

Macroprudential oversight in an age of heightened uncertainty

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Multiple shocks since 2020

- Covid-19
- Supply chain congestion
- Energy price crisis
- Russian invasion of Ukraine
- Wars in the Middle East
- Geopolitical tensions in Asia
-
- Poly-crisis
- Time of Great Volatility

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What do these shocks imply
for financial stability and
macroprudential policy?

The ‘traditional view’

- Macroprudential oversight focuses on ‘traditional’ risks (financial cycles, notably in the real estate sector) that arise in the financial system
- Similarly, cross-sectional dimension (e.g., G-SIFI) focuses on risks within the financial system
- Reaction to Global Financial Crisis, where such risks played a critical role in building up imbalances and in providing triggers
- Introduction of CCyB, SyRB, G-SIFI buffers
- Institutional level: ESRB in Europe as coordination mechanism

From traditional to unconventional shocks

- ‘Unconventional’ shocks come from outside the financial system
- ‘Unconventional’ shocks are characterised by Knightian uncertainty, i.e., shocks for which we do not have probabilities, but which can be expected to occur – and possibly with increasing likelihood and severity
- Examples: climate risks, cyber-attacks, disruptive technological developments, geopolitical confrontations).
- “Unconventional” risks cannot be gauged with current perception indicators or probabilities based on historical data, but they can and should be envisaged.
- These risks can come together and interact with each other

White, grey and black swans

White swan: known known

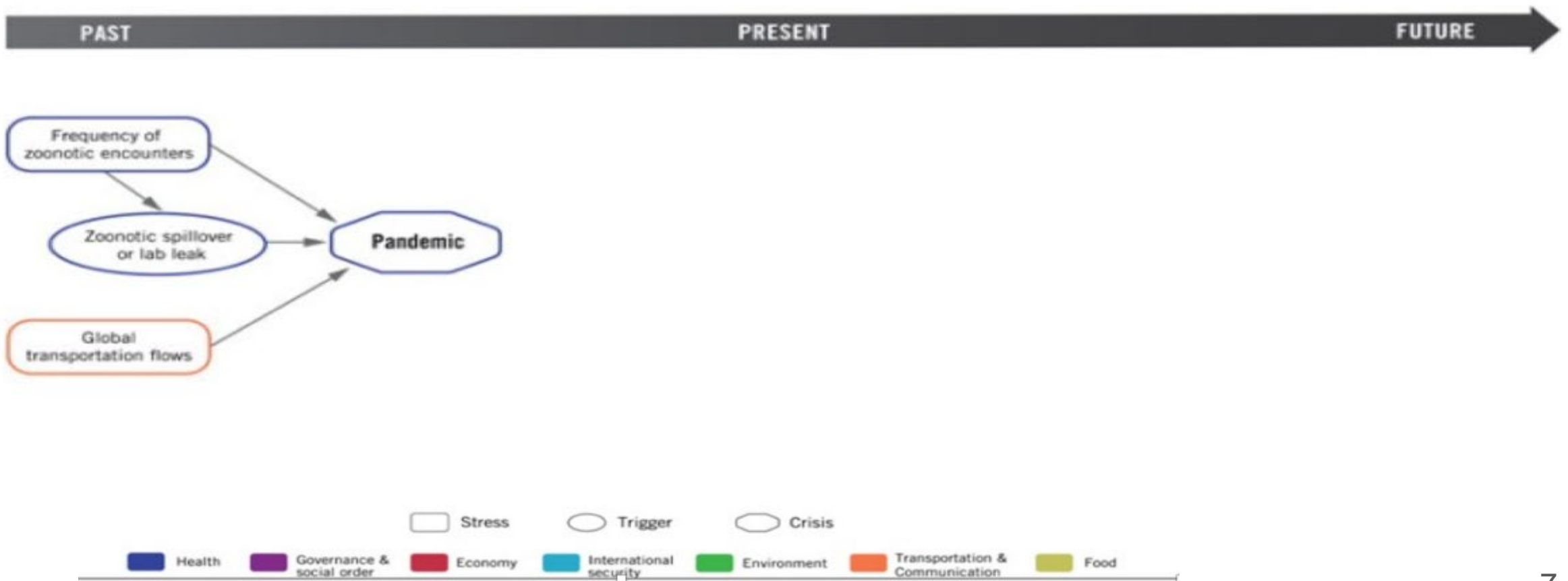
Grey swan: unknown known

Black swan: unknown unknown

Source: Barth and Schreft (2025)

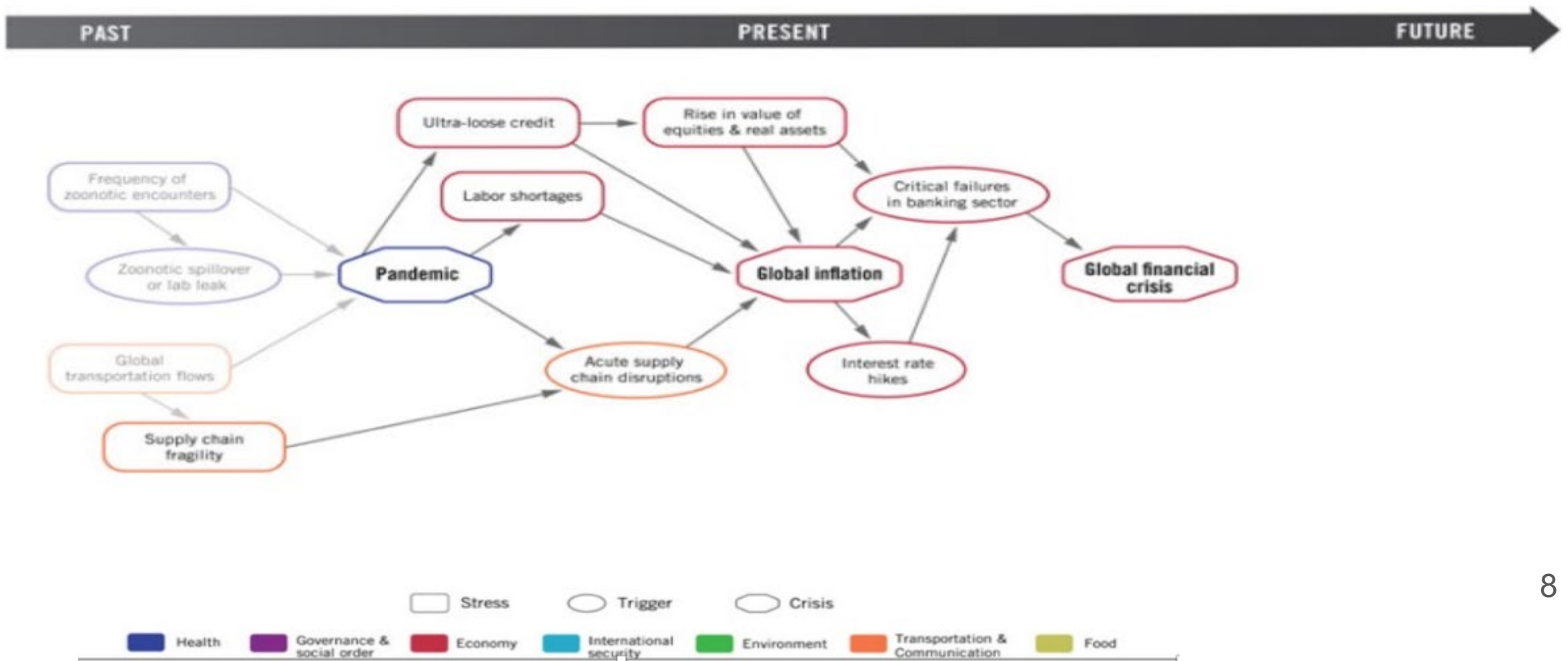


Elements of a global polycrisis

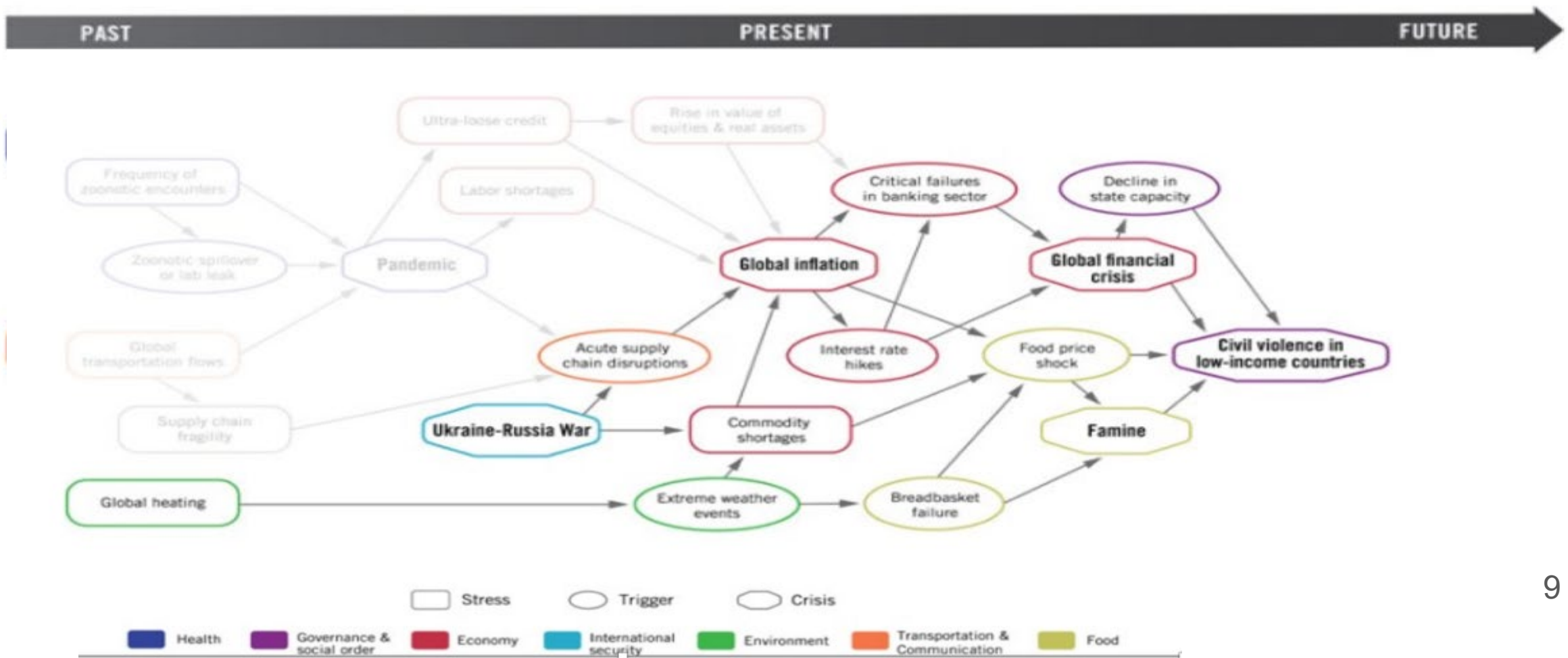


Source: Lawrence M, Homer-Dixon T, Janzwood S, Rockstöm J, Renn O, Donges JF (2024). Global polycrisis: the causal mechanisms of crisis entanglement. *Global Sustainability* 7, e6, 1–16. <https://doi.org/10.1017/sus.2024.1>; Figure design by Jacob Buurma, Vibrant Content.

Elements of a global polycrisis



Elements of a global polycrisis



Conceptual framework

Primary triggers*

* based on the [Taxonomy of Threats for Macro-Catastrophe Risk Management](#) of the [Cambridge Centre for Risk Studies](#)

- Trade dispute
- Geopolitical conflict
- Internal political conflict
- Climate or other natural catastrophe
- Technological catastrophe
- Disease outbreak
- Humanitarian crisis

Triggers and transmission channels evolve over time as a result of structural change and longer-term trends. They also interact ('Polycrisis').

Feedback loops

Transmission channels to the financial system

Indirect (through the economy)

- NFC failures
- Lower GDP
- Unemployment
- Inflation & interest rates
- Public debt

Direct

- Cyber attacks
- Sabotage (e.g. data cables)
- Sanctions
- Insurance pay outs

Materialisation in the financial system

- Credit risk
- Market risk
- Liquidity risk
- Interest rate risk
- Underwriting risk
- Operational risk
- Business model risk
- Governance risk

2nd round effects

1. Amplification
2. Contagion
3. Mitigation

Preventive and corrective policy actions

Impairments to the financial system*

* 'systemic risk' means a risk of disruption in the financial system with the potential to have serious negative consequences for the real economy of the Union or of one or more of its Member States and for the functioning of the internal market.

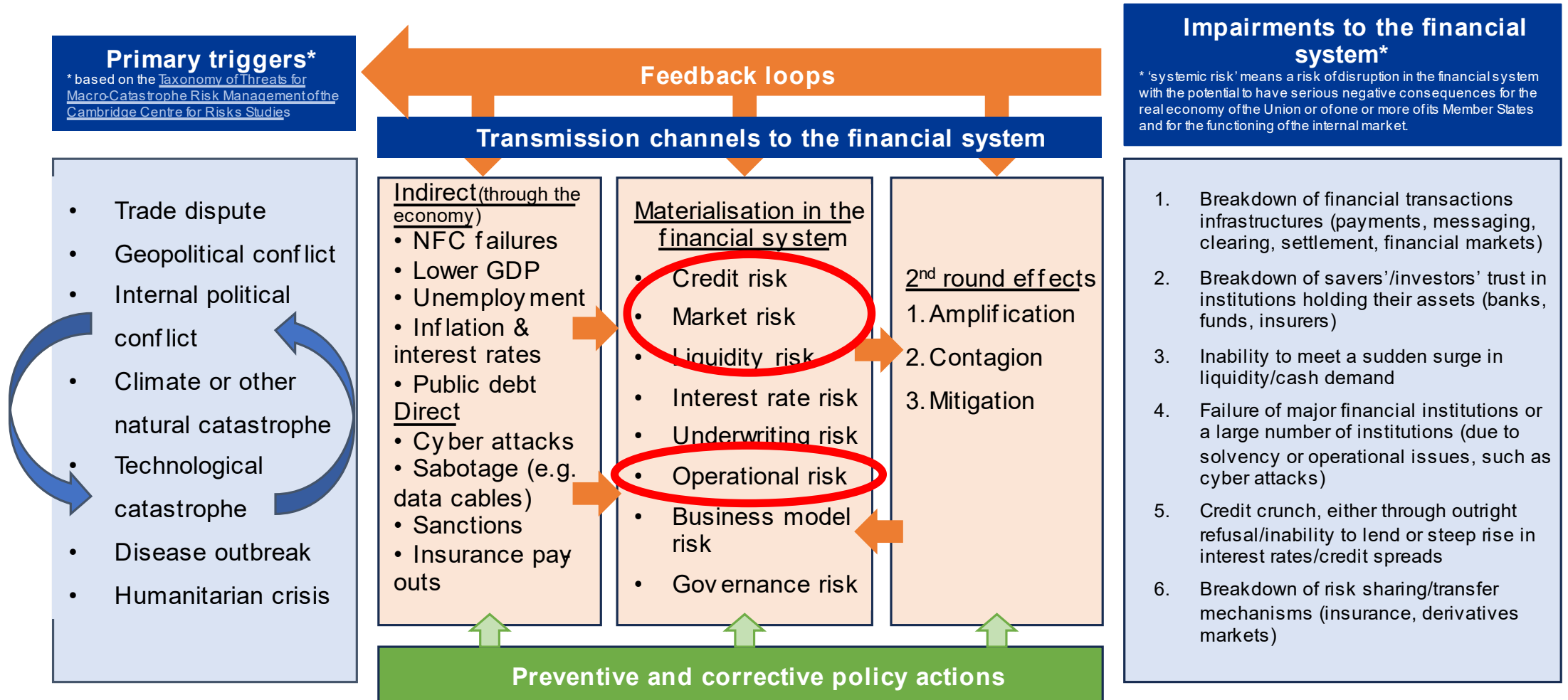
1. Breakdown of financial transactions infrastructures (payments, messaging, clearing, settlement, financial markets)
2. Breakdown of savers'/investors' trust in institutions holding their assets (banks, funds, insurers)
3. Inability to meet a sudden surge in liquidity/cash demand
4. Failure of major financial institutions or a large number of institutions (due to solvency or operational issues, such as cyber attacks)
5. Credit crunch, either through outright refusal/inability to lend or steep rise in interest rates/credit spreads
6. Breakdown of risk sharing/transfer mechanisms (insurance, derivatives markets)

Looking back – Covid-19 pandemic

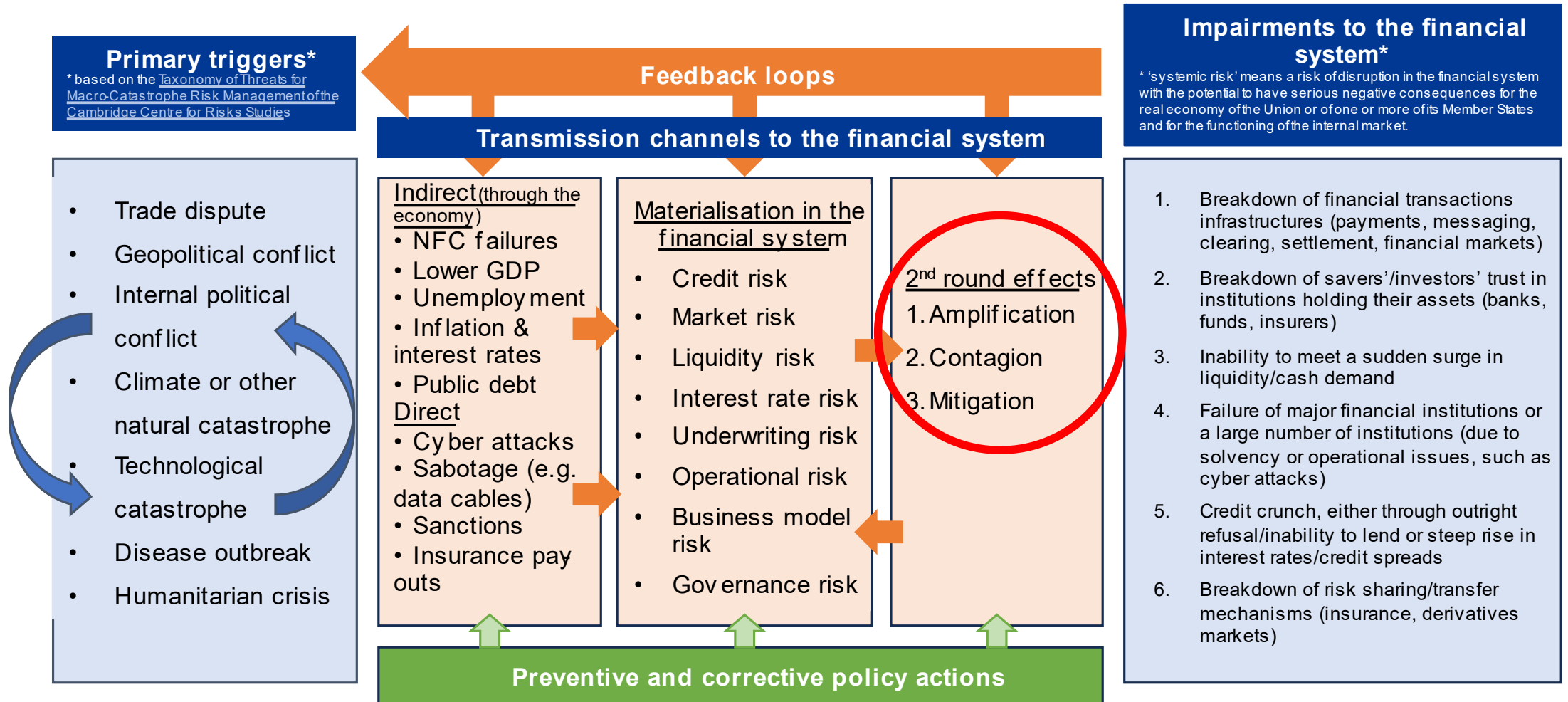
March 2020 – lock-downs being implemented - what if...

- ... no government support for corporations or households
- ... no credit guarantees
- ... no monetary policy loosening
- etc.

Conceptual framework



Conceptual framework



Regulatory responses to Covid-19

- **Capital release**
 - Aggressive release of capital buffers (counter-cyclical, conservation buffers, Pillar II)
 - Objective: support lending to real economy
 - Successful, but not as much as hoped (important to focus on counterfactual)
 - Banks reluctant to reduce capital buffers too much (signalling to investors, future reversal, provision for future losses?)
- **Dividend restrictions**
 - Avoid risk shifting, preserve capital
 - Overall successful (debt up, equity down)
- To which extent should such policy measures become part of permanent toolbox? Should they be restricted to extreme, once-a-century situations?

How to manage unconventional shocks?

- Knightian uncertainty, i.e., no clear probability of such shocks happening
- Or: Tail risks with low probability but high impact
- Hard to measure exposure given nature of these risks
- Stress tests difficult if not impossible, given lack of historic data for such events
- Capital buffers might not be the right instrument
- Traditional risk management tools might not sufficient

Trends and medium-term scenarios

European Strategy and Policy Analysis System. Global Trends to 2040: Choosing Europe's Future:

- centrality of geopolitics (incl. hybrid warfare, disinformation)
- economic challenges (incl. trade fragmentation, technological patterns...)
- demography (incl. ageing, labour force...)
- environmental and climate crises (cataclysms, biodiversity degradation...)
- energy transition (critical minerals, electric grid capacity...)
- quest for equality (social unrest, political polarisation...)
- technological acceleration and convergence (new technology, rivalry...)
- managing health (pandemics; health sector...)
- changes in where and how we live (urbanisation, hybrid work...)
- threats to democracy (rule of law, elections...).

Trends and medium-term scenarios

- None of these trends can be influenced by macroprudential policies.
- Rather: what are the implications of these trends for financial sector structure, possible new sources of fragility and possible new triggers

Trends and medium-term scenarios

Example: The rise of AI

- What changes in financial system structure can you envision?
- What new sources of fragility might AI create?
- What new triggers and contagion/amplification channels can AI create?
- What can macroprudential policy do to addresses sources of fragility and triggers?

Scenario building and analysis

- More immediate scenarios – need for quantification
- More medium-term and less probable (but plausible) scenarios:
 - Complex structure as actions and reactions have to be taken into account
 - Include possible policy reactions (including outside regulation and supervision)
- Important challenge: outside-the-box thinking
 - Look beyond financial sector experts
 - Diverse participants with diverse backgrounds

Scenario building and analysis

- Through scenario analysis, it is possible to prepare for unconventional shocks and to ensure that they do not destabilise and impair the financial system in ways that would amplify the initial shock; such scenario analysis should complement existing stress tests (which are also scenario-based).
- Examples:
 - Major disruption in energy supply
 - Major cyber-attack
 - Large-scale flooding
 - Geopolitical conflict

Thank you

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