DIASPORA SUPPORT FOR EARTHQUAKE MICROINSURANCE IN CHINA

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ABSTRACT:

The importance of remittances in post-disaster relief is well documented: remittances typically increase significantly after disasters. Remittances are a form of ex-post insurance for countries with a less developed insurance infrastructure: diaspora communities help to diversify sources of external finance for meeting disaster repair costs. Rather than face the prospect of increasing remittances over a prolonged period of time to cover catastrophic loss, remitters would benefit from risk pooling schemes, such as provided by natural hazards insurance. Recognizing the global inter-connectedness of the international financial community, the practical possibility exists for diaspora communities to be actively involved in supporting the development of earthquake microinsurance, as it is in contributing towards foreign direct investment.

KEYWORDS: Earthquake, microinsurance, diaspora, migrant, remittances

1. INTRODUCTION

As the prefix (micro) suggests, a key attribute of microinsurance is the modest size of individual policies, tailored to suit the needs of people of very limited financial means, for whom self-insurance is not a viable option. The economic impact of a loss to an individual, and his or her family, can be cushioned if some kind of risk sharing insurance mechanism is in place. Mutual insurance schemes work well at the village level, where participants know each other well enough that schemes are backed at least by a solid amount of social, if not financial, capital. This has been shown to be vital for the success of microfinance schemes. If an individual member of a village community has obtained a microfinance loan to buy a farm animal, which suddenly dies, the community can provide moral support and aid to encourage and assist the unfortunate fellow villager make a progressive financial recovery.

However, if the entire village suffers a disaster, recovery is very much harder. Worse still is the situation where many villages in a region experience a major natural catastrophe, such as earthquake, cyclone, flood or drought. Such risk is highly correlated and cannot be diversified within the region. Beyond a certain scale of loss, commercial providers of microinsurance need to have some reinsurance coverage. There are specialist reinsurers, such as the Netherlands-based Interpolis Re, which have altruistically offered subsidized reinsurance cover for a combination of humanitarian and business development reasons. Another Dutch company, Eureko Re, provides reinsurance cover for a Sri Lankan Life & Health insurer against loss from a tsunami, which is a remote risk with quite a long return period. Otherwise, commercial catastrophe reinsurance of microinsurance schemes is a rarity, especially for property loss. The people who would benefit most from such cover live in areas prone to natural disasters, but the payment of disaster insurance premiums is not perceived as a high priority, given other pressing demands on family expenditure, and the hopeful prospect of national and foreign post-disaster charitable relief.

Murphy (2007) has categorized the use of remittances in China, most of which are sent by the several hundred million urban migrant workers back home to rural areas. These include the purchase of everyday items and durable consumer goods, healthcare, education, agriculture, as well as house repairs and house construction. Rural households may allocate more than half of their remittances to house construction. Such expenditure enables the family members remaining behind to enjoy basic improvements in accommodation which enhance family welfare. In rural China, preparations to build a house have customarily involved finding money to buy materials and asking friends and neighbours to help with building work. With migration however, cash has replaced labour, and local construction teams are paid to undertake the work. In the event of a major earthquake, migrants are exposed to the risk of sharply increasing remittances to pay for damage repairs or reconstruction. There ought thus to be a demand for earthquake insurance, provided this were perceived as affordable.

2. DIASPORA INFLUENCE ON WORLD BANK INITIATIVES

At the opposite insurance pole to microinsurance is state insurance. Replace the individual by an island, and the village by a confederation of islands, and the problem of catastrophe reinsurance emerges in an altered guise. If a natural disaster strikes one or two islands moderately, mutual support from the other confederated islands will go a long way to expediting recovery. However, if a major catastrophe were to occur afflicting many of the islands simultaneously, or several very destructively, then the financial implications could be calamitous collectively for the islands.

Following the destruction in Grenada, Jamaica and Grand Cayman wrought by Hurricane Ivan in 2004, Caribbean Community (CARICOM) Heads of Government requested World Bank assistance in establishing a Caribbean Catastrophe Risk Insurance Facility (CCRIF). This is one of the ways the Caribbean region has begun to take a proactive stance against impending major natural disasters. The launch and success of the world's first regional risk insurance facility is a signal to international donors, lending agencies, insurance markets as well as local disaster agencies and citizens, that Caribbean governments are keeping ahead in pre-disaster planning by working to develop programmes and policies to mitigate natural disasters long before they happen.

The CCRIF constitutes an important change from ex-post disaster response to ex-ante disaster management. Governments purchase catastrophe coverage akin to business interruption insurance that would provide them with an early cash payment after a major hurricane or earthquake, so expediting repairs and reconstruction. The islands of the Caribbean have sufficient political solidarity and geohazard affinity to make a pool worthwhile and workable, and a similarly structured pool is being developed for islands of the South Pacific. Risk pooling generates a diversification benefit, which significantly lowers insurance costs: for this specific pool, the premium reduction is as much as 40%.

A Donor Pledging Conference hosted by the World Bank in Washington, DC gathered ministers and other representatives of 18 governments of the Caribbean region, international and regional organizations, and potential donors. Supporting this pioneering multi-country catastrophe insurance pool, Canada, Bermuda, UK and France, combined with the Caribbean Development Bank and the World Bank to pledge US$47 million to the reserve fund of the Caribbean Catastrophe Risk Insurance Facility (CCRIF), so providing participating governments from the region with immediate access to liquidity if struck by a hurricane or earthquake.

For Canada, UK and France to have participated in this ex-ante risk sharing reflects the strength of international historical ties with the Caribbean, not least the numerous individual family connections. There are very sizeable Caribbean diaspora populations in these countries, which is not the case for Japan or other European countries invited to the Donor Pledging Conference. The fundamental political reality is that there are inescapable ex-post obligations for these specific nations to assist anyway. For any prosperous industrialized country, which has a sizeable Caribbean diaspora population, it is a matter of national self-interest to seek to bolster the Caribbean Catastrophe Risk Insurance Facility. Each diaspora population has a public voice which can influence government policy on disaster relief abroad. But, quite apart from disaster management at a government level, diaspora populations can contribute effectively at a personal level to providing disaster insurance cover for their compatriots.

3. PERSONALIZING RISK TRANSFER

Globalization has yet to reform the settlement of financial loss from natural disasters in developing countries. Much more of this financial risk could be transferred to the safer and more prosperous havens of the world. Traditionally, there has been heavy reliance on post-disaster overseas aid from both government and non-government organizations, as well as from charitable donations from private citizens. Where aid is chanelled through the government of the afflicted country, the frictional loss from maladministration and misappropriation can be a serious concern: developing countries, even those which are nominally democracies, tend to be especially vulnerable to poor governance.

In the aftermath of the Kashmir earthquake of 2005, some of the relief funds sent to Pakistan are believed to have been diverted to benefit the Pakistan military, as well as separatist terrorist causes. The Myanmar cyclone of May 2008 is an especially tragic example of a natural catastrophe, the human death toll from which was grossly aggravated by the government's self-serving prioritization of national security over humanitarian relief. Authoritarian insistence on retaining the control over aid dispensation creates many opportunities for state corruption and other forms of mismanagement.

Recognizing the frictional losses associated with government mediation and bureaucratic processing of donations, there is an efficiency gain to be made from direct donor to recipient transactions. This sector of aid is therefore to be encouraged. Personal connections between donor and recipient countries are key. A recent example where more could have been achieved is the Kashmir earthquake of 2005; most of the 1.6 million UK citizens of Pakistani origin have some Kashmiri connections. The physical distance across Eurasia from Britain to Pakistan is surmounted by human ties, binding people across continents.

The evolution of natural catastrophe insurance has been punctuated by the occurrence of actual disasters that have changed the course of the insurance market, and led to commercial innovation in the design and structure of insurance policies. The Indian Ocean tsunami, Hurricane Katrina, and the Kashmir earthquake are three major hazard events of global significance, each making disaster history in a unique way. The occurrence of these events within a short period of under a year may have caused international disaster fatigue, but out of these consecutive tragedies there should emerge improved innovative methods of insurance risk transfer.

3.1. The Global Village

Social norms of behavioral conduct in small village communities play a vital role in the practical and efficient functioning and regulation of microfinance and also microinsurance schemes. A strength of traditional society which facilitates microbusiness is the endowment of social capital, such as information flow, trust, and empathy between village members. The definition and meaning of a village community in the 21st century have been transformed from their historical sense by the universal expansion of communication networks, and the global migration of populations. Diaspora communities virtually extend the concept of a village to a global scale, and the rapid expansion of the use of the internet and cell phones allows immediate communication of news and the ready transfer of information and money.

How can the modern concept of the global village encourage innovation in microinsurance for the developing world? First, diaspora populations extend family groups beyond the borders of developing countries, into the territories of the industrialized nations. Secondly, cell phones and the internet allow financial transactions to be made instantly by proxy. The separation distance metric which is relevant is now not spatial distance across the globe, which might be tens of thousands of kilometers, but rather the time taken for financial transactions to be made electronically and processed, which may vary from seconds to minutes. For a relative to send money across the globe today is hardly more onerous than a relative walking from home to home in a village a century ago.

To the extent that air-time on mobile phones is becoming a universal international currency, the topping-up of mobile phones in one region by relatives or benefactors far away may provide a convenient and efficient means for the payment of insurance premiums. Conversely, the payment of insurance claims could be settled at mobile phone vendor outlets. There may thus be a common mobile phone solution to a number of classic 'last mile' problems: how to bring telecommunications, banking and microinsurance to a small village. For entrepreneurs, the financial motivation to succeed lies in the long-tail of millions of small transactions, each of which may contribute a minuscule amount towards profitability.

For families living in the same village, or perhaps district, risk sharing would be a social norm. This is less the case for families separated by national borders. However, family ties of financial obligation may not be much weakened with separation, and a relative in one country might help pay insurance for other relatives in another. Especially if there are massive differences in the standard of living, this risk transfer from the developing world to the industrialized world should be comparatively easy for an expatriate living in an affluent country, used to sending remittances back home. Already health and life insurance is being transacted through remittances. Life insurance cover for Indian migrants working in the Persian Gulf may be purchased by family members in India. Dependent families of Guatemalan migrants working in Canada may be included in health insurance schemes.

Of course, there are international business barriers and bureaucratic hurdles to be overcome, which do not exist at a village level. For example, the international regulation of monetary transfers and insurance is an important factor which needs to be addressed. But the political will to overcome such hurdles is concentrated by the future dismal prospect of political instability and insecurity resulting from mass migration linked with climate change (IOM, 2008). By expediting post-disaster recovery, insurance can help stabilize migration flows following natural disasters of increasing frequency and severity.

Governments of the industrialized nations, prosperous as they are, have saturating disaster assistance budgets. The private sector potential for risk transfer remains to be fully explored and expanded. National schemes for implementing diaspora microinsurance (Woo, 2006) may open up a new private sector channel of funding of natural disaster loss in developing countries. These schemes could be operated alongside initiatives to encourage disaster risk mitigation, which would help to lower risk premiums.

With climate change threatening national security through the destabilization of populations, G8 governments may be motivated, as much by national self-interest as international solidarity, to swap developing country debt for the implementation of major risk mitigation schemes that may stem migration flows. The concept of western governments using debt forgiveness as a vehicle for driving through important risk mitigation measures in developing countries is politically and ecologically appealing. In drawing upon the responsibilities of those better able to afford to pay, it mirrors the underlying concept of diaspora disaster insurance. In both cases, finance sourced from the more prosperous industrialized world is used to reduce future loss, which is ultimately a shared international burden. This conceptual synergy is helpful for a joined-up approach to risk sharing and insurance.

4. DIASPORA REMITTANCE SUPPORT

Remittances are the most reliable source of money going to developing countries. The importance of remittances in post-disaster relief is especially well recognized by the US government. Migrants from devastated countries have been permitted to work longer in the USA, so as to earn aid money to send home. Indeed, the policy has been formally proposed of admitting citizens from disaster zones to work in the USA specifically to earn money to pay for reconstruction back home (Wilkinson, 2005). This may be viewed as a relatively inexpensive way to reduce the direct US financial commitment to disaster relief.

As an illustration, El Salvador was struck by several destructive earthquakes in 2001, after which temporary protective status was granted by the US to 150,000 illegal El Salvadoran immigrants. As part of the US administration's ongoing efforts to assist the earthquake recovery process, this has been extended periodically for a duration covering at least two World Conferences on Earthquake Engineering. The pace of earthquake reconstruction has been painfully slow, and not helped by the 2005 eruption of the Santa Ana volcano, and mudslides and flooding caused by Hurricane Stan. Only 46% of the total number of houses destroyed or damaged had been reconstructed or repaired as of January 2006. Housing programs funded by the European Union and the Inter-American Development Bank were still incomplete, as was reconstruction of the country's seven main hospitals. Remittances sent by Salvadorans living abroad, mostly in the United States, are a key economic driver. In 2007, the $3.5 billion of remittances accounted for 18% of El Salvador's Gross Domestic Product. Remittances are used not just for essential subsistence items, but for consumer goods that improve the quality of life: electrical kitchen appliances, televisions etc.. Furthermore, the El Salvador government is already working with international development organizations to encourage the productive use of remittances, such as in family business investment. In a country as hazard-prone as El Salvador, remittances could also be used prudently for risk mitigation and risk transfer.

Even more than from El Salvador, another diaspora community which might well take advantage of remittance-based microinsurance is from the Philippines. With 1 in 7 Filipino workers earning a living abroad, remittances from Filipino Overseas Foreign Workers (OFW) reached $15 billion in 2007, contributing about 12.5% to their home nation's Gross Domestic Product. The majority of remittances are sent from the USA, with which the Philippines has historical colonial ties; Saudi Arabia is second, followed by other Gulf states and the prosperous South East Asian tiger economies. The Philippine economy has been a significant beneficiary of the double-digit growth rate in the volume of remittances, and the Philippine banks have received valuable fee income from their remittance business lines. With Manila being the text-message capital of the world, mobile phones are likely to be the predominant efficient low-cost mode for sending remittances in the future. The countries where the Filipino OFW work are much less disaster-prone than the Philippines, which ranks as one of the most hazardous in the world. Earthquakes, volcanic eruptions, typhoons and floods pose a continual threat to the lives, homes, and livelihoods of the domestic population. With financial transaction costs minimized through the use of mobile phone technology, the labouring Filipino diaspora could make a significant contribution to the provision of disaster microinsurance.

A socio-economic feature of remittances of microinsurance potential is the diversity of ways these may be received back in their motherland. Besides sending remittances to family members, migrants may provide financial support to development projects in their country, in particular to the village associations in their respective villages. In Senegal, for example, the village association as a channel for collective remittances has become an important phenomenon. Members of a village association make regular financial contributions towards development projects in their home village. The most popular projects have been in the field of education, health, telecommunications and agriculture. These projects are widely recognised as contributing importantly to improving living conditions, and could encompass future schemes to mitigate the impacts of natural disasters, or provide microinsurance at village level for extreme crop failure, or property loss from natural disasters.

5. LESSONS FROM THE WENCHUAN EARTHQUAKE OF 12 MAY 2008

The challenge of catastrophe microinsurance is magnified by the scale of disaster. With the tally of fatalities and the missing approaching six figures; casualties numbering hundreds of thousands; and five million homeless, disasters seldom are as calamitous as the Wenchuan County, Sichuan, earthquake that struck tragically in the early afternoon of Monday, 12th May, 2008. International offers of tents, communications equipment and technical support were swiftly made to expedite the Chinese response. An outpouring of domestic and international donations in cash and goods to China's earthquake zone exceeded $8 billion in value, and China's central government allocated a similarly large amount to the country's reconstruction fund. The sum raised nationally is not surprising, given that Sichuan province receives billions of dollars of remittances annually from intra-China migration from the agricultural interior to the prosperous industrialized eastern coastal provinces.

Frictional loss of disaster funds is an endemic relief problem. The Chinese President Hu Jintao said that supervision over the use of the generous earthquake relief fund and materials should be intensified to guarantee they would be exclusively used for what they were intended, and that clean governance should be strengthened. Apart from the earthquake engineering lessons to be learned from this disaster, there are financial lessons on risk transfer. It is in the interest of the Chinese government to encourage the development of the private insurance sector, to alleviate the risk burden to itself. As in all developing countries where a measure of corruption is intrinsic to the way of life, efforts to transfer risk in a personalized way, bypassing state intermediation and frictional losses, should be welcomed.

In its rapid response to the disaster, the Chinese diaspora dispersed around the world contributed millions of dollars. The New York based Chinese Consolidated Benevolent Association alone has raised more than $800,000, chanelled through the Red Cross Society of China. This is the largest fund-raising drive in its recent history, surpassing the money raised for victims of past natural disasters on the Chinese mainland, including a severe winter storm that struck southern China, and the devastating floods in 2003. Given the earthquake location well within the interior of the country, the number of direct personal connections with the Chinese diaspora was far fewer than if the earthquake had occurred within one of the coastal provinces. Foreign migration has predominantly come from these provinces. A major natural disaster along the coast would almost certainly have evoked an even larger diaspora response.

The key role that mobile networks play in the aftermath of natural disasters is reflected in the generosity of their response after the 2004 Sumatra earthquake and Hurricane Katrina in 2005. Following the 12 May earthquake, Nokia and Nokia Siemens Networks pledged a total of over RMB 53 million ($8 million) to earthquake relief, of which approximately RMB 18 million was earmarked for the immediate needs of those most affected. The additional RMB 35 million was for the rebuilding efforts and for other longer term needs in the affected areas. Nokia also donated 5,000 phones with prepaid SIM cards in partnership with Sichuan Mobile. Furthermore, to ensure the integrity and effectiveness of its network, which is critical in relief and reconstruction work, Nokia Siemens Networks established a 24-hour, on-site service for the local operator.

6. MIGRANT MARKET FOR EARTHQUAKE MICROINSURANCE IN CHINA

The traditional social conventions of rural communities in China place great store on housing. It is hard for a man to find a bride if he does not have a respectable house. Using migrant urban earnings to build a house is therefore essential for rural people to gain respectability. Building a large house is more a matter of self-respect not ostentation. Indeed, it is also a prerequisite for social participation (Murphy, 2007). Given the societal importance of housing, and the significant proportion of remittances allocated for house improvements and construction, there ought to be a viable thriving earthquake microinsurance market for urban migrants. The question is how this market can be developed commercially. Obviously, a programme of education is needed to convey the benefits of insurance protection of a highly valued asset.

But affordability is a stumbling block. As with all microinsurance, unit transaction costs have to be minimized. Fortunately, rapid progress to reduce such costs is being made. Already, the concept of using mobile phones to send remittances in China is being developed. Complementary to their vital logistical contribution ex-post, mobile phone companies also have a potentially important ex-ante role as the ultimate link between financial services provider and the consumer. In this role, they can facilitate mobile microinsurance (MMI). So the technological prospects for driving down unit costs are excellent. But even with transaction costs minimized, the risk premium may still be deemed to be excessively expensive. With cover restricted to compensation for severe damage, or total destruction, by an earthquake, the overall insurance premium for an ordinary rural house might amount to several US dollars per month.

Prosperous though urban migrants are in China, by the standards of their rural compatriots, their income levels fall well short of foreign migrants earning a livelihood in an industrialized nation. Chinese emigrants prefer North America and Western Europe as their destination, but also settle for Argentina, South Africa, Mauritius, Israel, the Gulf States, etc.. For foreign migrants, an amount of several US dollars per month is a very modest expense – about enough to pay for a drink. It makes financial engineering sense for some of the disaster risk to be transferred to more affluent Chinese diaspora communities dispersed throughout the industrialized world, where insurance is a familiar commodity, and standards of living are so much higher. Through increased remittances over time, or ex-post charitable donations such as after the Wenchuan earthquake, diaspora communities are already accustomed to paying for loss after a natural disaster strikes. Diaspora disaster insurance cover could be structured at various societal levels. At a family level, it would provide coverage against family earthquake loss, and a remitter's subsequent obligation to increase remittances to pay for catastrophic loss from an earthquake. At a collective village level, through the action of village associations, the insurance would provide cover for village earthquake destruction.

In addition, as with the Caribbean Catastrophe Risk Insurance Facility, a Chinese earthquake insurance fund for the rural poor might be established with initial contributions from a wide range of public and private sources with a political or commercial regional interest. Apart from government organizations, contributions might be solicited from major multi-national corporations, such as Nokia, with substantial business interests in China, and a social responsibility agenda. Such a fund, supplemented by additional contributions from the Chinese diaspora, could make earthquake microinsurance widely affordable to urban migrants with rural households. The expansion of the earthquake microinsurance market in China is a classic win-win outcome, with significant long-term benefits accruing both to the insured, and also the Chinese earthquake insurance fund contributors.

7. REFERENCES

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