How to Eat an Elephant –
Insurability and Pandemic (or More Generally, Shared Resilience) Risk

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Based on a paper published on the Actuarial Association of Europe website
These graphs were generated in week 2022-11 with data from 26 participating countries: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Germany (Berlin), Germany (Hesse), Greece, Hungary, Ireland, Israel, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, UK (England), UK (Northern Ireland), and UK (Scotland).

Estonia, Ukraine, and UK (Wales) did not contribute to this week's data.

Ukraine, Germany (Berlin) and Germany (Hesse) were not included in the pooled data.

Source: https://www.euromomo.eu/graphs-and-maps
Happened this far

• Huge stress on health care systems – but not too much concern on insuring life and health risk

• Business interruption causing losses and bankrupties – criticism to the insurance concept because BI cover is (mostly) not covering so-called Non-Damage Business Interruption losses (NDBI)

• Banks have helped their clients through moratoria etc., made possible by counter-cyclical macroeconomic tools in their sector

• Discussion on the role of insurance – although interest has declined with the realisation that very little can be done with current losses.
Risks materialising

- Still in the middle of the pandemic, with vaccination progressing and creating hope for the future

- Total losses still unclear:
  - The World Bank has used the figure €3 700 trillion
  - Swiss Re has talked of the figure €9 900 trillion.

- Problems
  - what can be learnt from today’s situation to be better prepared for the future,
  - what would be the measures needed in order to cope with the next pandemic, and
  - can there be a more general approach, so-called Shared Resilience Solutions (SRS), that could address not only a future pandemic but also other large-scale disruptions that could hit our highly networked societies?
Possibility of counter-cyclical macroprudential measures for insurance

- Macroprudential tools exist (more) in the banking sector but are increasingly proposed for insurance – they are usually categorised as either structural or counter-cyclical macroprudential tools.

- Counter-cyclical tools in banking rely on the concept of ‘banks creating money’ – by lowering capital requirements in a down-turn banks can quickly leverage the functioning of the economy.

- Could there be similar tools for insurance?
  - Insurance pays claims according to terms and conditions of the contracts.
  - A counter-cyclical lowering of capital requirements could lead to lowering of premiums – which would not help much in the short run (but certainly would help in avoiding fire sales of assets).
Cost of (private sector) ex-ante preparedness

• Toy calculation – what would be the cost of the capital if insurance was prepared to pay losses of € 3 700 to 9 900 trillion?
  • The toy is based on a capital market solution – but preparedness with traditional insurance would create a cost in the same area
  • There are many uncertainties with the cost, depending on many things like the return period of a pandemic (and also whether, in an SRS solution, other perils are included)
  • Probably the annual cost would not be lower than 0,5 % of the GDP

• An additional problem with a solution would be that it would need the quick liquidation of the funds when the catastrophe strikes (4,2 % of the outstanding bond market) – would this transfer the pandemic risk into a capital market risk?
Problems with insurability (i.e., pooling with actuarial techniques, not necessarily in an insurance company)

- Large number of similar exposure units
- Definite and calculable loss
- Accidental loss
- Large loss
- Affordable premium
- Limited risk of catastrophically large losses
- Possibility of adverse selection, moral hazard and insurance fraud

Especially the correlation of losses across regions, in connection to the losses being triggered by societal lockdowns create the problems
What could be the future?

• Usual immediate insurance reaction when an unanticipated risk materialises:
  • It is not to be compensated according to the terms and conditions of our policies, is it?
  • How can we write an exclusion for our future policies?

• On a little longer time-scale things can become insurable
  • Examples include terrorism and natural catastrophes

• Insurability needs strong cooperation by different actors
  • E.g., the US created the DHS after 9-11

• Creating a wholesale SRS could be impossible, but being prepared for the next pandemic could be possible
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