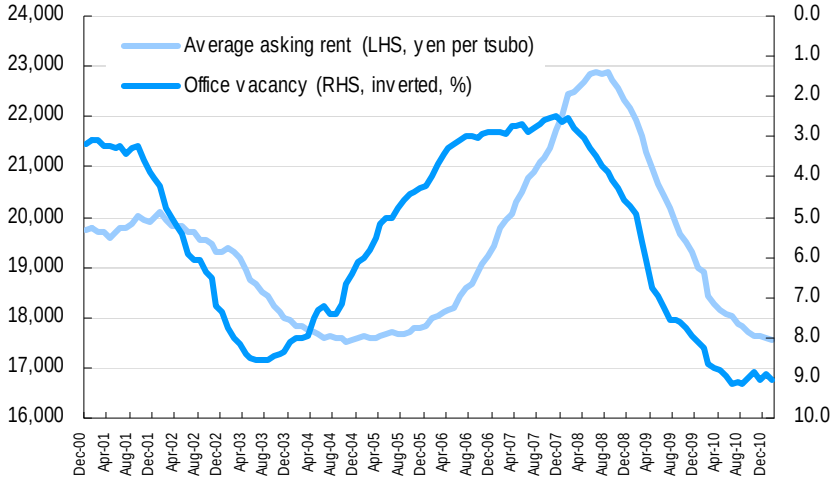
Source: Ministry of Finance "Statistics on business activities", TMPIM

Figure-5 Capital expenditure and Tokyo's office vacancy



Source: Ministry of Finance "Statistics on business activities", Miki-shoji

Figure-6 Tokyo's office vacancy and asking rent



Source: Miki-shoji

- Effects on supply side
  On the supply side, the construction of new office could be severely limited or postponed while TEPCO is unable to power any newly built office with no extra capacity to power, which might ease the impact of an increase of office supply from 2011 to 2012. The supply of residential properties in Tokyo could also be significantly restricted since building materials will be preferentially used for rebuilding efforts in Tohoku region. In the wake of earthquake risk, residential demands are migrating to higher quality and more earthquake resistant properties. Condo developers are seeing an increase in demand for condos in inward areas of Tokyo that are historically less susceptible to earthquake whereas sales of high-rise condominiums in bay area could suffer.

[Explanation of Risks]

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We will seek to issue a solicitation and advice tailored to your intentions and actual status, taking your knowledge, investment experience, property, and purpose of investment into consideration.

2. Time, place, and method of solicitation

We will make no solicitations during such hours or at such place or by such method that may cause discomfort. If you are aware of any such time, place, or method, please inform your salesperson.

3. Explanation of commodities

We will seek to provide an adequate, full explanation of the proposed commodity, and risks involved, taking your knowledge and investment experience into consideration, thereby allowing you to conclude the transaction on your own judgment and responsibility.

4. Maintenance of compliance and internal control systems

We will seek to establish and maintain an appropriate internal control system to ensure that solicitations for investment are made in accordance with relevant laws and regulations, as well as this solicitation policy.

5. Acquisition of and training in expert knowledge and skills

Our officials and employees will seek to acquire and receive training in expert knowledge and skills to be deserving of your trust and to make appropriate solicitations for investment.

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- The financial instruments we deal in and the services we offer are specific in terms of type, content, and contract term. Thus, fees, remuneration, and charges (“Remuneration etc.”) are determined individually. We cannot provide specific amounts, upper limits, and calculation methods in advance. The Remuneration etc. includes, for example, an intermediary fee for the acquisition or sale of real estate trust beneficiary rights, remuneration for investment and advice, and a handling charge for private placement. Please contact your salesperson for the specific amount, calculation method, and other information pertaining to a particular transaction.
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- Financial instruments have little liquidity. They cannot be assigned without the approval of stakeholders, and you may be unable to liquidate them at the expected point in time. In addition, their value may be impaired or reduced, and in certain cases, a loss in excess of the principal amount may result, due to various contracts related to the financial instruments or their design.

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- Please refer to our website for information on which section to submit problems or complaints concerning our financial instrument trading business or money lending business and for information on what action we take to settle complaints and resolve disputes.

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