



**ESRB**

European Systemic Risk Board

European System of Financial Supervision

# Systematic Systemic Stress Tests, Breuer & Summer (2018)

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## A discussion



ECB-PUBLIC

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The views expressed in this presentation are my own and do not necessarily reflect those of the ESRB or its member institutions

# The paper – overview

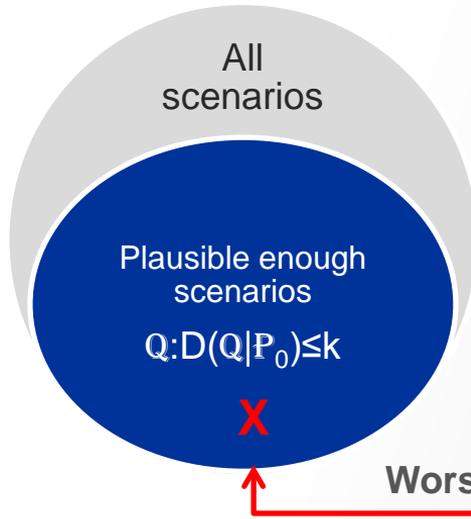
- Two parts:
  1. Banking stress-testing scenario genera(lisa)tion (*a la* Breuer & Csiszár 2013)
  2. Second-round effects (fire sales) resulting from deleveraging triggered by leverage ratio breaches (*a la* Cont & Schaanning 2016)
- Contribution:
  1. Apply generalised scenario approach to a subset of the risk factors in EBA 2016 ST – worst case scenario
  2. Discuss potential second-round effects for both the EBA adverse and worst case scenarios

# The paper – general comments

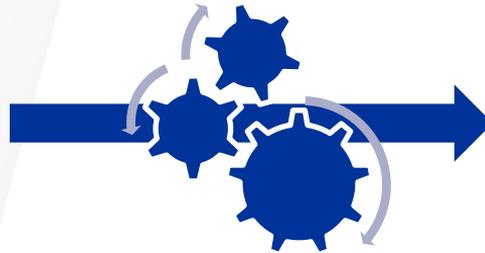
- Deals with very important topics
- Presents a very interesting and relevant application for both policy and research audiences
- Very elegant setup with well-defined mathematical criteria for scenario selection
- At the same time, illustrates well the challenges encountered in this area of policymaking and research

# The setup – scenario generalisation

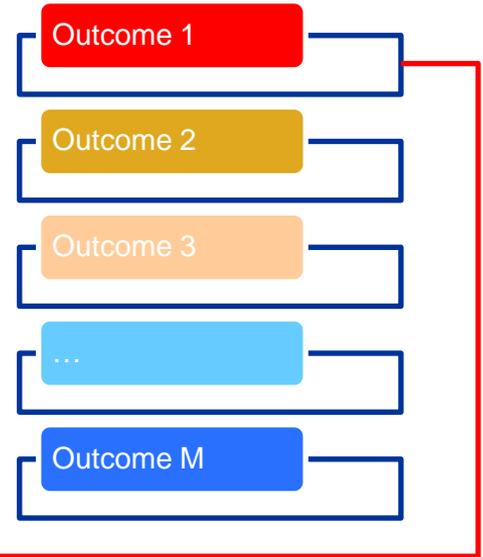
## Scenario design



## Portfolio Valuation

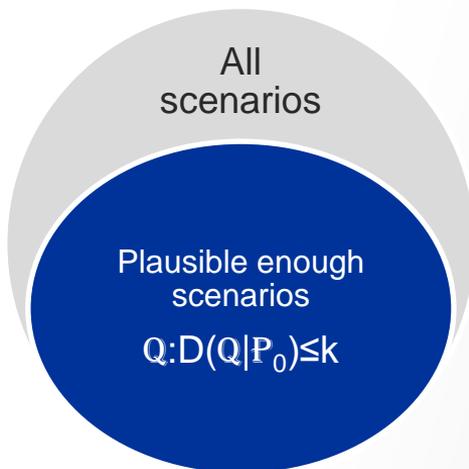


## Objective Function



# The setup – scenario generalisation

## Scenario design

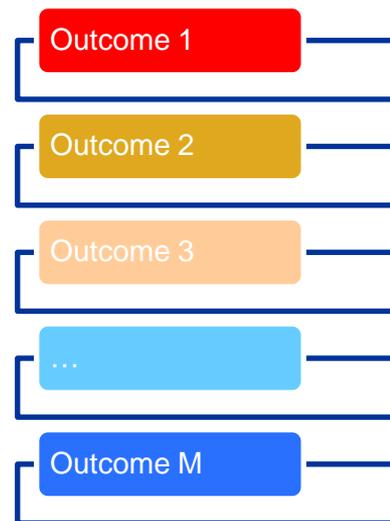


- The authors suggest setting  $k$  based on risk factor distributions observed during crises
- Adverse scenarios tend to be designed around an economic narrative based on risk assessment. How can the setup best accommodate this?
- Any advice to policymakers on how to communicate such scenarios?
  - Could it be the case that the worst case scenario is fundamentally different (from an economic perspective) for key risk factors compared to the crises distributions?

# The setup – scenario generalisation

- The setup is flexible to allow for a wide range of objective functions – comes in handy as stress tests can also have a wide range of purposes
- For macroprudential STs: how difficult can the curse of complexity be in this context?
  - Since the paper dedicates (and rightly so) its second part to amplification effects, further discussion on this point would be appreciated

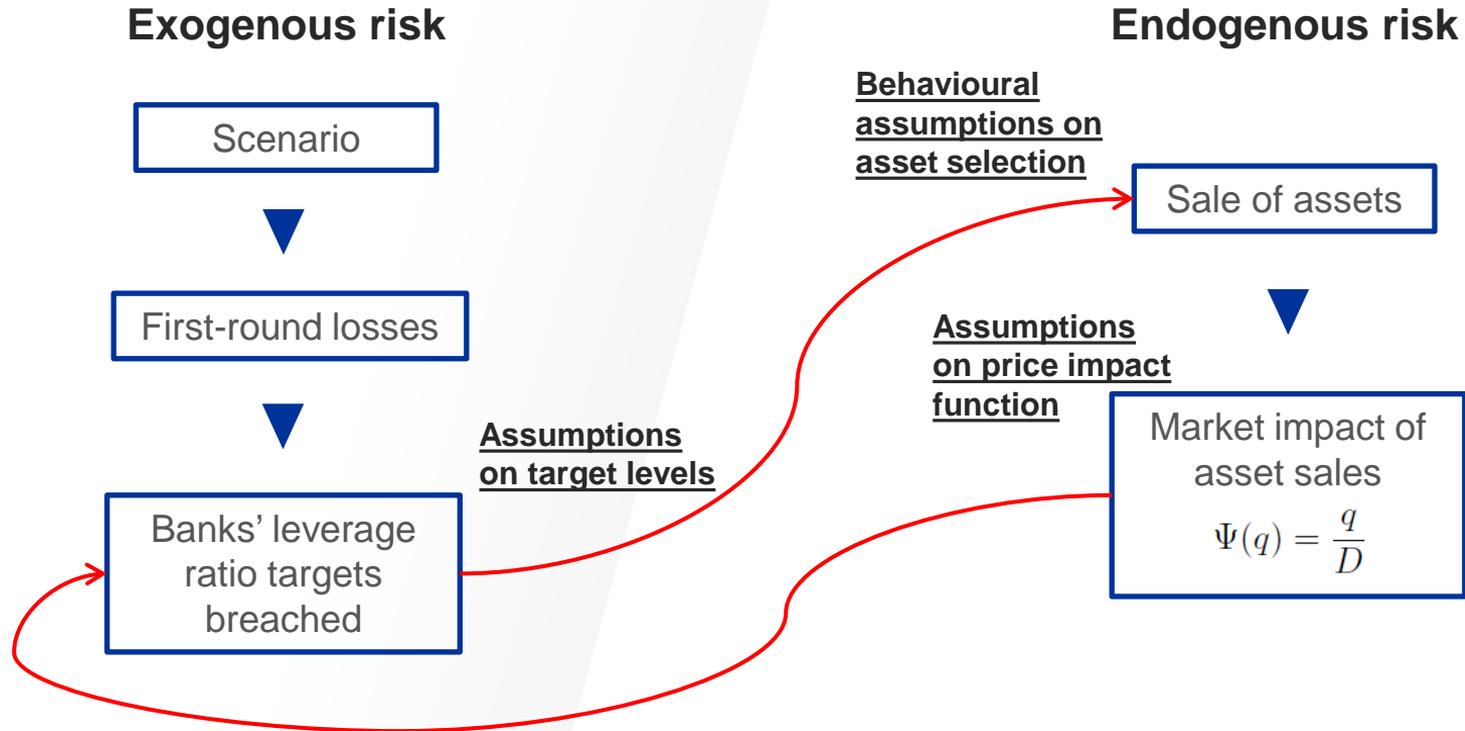
## Objective Function



# The setup – deleveraging-induced fire sales



# The setup – deleveraging-induced fire sales



Thank you for  
your attention

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