Box B The Global Reinsurance Industry

Reinsurance is a transaction where an insurer cedes all or part of an underwriting risk to a reinsurer in exchange for a premium. By transferring some of the risks they assume (known as cession), insurers can reduce risk concentrations and diversify their risk, which should reduce volatility in their net underwriting income and leave insurers more resilient to claims arising from large-scale events such as natural catastrophes.

Around 200 companies globally offer reinsurance – these firms' annual gross reinsurance premiums written totalled around US\$200 billion in 2010, a small fraction of the US\$4 trillion in primary insurance gross premiums. The global reinsurance industry is concentrated: the top 10 reinsurers accounted

for nearly 65 per cent of industry gross premiums in 2010 and the top five reinsurers accounted for just under one-half (Table B1). Munich Re is the largest reinsurer in the world with gross premiums of US\$31 billion in 2010, or 15 per cent of the total market. A number of large general insurers also write reinsurance business, although most companies offering reinsurance are specialised reinsurers.

Reinsurers domiciled in Bermuda, Germany, Switzerland, the United Kingdom and the United States account for the largest share of the reinsurance industry. European-domiciled reinsurers accounted for around 60 per cent of gross premiums written by the industry in 2010. The US-based reinsurers made up 15 per cent of gross premiums,

Rank	Company	Domicile	Gross premiums written	Estimated market share
			US\$ billion	Per cent
1	Munich Re	Germany	31.3	15
2	Swiss Re	Switzerland	24.8	12
3	Hannover Re	Germany	15.1	7
4	Berkshire Hathaway	United States	14.4	7
5	Lloyd's	United Kingdom	13.0	6
6	SCOR	France	8.9	4
7	Reinsurance Group	United States	7.2	4
	of America			
8	Allianz	Germany	5.7	3
9	Partner Re	Bermuda	4.9	2
10	Everest Re	Bermuda	4.2	2
	Top 10		129.4	64
	Total market ^(a)		203.3	

Table B1: Top 10 Global Reinsurers Ranked by gross reinsurance premiums written in 2010

(a) Estimate

Sources: A.M. Best Company; Swiss Re

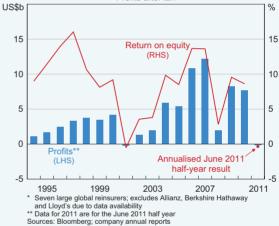
while Bermudian reinsurers accounted for 12 per cent. Despite European reinsurers' dominant market share, the United States is the biggest reinsurance market in the world reflecting the substantial value of insured property in catastrophe-prone areas. By region of the ceding primary insurer, North America accounts for the largest share of gross premiums assumed (about 45 per cent in 2009), while Europe's share is around 30 per cent, and Asia's is a little under one-fifth.

Non-life insurance accounts for the bulk of gross premiums assumed by reinsurers – around four-fifths in 2009, according to Swiss Re estimates. Primary insurers cede a higher share of non-life insurance premiums because many of the potential claims, such as those resulting from major catastrophes, are much larger and more clustered than life insurance claims. Also, some lines of non-life insurance are more specialised, meaning that primary insurers that assume these risks can potentially face risk concentration; ceding a relatively high proportion of these premiums to reinsurers helps to mitigate this problem.

Most of the largest reinsurers, such as Munich Re, Swiss Re, Hannover Re and Llovd's, are highly diversified across geographical and business segments. While all of these reinsurers operate globally, Munich Re and Hannover Re are more focused on Europe, while Swiss Re and Lloyd's conduct a greater share of their business in the North American market. Non-life reinsurance accounts for the bulk of these reinsurers' gross reinsurance premiums, although Munich Re and Lloyd's also have significant primary insurance operations. Within the non-life segment, these reinsurers offer reinsurance across property and casualty lines as well as specialty segments, such as marine and aviation. Many smaller reinsurers are domiciled in Bermuda, playing a major role in the property catastrophe reinsurance market.

The profitability of the large global reinsurers has generally been solid since the mid 1990s. The annual after-tax return on equity across seven large reinsurers (the top 10 excluding Allianz, Berkshire Hathaway and Lloyd's) averaged about 10 per cent between 1995 and 2010, although returns were low or negative in the early 2000s and in 2008 (Graph B1). Investment earnings accounted for the majority of reinsurers' profits over this period, while the remainder was mainly due to their underwriting operations.



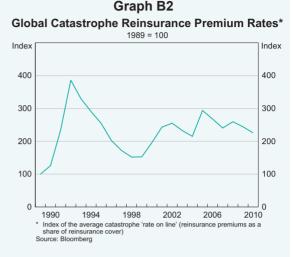


Reinsurers' investment income, along with that of many other insurers, declined during the 2008 crisis as equity prices fell and non-government bond spreads increased. Investment income has recovered somewhat since the crisis, although low interest rates continue to dampen returns. Fixed-income securities account for around 70 per cent of the seven large global reinsurers' investment portfolios, while loans and equity investments make up 16 per cent and 7 per cent, respectively. The proportion of equities in these reinsurers' investment portfolios has declined by 6 percentage points since the onset of the financial crisis, while the proportions in fixed-income securities and loans have increased slightly. Large reinsurers generally have significant investments in sovereign debt, accounting for around one-half of their fixed-income portfolios in the cases of Munich Re, Swiss Re and Hannover Re; the bulk of these exposures are to German, UK and US sovereign debt. These reinsurers' exposures to the sovereign debt of Greece, Ireland, Italy, Portugal and Spain are relatively small. Munich Re's investments in Italian and Spanish sovereign debt together account for 10 per cent of its government bond portfolio, while Greek, Irish and Portuguese sovereign debt make up 4 per cent. Swiss Re's exposure to these countries is negligible and Hannover Re also has a very small exposure.

The recent spate of natural catastrophes has resulted in most reinsurers reporting an underwriting loss for their non-life operations in the half year to June 2011. Aggregate catastrophe claims from the natural disasters occurring in the first half of 2011 are estimated to be around US\$70 billion, the second highest (inflation-adjusted) level of claims for any calendar year since 1970 (see Graph 1.19 in the chapter on 'The Global Financial Environment').¹

Historically, reinsurers' underwriting performance has been significantly affected by catastrophe events, and the impact of major catastrophes is evident in reinsurance price cycles. Most notably, global catastrophe reinsurance premium rates increased sharply following Hurricane Andrew in 1992 (Graph B2). Premium rates declined during the mid to late 1990s as high prices earlier in the decade encouraged the expansion of reinsurance supply and new entrants into the reinsurance market. Many of these new entrants were based in Bermuda because of its relatively favourable regulatory and tax regimes. Prices for catastrophe reinsurance increased again following the terrorist attacks on September 11, 2001, and Hurricane Katrina in 2005. However,

 Long-run data on catastrophe claims do not account for factors such as increased population density and property development over time.



the price cycle was more moderate in these cases as capital flowed to reinsurers more quickly, partly due to the Bermudian reinsurance market's more advanced stage of development and the increasing role of hedge funds in providing capital to the reinsurance industry.

Reinsurance contributes to financial stability in a number of ways. Reinsurers absorb some of the underwriting risks primary insurers face, and therefore indirectly support the balance sheets of households and businesses using primary insurance services. Without reinsurance, some primary insurers might not underwrite certain risks as they would be unwilling to take on the entire risk themselves.² Along with primary insurers, reinsurers are significant investors in financial markets. Through their investments, reinsurers are a source of funding for banks, non-financial corporates and sovereigns, and their long-run investment horizons are generally stabilising in these markets.

² Reinsurance cover plays an important role in the business models of Australian general insurers, as well as the Australian Prudential Regulation Authority's risk-based capital requirements. For further discussion, see RBA (2011), 'Box B: Reinsurance and the Australian General Insurance Industry, *Financial Stability Review*, March, pp 39–41.

Reinsurance can in theory also pose risks to financial stability. Reinsurers assume underwriting risks from primary insurers (cession) and from other reinsurers (retrocession). If a reinsurer were to fail, the ceding insurer would be liable for any claims that they had ceded to that reinsurer. That could raise reinsurance premiums or disrupt the primary insurance industry. Loss of reinsurance cover might cause primary insurers and other reinsurers to scale back their underwriting activities. If this occurred, households and businesses may find it harder to insure themselves against risk, which in turn could adversely affect economic activity. However, disruptions in reinsurance supply are likely to be temporary as higher prices would likely attract new capital and encourage reinsurers to increase supply. Some industry observers, including the International Association of Insurance Supervisors (IAIS), think this could happen guite guickly and, as noted above, the flow of new capital invested in the reinsurance

industry following major catastrophes in 2001 and 2005 is consistent with this.³ Reinsurance cover could also be expanded by existing reinsurers transferring some of the underwriting risks they assume to capital markets through issuing insurance-linked securities such as catastrophe bonds.

Some aspects of reinsurers' business models make it less likely that they will suffer financial distress compared with banks. Reinsurers are less leveraged than banks and their liabilities are pre-funded by premiums, so they are typically not reliant on debt markets for funding. Unlike banks, reinsurers do not have to pay out liabilities on demand; rather, their liabilities are contingent on claims arising after underwriting risks materialise. Like banks, reinsurers are subject to prudential standards; European Union regulators are in the process of implementing a new regulatory regime (Solvency II) designed to make minimum regulatory capital requirements for insurers and reinsurers more risk-sensitive.

³ IAIS (2010), 'Position Statement on Key Financial Stability Issues', 4 June.