Il ruolo delle imprese di assicurazione nella crisi finanziaria: Solvency II è una risposta adeguata?

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Agenda

- Le assicurazioni e la crisi
  - Effetti della crisi sulle assicurazioni
  - Le assicurazioni e il rischio sistemico

- Il tema della pro-ciclicità
  - Pro-cyclicality and risk-based capital requirements
  - Pro-cyclicality and Solvency II
  - Relationship between Accounting Standards and Capital Regulation

- Conclusioni
Effetti della crisi sulle assicurazioni (1/3)

- Le imprese di assicurazione non hanno originato la crisi finanziaria, ma ne hanno ovviamente risentito …

- … gli effetti sono stati soprattutto indiretti, derivanti dal forte calo del valore degli assets
  - hanno perciò beneficiato da marzo ad oggi del recupero dei valori mobiliari, soprattutto dei corporate bonds

- I casi di dissesto (o insufficiente capitalizzazione), che non hanno interessato l’Italia, sono stati assai rari ma non trascurabili

  - In October 2008, Yamato Life, a mid-sized life insurer in Japan went bankrupt. AIG, historically referred to as the world’s largest insurance company had to be rescued by an enormous injection of public capital and explicit financial guarantees from the U.S. government … Two U.S. life insurance companies, Hartford Financial and Lincoln Financial, requested assistance to keep their solvency ratios up. And in the Netherlands, Aegon, one of the most respected European insurance companies embraced official help. Similarly, important bancassurance institutions like ING and Fortis required direct government intervention. (Parallax: Striving for a More Resilient International Financial Architecture, Patrick M. Liedtke, Sept. 2009, available at the website www.genevaassociation.org)
**Effetti della crisi sulle assicurazioni (2/3)**

<table>
<thead>
<tr>
<th>Table 3. Insurance Sector Announced Losses and Capital-raising to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Worldwide</strong></td>
</tr>
<tr>
<td>Americas</td>
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<tr>
<td>Europe</td>
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<tr>
<td>Asia</td>
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<td></td>
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**Major losses by firm**

<table>
<thead>
<tr>
<th>Firm</th>
<th>Loss</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>American International Group</td>
<td>87.0</td>
<td>91.8</td>
</tr>
<tr>
<td>Ambac Financial Group</td>
<td>12.1</td>
<td>1.4</td>
</tr>
<tr>
<td>AMB Generali Holding</td>
<td>7.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Hartford Financial</td>
<td>11.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Met Life</td>
<td>12.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Prudential Financial (US)</td>
<td>9.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Allstate Corp</td>
<td>7.2</td>
<td>0.0</td>
</tr>
<tr>
<td>MBIA</td>
<td>5.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Allianz</td>
<td>7.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Swiss Re</td>
<td>6.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Lincoln National Group</td>
<td>4.5</td>
<td>0.0</td>
</tr>
<tr>
<td>XL Capital</td>
<td>4.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Aegon NV</td>
<td>7.9</td>
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<td>Genworth Financial</td>
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<td>Principal Financial Group</td>
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<td>Can Financial</td>
<td>3.8</td>
<td>1.3</td>
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<tr>
<td>Scottish Re Group</td>
<td>1.7</td>
<td>1.1</td>
</tr>
<tr>
<td>AXA</td>
<td>1.8</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: Bloomberg

**Effetti della crisi sulle assicurazioni (3/3)**

- Si argomenta spesso che la vicenda AIG sarebbe una prova decisiva della vulnerabilità del settore assicurativo

- Senza entrare nella questione su chi doveva vigilare AIG Financial Products, mi sembra condivisibile il giudizio del Governatore Bernanke
  
  - “AIG exploited a huge gap in the regulatory system, there was no oversight of the financial-products division, this was a hedge fund basically that was attached to a large and stable insurance company“

- Credo che, in generale, si possa affermare che i rari casi di dissesto sono stati determinati …
  
  - da una spropositata (e non vigilata) offerta di copertura sui mercati derivati (anch’essi non vigilati) e di garanzie finanziarie – AIG e monoline
  
  - da un legame con un’attività di raccolta dei depositi e credito preponderante all’interno del conglomerato

  - … e non da una insufficiente capitalizzazione delle compagnie o da un cattivo business model
Le assicurazioni e il rischio sistemico (1/4)

- Secondo, Trichet le assicurazioni giocano un ruolo importante per stabilità del sistema finanziario, in quanto:

1. **Sono investitori istituzionali di dimensione molto rilevante**

   - Collectively within the euro area, their investment amounted to €6 trillion at the end June 2009. Most of the time, given the typically long-term investment horizons of insurers and pension funds, they are a source of stability for financial markets. Due to the sheer size of their investment portfolios, reallocations of funds or the unwinding of positions by these institutions have the potential to move markets. In extreme cases, that could put at risk financial stability by triggering large swings in asset prices.

2. Per i crescenti link tra banche e assicurazioni

- Euro area insurance companies and pension funds hold about €435 billion of debt securities issued by euro area banks. This represents about 10% of the total amount outstanding of debt securities issued by euro area banks. From a financial stability perspective, we need to have a good understanding of these linkages in order to assess the potential transmission of problems from one sector to another.

3. Proteggono famiglie e imprese

- The default of an insurer could cause financial distress in these sectors. As we all know, this is why insurers and pension funds are supervised.

Le assicurazioni e il rischio sistemico (3/4)

- Pur essendo di “buon senso”, le argomentazioni di Trichet non sembrano andare al cuore del problema del rischio sistemico. In particolare, non tengono conto del fatto che:

  1. la stragrande parte del passivo assicurativo (le riserve) ha un grado di illiquidità molto elevato (soprattutto, nell’assicurazione danni)
    - la crisi ha dimostrato che l’esposizione a “run” della clientela assicurativa è limitata (sia pure, probabilmente, superiore a quella di alcuni anni fa)
  2. le assicurazioni hanno un limitato grado di indebitamento sul mercato finanziario e, per la gran parte, a medio/lungo termine
    - inoltre, le assicurazioni non sono attive nel mercato interbancario, che è il principale canale di contagio sistemico
  3. nei prodotti “with profits” (quota rilevante dell’assicurazione vita) le perdite sui cespiti finanziari sono condivise con gli assicurati
    - dopo l’“asset crisis” derivante dallo sboom delle dot-com nel 2001-2 vi è stato anche un miglioramento delle tecniche di ALM
Le assicurazioni e il rischio sistemico (4/4)

- Le argomentazioni di Trichet mi sembrano, invece, assai più rilevanti sul tema di come anche la regolamentazione debba risolvere alla radice il problema della pro-ciclicità (oggetto della seconda parte di questa presentazione)

- Prima però qualche riflessione sulla “vigilanza sistemica”:
  - il rischio concreto è che la definizione di istituzioni sistematicamente rilevanti attribuisca “implicitamente” una patente di “too big to fail”: queste istituzioni potrebbero godere di vantaggi competitivi e/o potrebbero essere soggette a indebite “pressioni politiche” (come tassazione o distorsione nell’allocazione dei fondi). Non è affatto detto che la mano pubblica possa trovare un’efficiente soluzione al trade-off
  - se davvero si ritiene che alcune istituzioni finanziarie sono troppo grandi, e/o complesse e/o rischiose l’unica soluzione (dolorosa e costosa per l’economia) è favorire/imporre il **break up**
  - non è chiaro perché il primo punto della riflessione non riguardi mercati e intermediari non regolamentati (**shadow banking**) che hanno certamente svolto un ruolo rilevante nel creare le condizioni per la crisi sistemica
Pro-cyclicality and risk based capital requirements (1/2)

An Academic Response to Basel II: By Jón Daníelsson, Paul Embrechts, Charles Goodhart, Con Keating, Felix Muennich, Olivier Renault and Hyun Song Shin (May 2001)

- The proposed regulations fail to consider the fact that risk is endogenous
  - Value-at-Risk can destabilise an economy and induce crashes when they would not otherwise occur
- Statistical models used for forecasting risk have been proven to give inconsistent and biased forecasts
  - notably under-estimating the joint downside risk of different assets
- Heavy reliance on credit rating agencies for the standard approach to credit risk is misguided
  - They are unregulated and the quality of their risk estimates is largely unobservable
- Operational risk modelling is not possible
Financial regulation is inherently procyclical

- Our view is that this set of proposals (BASEL II) will, overall, exacerbate this tendency significantly. In so far as the purpose of financial regulation is to reduce the likelihood of systemic crisis, these proposals will actually tend to negate, not promote this useful purpose.

- Of special concern is how the proposed regulations would induce the harmonisation of investment decisions during crises with the consequence of destabilising rather than stabilising the global financial system.

Unfortunately, the financial turmoil proved they were right!

- Several measures have been proposed to mitigate the pro-cyclicality of risk-based regulation. All rules require further harmonisation of accounting standards and of the criteria for consolidation.

- Adjusting for expected losses
  - Since defaults increase in downturns, dynamic provisioning for expected losses could be introduced (the experience of SPAIN).
  - Problem: It is not consistent with IAS. But, should the Accounting Standards be counter-cyclical?
  - Alternatively (Panetta et al., 2009): Modify banks’ own funds by introducing credit value adjustments (CVA) computed on the basis of the deterioration in credit quality experienced in past downturns. Accounting not affected.
Solving pro-cyclicality in banking (2/3)

- **Adjusting for unexpected losses**
  - Smoothing PD, LGD, EAD, M over time, since ratings proved not to be smoothed over the cycle (Example: Downgrading the customer in good times)
  - Repullo et al. (2009): smoothing the output of the capital function using an adjustment factor that depends on the deviation of GDP growth from its long-run average

- **Adjusting for macro-prudential risks**
  - Goodhart and Persaud (2008) propose to link capital requirements to the rate of expansion of bank lending and to asset prices in the relevant sectors
  - coupled with a sufficiently low floor under capital adequacy requirements (the authors mention 3%)
Contingent capital

- Kashyap et al. (2008): Banks should buy insurance contracts that would pay off in case of a systemic crisis
- The seller of protection (e.g. a pension fund or a sovereign wealth fund) should put the potential pay-off in a custodial account

Target leverage ratio

- Limits on leverage, defined as the ratio between unweighted total bank assets and capital
Unlike banking, in insurance the major sources of potential pro-cyclicality are to be found in the financial markets and not in the credit markets:

- Equities and Default risk for bond issuers

The mechanism is quite different:

- in a downturn, the increased likelihood of breaches of the capital requirement might lead insurance companies to sell equities and bonds, exacerbating the market trend
- Basically, risk is not endogenous!

A very important point is that capital in Solvency II will be fully market based, so both assets and liabilities will be at market value rather than at cost

- This represents a major difference from banking regulation and means that capital could be very vulnerable to asset price movements. For this reason a key concern for us is how to deal with the potential pro-cyclicality of Solvency II (JP MORGAN, European Equity Research, 19 January 2010)
In order to mitigate potential pro-cyclical effects, the market risk module of the standard formula for the Solvency Capital Requirement should include a symmetric adjustment mechanism with respect to changes in the level of equity prices.


1. The equity risk ... shall include a symmetric adjustment to the equity capital charge ...
2. The symmetric adjustment ... shall be based on a function of the current level of an appropriate equity index and a weighted average level of that index. The weighted average shall be calculated over an appropriate period of time ..
3. The symmetric adjustment ... shall not result in an equity capital charge being applied that is more than 10 percentage points lower or 10 percentage points higher than the standard equity capital charge
In the event of exceptional falls in financial markets ... provision should be made to allow supervisory authorities to extend the time period within which insurance and reinsurance undertakings have to re-establish the level of eligible own funds covering the SCR.

Article 138: Non-Compliance with the Solvency Capital Requirement
4. In the event of an exceptional fall in financial markets, the supervisory authority may extend the period set out in the second sub-paragraph of paragraph 3 (6 months) by an appropriate period of time taking into account all relevant factors.

Article 143: Implementing Measure
- The Commission shall adopt implementing measures specifying the factors to be taken into account in accordance with Article 138(4) including the maximum appropriate period of time, expressed in total number of months, which shall be the same for all insurance and reinsurance undertakings as referred to in the first sub paragraph of Article 138(4).
The MCR should ensure a minimum level below which the amount of financial resources should not fall.

- It is calculated in accordance with a simple formula based on technical provisions, written premiums, capital-at-risk, deferred tax and administrative expenses.
  - basically, it is a sort of leverage ratio

- MCR shall not fall below 25% nor exceed 45% of the undertaking’s SCR.
This approach is a step in a new direction. Solvency II is the first Directive/Regulation which explicitly mentions the risks of pro-cyclicality.

The symmetric adjustment mechanism (SAM) - coupled with the definition of MCR (which is a sort of leverage ratio) - designs an approach a là Goodhart and Persaud (2008) which doesn’t interfere with the accounting.

Is it enough? Difficult to say ...

- it will also depend on the design of the SAM, which should be defined at Level II and CEIOPS proposal is quite discouraging.

… but likely it is not!
CEIOPS proposes that a standard stress for global equities is calibrated at 45%. An alternative equity stress, which consists of applying a 39% stress to global equities, is being supported by a minority of CEIOPS’ Members. One Member State supports a 32% stress.

CEIOPS proposes an averaging period of one year. A minority CEIOPS’ Members has expressed its preference for an averaging period of three years or more.

- Minority view: it seems to me very convincing!
CEIOPS’ recommendation on the averaging period also takes into account that in a falling market, a longer reference period leads to a lower capital charge; this has potential for moral hazard, in that undertakings may take on inappropriately large equity investments. This would worsen any procyclical effects at low points in the equity cycle.

- Never heard that undertakings may take on inappropriately large equity investments at low points in the equity cycle!
- Buying at low prices is both meaningful and anti-cyclical

Further, CEIOPS suggests that undertakings may move away from other asset types such as bonds or properties, where there is no counter-cyclical charge, if they know already that the capital charge for equities will provide countercyclical relief

- This might be true. But, eventually, it is a good reason to introduce anti-cyclical mechanisms for other asset classes
The major problem is that the SAM applies only to equities and not to bonds or real estate properties

- This is why the insurance industry UK (where the duration of the liabilities is longer and the FSA strongly discourages equity investment after the Equitable case) proposes the use of a “liquidity premium” which will allow the worst short term movement in asset values to be offset by an adjustment to the value of liabilities
- In any case, it is crucial to avoid creating arbitrage conditions between equity and bonds (including Government bonds)

The provision that extends the time period to recover a breach of the SCR during period of exceptional falls in financial market is extremely important

- however, automatic mechanisms are preferable to discreional, since they eliminate the need for Supervisors to justify forbearance during bad periods, when risk perception is greatly increased in the markets and, most importantly, in public opinion
- a solution might be calculating capital requirement at a lower level (at the SCR level or at a 99% VAR as in SCOR proposal)
Relationship between Accounting Standards and Capital Regulation (1/2)

- On procyclicality, the FSB recommends actions that will dampen procyclicality in bank capital, establish more forward-looking loan loss provisions, and mitigate the adverse interaction between the build-up of leverage, maturity mismatching and fair value accounting (Draghi, 2009)

- A key point is whether or not IAS should be counter-cyclicical
  - Accountants do not accept the concept of “latent” or expected losses, on which dynamic provisioning is based. They prefer to focus on actual losses, information that is more relevant for short-term investors (and, very often, for managers with misaligned incentives as well as Governments looking for hefty anticipated taxes)

- My impression is that prudential supervision alone cannot do the whole job. If this were attempted, huge incentives for regulatory arbitrage between sectors and areas would arise
If the IAS want to be really global (and functional) they should face the problem of forward-looking provisions

- Think about Cat-risks: without equalisation reserves, the insurance mechanism is not efficient

But the very general point is made by Diamond and Rajan (2009):

- “in boom times, the market requires banks to hold very low levels of capital, in part because euphoria makes losses seem remote …
- Attempts to reduce capital requirements in busts are equally fraught. The risk-averse market wants banks to hold a lot more capital than regulators require, and its ill naturally prevails”

Accounting based on “fair value” cannot ignore that the appetite for risk varies through the cycle. In other terms, the risk-free rate is not observable directly from the market
Relationship between Accounting Standards and Capital Regulation (3/3)

- A sound and simple principle: no gains from fair value can be distributed until the risk that originated them is completely expired

- Easy to say, hard to do ...
- … and quite distant from the traditional IASB approach …
- … but the time is now!
Conclusioni (1/2)

- Il sistema assicurativo ha superato la più importante crisi finanziaria degli ultimi 70 anni in buone condizioni e senza registrare difficoltà sistemiche …
- … non sembra perciò necessario un aumento generalizzato del livello di capitalizzazione dell’attività assicurativa.

- Nel complesso, i due principali strumenti previsti nella Direttiva mantengono intatta la loro validità anche dopo la crisi finanziaria:
  1) Promozione di una più efficace gestione dei rischi e dei controlli interni
  2) Requisiti patrimoniali coerenti con il profilo di rischio dell’impresa e in grado di garantire, con una probabilità del 99,5%, l’assolvimento degli impegni nei confronti degli assicurati nei successivi dodici mesi


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**Conclusioni (2/2)**

- Ma i pareri del CEIOPS vanno nella direzione di un fortissimo aumento dei requisiti
  - i costi connessi con un fabbisogno di capitale eccessivo sarebbero destinati a tradursi in un ingiustificato incremento del prezzo del servizio e/o in una riduzione dell’offerta assicurativa

- Solvency II affronta, per la prima volta nella normativa europea, il tema della pro-ciclicità …
  - non sembra che i supervisors assicurativi abbiano compreso fino in fondo l’importanza del tema …
  - … così come è decisivo che lo IASB formuli proposte coerenti con le raccomandazioni del FSB

- … ma forse non è sufficiente
  - Occorre eliminare gli incentivi regolamentari che costringono le imprese a vendere titoli mobiliari durante le fasi di ribasso dei mercati, così come va favorito l’irrobustimento del patrimonio nelle fasi di espansione
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