

## **Systemic Risk Management**

### **Syllabus and reading list**

Master in Finance, Insurance and Risk Management (Collegio Carlo Alberto)

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**Short description** This course is a primer on systemic risk. Systemic risk is the risk of collapse of the entire financial system, possibly due to shocks that hit a specific financial institution (or a set of financial institutions), and then propagate to the entire system. It explains how systemic risk arises and impacts the financial sector, and presents different measures used to track and manage systemic risk, with simple Matlab examples and applications.

**Detailed syllabus and reading list** The main topics covered in the this short course are the following:

1. What is systemic risk? [Freixas et al. \(2015\)](#)'s chapters 1–2; [The roots of the "clean up after bubbles" approach](#) (The Economist)
2. Contagion: [Freixas et al. \(2015\)](#)'s chapter 5
3. How to measure systemic risk: [Freixas et al. \(2015\)](#)'s chapter 7; [Banco Popular CoCo bonds wiped out after Santander takeover](#) (The FT)
4. One application: *CoVaR* and systemic risk in the market for emerging government debt: [Adrian and Brunnermeier \(2016\)](#), [Borri \(2017\)](#).

**Additional non-required references** [Acharya et al. \(2017\)](#); [Benoit et al. \(2016\)](#); [Gorton and Ordoñez \(2016\)](#); [Schularick and Taylor \(2012\)](#); [Duffie \(2010\)](#)

## References

- Acharya, Viral V, Lasse H Pedersen, Thomas Philippon, and Matthew Richardson**, “Measuring systemic risk,” *Review of Financial Studies*, 2017, 30 (1), 2–47.
- Adrian, Tobias and Markus K Brunnermeier**, “CoVaR,” *The American Economic Review*, 2016, 106 (7), 1705–1741.
- Benoit, Sylvain, Jean-Edouard Colliard, Christophe Hurlin, and Christophe Pérignon**, “Where the risks lie: A survey on systemic risk,” *Review of Finance*, 2016, p. rfw026.
- Borri, Nicola**, “Local currency systemic risk,” *Emerging Markets Review*, 2017.
- Duffie, Darrell**, “The failure mechanics of dealer banks,” *The Journal of Economic Perspectives*, 2010, 24 (1), 51–72.
- Freixas, Xavier, Luc Laeven, and José-Luis Peydró**, *Systemic risk, crises, and macroprudential regulation*, MIT Press, 2015.
- Gorton, Gary and Guillermo Ordoñez**, “Good booms, bad booms,” Technical Report, National Bureau of Economic Research 2016.
- Schularick, Moritz and Alan M Taylor**, “Credit booms gone bust: monetary policy, leverage cycles, and financial crises, 1870–2008,” *The American Economic Review*, 2012, 102 (2), 1029–1061.