The Global Financial Crisis – What Next?

Introduction

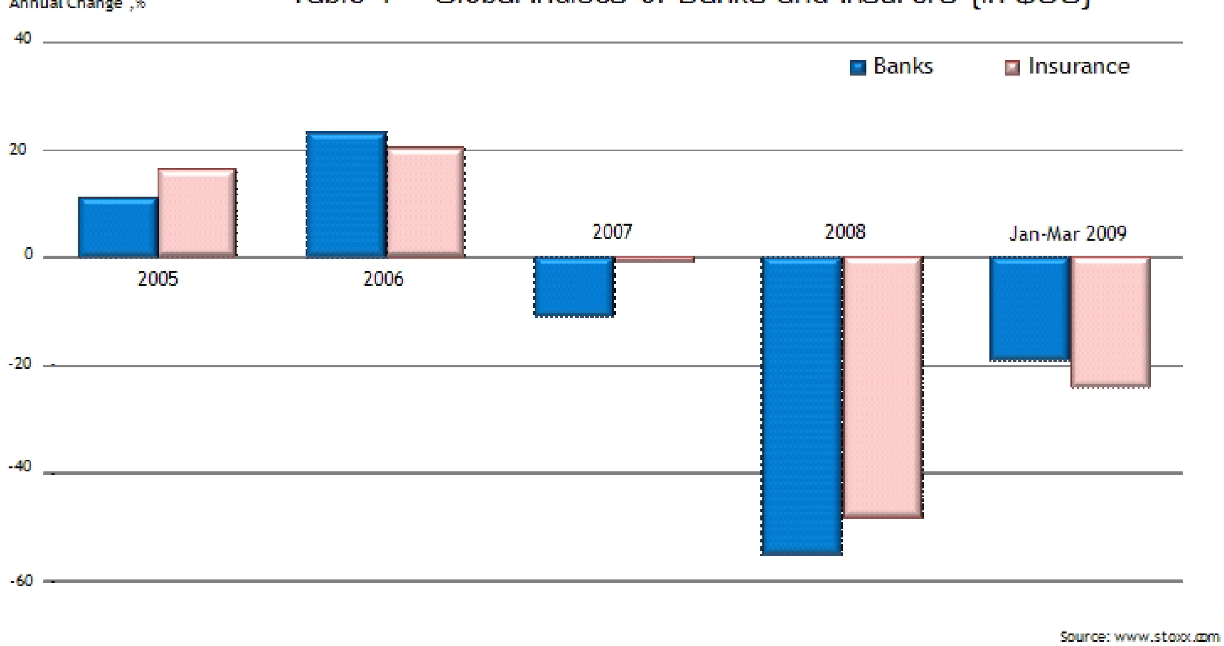
The causes and current impacts of the Global Financial Crisis (GFC) have now been clearly recognised and analysed by a succession of reviews and commentators around the world. While it has become clear that we are all now living through an event that will probably only occur once a typical person's working career, its effects will be pervasive on many activities of interest to actuaries and it is worthwhile to contemplate what we should expect to arise going forward as the continued impacts of the GFC unfold, particularly with respect to regulatory reform.

In the words of Lord Turner, Chairman of the UK Financial Services Authority:

> The financial crisis has challenged the intellectual assumptions on which previous regulatory approaches were largely built, and in particular the theory of rational and self-correcting markets. Much financial innovation has proved of little value, and market discipline of individual bank strategies has often proved ineffective … major changes in regulation and in supervisory approach are required.

Table 1 below illustrates the extent of the impact of the GFC to date on the market value of both banks and insurers internationally.

Table 1 – Global Indices of Banks and Insurers (in $US)



Implications for insurers and pension funds

At the time of writing it is evident that the GFC is not yet over and further developments can still be expected. In particular, insurers and both private and public sector sponsors of defined benefit pension or retirement schemes and their actuaries can expect:

- Low current market interest rates which will lead to low discount rates applicable to liabilities and hence higher liability values
- Low asset values, especially in jurisdictions where assets are marked to market, which (with higher liability values) will lead to significant pressure on emerging earnings, capital positions and solvency
- Considerable continuing difficulties in the valuation of illiquid assets
- Further challenges using market data to disaggregate measures of credit spreads from illiquidity margins so as to obtain suitable discount rates for liabilities
- Re-estimation of many parameters in Dynamic Financial Analysis models and/or "internal models" used to estimate economic capital requirements
- To need to review the methodology and assumptions used to calculate diversification benefits in portfolios and/or the extent of correlations between risks in different product markets and geographies.

Insurers can also expect consequent effects including:

- Life insurers with significant capital guarantees or minimum interest rate crediting obligations inherent in their product liabilities will come under intense pressure if their positions are unhedged
- Embedded Values reported by insurers are likely to drop
- Reduced credit ratings leading to decreasing new business
- Potential liquidity demands may increase surrenders
- Possible new requirements impacting the eligibility of Tier 2 or hybrid capital leading to a potential need to raise significant levels of new Tier 1 capital
- Low investment returns increasing premium rates required for annuity business and for long tail non-life classes of business
- Changing patterns of non-life claims costs associated with poor economic conditions e.g., lenders mortgage insurance, professional liability, Directors and Officers, bodily injury and workers compensation classes can all be expected to show changing experience
- Increased focus on credit-worthiness of counterparties, including reinsurers.

On a wider front it is also clear that the regulatory framework for all financial services institutions is likely to be fundamentally reviewed in an effort to prevent a recurrence of the GFC in the future. All members of the actuarial profession will need to remain alert to these issues and be prepared for the recovery and regulatory reform processes that will undoubtedly evolve.

In particular, the recent G20 meeting held in London on 2 April 2009 committed to an agenda intended to:

- restore confidence, growth and jobs through a concerted fiscal expansion
- repair the financial system to restore lending, including greater systemic co-operation between national regulators and the creation of the Financial Stability Board to replace the Financial Stability Forum so as to improve international risk early warning mechanisms
- strengthen financial regulation to restore trust by extending regulation to all systemically important institutions, including hedge funds and credit rating agencies
- endorse new principles covering incentive based remuneration for executives
- introduce sanctions against tax havens and changes designed to bring an end to “the era of banking secrecy”
- fund and reform key international financial institutions, including a trebling of the resources available to the International Monetary Fund (IMF)
- promote global trade and investment and reject protectionism
- build an inclusive, green and sustainable recovery and to address the threat of climate change.

Other recent developments of interest to actuaries

The International Actuarial Association (IAA) has been active in addressing these issues in recent months, through the work of a taskforce formed for this purpose which has sought to identify lessons being learned from this crisis and suggest potential reforms, improvements and solutions – many of which will impact the work of actuaries.

Details of some of the IAA work in this area are set out in the paper Dealing with Predictable Irrationality – Actuarial Ideas to Strengthen Global Financial Risk Management (the February IAA Paper) which can be downloaded from the IAA website (www.actuaries.org).

In recent weeks presentations and representations on these issues have been made on behalf of the actuarial profession to:

a) various national regulators of banks, insurers and pension funds;

b) the International Association of Insurance Supervisors;

c) the Joint Forum (an international group of banking, insurance and securities markets regulators);

d) the Social Insurance, Pension and Provident Fund Conference “Pensions in Crisis” held in Cyprus;

e) the UK Board of Actuarial Standards;

f) the US House of Representatives Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises; and

g) the Financial Crisis Advisory Group of the IASB/FASB.

In addition, the IAA Risk Crisis Subgroup has been monitoring the relatively rapid political and regulatory developments internationally in response to the GFC. These began with the declaration of the G20 immediately following its meeting on 15 November 2008, to take measures to strengthen transparency and accountability in financial institutions, enhance sound regulation, promote integrity in financial markets, reinforce international co-operation and reform various international financial institutions.

Since then we have seen many important developments including:

a) continued development of the concepts endorsed by the G20 by four key working groups leading up to the meeting of the G20 leaders in London on 2 April

b) the inauguration of President Obama's new US administration introducing a fiscal stimulus policy approach to the crisis at a level which is controversial in Europe

c) relevant announcements from various relevant international bodies including the International Monetary Fund, the Bank for International Settlements (BIS) and the Financial Stability Board

d) major financial support packages for banks being announced, ranging from government guarantees to equity injections and full nationalisations, which blurred the distinction, in some cases, between bank and government credit risk

e) the full extent emerging of the cost to the US government of preventing the collapse of AIG and the revelation of the continued payment of bonuses to executives of AIG and other entities that received government support

f) continued negotiations impacting the progress and eventual form of the Solvency II regulatory reform package for insurance in Europe

g) publication of the Group of 30 Report chaired by Paul Volcker in January 2009

h) publication of the De Larosière Report in February 2009 for the EC

i) publication of the Turner Review in March 2009 in the UK.

Much of this work now recognises the importance of investigating the introduction of dynamic counter-cyclical regulatory arrangements similar to the approach endorsed in the February IAA Paper. This concept envisages prudential capital requirements becoming more dynamic and counter-cyclical rather than pro-cyclical where regulators would transparently change capital requirements for market participants (not just interest rates) when early warnings appear of market "bubbles" emerging. This would allow capital "shock-absorbers" to be put in place to gradually deflate market bubbles before they burst painfully, and create the capacity to allow "draw downs" of such capital during periods of market stress rather than having to enforce tougher capital requirements at such times.

However, implementing such a concept requires a fundamental reconsideration about how the regulation of financial institutions should interact with the operation of monetary and fiscal policy and therefore raises many issues for governments, regulators and financial market participants around the world. As a result the need to create a new “super regulator” or “chief risk supervisor” in each country and how it would operate is being actively discussed and promoted by influential figures including Ben Bernanke, Chairman of the US Federal Reserve. Once again, this is similar to the approach advocated in the February IAA Paper.

The IAA advocated such a role to administer the proposed dynamic counter-cyclical capital requirements and facilitate greater co-ordination and co-operation between national jurisdictions. It could possibly be created as part of each country's central bank. The IAA envisages the functions of this role would include:

a) developing an agreed risk appetite policy for key market-wide risk indicators;

b) monitoring, managing and publicly reporting on risk indicators within that appetite;

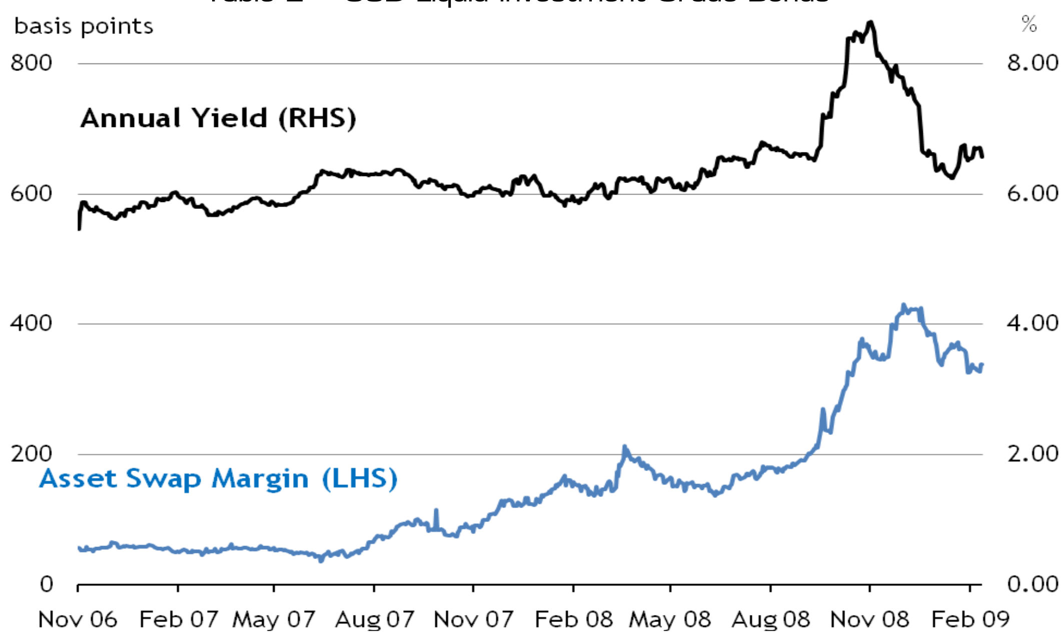
c) changing capital requirements for regulated market participants at its discretion; and

d) facilitating risk identification and communication with appropriate decision-makers, at both the national and international levels.

Creation of a network of such roles would also provide a framework to better manage risks and overcome the geographic and industry silos that allow inconsistencies and gaps which critically weaken current risk management protocols.

Table 2 below demonstrates one reason why such a framework is needed by illustrating the relative impotence of reductions in official US interest rates during the crisis – driven by conventional monetary policy – in stimulating the US economy. Table 2 shows the progress of yields on US investment grade bonds through this period. Because the GFC triggered a significant increase in credit risk spreads, even investment grade borrowers have faced higher total borrowing costs during the crisis rather than lower overall borrowing costs – the opposite of the effect sought by reductions in official interest rates. Further, official US interest rate reductions took official rates to levels close to zero so that conventional monetary policy needed to be supplemented by “quantitative easing” and fiscal policy measures.

Table 2 – USD Liquid Investment Grade Bonds



Accordingly, the concept of pursuing dynamic capital requirements (consistent with the IAA February Paper) would give central banks and regulators further tools to manage the wider economy in future rather than just relying on conventional monetary and fiscal policy. Further, dynamic changes to capital requirements can, if required, be targeted from time to time to specific "overheated" markets rather than applying the relatively blunt instrument of interest rate policy across the economy.

Further support for giving regulators discretion in this regard emerged in an informal agreement reached on 26 March 2009 with respect to the ongoing development of the EU Solvency II framework for insurers where measures have been taken in order to try and avoid potential negative feedback loops between market falls and capital requirements. In particular:

- The equity stress test can be increased or reduced by 10% depending on the movements in an appropriate equity index
- Member states have the option to allow a duration-based equity stress test for ring-fenced pension business
- In the event of an exceptional fall in financial markets, supervisory authorities have the option to extend the period during which coverage of the Solvency Capital Requirement (SCR) must be restored, should it be breached
- Supervisors will also have the power to change the parameters of the standard formula SCR for an insurer if they believe the standard SCR does not reflect the risk profile of that entity.

Other themes emerging

Other themes that have emerged common to the reports referred to above and consistent with the direction set by the G20 meeting in London on 2 April include:

a) The need to close regulatory gaps and to have regulation which is more internationally co-ordinated, principle-based, risk-sensitive and less driven by industry (banking, insurance, pension funds, etc.) and geography with effective and integrated supervision of major international financial groups – whilst this is politically difficult, it is clear that there is a need to supervise holding companies of international financial services groups in a manner similar to other group entities;

b) Introduction of principles which will increase the capital requirement for any market participant with remuneration incentives which focus excessively on short term results, that remuneration and other incentive structures do not distort the proper evaluation of risks;

c) Regulation of "shadow banking" activities on the basis of economic substance rather than legal form so that some hedge funds, guarantee companies and insurers are likely to face increased reporting and minimum capital requirements;

d) Increased regulations of credit rating agencies to limit inherent conflicts of interest and use of inappropriate methodologies;

e) Reform of accounting standards, particularly in relation to “off balance sheet” activities, the accounting for loan loss provisions for banks and the various options available for reporting transactions involving financial instruments;

f) Reform of derivatives markets so that any that are traded “over the counter” will face regulation and those traded via an exchange will have standardised contracts cleared through a central entity with open positions subject to margin calls so as to control counterparty risk (thereby seeking to avoid a repetition of the concentrated exposure that firms such as AIG developed in these markets);

g) Risk management must be viewed as both independent from and integral to the operation of a financial services business so that risk teams have the freedom and the capability to take an objective view that may differ from management’s based on full and unrestricted access to the same information, and differing views on material matters must be reported to the board and be transparent to the prudential regulator;

h) The Basel II regime governing the minimum capital requirements for banks internationally should be reviewed to strengthen capital requirements, restrict “off balance sheet” activities and reduce pro-cyclical effects; and

i) Stress testing and scenario analysis, including an assessment of events that would be extreme enough to ruin a firm, should form an integral part of a firm’s risk management processes and embedded as part of the normal decision making of senior management.

A further issue of interest to actuaries advising pension funds is whether separate actuaries should be appointed by plan sponsors and plan participants to avoid conflicts of interest that can arise between plan sponsors who may wish to adopt a higher risk appetite and investment exposure to equities to reduce cost, versus plan participants who may wish to adopt a lower risk appetite and lower equity exposure, particularly where plan participants jobs are at risk if their employer encounters financial stress. This may imply a need for mandatory scenario/stochastic testing in reports on funding policies for pension plans to ensure that risk levels are consistent with target risk appetites.

In the longer term the GFC also re-opens the question of whether the progressive conversion of defined benefit schemes to defined contribution pension and saving arrangements in recent years has contributed to increased systemic risk by transferring risks to individuals and removing the source of some buffers in the system. The GFC also poses a challenge to the private sector based contractual savings industry (including pensions and life insurance) to deliver the security sought by their ultimate clients without having recourse to various forms of government support or the ultimate taxing power of governments.

Conclusion

The impacts of the GFC will no doubt be felt for many years to come in many different ways. Actuaries and their clients will need to continue to be alert to both risks and opportunities (including opportunities for the actuarial profession) that will emerge as a result of the GFC.

Association Actuarielle Internationale
International Actuarial Association
150 Metcalfe Street, Suite 800
Ottawa, Ontario
Canada K2P 1P1
www.actuaries.org
Tel: 1-613-236-0886 Fax: 1-613-236-1386

Email: secretariat@actuaries.org