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GLOBAL SEMINAR ON DISASTER RISK FINANCING: TOWARDS THE DEVELOPMENT OF EFFECTIVE APPROACHES TO THE FINANCIAL MANAGEMENT OF DISASTER RISKS

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SUMMARY RECORD

The Global Seminar on Disaster Risk Financing: Towards the Development of Effective Approaches to the Financial Management of Disaster Risks was organised jointly by the ASEAN Insurance Training and Research Institute (AITRI), Bank Negara Malaysia, the Asian Development Bank (ADB) and the OECD.

Opening Remarks

The seminar was formally opened by Dato' Syed Moheeb Syed Kamarulzaman (CEO, AITRI) and Rintaro Tamaki (Deputy-Secretary General of the OECD). The two speakers opened the seminar by reminding participants of the particular vulnerability of Asian countries to natural disaster risks, given high-levels of urban growth in high-risk areas and the potential implications of climate change for Asian countries, and highlighted the need for regional cooperation to manage the impacts of disasters that cross national borders. Rintaro Tamaki also highlighted the importance of OECD's work on disaster risk financing in terms of addressing the potential impact of climate change, how it has been recognised by the G20 and APEC Finance Ministers, and the OECD's plan to propose guidance on the development of disaster risk financing strategies.

Session 1: The need to develop disaster risk financing strategies: considerations and international

During the first session, the International Monetary Fund (IMF), ADB, OECD and the World Bank provided an overview of the case for developing disaster risk financing strategies and the tools and guidance available to support countries in the development and implementation of effective strategies for the financial management of disaster risks. The benefits of an effective strategy for the financial management of disaster risks in terms of supporting a quicker recovery from disaster were highlighted. The IMF noted the increasing importance of these issues for its work, including in technical assistance and lending operations to help countries manage the impact of disasters, and research and analysis into the macro-economic implications of disasters. The ADB outlined the case for estimating and reporting on the contingent liabilities that countries face as a result of disaster risks, including both the explicit liabilities resulting from the costs of rebuilding public infrastructure and providing pre-arranged financial assistance as well as the implicit liabilities related to unanticipated financial assistance. The OECD provided an overview of its proposed guidance on the development of disaster risk financing strategies aimed at supporting governments in the implementation of strategies to manage the financial impacts of disasters, including in addressing some of the common challenges that have been identified through the OECD's work on these issues. The World Bank provided an overview of its work with countries and regions on

disaster risk financing, including recent areas of focus such as the use of existing social protection programs to provide financial protection, the need to develop *ex ante* disbursement procedures to ensure quick access to funding and strategies to manage the significant contingent liabilities created by public assets. A representative from the Australian Attorney-General's Department closed the session with an overview of some of the findings from an in-depth assessment of the efficiency and effectiveness of natural disaster funding arrangements in Australia, including the need to shift funding towards prevention (away from response) and to streamline funding transfers to sub-national governments by paying against estimated costs of reconstruction rather than actual expenditures. Participants discussed the role of capital standards in ensuring sufficient capacity in the financial sector to manage disaster risks (and the lack of a specific capital requirement for disaster risks in the banking sector). The issue of risk awareness and disaster preparedness was raised and how it could be better addressed.

Session 2: Tools for understanding disaster risk

The second session provided an overview of the various tools and indicators available for understanding and measuring disaster risk. The Inter-American Development Bank provided an overview of the indicators they use to measure disaster risks (country risk profiles), financial resilience (disaster deficit index) and the legal, institutional and budgetary condition for disaster risk management (Index of Governance and Public Policy in Disaster Risk Management (iGOPP)). AIR Worldwide provided an introduction to catastrophe modelling, the data necessary to measure disaster exposure, and some of the challenges in terms of gathering the needed data (particularly for public sector assets). Munich Re identified some of the implications of climate change on understanding disaster risks, noting that an increase in losses for some specific regions and perils is attributable to climate change, and that the potential for climate change impacts needs to be included in risk assessment (along with climate variability more generally). The session closed with a presentation by a representative of the Peruvian Ministry of Economy and Finance on their experience in assessing exposures to earthquake and flood risks (including the technical challenges involved in assessing flood risks). The speaker highlighted some of the potential implications of the allocation of losses from a major earthquake, including the potential for stress in the financial sector as a result of loan defaults and the potential for political pressure to provide financial assistance as a result of the large share of losses in the housing sector. Participants discussed the potential for technological developments, such as better quality satellite imagery, to provide the necessary data for risk assessment and the limitations of those technologies relative to weather stations. A question was made whether the residual risk after risk transfer through government involvement could be covered by an industry fund rather than the government fund, which would ultimately be absorbed by taxpayers.

Session 3: Recovering from disasters: ensuring the availability of funding

The third session provided a broad range of country experiences in terms of ensuring the availability of funding for recovery through the use of reserve funds, transfers between levels of governments, insurance coverage and catastrophe bonds, amongst other instruments. A representative of the Mexican *Secretaría de Hacienda y Crédito Público* provided an overview of FONDEN, a reserve fund to provide funding to the federal and state governments for the reconstruction of public assets that is backed by insurance and catastrophe bonds placed in international capital markets. FONDEN has been strengthened by a number of innovations aimed at sophisticated risk and damage assessments that allow for efficient funding of reconstruction. A representative from the Indian National Disaster Management Authority provided an overview of the reserve funds that have been established for the more narrow purpose of funding emergency relief provided by national and state governments. The speaker noted the challenges in securing appropriate (and politically-acceptable) insurance coverage for the reserve funds. A representative from the Australian Attorney-General's Department provided an overview of the financial assistance available from the national government for state governments as well as individuals and businesses including the level of flexibility in providing such assistance. The particular challenge of designing financial assistance

programmes for state governments that do not exacerbate moral hazard was highlighted (i.e. assistance that does not reduce incentives for risk reduction by the state governments beneficiaries). A representative from the Philippines Ministry of Finance provided an overview of the comprehensive disaster risk financing and insurance strategy that has been developed, including the completion of catastrophe modelling of disaster risk exposures and the quantification of average annual losses, the procurement of contingent credit facilities to address sovereign funding needs and support for the development of financial protection mechanisms for local governments and residential property. A representative from the Japanese Ministry of Finance closed the session by providing an overview of Japan's approach to the financial management of disaster risks, highlighting the importance of significant investments in preparedness and prevention (which, in the speaker's view, should be considered as part of a disaster risk financing strategy), quick disbursement of post-disaster funding and the availability of existing mechanisms (such as public financial institutions) to providing financing in order to support economic recovery. Participants confirmed the important of allocating sufficient resources to both ex ante and ex post measures to mitigate disaster risks, and discussed how DRF could be better addressed in the global agenda.

Session 4: Experience in pooling disaster risks

The fourth session explored a diverse set of country experiences in pooling various disaster risks different participants, including a single-peril national pool in Australia, a pool among local government authorities in New Zealand and a multi-peril pool formed by a number of small island states in the Caribbean. A representative from the Australian Reinsurance Pool Corporation provided an overview of various single-peril pools in Australia, including an established terrorism risk pool and a possible pool to cover cyclone risks that is under consideration. The speaker highlighted some key requirements for the establishment of a pool by governments, including that a market failure exists and that the failure creates a threat to the economy, and some recommendations for the design of an effective pool, including that a sufficient pool of funds is accumulated (where insurance cover is optional) and that private insurance market participation in covering the risk be encouraged (e.g. through deductibles on reinsurance cover and retrocession of pool exposure). A representative from the establishment board for a Local Government Risk Agency in New Zealand shared the experience of the Local Authority Protection Programme (LAPP) disaster fund which was formed to help local government authorities cover the costs of their share of public infrastructure reconstruction but has since been depleted as a result of losses from the Canterbury earthquake sequence. The speaker noted that a key reason for the depletion of the pool's funds was the significant increase in the growth of local government asset values which was not matched by a parallel increase in premiums. A representative from CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility) provided an overview of the operations and coverage provided by the first regional (supranational) risk pool. The speaker highlighted the benefits that can be achieved through risk pooling, including lower premiums, increased access to international insurance markets and cost-savings associated with efficiency gains. Participants discussed the relevance of these pools for other countries/regions and some of the challenges (particularly political) to their long-term sustainability, particularly in the context of a major disaster affecting a member of the pool.

Session 5: Financial solutions to manage disaster risks

The fifth session explored the financial tools available to governments to help manage disaster risks. The World Bank provided an overview of the financial tools that it has designed, including contingent credit lines (Deferred Drawdown Option for catastrophe risks or CAT DDO), weather derivatives and catastrophe bonds and the benefits that these instruments can provide to its member countries. Representatives from Swiss Re, RMS and Guy Carpenter then provided an overview of the market for sovereign risk transfer, with a focus on catastrophe bonds and some considerations for government interested in exploring the potential use of these instruments. The speakers highlighted the attributes that can make these instruments attractive to investors (transparency in structuring, independent and simple triggers, diversification benefits,

relative returns in a low-yield environment, etc.) and the challenges to their broader use by governments (complexity, data availability/quality for modelling and trigger development). However, the speakers also noted the potential for a staggered approach to market entry by government issuing, beginning with parametric triggers and smaller amounts as a means to building market comfort and experience with the specific covered perils. Issues of moral hazard in relation to contingent credit lines and the wider impact it may trigger were discussed. The liquidity of cat bonds were also of interest to participants.

Session 6: The role of insurance in supporting financial resilience

The sixth session explored the role of insurance in supporting financial resilience and the challenges to increasing the coverage of disaster risks, particularly in emerging markets. A representative from the Geneva Association highlighted the increasing losses from natural disasters, especially in middle-income countries, and the persistent challenges to enhancing coverage of disaster risks such as underinvestment in prevention and gaps in the data necessary for making effective disaster risk management decisions. The ADB provided a set of preconditions necessary for the development of disaster insurance markets and the impediments to meeting those preconditions, including lack of trust in insurance companies and insufficient capacity (solvency strength) for covering disaster risks among insurers. The speaker noted the particular benefits of standardised data on risks and exposures as a means of supporting cross-border risk transfer. A representative from Pakistan described some of the challenges to enhancing disaster insurance coverage in her country (echoing many of the comments made by the ADB), including limited awareness of the benefits of securing financial protection, distrust in insurance companies, the existence of post-disaster financial assistance which acts as a disincentive to insurance take-up and undercapitalisation of insurance companies. She also highlighted some of the reasons for the persistence of these challenges, such as limited oversight of insurance companies (which leads to fraudulent practices and exacerbates distrust) and an unlevel playing field between private and state insurers which impedes competition and the adoption of new technologies in areas such as product distribution. The session closed with a presentation by a representative from the New Zealand Earthquake Commission (EQC) which highlighted the significant benefits of high-levels of insurance coverage and cross-border risk transfer in managing the financial impacts of disasters. Despite facing losses equivalent to approximately 20% of GDP as a result of the Canterbury earthquake sequence, New Zealand was able to recover relatively quickly and without resorting to an increase in taxes to cover the significant reconstruction costs as most losses were insured by EQC or the private insurance industry and reinsured in international markets (which absorbed much of the cost). Participants discussed the barriers to transferring risks to international markets, notably a lack of standardisation in the quantification of exposures. One participant noted the efforts by the insurance industry to develop a standard format in Europe for transferring risk exposure data between insurers and reinsurers (CRESTA) and the benefits that would be derived from a global standard. The possibility that technology could support better data collection for the purposes of disaster risk management was raised.

Session 7: Supporting the development of an insurance culture

The seventh session explored the public awareness and regulatory initiatives that can support the development of an insurance culture. A representative from the General Insurance Association of Japan provided an overview of its comprehensive approach to ensuring understanding of disaster risks and the role of insurance in protecting against those risks, with specific initiative targeting students from primary school to university. The speaker highlighted the importance of considering the specific characteristics of the target audience in developing risk awareness initiatives and the role of insurance companies in building trust by developing products that are fair and provide a real benefit to policyholders. A representative from GIZ's Regulatory Framework Promotion for Pro-poor Insurance Markets (RFPI) in Asia programme provided an overview of their work with regulators, service providers, insurance companies and distributors in a number of countries on creating an enabling environment for inclusive insurance products that meet the financial protection needs of vulnerable communities. The speaker described initiatives aimed

at making regulatory frameworks more conducive to the development of micro-insurance products and developing innovative crop insurance and flood insurance products for low-income segments of the population. The Insurance Commissioner for Oklahoma closed the session by describing the communications tools used to promote the use of disaster insurance and the quick settlement of claims post-disaster. He highlighted the importance of raising awareness among businesses along with households as well as the important role of regulators in monitoring for fraud in post-disaster environments. Participants discussed the increase in disaster insurance penetration following the occurrence of a disaster and the potential for such events to serve as an opportunity for communicating the need for financial protection. Participants also discussed the increasingly important role of social media as a means for communicating with individuals and business pre- and post-disaster.

Session 8: Disaster insurance as a tool to support the wider economy

The eighth session explored some of the approaches used to provide financial protection for challenging risks and underserved segments of the populations, as well as some international initiatives and proposals to enhance the role of insurance in the financial management of disaster risks going forward. A representative of Willis Re described a proposal aimed at addressing the lack of demand for financial protection by integrating exposure to disaster risk into financial reporting (“1-in-100 Initiative”). A representative of the Japanese Ministry of Finance provided an overview of the Japanese earthquake insurance scheme which provides a flexible risk-sharing mechanism between the government and the insurance sector for able the significant financial impacts of major earthquake in Japan. A representative from the Micro-Insurance Network highlighted some of the attributes necessary for expanding the use of micro-insurance for providing financial protection against disaster risks, including product design features, proportional regulation and consumer education. He noted the inclusion of micro-insurance as an important component of the Cebu Action Plan objective to enhance financial resilience. A representative from Munich Re closed the session with an overview of the G7 Climate Insurance Initiative, announced by G7 Leaders in Germany in June. The speaker highlighted some of the challenges to meeting the commitment to extend financial protection to 400 million people in vulnerable countries (particularly direct insurance) and some of the investments that could be made to support the achievement of the goal (for example, investments in improving data collection, capacity building, capitalisation of existing insurance pools, etc.). Participants discussed some of the specific regulatory changes that can be made support the development to micro-insurance markets, such as elimination of agent licensing requirements, simplified language in policy documents and flexibility in premium-setting and claims-settlement requirements. There was also a discussion of some of the challenges to meeting the medium-to-long-term objectives of increasing access to climate insurance in countries with limited insurance market development and the potential role of compulsion in lowering transaction costs and ensuring sufficient demand for financial protection.

Closing Remarks

The seminar was formally closed by Timothy Bishop (Head of Financial Affairs Division, OECD) and Arup Chatterjee (Senior Financial Sector Specialist, ADB). Timothy Bishop summarised some of the key findings from the discussion, including:

- The need for an integrated approach to the financial management of disaster risks, that recognises the benefits of collaboration across government and between the public and private sectors. To be effective, a disaster risk financing strategy must benefit from high-level political support, which can better be secured by recognising the contribution of disaster risk financing to a broad range of public policy goals.
- Insurance coverage supports financial resilience and a key objective of policymakers should be to expand the insurance coverage of disaster risks, including by enhancing the reach of insurance to

vulnerable populations through micro-insurance as well as by investing in building risk awareness and the enabling regulatory environment necessary for achieving significant levels of insurance coverage. He noted that new risk transfer tools and continued investments in risk mitigation and prevention will be important for ensuring sufficient capacity for insuring disaster risks.

- The need for governments to invest in the collection of quality data that will allow for the quantification of disaster exposures is critical, particularly as climate variability and change increased the level of complexity in assessing disaster exposures. Data standards as well as open access to data can provide important support to improving the quality and availability of data and facilitating the transfer of risks to international insurance and capital markets.
- International dialogue will remain key in addressing this complex policy challenge. Disaster risks (and impacts) are international and there are many successful examples of international cooperation to manage these risks (such as regional risk pools and the cooperation of international organisations in the development disaster risk financing strategies).

Arup Chatterjee from the ADB supported the summary presented and highlighted the need to cooperation to address these challenging issues and the role of international donors and development banks in helping to build capacity in these areas.