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Finer-grained earthquake insurance loss assessments could give rise to new problems

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Executive Summary



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Earthquake insurance's purpose is to help stabilize earthquake victims' daily lives in the aftermath of an earthquake. In reality, however, it is used to indemnify property losses. Earthquake insurance reform is now under discussion, but expedient reforms will likely give rise to new problems.

NOTE

1) The discussion herein is limited to residential earthquake insurance, which in Japan is jointly provided by nearly all nonlife insurers.

2) Earthquake insurance coverage is required to be between 30% and 50% of fire insurance coverage, subject to a maximum of ¥50 million for real property and ¥10 million for personal property. Earthquake insurance pays benefits equivalent to 100% of the insured amount in the event of a 100% loss, 50% of the insured amount in the event of a 50% loss, and 5% of the insured amount in the event of a minor loss (up to a maximum of the damaged property's market value).

Earthquake insurance scheme's purpose and structure

Japanese earthquake insurance¹⁾ is a public-private insurance scheme based on the Earthquake Insurance Act (EIA). Article 1 of the EIA states that earthquake insurance's purpose is to help stabilize earthquake victims' daily lives in the aftermath of an earthquake. In other words, earthquake insurance should properly be regarded as "expense insurance" that covers living expenses, not property insurance that indemnifies losses due to earthquakes.

To fulfill its purpose, the earthquake insurance scheme is designed to enable nonlife insurers to settle earthquake insurance claims expeditiously. Specifically, the insurers settle claims by classifying them into one of three strata²⁾ based on severity of damage, irrespective of the loss's monetary amount.

Prompt payment of claims through nonlife insurers' efforts

The earthquake insurance scheme has thus adopted a simplified method of determining the amount of insurance benefits payable. In most cases, however, once earthquake victims have contacted their insurers to file a claim, the insurer must send an employee or registered nonlife insurance appraiser to the victims' homes to inspect the extent of the damage and reach an agreement with the insured. Earthquakes impose a heavy burden on insurers' claims payment operations because of the difficulty of processing the high volume of claims filed all at once due to an earthquake (insured event).

Nonetheless, insurance claims arising from the Great East Japan Earthquake of March

11, 2011, were promptly paid by virtue of nonlife insurers' diligent efforts. The insurers appropriately processed almost all policyholders' claims, completing the property inspections for 97.5% of filed claims within six months of the earthquake.

How insurance benefits are spent

3) Nozaki, Hiroyuki et al., NRI Survey of Uses of Earthquake Insurance Benefits, November 2011.

However, a survey³⁾ conducted eight months after March 2011 earthquake revealed that a large portion of earthquake insurance benefits are not spent on immediate living expenses.

Only 25.0% of the survey's respondents had entirely spent the insurance benefits they had received while 37.5% had not yet spent any (Exhibit 1). In monetary terms, more than half of total insurance benefits remained unspent in the form of cash or bank deposits (Exhibit 2). Additionally, over 80% of insurance benefits received by earthquake victims were earmarked for repairing or replacing buildings, furniture or home appliances⁴⁾.

4) GIAJ, Great East Japan Earthquake: Nonlife Insurance Industry's Response and Future Issues, December 15, 2011 (in Japanese).

The survey data suggest that earthquake insurance claims need not be promptly paid from an economic standpoint. Another finding is that for recipients of earthquake insurance benefits, earthquake insurance functions as property insurance, contrary to its intended purpose. This reflects that earthquake insurance coverage's prevalence is directly correlated with household income. Coverage is not sufficiently prevalent among economically unstable households that need help with their immediate living expenses following an earthquake.

Exhibit 1. Percentage of survey respondents who had spent earthquake insurance benefits within 8 months of receipt (N = 800, SA)

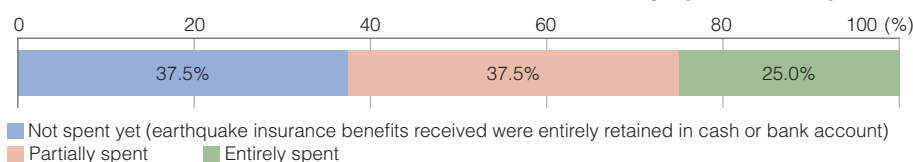
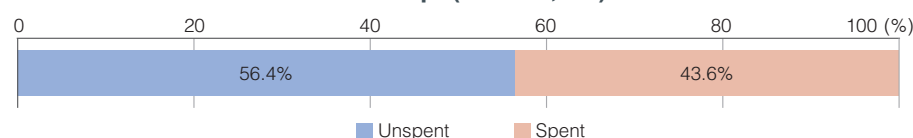


Exhibit 2. Percentage of aggregate earthquake insurance benefits spent within 8 months of receipt (N = 800, SA)



Source: (both exhibits): NRI Survey on Uses of Earthquake Insurance Benefits

Consumers' wishes vis-à-vis earthquake insurance scheme/product

Following the Great East Japan Earthquake, interest in earthquake insurance among consumers has increased, resulting in substantial growth in the number of households covered by earthquake insurance⁵⁾. Meanwhile, the media have extensively reported on the shortcomings of the earthquake insurance scheme and its products. In response, the General Insurance Association of Japan (GIAJ) has recommended that the insurance industry report to the government about consumer demands for higher insurance coverage limits and greater stratification of loss assessment standards and begin discussing modification of earthquake insurance products⁶⁾. The Ministry of Finance has already convened an Earthquake Insurance Project Team. The aforementioned survey likewise confirmed that consumers want greater stratification of loss assessment standards.

5) Non-Life Insurance Rating Organization of Japan, Earthquake Insurance Policies in Force and New Policies Written (by Prefecture) in July 2012, October 15, 2012 (in Japanese).

6) Nikkei Shimbun, Earthquake Insurance Revision under Discussion, July 1, 2011 (in Japanese).

The problem with greater stratification of loss assessment standards

The reason that consumers want greater stratification of loss assessment standards is presumably dissatisfaction with or concern about the magnitude of the differences in insurance benefit payouts among the existing loss assessment strata. Depending on the result of the loss assessment, the amount of insurance benefits payable could be reduced by 50% or even 90%. Such large variation in benefits would naturally be rectified by greater stratification of the loss assessment standards. However, many people with earthquake insurance coverage apparently expect earthquake insurance to function as property insurance. Accordingly, once loss assessment standards have been further stratified, a new problem would inevitably arise if the amount of loss and amount of insurance benefits are not properly aligned.

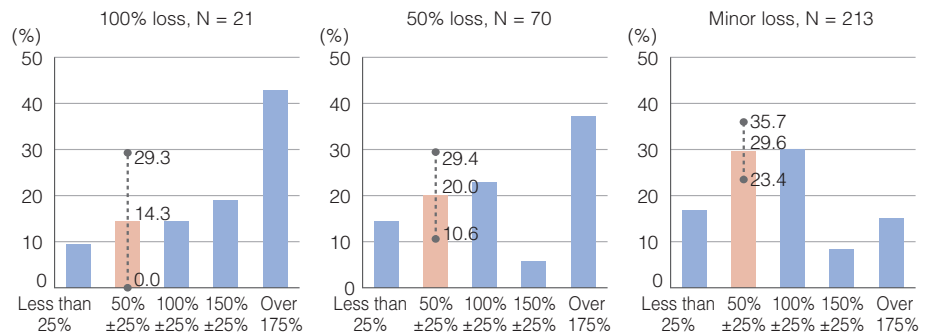
Under the earthquake insurance scheme, losses are assessed based on the extent of damage to buildings' core structural components⁷⁾ as a proxy for damage to the building as a whole⁸⁾. If we assume that earthquake insurance is intended to indemnify 50% of actual losses, there appears to be a reasonable relationship between insurance benefits and losses in the case of minor losses (Exhibit 3). In the case of 50% and 100% losses, however, earthquake insurance can by no means be characterized as property insurance.

I believe that earthquake insurance coverage should be strictly limited to immediate post-earthquake living expenses in accord with its existing stated purpose. However,

7) Core structural components include framework, foundation, roof, and exterior walls. Insurance benefits payable are determined by the extent of damage to such components.

8) GIAJ and *Hoken Mainichi Shimbun* (ed.), Complete Guide to Earthquake Insurance, *Hoken Mainichi Shimbun*, 1972 (in Japanese).

Exhibit 3. Relationship between amount of insurance benefits and amount of loss



Notes: (1) Graphs plot amount of insurance benefits as a percentage of the amount of the loss incurred.
 (2) Earthquake insurance coverage is set at a fixed percentage of insurable value. Accordingly, the second bar from the left (50% ± 25%) should ideally extend much higher than the other bars. Due to inadequate sample sizes, the graphs also showed 95% confidence intervals for each 50% ± 25% bar.
 Source: NRI Survey on Uses of Earthquake Insurance Benefits

if earthquake insurance loss assessment standards are to be further stratified, I recommend, from the standpoint of fairness, taking steps to ensure that the relationship between damage to a building as a whole and damage to its core structural components does not pose basis risk, regardless of earthquake insurance's purpose⁹⁾.

9) The aforementioned MOF Project Team will presumably confirm or modify earthquake insurance's purpose and clarify whether it covers living expenses or property damage.

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