

---

# **Current financial stability initiatives relating to insurers and pension funds**

**Malcolm Kemp**

**Presentation to the AFIR-ERM Colloquium**

**22 May 2019**

- Models of systemic risk
- Macroprudential proposals for insurers
- Insurers versus pension funds

- Models of systemic risk
- Macroprudential proposals for insurers
- Insurers versus pension funds

- Systemic risk
  - Largely new term coined during 2007-09 Credit Crisis (the 'Global Financial Crisis')
  - Borrows from multiple disciplines and hence has multiple angles
- Financial stability
  - The mandate given to bodies that have responsibility for mitigating systemic risk
  - E.g. Financial Stability Board (FSB, global), European Systemic Risk Board (ESRB, EU)
  - C.f. financial stability departments within e.g. EIOPA, BoE, ECB, Federal Reserve, IMF
- Macroprudential regulation/policy
  - Regulation/policy that tries to tackle systemic risk and to foster financial stability

- Earlier systemic crises included e.g. Savings and Loans Crisis, 1929 Wall Street Crash, LTCM, Continental Illinois ('Too Big To Fail'), LDC Debt Crisis
- 2007-2009 GFC particularly impacted the banking sector (and related areas such as 'shadow banking') as did many previous systemic crises
- But regulators don't think insurers are immune from systemic risk
  - C.f. AIG (although the insurance industry argue that its near failure wasn't insurance related), some EU insurers during the GFC (particularly ones with significant CDO / CLO exposures) and e.g. ESRB December 2015 Report on systemic risks in the EU insurance sector (including exposure to long-term interest rates: 'low for long')
  - Ignoring possible ways in which systemic risks might influence, be magnified by or even possibly be created by insurers may focus too much on solving the last crisis rather than mitigating the next one

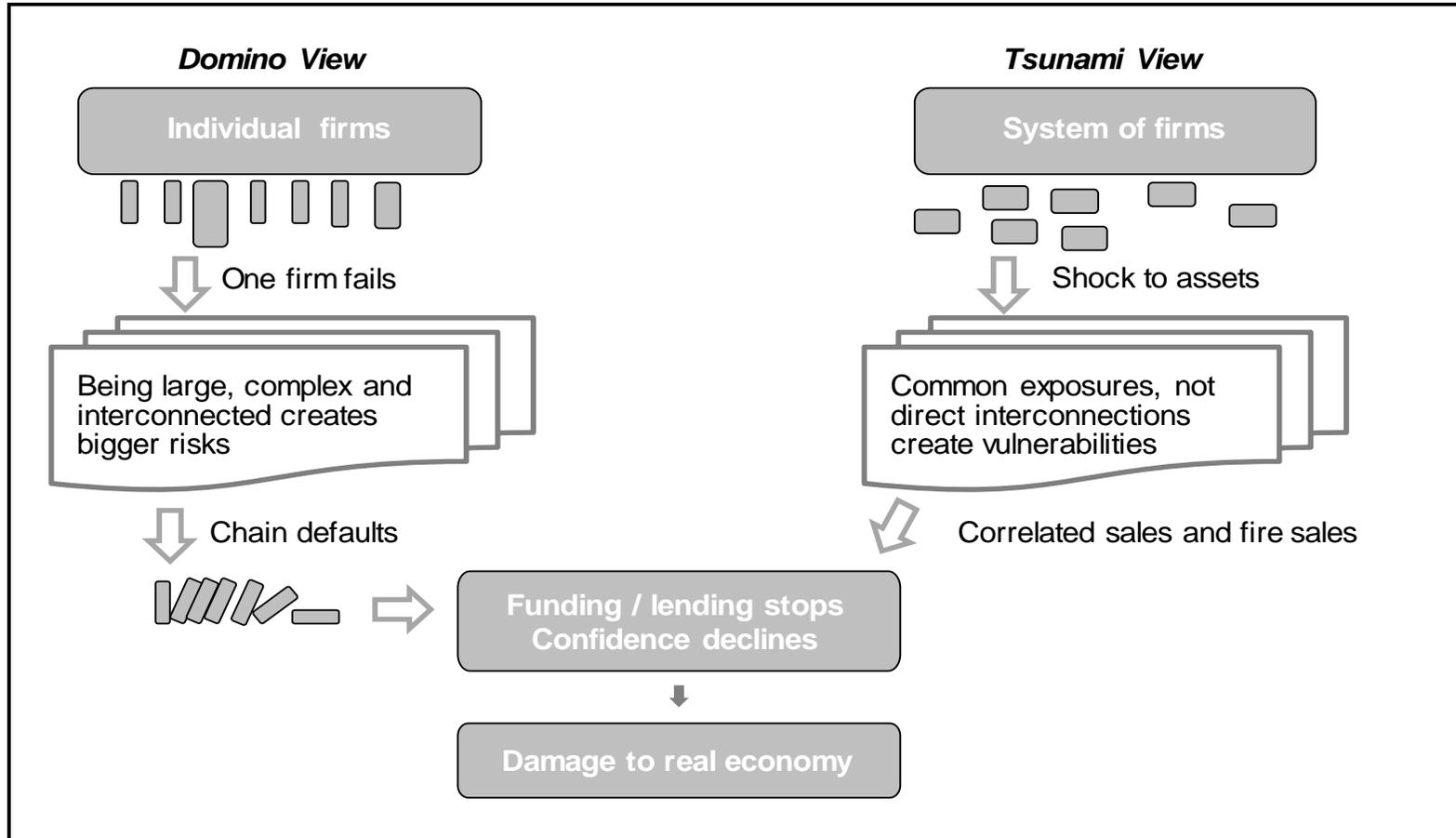


# Different business models: banks vs. insurers

	<b>Banks</b>	<b>Insurers</b>
<b>Monetary role industry mainly fulfils</b>	A means of payment in exchange for goods and services	A store of value, permitting deferred consumption and smoothing
<b>Other roles</b>	Financial services	Risk pooling
<b>Comparative advantage</b>	Screen and finance short-term projects	(As investors) invest long-term and gain from illiquidity premium
<b>Core business activities</b>	Largely asset-driven, often supported by leveraged balance sheets	Mainly liability-driven, less leveraged and often less exposed to 'runs'
<b>Exposure to systemic risk from any one firm?</b>	Higher	Lower
<b>Risk that safety net costs fall on government?</b>	Higher (more 'essential' to current economic activity)	Lower

Source: Nematrian and Kemp (2017). Systemic risk: A Practitioner's Guide to Measurement, Management and Analysis

# Models of systemic risk



Source: Nematrion and Kemp (2017). Systemic risk: A Practitioner's Guide to Measurement, Management and Analysis. Adapted from IMF (2016). Global Financial Stability Report, April 2016, Chapter 3: The Insurance Sector - Trends and Systemic Risk Implications

- Models of systemic risk
- **Macroprudential proposals for insurers**
- Insurers versus pension funds

- ESRB set up by EU Regulation in December 2010 in response to GFC
  - Part of the European System of Financial Supervision (ESFS) along with EBA, ESMA and EIOPA
- Responsible for macroprudential oversight of EU financial system and the prevention and mitigation of systemic risk. Operates primarily by persuasion:
  - Its General Board is currently chaired by Mario Draghi (ECB president)
  - Other permanent representatives include national central bank governors, chairs of EU sectoral supervisory bodies (EBA, ESMA, EIOPA), a representative of the EU Commission, Chairs and two Vice-chairs of the ESRB's Advisory Scientific Committee and Chair of the ESRB's Advisory Technical Committee
  - Insurers and pension funds therefore more likely to interact with EIOPA or national supervisory authorities



## Systemic risk type (insurers)

### Generic risk type

Targets	Options
<ul style="list-style-type: none"> <li>- Mass lapses</li> <li>- Number and pace of failures</li> <li>- Transmitters</li> <li>- Impact</li> </ul>	Recovery and resolution framework
<ul style="list-style-type: none"> <li>- Procyclicality</li> <li>- Under-capitalisation</li> <li>- Under-pricing</li> <li>- Under-reserving</li> </ul>	Extending Solvency II reporting requirements
Under-capitalisation (significant institutions)	Extension of HLA concept
Under-capitalisation	Market-wide capital increases and dividend restrictions

### Specific systemic risk

#### Contagion

Targets	Options
Procyclicality	<ol style="list-style-type: none"> <li>1. Symmetric capital requirements for cyclical risks</li> <li>2. Liquidity requirements</li> </ol>
Mass lapses	Discretionary intervention powers
Bank-like activities	Alignment of the treatment of loans

Source: ESRB (2018). Macroprudential provisions, measures and instruments for insurance (adapted)

- European Insurance and Occupational Pensions Authority: three previous papers on macroprudential policy (in 2017 and 2018) plus 2019 Consultation
  - Greater emphasis on Solvency II than ESRB, but mostly similar conclusions
- European Commission also raised topic in its call for advice from EIOPA on 2020 Solvency II Review

*“EIOPA is asked to assess whether the existing provisions of the Solvency II framework allow for an appropriate macro-prudential supervision. Where EIOPA concludes that it is not the case, EIOPA is asked to advise on how to improve the following closed list of items:*

- *the own-risk and solvency assessment;*
- *the drafting of a systemic risk management plan;*
- *liquidity risk management planning and liquidity reporting;*
- *the prudent person principle.*

*This assessment should be based on strong supporting evidence, also assessing the possible impact of such additional specifications of insurers’ behaviour and possible interactions with other Solvency II instruments.”*

- Lessons from crisis include
  - Supplement **microprudential** with **macroprudential**, and avoid conflicts if possible
  - Identify sources of risk: include **entity-based**, **activity-based** sources and **behaviour-based** sources of systemic risk
  - Widely acknowledged that traditional insurance activities generally less systemically important than banking, but insurance can also potentially create or amplify risks
- Conceptual approach focusing on:
  - Triggering event, company risk profile, systemic risk drivers, transmission channels, sources of systemic risk
- Solvency II has many elements that can mitigate systemic risk

Tool	Type of tool proposed for further consideration
<b>Enhanced reporting and monitoring</b>	
Leverage ratio	Capital and reserving-based
Enhanced monitoring against market-wide under-reserving	Capital and reserving-based
Additional reporting on liquidity risk (*)	Liquidity-based
Liquidity risk ratios	Liquidity-based
Enhancement of Prudent Person Principle (PPP) (*)	Exposure-based
Enhancement of own risk and solvency assessment (ORSA) (*)	Exposure-based
Recovery plans (*)	Pre-emptive planning
Resolution plans (*)	Pre-emptive planning
Systemic Risk Management Plans (SRMP) (*)	Pre-emptive planning
Liquidity Risk Management Plans (LRMP) (*)	Pre-emptive planning
<b>Intervention powers</b>	
Capital surcharge for systemic risk	Liquidity-based
Temporary freeze on redemption rights	Liquidity-based
Concentration thresholds	Exposure-based

Source: EIOPA (2019) Systemic Risk and Macroprudential Policy in Insurance (adapted)

(\*) tools referred to in EU Commission call for advice on 2020 Review of Solvency II

- International Association of Insurance Supervisors: Exposures potentially leading to systemic impact include:
  - Liquidity risk, interconnectedness, lack of substitutability, other
- Liquidity risk: e.g. derivatives, securities lending transactions, backing liquid liabilities with illiquid assets
- Transmission channels include:
  - Asset liquidation
  - Exposure channel. Can be **indirect** (via macroeconomic exposures) or **direct** (via interlinkages, so distress at one institution can propagate to rest of financial system)
- Critical functions: interruption systemic if important for wider functioning and large market share
- Other
  - E.g. Cyber-risk or widespread under-reserving without possibility to reprice (c.f. EIOPA)

# IAIS Overview of supervisory policy measures

	Policy measure	ICP	ComFrame (IAIG)	G-SII
Macroprudential surveillance	Enhance link of macroprudential monitoring to the supervisory framework	●	●	●
Requirements on insurers	Liquidity management & planning	○	●	●
	Strengthened enterprise risk management	○	●	●
	Disclosure requirements on liquidity risk	●	●	●
	Higher loss absorbency (HLA)			●
Crisis management and reporting	Crisis management groups		●	●
	Recovery plan	○	●	●
	Resolution plan		○	●
Powers of intervention	Preventive and corrective measures based on macroprudential concern	○	○	○
	Including reporting on the management of systemic risk	○	○	● (SRMP)

[ ] Not applicable; [○] Required as necessary only; [●] Required; [●] G-SII Policy measure

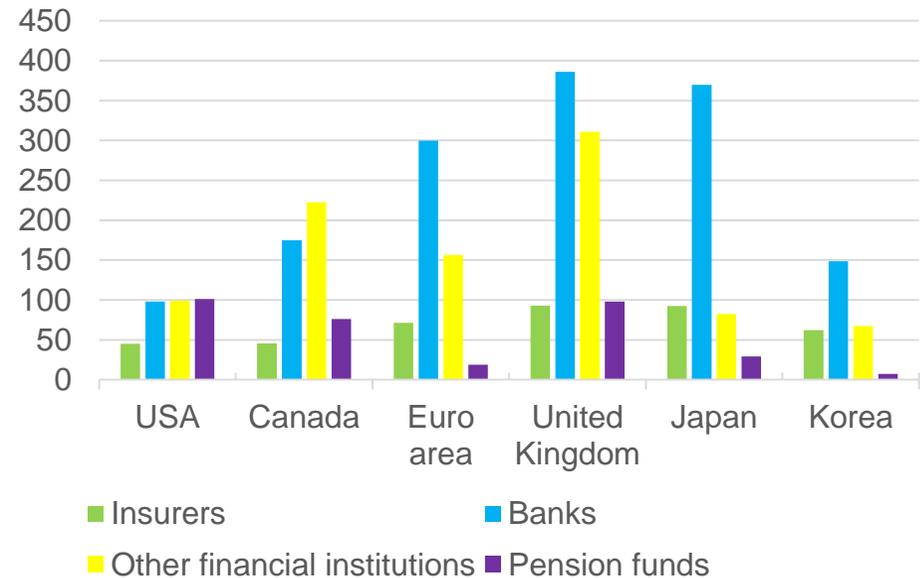
Source: IAIS (2018) Holistic Framework for Systemic Risk in the Insurance Sector (adapted)

- Models of systemic risk
- Macroprudential proposals for insurers
- Insurers versus pension funds

# Pension fund interaction with systemic risk (1)

- Limited regulatory focus to date on systemic risk
  - C.f. EU IORP II Directive largely avoids specific ‘solvency’ requirements
- Significant differences between jurisdictions
  - Even within EU
  - Social nature of pensions
  - Is the ‘pension’ system even part of the financial system?
  - Pillar 1 / Pillar 2 / Pillar 3 and DB / DC

Relative size of financial intermediaries (2014)  
(Percent of GDP)



Source: Nematrian and Kemp (2017). Systemic risk: A Practitioner’s Guide to Measurement, Management and Analysis and IMF (2016) Global Financial Stability Report, April 2016, Chapter 3: The Insurance Sector - Trends and Systemic Risk Implications (adapted)

# Pension fund interaction with systemic risk (2)

- Usual (Anglo-saxon?) policymaker view: pension funds have long-term investment horizons and **probably make a positive contribution to financial stability**
  - Typically unleveraged (but derivatives, securities lending, asset management links?)
- But **maybe only true in the past**, when DB schemes were open, well-funded (or at least benefits were substantially discretionary) and the norm across industry
- Challenges include:
  - DB funding (and buy-out!) shortfalls, demographics
  - Optimistic asset return assumptions (e.g. some US local government schemes)
- Possible exposure channels:
  - Centralised Pension Protection Schemes
  - Corporates needing to divert funds from investment towards underfunded pension schemes?
  - Breakdown of social contract underlying pension provision?

- EIOPA December 2018 Financial Stability Report:
  - Current macroeconomic environment and ongoing low interest rates continue to pose challenges for European occupational pension fund sector. Sudden increase in yields might also be problematic depending on accounting treatment
  - For now, focus is principally on monitoring, reporting and (system-wide) stress testing: “***EIOPA closely monitors potential negative impacts of macroeconomic developments on the IORP sector and financial stability through stress test exercises***”
- Recent EIOPA IORP stress tests have included a **common assessment framework** which aims to quantify exposures (including benefit security mechanisms) in a market consistent manner
  - Potentially challenging for pension funds to comply with



## ■ Models of systemic risk

- Regulators accept insurance is different to banking, but still think insurance has some systemic relevance
- Domino versus tsunami model
- Activity-, entity- and behavior-based drivers

## ■ Macroprudential proposals for insurers

- A range of interested regulatory bodies
- A recent flurry of proposals, but with many common strands

## ■ Insurers versus pension funds

- Pension funds usually considered stabilisers
- But maybe less true now than in the past, depth of analysis increasing



# Important Information

Material copyright (c) Nematrian, 2019 unless otherwise stated.

All contents of this presentation are based on the opinions of the relevant Nematrian employee or agent and should not be relied upon to represent factually accurate statements without further verification by third parties. Any opinions expressed are made as at the date of publication but are subject to change without notice.

Any investment material contained in this presentation is for Investment Professionals use only, not to be relied upon by private investors. Past performance is not a guide to future returns. The value of investments is not guaranteed and may fall as well as rise, and may be affected by exchange rate fluctuations. Performance figures relating to a fund or representative account may differ from that of other separately managed accounts due to differences such as cash flows, charges, applicable taxes and differences in investment strategy and restrictions. Investment research and analysis included in this document has been produced by Nematrian for its own purposes and any investment ideas or opinions it contains may have been acted upon prior to publication and is made available here incidentally. The mention of any fund (or investment) does not constitute an offer or invitation to subscribe to shares in that fund (or to increase or reduce exposure to that investment). References to target or expected returns are not guaranteed in any way and may be affected by client constraints as well as external factors and management.

The information contained in this document is confidential and copyrighted and should not be disclosed to third parties. It is provided on the basis that the recipient will maintain its confidence, unless it is required to disclose it by applicable law or regulations. Certain information contained in this document may amount to a trade secret, and could, if disclosed, prejudice the commercial interests of Nematrian or its employees or agents. If you intend to disclose any of the information contained in this document for any reason, including, but not limited to, in response to a request under the Freedom of Information Act or similar legislation, you agree to notify and consult with Nematrian prior to making any such disclosure, so that Nematrian can ensure that its rights and the rights of its employees or agents are protected. Any entity or person with access to this information shall be subject to this confidentiality statement.

Information obtained from external sources is believed to be reliable but its accuracy or completeness cannot be guaranteed.

Any Nematrian software referred to in this presentation is copyrighted and confidential and is provided “as is”, with all faults and without any warranty of any kind, and Nematrian hereby disclaims all warranties with respect to such software, either express, implied or statutory, including, but not limited to, the implied warranties and/or conditions of merchantability, of satisfactory quality, or fitness for a particular purpose, of accuracy, of quiet enjoyment, and non-infringement of third party rights. Nematrian does not warrant against interference with your enjoyment of the software, that the functions contained in the software will meet your requirements, that the operation of the software will be uninterrupted or error-free, or that defects in the software will be corrected. For fuller details, see license terms on [www.nematrian.com](http://www.nematrian.com). Title to the software and all associated intellectual property rights is retained by Nematrian and/or its licensors.