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Is a capital surcharge the right instrument to control systemic risk in insurance?¹

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That insurance companies are different from banks is well known. But it is less known why these differences should apply to the regulation of insurance companies when it comes to controlling possible systemic risk. Do large insurance companies differ significantly from large banks or can one essentially base their systemic regulation on one framework devised for systemically important banks? Would capital surcharges for insurance function in the same way as for banking in controlling systemic risk? And what about leverage, is that the same in insurance as in banking?

Closer inspection of the balance sheet structure and the functioning of insurance compared with banking shows that there are more differences than similarities between insurance and banking. And it also shows that three crucial concepts for controlling systemic risk—capital, leverage and loss absorption capacity—are very different in insurance.

Banks and insurance in systemic interaction compared

Specifically, there are four main differences and two similarities between insurance and banking with regard to systemic interaction.

Institutional interconnectedness: the first key difference between banks and insurers with regard to systemic risk is that banks operate within a system, namely the banking system, while insurers do not. Banks are institutionally interconnected through unsecured and secured interbank lending. The fact that there is a central bank demonstrates further that banks function, and can only function, within a system. Insurers are not institutionally interconnected; they are stand-alone operators in institutional terms. There exists no 'insurance system' and no 'central insurer' comparable to a central bank. It is sometimes argued that insurers and reinsurers together constitute a system that resembles the banking system. But such a parallel overlooks the functions and size of reinsurers, which only take up portions of the primary risks of insurers. Hence, as there exists no 'insurance system', the notion of systemic risk also needs to be thought of differently for insurers.

Maturity transformation: banks engage in maturity transformation combined with leverage; they transform short-term liabilities into longer-term assets. Insurers do not engage in maturity transformation. They pursue a liability-driven investment approach, trying to match their asset profiles with their liability profiles. Since they are funded long-term, insurers are essentially 'deep-pocket' investors. This makes them react very differently to downward market pressure compared with a short-term funded or leveraged investor.

Liquidity risk: liquidity risk is inherent in banking, but not in insurance. Banks risk being liquidity-short, because deposits are the largest item on banks' balance sheets and these deposits are predominantly short-term, withdrawable at will and held exclusively by trust.

Insurance liabilities are less fugitive and insurers are actually liquidity-rich. The liabilities for insurance of general protection, property, casualty and health are not callable at will. They relate to exogenous events that policyholders

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do not influence. The part of liabilities that are theoretically callable concerns those parts of life insurance business that are not annuities. But there are often penalties for early withdrawal, and tax benefits might vanish.

Money, credit and payment function: banks deal with the payment function: they create credit and their liabilities constitute money. This means that they are a means of payment and entail a public good function in a market economy. As money is by definition systemic, the money creation by banks is the core of their systemic nature, and the disruption or risk of disruption to this function has immediate adverse implications on the real economy. The second unique role commercial banks have is that they organise the payment function, coordinated by central banks to do so. The multiplicity both of issuers of money and of payment mechanisms is indeed a common feature in all developed economies.

Insurers' liabilities do not constitute money but represent an illiquid financial claim. Moreover, insurers do not provide essential financial market utilities and are less integrated into the financial market infrastructure, and often have no formal links to their national central banks. In particular, they are not an organisational part of the payments system, where the smallest interruption would cause turmoil for the economy.

Two similarities between banks and insurers

The role as financial intermediaries: just like banks, insurers are financial intermediaries as far as their life insurance business lines are concerned. Their liabilities represent financial claims for policyholders, and their assets are predominantly financial assets. Insurers collect savings, intermediate between savers and investors, channel funds, and fulfil a function of capital allocation in the economy. They are indeed important sources of funding for the real economy.

The role as investors: just like banks, insurance companies are large investors in financial markets. They receive insurance premiums against a promise to cover adverse events and carry savings forward. The premiums are invested in a diversified portfolio of assets, encompassing government and private sector bonds, equities, loans, infrastructure finance and other assets.

The roles of leverage, capital, and loss absorption capacity and implications for systemic regulation of insurance

The chief enemy of systemic risk control is leverage. Leverage is inherent in banking and quasi-absent in insurance. 'Banking is all about leverage', says Stefan Ingves, Chair of the Basel Committee for Bank Supervision.

For insurers, the largest liability consists of policyholder reserves. Insurers do not raise debt to purchase financial assets to cover liabilities towards policyholders. They do so mainly to finance mergers and acquisitions and to a lesser extent to establish a cash buffer if needed or to buy fixed assets. For insurers, a leverage ratio would better not be defined as equity over assets (as for banks) but as equity over debt, or the inverse, which is often referred to as the gearing ratio.

This difference has major implications for regulation. For banks, capital surcharges can actually control leverage because they slow down asset acquisition, also by slowing credit growth; this is the process of deleveraging. Insurers can reduce the debt gearing but they cannot reduce their insurance assets because this would imply cancelling insurance contracts with existing policyholders, which is generally not allowed.

The linchpin of bank systemic regulation is capital. In addition to restraining leverage, higher capital charges for banks raise the costs of balance sheet growth and augment the immediate loss absorption capacity of individual institutions to shocks, which in turn limits the pass-through of such shocks to the system.

To the extent that liquidity risks begin to materialise, banking capital can help stem an initial outflow by helping to tap market funding or central bank resource, for which sufficient capital levels are a precondition. While robust capital levels do not protect depositors directly, they can be seen as providing a first protection against deposit outflows or other liquidity shortages.



In insurance, capital serves essentially to ensure that the last policyholder gets paid. First all assets are wound down, which typically can take many years, and to be sure that there are enough assets to cover eventually all liabilities including under adverse market conditions. Regulators demand more assets than liabilities from the outset, which is what establishes capital.

Hence, whereas in banking, capital enters the sequence of adverse events at the beginning, in insurance it enters the sequence of adverse events at the end. This difference has an important implication for systemic regulation because it changes the effectiveness of capital surcharges. Raising capital levels for banks increases their buffer to withstand shocks and therefore helps avoid the chain of systemic contagion when it unravels. Raising capital for insurers, in contrast, essentially means that there are (even) more assets available to cover the liability stream than otherwise, but has no crisis prevention or stabilisation function because those assets would be used at the end of a potential wind-down. In that sense, capital in insurance does not 'buy time' to handle a sudden shock, as it does for banking.

Loss absorption capacity: for banks, the loss absorbency on the liability side is mostly confined to the equity tranche. There have been recent market and regulatory initiatives to raise the degree of loss absorption through debt contracts converting into equity (conditional convertibles or CoCos) and through the formalisation of bail-in rules allowing for the write-down of subordinated debt, but these efforts remain limited in scope.

In insurance, the bail-in is built in—there is an inherent loss absorption capacity in the form of beneficiary participation in a significant part of life insurance contracts. In these contracts policyholders participate in the gains and losses of the investments linked to their policies. Hence, there is a built-in loss absorbency function in insurance on top of the equity tranche. In practice, when a bank is hit with a loss on its asset side, there is very little loss absorbency on the liabilities side because all deposits are redeemable at par (and their value does not fluctuate with the market). In insurance, parts of the policyholders represent investments in participating contracts, where policyholders participate in financial market movements on the upside as well as on the downside, at least to a certain extent. This is why there is higher 'loss absorbency' (and benefit participation) in insurance compared with banks.

The FSB/IAIS framework to deal with systemic risk

The regulatory strategy that the FSB has laid out for the implementation of insurance regulation foresees virtually the same three-pronged approach that was applied to banks: enhanced supervision at group level; the preparation of risk management and recovery plans; and the call for higher capital requirements. But as has been argued above, capital does not function in the same way in insurance as it does in banks. Capital surcharges therefore do not control systemic risk.

If one wanted to control systemic risk in insurance, the following four-pronged approach would be more effective:

1. limit and regulate non-insurance activities, scrutinising especially activities that would entail leverage combined with maturity transformation;
2. control whether insurance products are well managed (through pricing and reserves) and whether risks are appropriately hedged;
3. if derivatives are used for hedging, make sure that they are sufficiently collateralised so as to avoid cascading of risks in case of counterparty defaults;
4. as for balance sheet management tools, such as securities lending, limit the volume to a tolerable share of the balance sheet.

This approach would not only be effective but also ensure that capital is available for long-term investments and not double-layering on reserves that should already be sufficient to deal with risks, especially in a Solvency II type framework where capital is determined on a stressed basis and an encompassing risk scenario that already involves aspects of systemic risk.