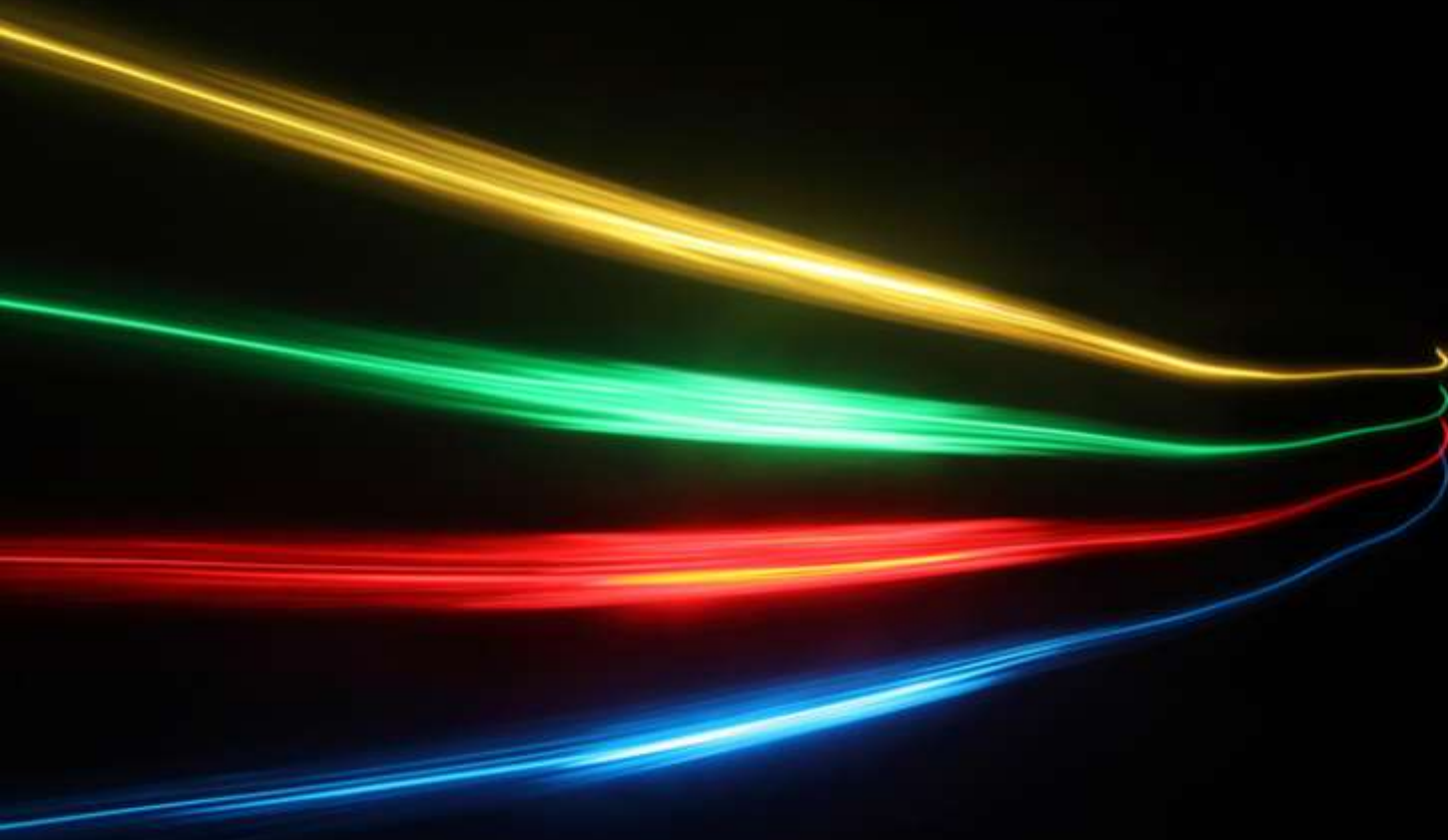


MANAGING EXTREMES

Willis Re

CREDIT CRUNCH AND ITS IMPACT ON THE INSURANCE MARKETS



Understanding the mechanics of the current financial crisis

- The earliest signs of a liquidity crisis appeared during the third quarter of 2007 before it went on to become a widespread phenomenon in 2008.
 - Drastic drop in Collateralized-Debt Obligations (CDOs)
 - Run on Northern Rock
 - Sub prime mortgages
 - Asset backed securities proliferating, including huge volumes of collateralised mortgage securities

A trinity of sins

The genesis of our financial crisis lies partly in Clinton's administration policy dating back to the late nineties which encouraged a new quality of consumer into home ownership. The following "trinity" was a major engine driving the crash of our financial world:

- Self certification of income
- 100% loan-to-value mortgages
- Exploding ARM (Adjustable Rate Mortgages)

Asset Backed Securities

The huge increase in the market for ABS earlier during this decade exacerbated the risks of sub-prime mortgages by spreading it around the world. Below are the key characteristics of ABS:

- Tranching of mortgage debts into layers and using it as a collateral to borrow money from other banking syndicates.
- Primary bank passes on part of the interest to the syndicate bank.
- The ultimate lender doesn't incur material administrative costs and is therefore financially better off.

Rating Agencies

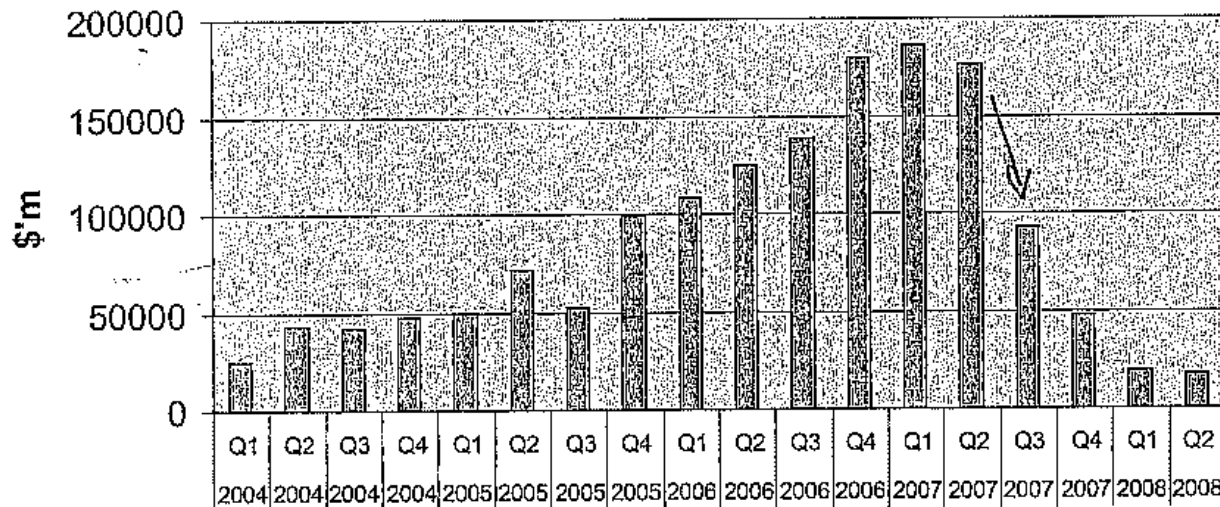
Rating agencies provide independent advice relating to the credit quality of a business. Many financial institutions use it to authorize loans to big businesses. The following are highlights of the problems with such agencies and their practices:

- Banks and other financial institutions became too reliant on the reports provided by rating agencies.
- A lot of rating agencies exploited their position by writing over-optimistic reviews and in effect, forcing their competitors into such practices too.
- Those who were not worthy of borrowing money managed to borrow it on the basis of unrealistic reports and often defaulted.

When Thunder Struck Liquidity Crisis

- The first signs of liquidity drying up were visible in the 2nd half of 2007 when the quarterly return for global CDO issuance showed a decline. It halved between the second and third quarters of 2007 and triggered the liquidity crisis and recession.

Global CDO Issuance



D & O and Professional Indemnity

- The current recession may lead to a lot of litigation against directors and executives and therefore, numerous pending claims for insurance companies.
- This creates one form of direct impact on the insurance sector
- However the total insured costs from this type of claims are not great – some estimates put it as high as \$3 bn but we think that is a very cautious number – we think under \$1 bn

Credit Default Swaps (CDS)

Credit Default swaps have also been blamed for exaggerating the current recession. The following points illustrate the nature of CDS and how they differ from buying insurance.

- A type of reverse trading
- CDS is a contract where the protection buyer makes a series of payments to the protection seller but, in exchange, receives a payoff if a credit instrument defaults.

Credit Default Swaps (CDS) (continued)

- Investors can buy or sell CDS without owning any debt of the reference entity. This is a distinguishing factor between buying a CDS and buying an insurance policy where the buyer needs to have an insurable interest.

Many economists blame CDS for the bankruptcy of monoliths like Lehman Brothers and Merrill Lynch due to huge numbers of CDS being placed on them for defaulting.

Key insurance impact here – **AIG** had heavy CDS exposures

Insurance Fraud

The current recession has also led to an increase in the number of frauds committed to gain advantage from insurance policies. This may and in some cases has led to an increase in the average premiums charged by insurance companies; even to honest people who have not committed any fraud.

- The figures for insurance frauds in UK has been rising for the last four years.
- The recession has sharpened the increase. Fraudulent claims in UK have risen by 30% between 2008 and 2009.

Insurer Balance Sheet Impact

The main impact of the Credit Crunch upon insurers and reinsurers has been on the **asset side of their balance sheets**

- Equity positions lost money – small part of most insurers' assets
- Bond positions also lost money – major examples among insurers and reinsurers but these were isolated as most insurers/reinsurers did not have risky bond positions

Secondary Impacts on Insurers

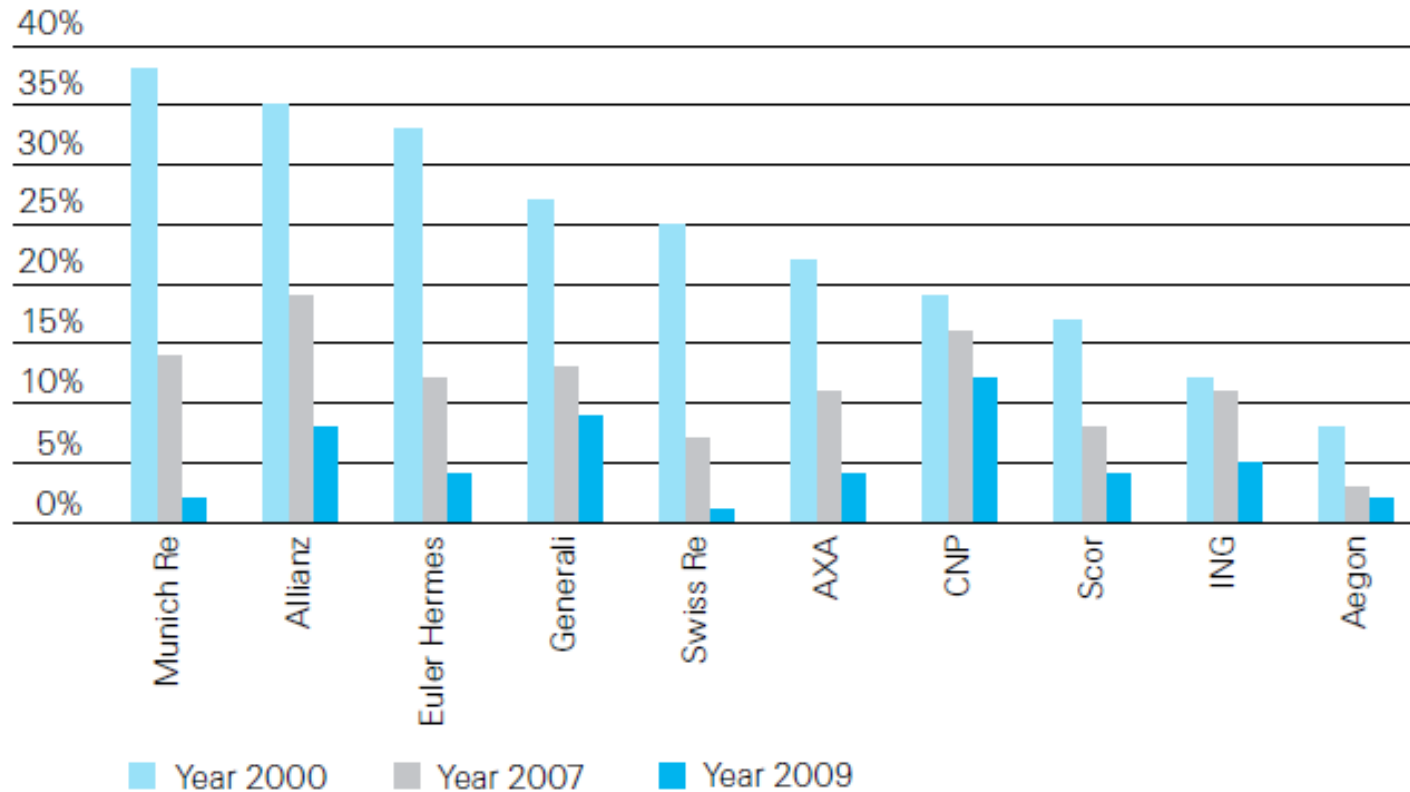
Following on from the Credit Crunch, regulators worldwide have sought to create protections against the same phenomenon striking again.

- Solvency II coming home more forcefully
- Greater attention to Enterprise Risk Management
- Tougher attitudes to ROE requirements for non-core business lines
- Contraction of capacity (in the medium term) for complex classes such as P.I. and D&O

American International General

- AIG faced a liquidity crisis in September 2008 following a downgrading of its credit rating.
- Downgrading automatically enforces an increase in collateral with trading counter-parties.
- Hence, AIG had to resort to government bailout funds in order to prevent bankruptcy.

Equity holdings of European Insurers, year-end 2000, 2007 and 2009



Source: Natixis

HISTORICAL STOCK PRICE PERFORMANCE

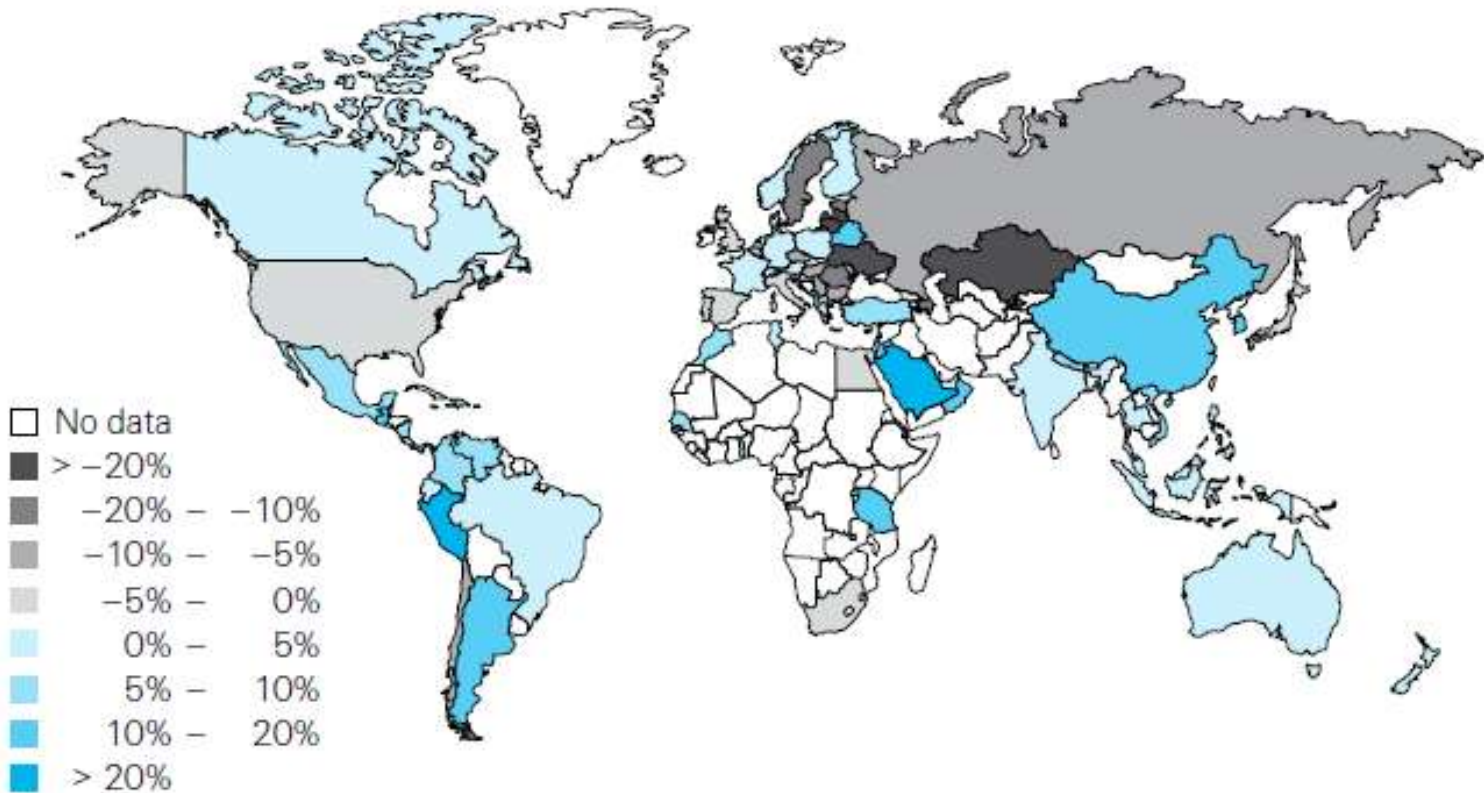
- All insurance sectors remain below their pre-crisis highs, with MI and FG the hardest hit



Source: FactSet, as of 10/26/2010.

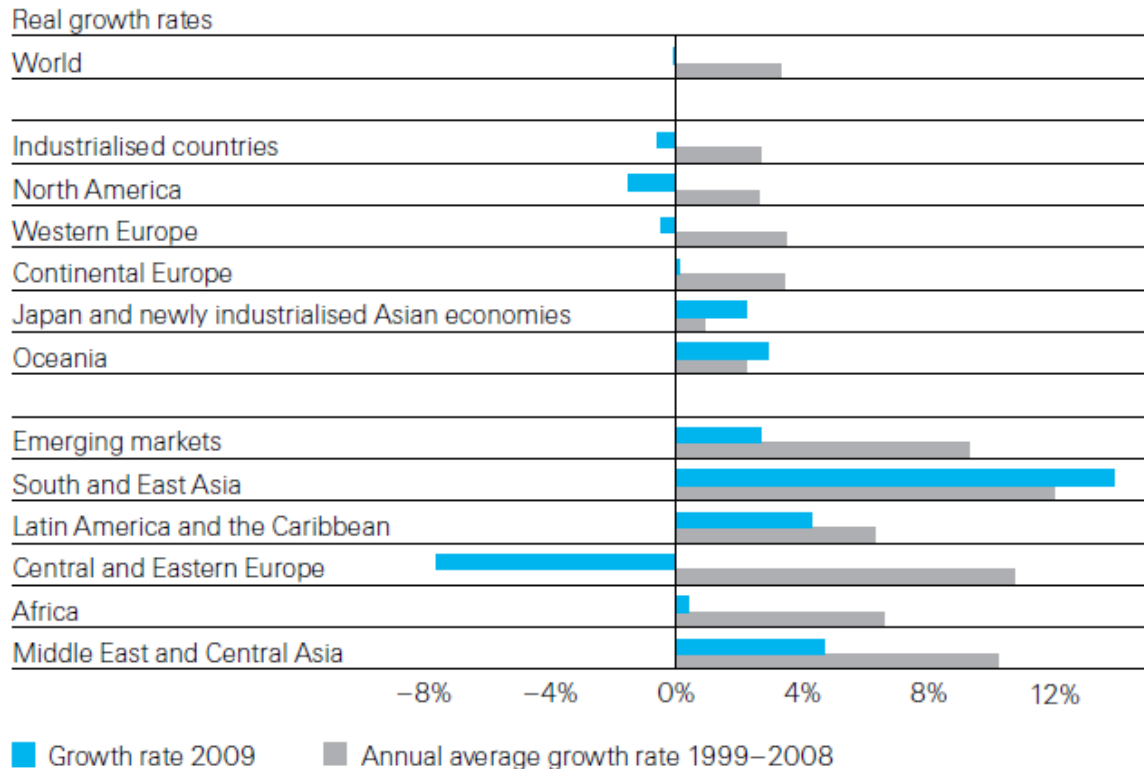
Mortgage Insurers Index includes: MGIC, PMI, Radian; Financial Guaranty index includes: Assured Guaranty, MBIA, Ambac; P&C Insurers index includes: Travelers, ACE, Chubb, CNA, Old Republic, Hanover, Allstate, Progressive; P&C Reinsurers index includes: XL, PartnerRe, Everest Re, Arch, AXIS, RenRe, Transatlantic Re, Validus, Alterra, Aspen Re, Allied World; Life index includes Metlife, Prudential, Principal, Lincoln National, Unum, Protective, Torchmark.

Non-Life Real Premium growth in 2009



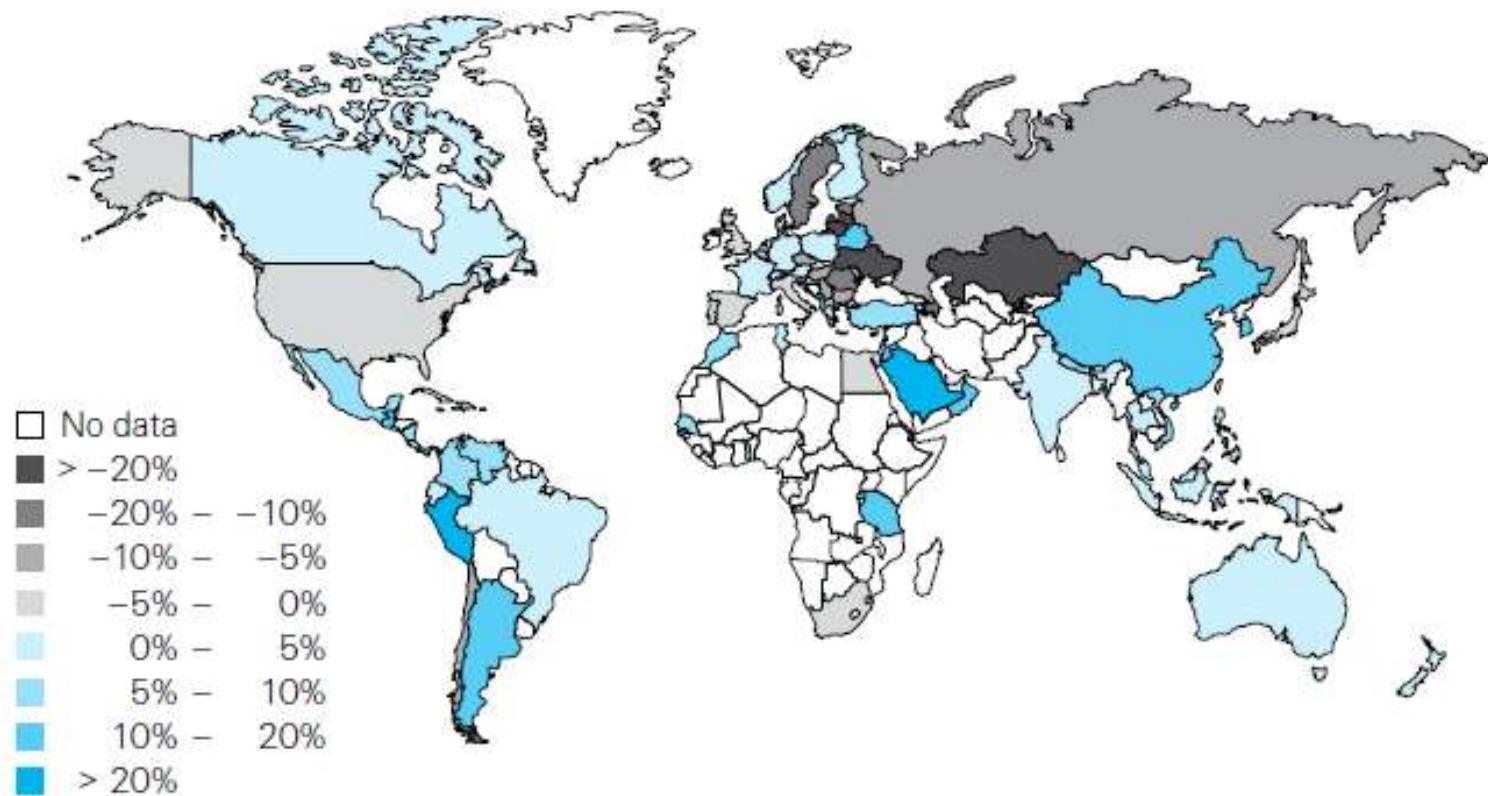
Source: Swiss Re Economic Research & Consulting

Non-Life Insurance Premiums



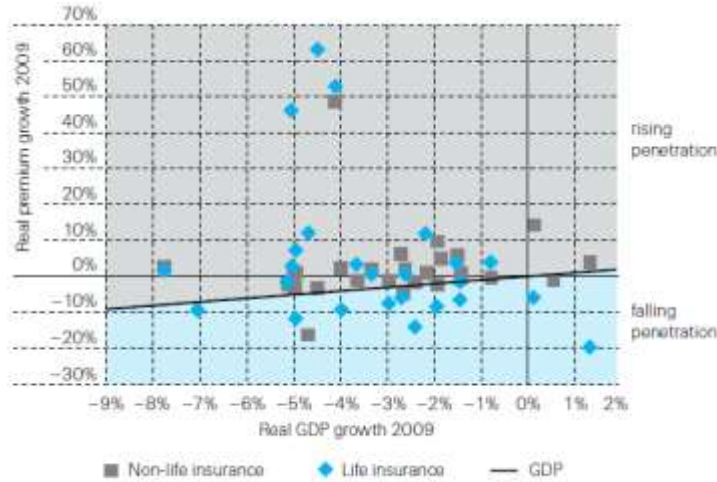
Source: Swiss Re Economic Research & Consulting

Non-Life Real Premium growth in 2009

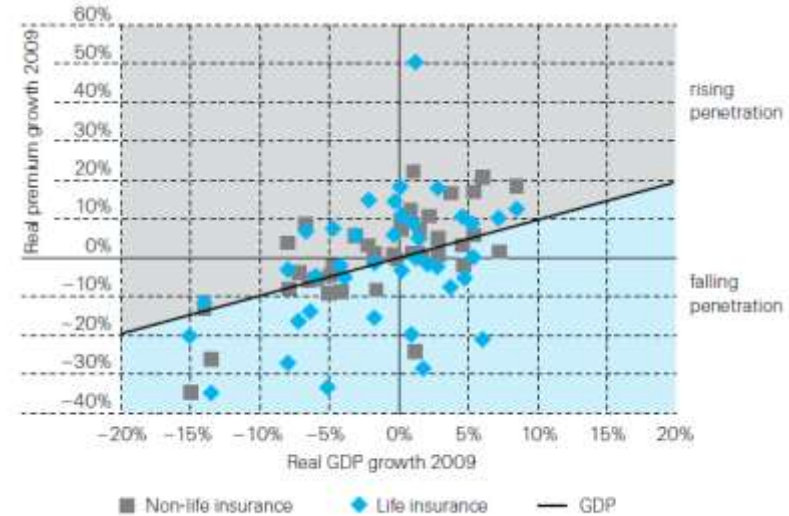


Source: Swiss Re Economic Research & Consulting

Life & Non-Life premiums vs GDP growth in industrialised countries



Source: Swiss Re Economic Research & Consulting



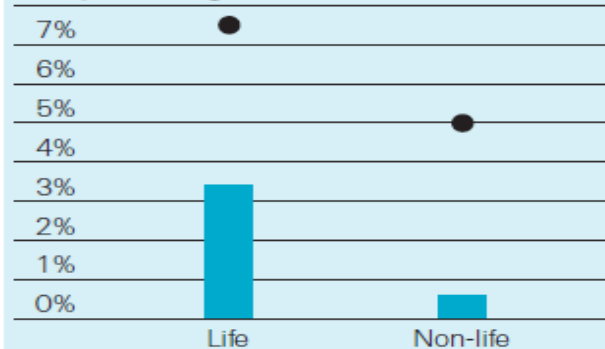
Source: Swiss Re Economic Research & Consulting

Premiums in Africa

Premiums in 2007 in Africa

	USD bn	World market share
Life	38	1.6%
Non-life	15	0.9%

Real premium growth

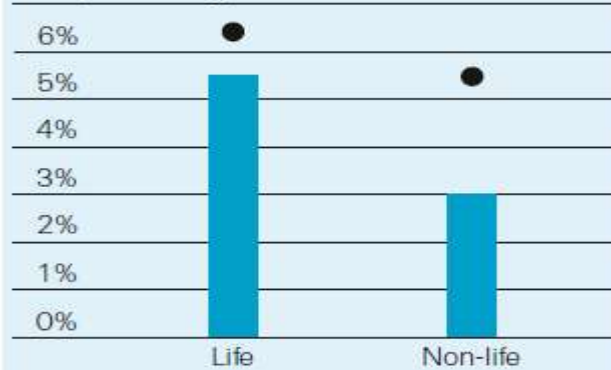


■ Growth rate 2007
● Annual average growth rate 1997-2006

Premiums in 2008 in Africa

	USD bn	World market share
Life	38	1.5%
Non-life	17	1.0%

Real premium growth

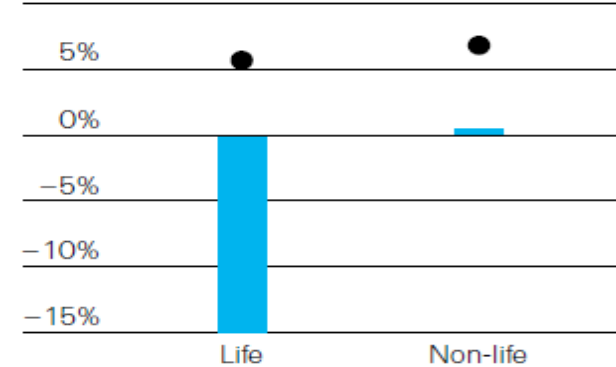


■ Growth rate 2008
● Annual average growth rate 1998-2007

Premiums in 2009 in Africa

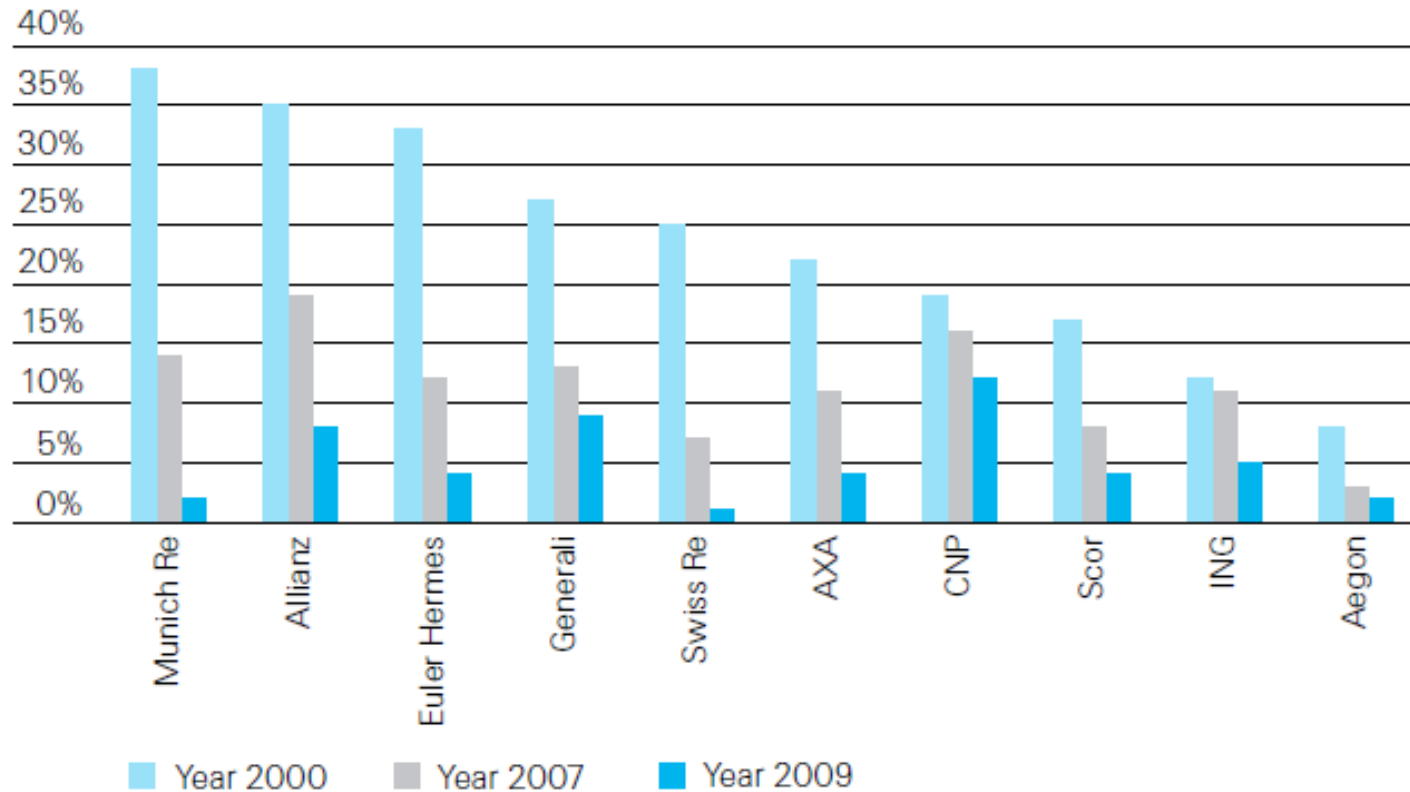
	USD bn	World market share
Life	34	1.4%
Non-life	17	1.0%

Real premium growth



■ Growth rate 2009
● Annual average growth rate 1999-2008

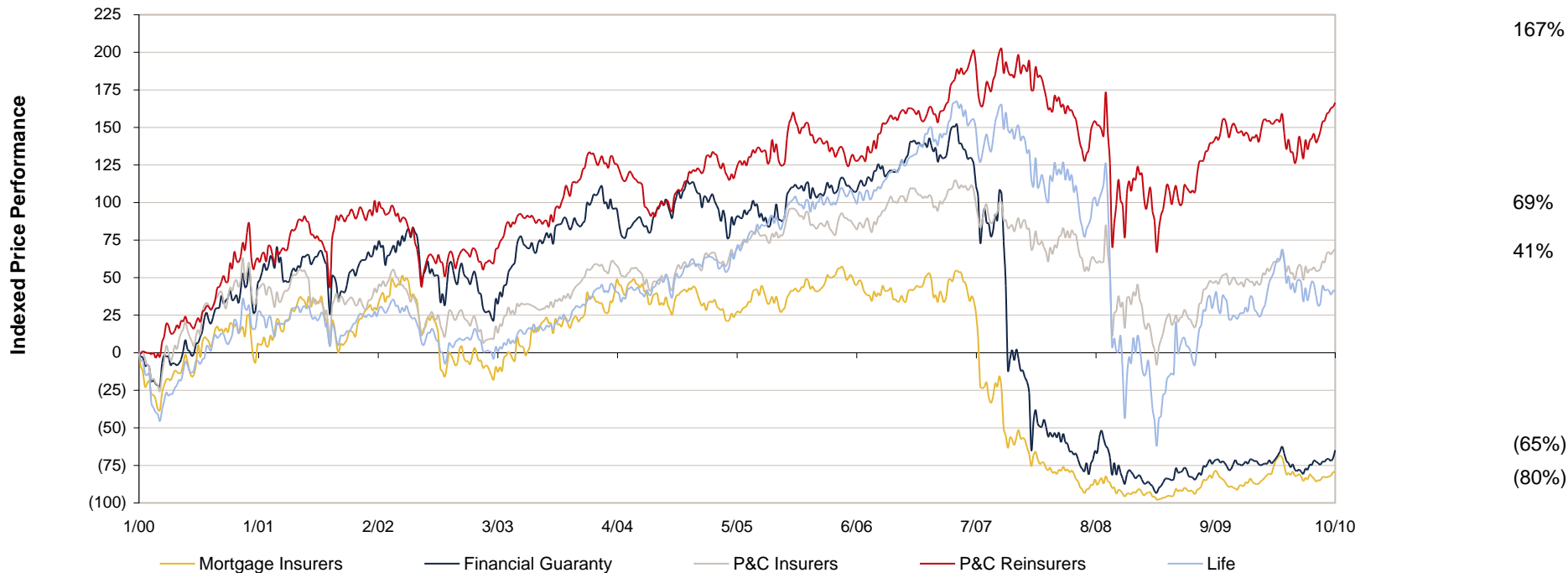
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