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Systemic Risk in Insurance: towards a new Approach

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Systemic Risk in Insurance: towards a new Approach*

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I. Can insurers cause financial instability?

Financial stability can be intended as the state whereby the build-up of systemic risk is prevented along with consequent major disruptions in financial markets that could have potential negative effects on the real economy. It follows that financial stability is considered a prerequisite for a sustainable economic growth (Dudley, 2011) and the empirical evidence suggests that an instable financial system can have indeed a negative impact on economic growth (Creel et al., 2015).

A growing body of literature provides evidence that among financial institutions, insurers do pose systemic risk[1]. Even if this risk is usually smaller compared to banks, it follows that insurers can be a source of financial instability that in turn may create significant adverse effects on economic activity.

Against this background, it is important to have a set of regulatory and supervisory tools in place that aim to enhance and preserve financial stability across the entire financial system. Such regulatory and supervisory tools might be adopted following a twofold approach: on the one hand, the completion of existing microprudential frameworks with tools that embed macroprudential features, i.e. the current Solvency II regime as an example (Christophersen and Zschiesche, 2015); on the other hand, the adoption of a macroprudential framework designed to take into account the characteristics of the insurance business, complemented by a set of additional measures designed to account for specific characteristics of other financial institutions, primarily banks. In this short letter, we mainly focus on the latter aspect, although the design of a macroprudential framework inevitably foresees macroprudential features into microprudential frameworks, thereby blurring the separating line between the two approaches.

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[1] See for instance Billio et al. (2012).

II. The evolution of the existing macroprudential framework

The current macroprudential framework was developed with the aim of tackling the externalities generated by insurers in the aftermath of the 2008/2009 financial crisis. One of the first policy measures designed to address systemic risk was the definition under the aegis of the Financial Stability Board (FSB) of the so called Global Systemically Important Insurers (G-SIIs) designation process.[2]According to this process, a list of insurance groups identified as systemically relevant based on a pre-defined set of criteria are subject to additional regulatory requirements, since their distress or disorderly failure would potentially cause significant disruption to the global financial system and economic activity. These additional regulatory requirements include

- Higher Loss Absorbency, i.e. additional capital charges starting from January 2019 for those insurers designated in 2017,
- Enhanced group-wide supervision, i.e. direct power of supervisors over holding companies and the oversight from supervisors of the development of the Systemic Risk Management Plan and the Liquidity Risk Management Plan,
- Group-wide recovery and resolution planning as well as aregular resolvability assessment, i.e. mandatory development of a Recovery and Resolution Plan and a Resolvability Assessment Process within institutions' Crisis Management Groups.

The criteria used on the G-SIIs designation were broadly inspired by the Global Systemically Important Banks (G-SIBs) designation process, in which "too-big-to-fail" was the dominant rationale and hence a major determinant of the systemic relevance of institutions.[3]

The current systemic risk assessment is also referred as *Entity Based Approach* (EBA) since it relies on a pre-defined set of indicators, which assign a weight to a pre-defined set of (balance sheet) items for each Internationally Active Insurance Group (IAIG) under assessment. Each institution is then ranked according to the aggregated result of these indicators and top scoring insurance groups enter the designation list.

In our view, a major drawback of such approach lies in the partial coverage of the actual drivers of systemic risk in insurance. As a matter of fact, in an EBA the failure or the distress of an entity is a necessary condition to generate systemic effects and the externalities are the result of the sums of the

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[2] G-SII group currently encompasses 9 insurance groups. The list is available here: http://www.fsb.org/2016/11/2016-list-of-global-systemically-important-insurers-g-siis/.

[3] In 2016, the IAIS released an update of its assessment methodology "Global Systemically Important Insurers: Updated Assessment Methodology". The 2016 updated methodology essentially reviewed the use of quantitative and qualitative components that are the underlying drivers of the overall assessment, without changing the approach to the assessment.

total exposures and activities. However, as Berdin and Sottocornola (2015) showed, certain activities, which do not only include insurance activities such as life or non-life lines of business, but also certain balance sheet items or certain managerial practices such as leverage or funding structures, tend to drive the contribution to systemic risk of insurers beyond the size of the institution or beyond the aggregated systemic contribution of the single institution.[4] To be more precise, in our analysis we considered the cross-section (i.e. horizontal perspective) of activities among a broad sample of insurers and observed how the intensity of the systemic risk contribution of insurers varied depending on the underlying activities. In other words, we (and other authors alike) take a different perspective, which is in contrast with the current vertical view of systemic risk in insurance that only tends to identify those insurers, which indicate a higher score as sum of different activities, and balance sheet items deemed as systemically relevant. A possible consequence of the approach currently in use, i.e. the EBA, is that there may exist insurers that do engage in systemically relevant activities but, according to the current metrics, are not labeled as G-SIIs and are thus not covered by the current macroprudential framework. It follows that externalities, generated by common systemically relevant activities of a sufficiently large number of non-G-SII entities, are likely to be neglected.Hence, in our view there is a considerable risk that the current assessment might be missing part of its objective and therefore a different approach on the systemic assessment is needed.

III. Towards an Activity Based Approach to assess systemic risk in insurance

During the last IAIS Global Seminar in June 2017, IAIS disclosed the agenda for a gradual shift in the systemic risk assessment methodology from the current EBA to a new *Activity Based Approach*(ABA). We see this attempt to change the perspective on how systemic risk in insurance is assessed as very positive as it appears to be more in line with existing empirical evidence on systemic risk and more generally, with the way systemic risk in insurance emerges from empirical analyses. A real game changer would be the full acknowledgement that externalities are not only generated upon failure of institutions but also stems from common and procyclical behaviors of one or more companies in reaction to exogenous events. This condition, besides being the foundation of an ABA, is also not contradicting the current EBA. Indeed, a failure of an institution requires some time to materialize and during the period of distress, preceding the bankruptcy recovery, actions might already produce footprints on the markets propagated for example via the liquidation of specific asset classes rather than via exposure channels typically appliedin case of failure. The condition thereof is precisely what is captured by the most widely known systemic risk measures, e.g. CoVaR (Adrian and Brunnermeier, 2016), and (Dynamic) Marginal Expected Shortfall (Acharya et al. (2017), Brownlees and Engle (2012))

[4] Similar evidence is provided in Weiß and Mühlnickel (2014).

which focus on tail events thatcause strong market reactions potentially leading to sector wide distress, financial instability and dislocation in economic activity. In such distressed states of the world, defaults of firms can certainly be a (likely) result that may trigger negative spillovers.However, this does not imply that they are also theunderlying causes. This seems to be particularly true for insurers.Even if no major default occurredduring the financial crisis, evidence suggests that insurers did pose systemic risk, thereby contributing to sector wide distress. Hence, defaults can be considered as sufficient but not necessary conditions for the propagation of systemic risk.

Thus, in our view, even if *size* is still a needed element of a systemic risk assessment, the strong emphasis put on the *too-big-to-fail*approach in insurance, i.e. EBA, might be partially missing the very same underlying natureof systemic risk in insurance.

A further key feature of the ABA that we see as particularly appropriate for assessing systemic risk in insurance, is given by the increasing overlapping of activities among insurers, banks and fund managers: such development calls for a common (i.e. not limited to insurers) approach, which aims to level the playing field for financial institutions and avoid regulatory arbitrages. As such, looking at activities might be the key founding element of a cross-sectoral macroprudential framework.

Concluding, we see the developments on the systemic risk assessment methodology positively, although many questions remain. Beside the implications related to a sound and proper development and calibration of the ABA assessment and of the subsequent policy implications, no common understanding on how to enforce the ABA has been reached. Should EBA and ABA coexist or should the ABA fully replace the EBA after a sufficiently extended period of transition? As always the devil will be in the details, but the ongoing discussion on the new approach represents a first sound intellectual basis for a better macroprudential framework in insurance. Much work needs to be done, and we see the tight cooperation among supervisors, standard-setting bodies, academics and industry as key to succeed and build a more resilient financial system.

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