



Assessment of systemic risk indicators in the insurance sector

IAIS Observer Hearing

17 February 2011

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Summary

- In responding to G20/FSB, it is important that the IAIS develops an adequate methodology with appropriate instruments to
 - assess activities which could be potentially systemically risky (as per FSB/IAIS criteria)
 - apply indicators specific to the systemic risk activities to identify potential global SIFIs
- Core insurance activities are not a source of threat to the financial and economic system. There are however two potentially systemically risky activities that require further assessment (derivatives speculation/financial guarantees and mis-managing short-term funding) as contained in an earlier report by the Geneva Association
- In responding to the IAIS' consultation, we propose a set of indicators for the identification of the potentially systemically risky activities
 - Some of indicators contained in the IAIS' memorandum can be used in a more targeted fashion
 - Other indicators will not work to identify those activities that are systemically risky, while at the same time they are likely to focus on others which pose no systemic risk
- The Geneva Association has a high interest in contributing to the IAIS work on systemic risk and financial stability, but continues to express concerns regarding the political decision taken to develop a list of insurance SIFIs



Need to treat the insurance industry¹ appropriately in the systemic risk discussion and SIFI identification

- The Geneva Association has communicated in the past
 - March 2010 and July 2010 reports containing extensive analysis
 - Participation in official IAIS hearings February, April, May, September and December 2010
 - Numerous presentations and discussions on systemic risk – FSB, ECB, US Treasury, etc.
- Key elements of Geneva Association findings supported by the global industry
 - Business models and roles in the economy of insurers and banks are different
 - Traditional insurance activities have an inverted cycle of production (pre-funding of liabilities)
 - Asset liability management as a key characteristic for insurance activities
 - Banks are traditionally involved in maturity transformation, while insurers typically do not take such risks
 - The insurance sector is stabilising because of its shock-absorbing capacity and its long-term investment horizon
 - Insurance companies have a proven and sound resolution mechanism that enables an orderly wind down over time
 - No core insurance activity has ever triggered a systemic financial crisis

1: Insurance refers to both direct insurance and reinsurance unless otherwise stated

Apply FSB/IAIS systemic risk criteria

Definition of Systemic Risk

- FSB: “The risk of disruption to the flow of financial services that is (i) caused by an impairment of all or parts of the financial system; and (ii) has the potential to have serious negative consequences for the real economy.”
- A potential SIFI is an institution that performs activities which pose a systemic risk
- Therefore criteria need to be applied on the activities of an institution

Identification of potential SIFIs

Apply FSB/BIS/IMF criteria

- **Size:** Critical is the size of the potentially systemically risky activities
- **Interconnectedness:** Critical is the linkage of the potentially systemically risky activities within the financial sector
- **Substitutability:** Critical is the substitutability of the institutions within the potentially systemically risky activities

Additional IAIS criteria is important for insurance

- **Timing:** For insurance markets (and resolution of insurers) timing is a very relevant criterion

Consistent focus on activities will

- target the source of systemic risk
- be efficient and economic in deployment of regulatory resources
- prevent regulatory arbitrage

Result of Geneva Association analysis: Core insurance activities do not give rise to systemic risk

Core activities at insurance companies

- **Investment Management activities:** ALM and Strategic Asset Allocation
- **Liability origination activities:**
 - Underwriting catastrophe risks
 - Underwriting short and long term risks
 - Writing business with redemption options
 - Writing life business with embedded guarantees
- **Risk-transfer activities:**
 - Hedging with derivatives
 - Reinsurance and retrocession
 - Insurance linked securities and derivatives
- **Capital, funding and liquidity management:**
 - Treasury related activities
 - Long term capital raising
- **Selling credit protection:** Credit insurance, e.g. for trade

Systemic riskiness rejected for at least one of the following reasons

- ✗ **Size: Limited size of activities**
 - No disruptive effects on financial markets
- ✗ **Interconnectedness**
 - Level/Intensity of interaction does not create contagion
- ✗ **Substitutability**
 - Given ability of market to find a substitute
- ✗ **Timing: Slow speed of impact**
 - Allows insurers to absorb impact, through capital raising or orderly wind-up



While core insurance activities do not give rise to systemic risk, there can be potentially systemically risky activities outside core business. The Geneva Association has identified two (derivatives speculation/financial guarantees, mis-managing short-term funding)



The main conclusions of the report's analysis were supported and echoed by government bodies and experts

Extract from expert reports or public statements

- “With respect to systemic risk, insurers also do not originate risk, but most often receive risk,”
NAIC, Insurance Commissioner M. McRaith, June 2009
- “Because insurers cannot reasonably be viewed as instigators of systemic risk, they do not require direct systemic risk regulation for their insurance operations,”
NAIC, Resident Scholar M. Weiss, February 2010
- “In the insurance industry, size allows for a greater diversification of risks and therefore a better overall risk profile. ..The nature of insurance activities is such that they cannot be described as systemic,” **French Ministry of Finance, LePetit Report, April 2010**
- “There is currently no de-facto need to rescue an insurance company...In contrast with banks, insurers have more possibilities of coping with the effects of a crisis,”
Swiss Federal Council Expert Commission, September 2010
- “Failures of one insurance company don't tend to produce knock-on failures among others,”
Lord Turner, Chairman FSA, October 2010
- “Both the IAIS and the insurance industry have concluded that core insurance activities do not pose systemic risk,” **IAIS press release, November 2010**



Discussion of IAIS/FSB proposed approach

Review of IAIS overall methodology

- As a first step it is important to focus only on institutions that are carrying out potentially systemically risky activities
 - Starting point should not be large institutions, global institutions or reinsurers
- 'Timing' criterion and the availability of resolution mechanisms need to be reflected when looking at insurers
- Indicators must be applied to assess an institution's potentially systemically risky activities
 - Proposed IAIS indicators are not effective in evaluating potentially systemically risky activities
- SIFI selection requires insight into individual institutions' circumstances and needs to give strong role to group supervisor
 - Current Steps 6 and 7 involve much subjectivity used at a supranational level
- When considering potential SIFIs, the regulatory consequences and their implications must be considered

Review of indicators considered by IAIS

- Some IAIS indicators will not work to identify those institutions that are systemically risky, while at the same time they are likely to identify others which pose no systemic risk. Such indicators are not appropriate, as they...
 - do not properly measure the impact on the financial sector (e.g. non-insurance revenues, technical provision ratio, leverage ratios)
 - confuse activities and institutions (e.g. net premium income, level 3 assets)
 - do not measure systemically risky activities (e.g. total assets, total revenues, reinsurance net premiums)
- Other indicators contained in the IAIS' memorandum identifying non-core activities can be used in a more targeted fashion (e.g. Financial guarantee/CDS exposure, liquidity measures, gross size of short-term borrowings)

Incorrectly identifying a potentially systemically risky activity or falsely including an insurer on a SIFI list would have detrimental consequences for the institution's business and the insurance industry



Review of proposed IAIS indicators – Selected comments (Refer to Appendix for detailed comments)

Proposal/Questions	Comment
“Total revenues” less “insurance premium revenues” less “net investment income related to insurance activities”	X : This is not a good indicator as it is too broad and does not properly capture the systemic riskiness of an activity in a targeted way while including not risky activities
How to measure leverage ratios related to the entire/non-traditional insurance business?	X : A leverage ratio is a foreign concept to underwriting in insurance and does not correlate with systemic riskiness
Are total assets, total revenues and gross written premium the best indicators? Which others could be considered?	X : Size of an institution is a misguided indicator. In insurance, size has positive implications due to diversification ✓ : Any size indicator would have to be directly linked to potentially systemically risky activities (refer to Geneva Association methodology)
Reinsurance net premiums	X : Reinsurance is not a potentially systemic risky activity (refer to appendix slides and see Geneva Association analysis) X : Reinsurance net premiums as a measure for potentially systemically risk activities is not a relevant indicator



Geneva Association puts forward a methodology, with criteria and indicators to assess systemic risk and SIFIs

Steps to execute proposed approach to address potential systemic risk concerns in insurance

Phase I on activities

1

Review of risk activities

- Review activities, which are conducted by insurers (refer to Geneva Association analysis using FSB/IAIS criteria)

2

Identify potential systemic risk activity

- Apply FSB/IAIS criteria to each activity
- Identify which activity is potentially systemically risky
 - Derivatives speculation/financial guarantees
 - Mis-managing short-term funding

Done in 2010

Phase II on SIFIs

3

Define indicators for institutions

- Define indicators for insurers conducting potentially systemically risky activities

4

Identify SIFIs

- Analysis to be conducted at group level
- Consider aggravating and mitigating factors

Phase 1: Geneva Association March 2010 report identified two activities that could be systemically risky

Derivatives activities



Derivatives hedging (for risk management purpose)

- Insurers enter into derivatives activities to hedge market risks and address volatility
- Positions captured in economic capital assessment and supervisory oversight
- Companies post collateral and positions captured in liquidity assessment

Asset replication



Derivatives speculation/financial guarantees

- Writing derivatives in non-insurance legal entities for speculative purpose
- Positions neither captured in economic capital assessment nor supervisory oversight
- Margin call to exceed liquid financial resources of very large trading book
- Financial guarantees: Monoliners connected to financial system through credit rating of securities

Short-term funding activities



Treasury/Funding activities

- Capital raising and long-term debt funding
- Securities lending for insurance activities only
- Liquidity risk framework and stress tests in place
- Appropriate disclosure



Mis-managing short-term funding

- Funding risky illiquid assets-through short-term debt or securities lending collateral
- Excessive risk-taking within short-term assets and cash equivalents



Aggravating and mitigating factors

- Internal risk control
- Posted collateral
- Supervisory oversight

Phase 2: Risk indicators for derivatives speculation/financial guarantees (1/2)

Quantitative indicators (all indicators must be triggered)

Size

Market value of net written (OTC) derivatives plus add-on for stressed market environment (offset for collateral and direct counterparty trades)

Interconnectedness

$$\frac{\text{Market value of net written (OTC) derivatives (offset for collateral and direct counterparty trades) to financial institutions}}{\text{Shareholders' equity of financial institutions}}$$

Substitutability

$$\frac{\text{Market value of net written (OTC) derivatives (offset for collateral and direct counterparty trades)}}{\text{Global (OTC) market value of derivatives (net of posted collateral)}}$$

Time

Immediate (criteria triggered)

Explanation of the indicators

- Market values are considered as the best estimate for the value of the derivative positions
 - Reflect current value if position is liquidated
- Over-the-counter derivatives considered as exchange-traded derivatives not subject to increased collateral requirements due to rating changes
- Offset for collateral reduces the exposure and hence the risk
- Threshold for size needs to be set in relation to total market
- Indicators subject to review and refinement

Phase 2: Risk indicators for derivatives speculation/financial guarantees (2/2)

Qualitative indicators

Enterprise Risk Management

- Effective risk management oversight through risk limits monitoring

Supervisory treatment

- Comprehensive group supervision capturing non-insurance legal entities

Substitutability

- Role of insurer in the respective derivatives and financial guarantees market

Data source

- Company specific data available from the individual companies' group risk management
- Market data available from public sources (BIS, national regulators):
 - Global (OTC) market value of derivatives
 - Shareholders' equity of financial institutions
- Potential difficulties with the indicator of shareholder's equity as there is limited data for certain types of financial institutions (e.g. hedge funds)

Phase 2: Risk indicators for mis-managing short-term funding (1/2)

Quantitative indicators (all indicators must be triggered)

Size

1. Market value of potential liquidity needs at the group level if all immediate positions are called
2. Market value of potential liquidity needs at the group level if all immediate positions are called minus immediate available liquidity sources

Interconnectedness / Substitutability

Market value of potential liquidity needs at the group level if all immediate positions to financial institutions are called
Total liquid assets held by financial institutions

Time

Positions callable within 3 months

Explanation of the indicators

- Immediate needs include short-term financing instruments, derivatives and securities lending
 - Does not include positions relating to traditional treasury activities
- Only positions with expiry date in the 'near future' lead to the obligation to settle under stress
- Threshold for size needs to be set in relation to total market
- Indicators subject to review and refinement

Phase 2: Risk indicators for mis-managing short-term funding (2/2)

Qualitative indicators

Enterprise Risk Management

- Effective risk management oversight through liquidity risk framework in place

Supervisory treatment

- Comprehensive group supervision and effective disclosure

Substitutability

- Role of insurer in the respective liquidity market

Data source

- Company specific data available from the individual companies' group risk management
- Market data available from public sources (BIS, national regulators):
 - Total liquid assets held by financial institutions
 - Potential difficulties with this indicator as there is limited data for certain types of financial institutions (e.g. hedge funds)



The surveillance of the system and of SIFIs requires an appropriate setup of micro and macro supervision

- IAIS should lead macro-prudential surveillance, co-ordinate among supervisors and issue standards as to criteria and indicators
 - The industry offers to provide proactive and industry specific input to IAIS/FSB on an ongoing basis
- Data collection and assessment performed by existing regulatory bodies
- Results of identification process should be collected by IAIS and made available to FSB (or specialised body)
 - Insurance expertise needs to be present to make well-informed decisions about a potential SIFI status
 - Group supervisor to play an important role in the decision-making process
 - Geneva Association offers to participate in an Advisory Council if IAIS decides to establish one



Next steps

Proposed next steps for IAIS

- Discuss any outstanding questions on potentially systemically risky activities with the industry (e.g. activities where the IAIS would like further clarity)
- In conjunction with the industry, discuss and confirm methodology and indicators
- Discuss data collection effort with the industry and group supervisors
 - Thresholds for indicators should be set after consultation with the insurance industry and extensive market testing
- Set up an Advisory Council with experts from the industry and academia to keep track of new market developments
- Carefully assess potential consequences for being identified as a SIFI



Appendix

Review of proposed IAIS indicators – Detailed comments (1/5)

Proposal/Questions	Comment
<p>“Total revenues” less “insurance premium revenues” less “net investment income related to insurance activities”</p>	<p>✗ : This is not a good indicator as it is too broad and does not properly capture the systemic riskiness of an activity in a targeted way while including not risky activities</p>
<p>“Technical provisions” in relation to “total liabilities”</p>	<p>✗ : Non-technical provisions are not a good indicator as they do not correlate with systemic riskiness</p>
<p>How to measure exposures to financial guarantees, mortgage guarantees and CDS protection sold to assess the extent of monoline type activities?</p>	<p>✓ : Refer to potential indicators to derivatives speculation/financial guarantees as presented in Geneva Association methodology</p>

Review of proposed IAIS indicators – Detailed comments (2/5)

Proposal/Questions	Comment
<p>How to measure leverage ratios related to the entire/non-traditional insurance business?</p>	<p>✗ : A leverage ratio is a foreign concept to underwriting in insurance and does not correlate with systemic riskiness</p>
<p>How to measure gross size of short-term borrowing, repos etc. to assess the extent of short-term funding reliance?</p>	<p>✓ : Refer to potential indicators for mis-managing short-term funding as presented in Geneva Association methodology</p>
<p>Level 3 assets as a measure of illiquidity of assets</p>	<p>✗ : Level 3 assets are not the correct measure for Illiquidity</p> <p>✓ : Refer to potential indicators for mis-managing short-term funding as presented in Geneva Association methodology</p>
<p>Which indicators do you think would be appropriate for assessing size?</p>	<p>✗ : Size of an institution is a misguided indicator. In insurance, size has positive implications due to diversification</p> <p>✓ : Any size indicator would have to be directly linked to potentially systemically risky activities (refer to Geneva Association methodology)</p>

Review of proposed IAIS indicators – Detailed comments (3/5)

Proposal/Questions	Comment
<p>Are total assets, total revenues and gross written premium the best indicators? Which others could be considered?</p>	<p>✗ : Size of an institution is a misguided indicator. In insurance, size has to be understood in relation to risk diversification.</p> <p>✓ : Any size indicator would have to be directly linked to potentially systemically risky activities (refer to Geneva Association methodology)</p>
<p>What accounting issues may need to be resolved to get comparable indicators from different countries?</p>	<p>! : Any indicator based on accounting measures might have certain accounting issues</p> <p>! : You will need to work with the industry to resolve these for any indicators proposed</p>
<p>Which indicators do you think would be appropriate for assessing interconnectedness?</p>	<p>✓ : Respective indicators need to measure the interconnectedness of the potentially systemically risky activities of an institution to the rest of the financial sector (refer to Geneva Association methodology)</p>
<p>Size of borrowings and other similar transactions from other financial institutions</p>	<p>✓ : Size of borrowings with potential impact on short term liquidity as related to the potentially systemically risky activity of mis-managing of short funding (refer to Geneva Association methodology)</p>

Review of proposed IAIS indicators – Detailed comments (4/5)

Proposal/Questions	Comment
<p>Size of lending and equity holding and other similar transactions to other financial institutions</p>	<p>✗ : Such measures would not be adequate as they are measuring how the insurer is affected by the systemic risk of others</p> <p>✗ : Any indicators linked to investment behaviour could have implications concerning diversification and funding of other institutions (including banks)</p> <p>✓ : In the context of potential systemically risky activities it could be an aggravating factor</p>
<p>Reinsurance net premiums</p>	<p>✗ : Reinsurance is not a potentially systemic risky activity (refer to appendix slides and see Geneva Association analysis)</p> <p>✗ : Reinsurance net premiums as a measure for potentially systemically risk activities is not a relevant indicator</p>
<p>Suitable indicators of importance as a derivatives counterpart</p>	<p>✓ : Refer to potential indicators to derivatives speculation/financial guarantee as presented in Geneva Association methodology</p>
<p>What are the best indicators for importance as a global player?</p>	<p>✗ : Systemic risk is not a function of the level of globalisation of an insurer</p>

Review of proposed IAIS indicators – Detailed comments (5/5)

Proposal/Questions

What are suitable indicators for substitutability of insurers and reinsurers (with particular focus on products such as catastrophe insurance and liability insurance)?

Comment

X : Substitutability needs to be looked at in the context of potentially systemically risky activities (refer to Geneva Association methodology)

Which indicators would show the extent of inter-linkages between individual insurers and reinsurers that could have an impact on substitutability?

X : Interconnectedness needs to be looked at in the context of potentially systemically risky activities (refer to Geneva Association methodology)

X : Reinsurance is not a potentially systemically risky activity (refer to appendix slides)

Activities regularly mentioned in the context of systemic risk: Overview

- **Variable Annuities with Guarantees**
 - Products with protection and saving components
 - No significant interconnectedness as insurer acts as an investor in the financial markets and does not offer a guarantee to other financial institutions
 - VA products can be substituted with a combination of pure investment products and pure insurance products
- **Hedging programs protect solvency of insurers**
 - Hedging programs reduce financial risk as they are risk mitigation measures that allow efficient capital management
 - No significant interconnectedness as insurer acts in the market as an investor and does not offer any guarantees to other financial institutions
 - No issue of substitutability as the use of hedging is not a product or service that is sold directly
- **Re-insurance**
 - Reinsurance only represents small portion of insurance risks (low interconnectedness)
 - Capital inflow into reinsurance market after large events (high substitutability)
 - Reinsurance spirals are unlikely today, following lessons of spirals and drop in retrocession volumes
 - Reinsurers monitor concentration of exposures and insurers conduct active counterparty credit risk management

Activities regularly mentioned in the context of systemic risk: Variable Annuities with Guarantees

Variable annuities

- Variable annuities with guarantees have both protection and saving components
 - Vast majority of VA contracts sold in U.S. today guarantee a minimum lifetime withdrawal benefit
 - Product design limits market risk to insurer
- New generation of VA products have emerged
 - De-risked products with new pricing and reduced guarantee features
 - Algorithmic asset rebalancing reduces hedging required
- Accelerated lapse rates and redemptions are not comparable to a bank run
 - Insurance liabilities are covered by reserves
 - Product design discourages early surrenders
 - Liquidity management mitigates the effect of a high volume of surrenders
- Risk of an accentuation of downward market movements not unique to VAs

Criteria for potential systemic risk activity

- ✘ Insurer operates in the market as an investor
 - No systemic relevant activity
 - Insurer uses derivatives for hedging purposes
- ✘ **No significant interconnectedness**
 - Insurer acts as an investor in the financial markets
 - No offering of guarantees to other financial institutions
- ✘ **Substitutability is ensured**
 - VA products can be substituted with a combination of pure investment products and pure insurance products
- **Risk could lead to a short term impact**
- **VAs are already subject to extensive insurance regulation**

Variable Annuities with Guarantees are not a potentially Systemically Risky Activity

Activities regularly mentioned in the context of systemic risk: Hedging techniques used in Variable Annuities

Hedging

- Hedging programs in VAs are an important risk mitigation measure and allows efficient capital management
- Hedging programs have become more sophisticated, improving their effectiveness
- Hedging has to be seen in concert with other financial risk mitigation techniques and not as a stand-alone
- No risk of uncontrolled liabilities due to the use of derivatives
 - Use of derivatives for hedging is distinct from trading derivatives for profit generation
 - Derivatives bought by insurers provide a right/guarantee against a premium
 - The seller of the derivative is exposed to the risk of generating uncontrolled liabilities and not the insurer
- There is a risk of accentuation of downward market movements but this is not unique to VAs
 - Any technique that limits losses in a downward market will have the potential to accentuate the decline
 - No VA hedging program conducts real time high frequency trading, which can add to market volatility

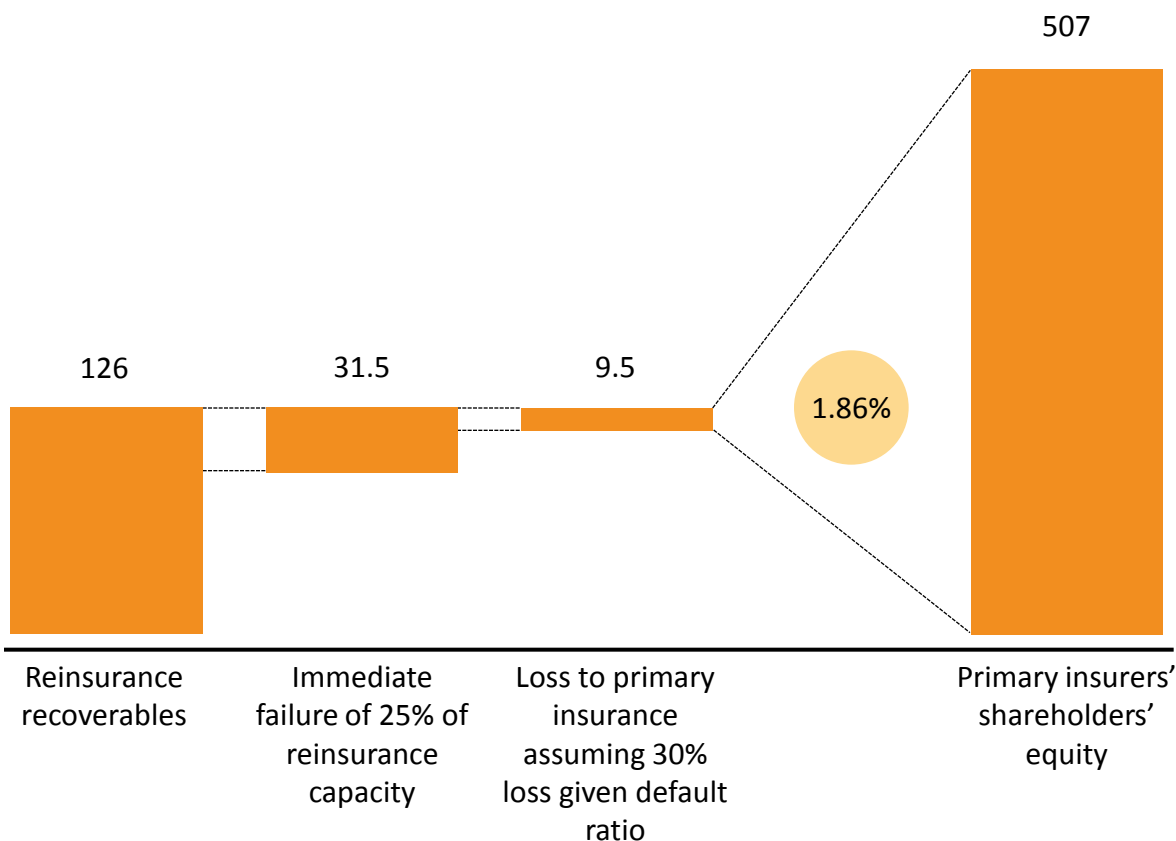
Criteria for potential systemic risk activity

- ✘ **No significant interconnectedness**
 - Insurer acts as an investor in the financial market
 - No offering of guarantees to other financial institutions
- ✘ **Substitutability is ensured**
 - Use of hedging techniques is not a product or service that is sold directly
- **Risk could lead to a short term impact**
- **Hedging programs for VA products are closely supervised by insurance regulators and are subject to reporting and reserving requirements.**

Hedging techniques used in VAs are not a potentially Systemically Risky Activity

Reinsurance failure would *not* cause systemic risk event – example using reinsurance recoverables

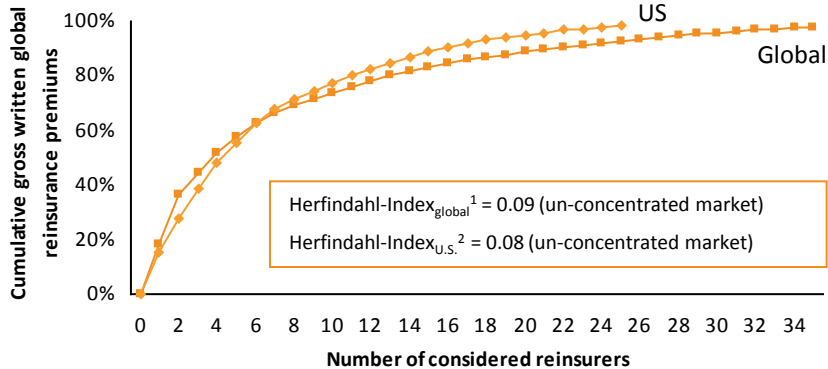
Reinsurance recoverables, shareholders' equity and effects of a reinsurance failure (sample of 20 of Top 30 primary insurance groups), US\$ MN (2009 data)



- Even in a hypothetical scenario of a reinsurance failure, primary insurers would only be impacted to a limited extent
- Using conservative assumptions, the total loss for the primary insurance industry of an immediate failure of 25% of global reinsurance capacity would be about 1.86% of primary insurers' shareholders' equity
- Ratio may vary among markets/regions, but will never reach systemically risky dimensions

Competition and substitutability in the reinsurance sector are high

Cumulative gross written premium



Source: AM Best, IAIS Global Reinsurance Market Report 2009

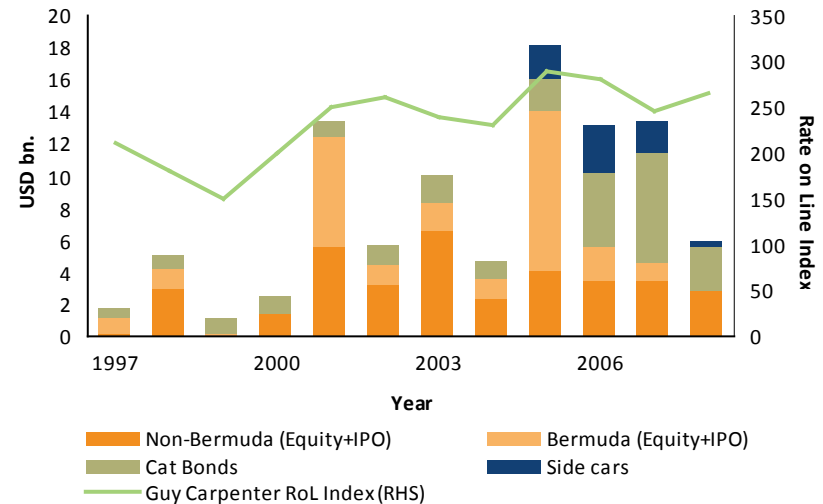
1. Based on the Top 35 global reinsurers (gross written premium 2008: \$156 BN) and the total gross written reinsurance premium according to the IAIS Global Reinsurance Market Report 2009 (2008: \$159 BN) which is only considering reinsurers writing reinsurance in excess of \$800 MM
2. Based on the Top 25 U.S. reinsurers (gross written premium 2008: \$37.2 BN of total U.S. gross written premium of \$37.7 BN)

Low concentration

Reinsurance sector remains strongly diversified with low rates of concentration

- No reinsurer has a monopoly in any material line of business
- No single institution plays a central market role such as clearing or acting as securities exchange

Capital flows into nat cat reinsurance



Source: Thomson, Guy Carpenter, AON Benfield, Dealogic, Oliver Wyman, Geneva Association March 2010

Quick recapitalisation

Reinsurance market has shown its capacity to recapitalise after a major event

- Market capacity is highly substitutable if the underlying event is insurable
- Cost of reinsurance linked to competition
- Timing of claims settlement reduces risk of contagion and enables recapitalisation in an orderly process

AIG case study: Non-core activities at the root of AIG's collapse and the rationale for its bail out

External (Macro) Factors to the Collapse

Reliance on rating agencies led to faulty "trust" in the markets

Housing market bubble (entitlement ideology) led to sub-prime mortgages and growth in mortgage backed securities (securitisation) of toxic loans

Lax banking and Thrift regulation led banks to use credit default swaps from highly rated providers. There was no derivatives regulation (the free markets ideology). Insurance regulators were not part of non-insurance operations of AIG Holding Company and AIGFP.

Insurance regulation has been strong over the AIG insurance units and insurance products

Financial markets crisis erupted and Lehman Brothers was allowed to collapse. The US Government recognized the interconnectedness of the AIGFP unit's activities worldwide.

Inside Factors to the Collapse

AIG's strong insurance operation provided a stellar rating. The high rating led highly sophisticated financial innovators to create the AIG Financial Products (AIGFP) unit under the AIG Holding company. AIGFP sold credit default swaps (CDSs) and other derivatives.

AIGFP responded to the increased needs for CDSs to provide "apparent assurances." The CDSs became enablers to growth in securitization and leveraging by banks. The circular motion led AIGFP to cover sub-prime mortgages despite its stricter guidelines. When the housing bubble burst AIGFP was the holder of the "apparent safety net" to many banks. The liquidity crisis erupted.

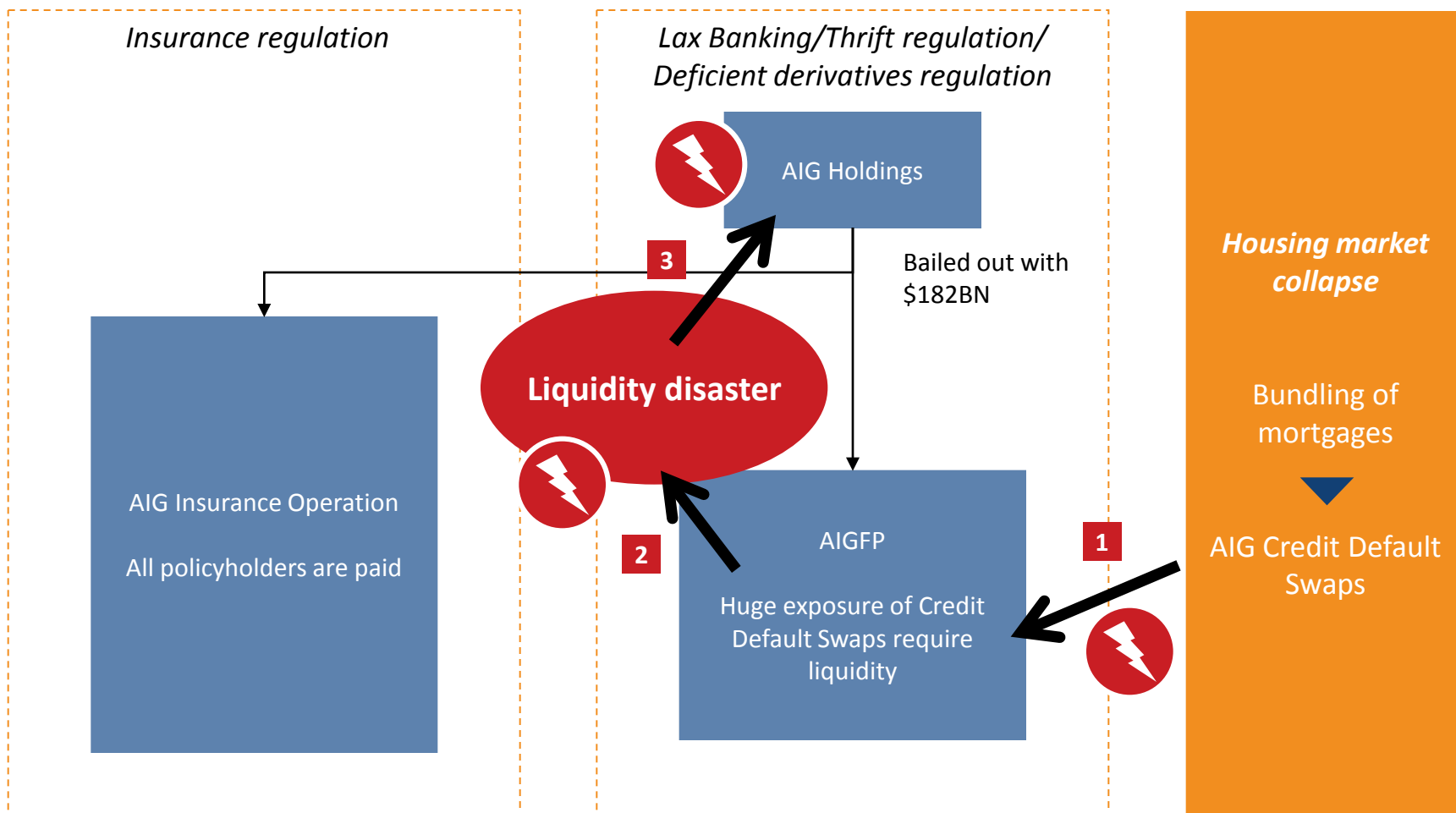
AIGFP exposure in CDSs grew to over \$500 billion by 2008. There were no checks and balances over the operations of the unit. The Thrift regulators noted their lack of expertise. Without derivatives regulations, there were no transparencies regarding the CDSs. CDSs contracts had faulty designs with fast-paced cash collateral calls for downgrades of AIG. The liquidity crisis of AIGFP was not transparent to the whole Conglomerate in time. Their faulty financial models neglected to account for some important assumptions. CDSs were and are not insurance contracts and thus, lacked the "safety valves" of insurance contracts.

The securities lending activities of AIG insurance units and the investments in mortgage backed securities were more aggressive than the regulatory guidelines. AIG had to provide cash pools to adhere to insurance regulations. The companies did not sell the toxic assets just acquired. These activities continued simultaneously as AIGFP was running out of cash, thus, exasperating the liquidity crisis. Insurance regulators did not allow the use of the \$1 trillion in the insurance companies' assets to help AIGFP, a non-insurance entity.

Efforts to find capital markets solutions failed and the US Government provided \$182 billion bailout

- **AIGFP was not an insurance company**
- **AIGFP was not regulated by insurance regulations**
- **AIGFP sold credit default swaps which were the key factor of AIG collapse**

AIG case study: Collapse of housing market led to chain reaction and AIG bail out



Resolution – Insurers do not pose problems

Insurance business model and regulation

- In insurance, both going concern supervision and insolvency regimes provide priority protection of policyholders
- In case of crisis, no accelerated wind-down process is required (low lapse rates, also during run-off, due to penalties for policyholders), and reserves and their assets further stabilize the actual wind-down process
- No trading portfolios: usually one set of liability holders (policyholders) and one set of assets (investments)

Current resolution landscape of cross-border insurance groups

- Supervisors can ringfence every single insurance entity with its assets at any time, and intervene long before insolvency
- In case of crisis, stable insurance entities can be isolated and kept as going concern, while problematic ones could be sold or put in run-off (hence no taxpayers liquidity is needed)
- International cooperation of supervisors enable actions for all insurance entities of groups simultaneously
- Reinsurance is another way to stabilize insurance entities which are in difficulties

Wind-up experience

- Experience: No single insurance insolvency caused a systemic crisis – AIG was not an insurance crisis. Insurance failures are solved in an orderly resolution like the failure of an industrial company
- If in future a conglomerate becomes a SIFI, the following could apply in case of crisis
 - Orderly wind-down of individual insurers according to existing rules, where necessary, and other sector activities according to their rules
 - Enhanced cross-sectoral cooperation of supervisors; subsequent isolation and wind-down of systemic business

Geneva Association methodology deals with potential systemic risk in conglomerate structures

Financial conglomerates were hit due to their banking activities and not the core insurance activities

Example ING

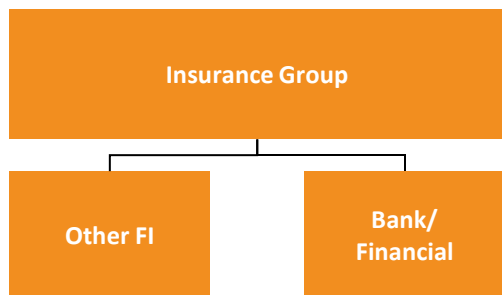
- ING hit in the crisis due to its **difficulties in its banking operations** especially its acquisition of a U.S. thrift with a large MBS portfolio

Example AIG

- AIG's trouble was its Financial Products division (AIGFP) - **not its insurance activities**
- The bailout was exclusively concerned with the impact of default through the derivatives markets

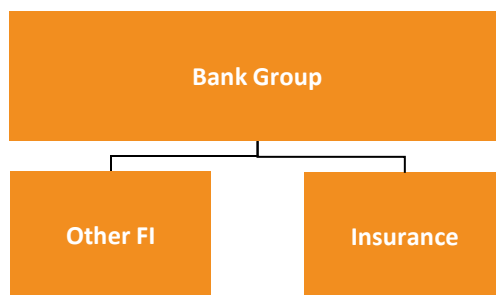
Application of GA methodology to conglomerate structures

Situation 1



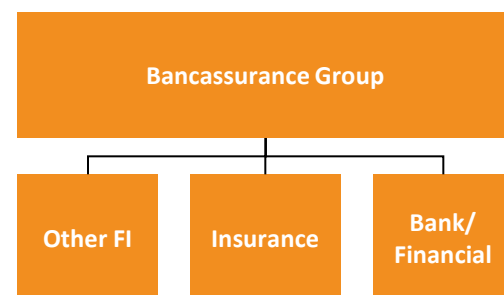
- Insurer and other operations: GA methodology captures potentially systemically risky activities
- Bank entities tested separately against banking SIFI indicators

Situation 2



- Banking SIFI rules apply to banking and other operations
- Insurance entities usually ring-fenced, and subject to GA methodology

Situation 3



- Insurance sub-group: GA methodology captures potentially risky activities
- For the rest, test against banking SIFI indicators and Basel III requirements