

IMF – Joint Vienna Institute (JVI)

**Course on Systemic Macro Financial Risk
Analysis (JVI.17.09)**

April 10 – 14, 2017

READING LIST

Monday, April 10, L-1: Causes and Stages of the Financial Crises; Financial Sector Surveillance

Acharya, V. 2013, “Understanding Financial Crisis: Theory and Evidence from the Crisis of 2007-08”, NBER report No.1.

<http://www.nber.org/reporter/2013number1/acharya.html>

Claessens, Stijn, and others, 2010, “Lessons and Policy Implications from the Global Financial Crisis,” IMF Working Paper WP10/49 (Washington: International Monetary Fund).

<http://www.imf.org/external/pubs/ft/wp/2010/wp1044.pdf>

Tobias Adrian and Adam B. Ashcraft, “Shadow Banking: A Review of the Literature” *Federal Reserve Bank of New York Staff Reports*, no. 580, October 2012.

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2175144

Gray, Dale. F., R.C. Merton, and Z. Bodie, 2008, “A New Framework for Measuring and Managing Macrofinancial Risk and Financial Stability,” Harvard Business School Working Paper No. 09/15 (Cambridge).

International Monetary Fund, 2012, “The IMF Financial Sector Surveillance Work Agenda”.

www.imf.org/external/np/pp/eng/2012/041012.pdf

International Monetary Fund, *Financial Sector Assessment Program: Frequent Ask Questions*.

<http://www.imf.org/external/np/fsap/faq/index.htm>

———, 2013. *Fact sheet: The Financial Sector Assessment Program*.

<http://www.imf.org/external/np/exr/facts/fsap.htm>

———, *Global Financial Stability Report*, various issues.

<http://www.imf.org/external/pubs/ft/gfsr/>

Supplementary Reading

Raghuram Rajan, 2010, *Fault Lines* (Princeton University Press).

Andrew Sorkin 2010 *Too Big to Fail*

Monday, April 10, L-2: Systemic Risk Monitoring

Basel Committee of Banking Supervision (BCBS), (2012), “Models and Tools for Macprudential Analysis,” May.

https://www.bis.org/publ/bcbs_wp21.htm

Blancher, N., Mitra, S., Morsy, H., Otani, A., Severo, T., and L. Valderrama (2013), “Systemic Risk Monitoring (“SysMo”) Toolkit – A User Guide

<https://www.imf.org/external/pubs/cat/longres.aspx?sk=40791>

European Central Bank (2012), “CISS – A Composite Indicator of Systemic Stress in the Financial System”, Working Paper No. 1426, March.

<https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1426.pdf>

Supplementary Reading:

Tarullo, D. K, 2011, “Regulating Systemic Risk,” Speech, (2011) *Credit Markets Symposium*, North Carolina, Charlotte, March 31, 2011, Board of Governors of the Federal Reserve System

<http://www.federalreserve.gov/newsevents/speech/tarullo20110331a.htm>.

Monday, April 10 L-3: Extracting Information from Market Prices and CCA

Gray, Dale, and Samuel Malone, 2008, *Macrofinancial Risk Analysis*, Chapter 2 (London: Wiley Finance).

Gray, Dale F., and Samuel Malone, 2008, *Macrofinancial Risk Analysis*, Chapters 4 and 5 (London: Wiley Finance).

Monday, April 10, L-4: Systemic Risk Models – CoVaR and related models

Adrian, T. and M. Brunnermeier, (2016), “CoVaR”, *American Economic Review* 106 (7), pp. 1705–1741.

Bisias, D., Flood, M., Lo, A., and Stavros Valavanis (2012), “A Survey of Systemic Risk Analytics”, *Office of Financial Research (OFR) Working Paper* 01, January 5.

European Banking Authority (2014), “Guidelines on criteria for the assessment of O-SIIs”, EBA/GL/2014/10.

[https://www.eba.europa.eu/.../EBA-GL-2014-10+\(Guidelines+on+O-SIIs+Assessment\)](https://www.eba.europa.eu/.../EBA-GL-2014-10+(Guidelines+on+O-SIIs+Assessment))

European Systemic Risk Board (2016), “The ESRB risk dashboard: an overview”, Issue 18, December 22.

<https://www.esrb.europa.eu/pub/rd/html/index.en.html>

European Systemic Risk Board (2016), “Annex I to the ESRB risk dashboard – Methodological Annex”, December.

https://www.esrb.europa.eu/pub/pdf/dashboard/20160630_annex1.en.pdf

European Systemic Risk Board (2016), “Annex II to the ESRB risk dashboard – Description of the indicators”, December.

https://www.esrb.europa.eu/pub/pdf/dashboard/140925_dashboard_annex2.pdf

López-Espinosa, G, A. Moreno, A. Rubia, and L. Valderrama, (2012), “Short-term wholesale funding and systemic risk: A global CoVaR approach”, *Journal of Banking and Finance*, vol. 36, pp. 3150-3162

International Monetary Fund (2014), “Austria: Publication of Financial Sector Assessment Program Documentation—Technical Note on Stress Testing the Banking Sector”, IMF Country Report No. 14/16

<http://www.imf.org/external/pubs/cat/longres.aspx?sk=41266.0>

Supplementary Reading:

Acharya, V, R Engle and M Richardson (2012): “Capital shortfall: a new approach to rankings and regulating systemic risks”, *American Economic Review*, vol. 102, no 3, pp 59–64.

Brownlees, Christian T., and Robert F. Engle, (2011), “Volatility, Correlation and Tails for Systemic Risk Measurement,” Working Paper (24 May), NYU Stern School of Business.

<https://vlab.stern.nyu.edu/en/welcome/risk/>

López-Espinosa, G, Valderrama L., and M. Anton (2013), “Good for one, bad for all: Determinants of individual versus systemic risk”, *Journal of Financial Stability*, vol. 9, pp. 287-299.

Segoviano, Miguel A., and Charles A. E. Goodhart, (2009), “Banking Stability Measures,” IMF Working Paper No. 09/04.

<https://www.imf.org/external/pubs/ft/wp/2009/wp0904.pdf>

Tuesday, April 11, L–5: Risk-Adjusted Balance Sheets and Contingent Claims Analysis (CCA) for Risk Analysis with Applications

Gray, Dale F., 2009, “Modeling Financial Crises and Sovereign Risk” in *Annual Review of Financial Economics*, ed. by Robert Merton and Andrew Lo, *Annual Reviews*, (Palo Alto: California), Vol 1, pp. 117–144.

Gray, Dale F., and Samuel Malone, 2008, *Macrofinancial Risk Analysis*, Chapters 4 and 5 (London: Wiley Finance).

Gray, D., A. Jobst, 2011, “Modeling Systemic Financial Sector and Sovereign Risk,” *Sveriges Riksbank Economic Review*, September.

Macrofinancial Modeling Group

<https://bfi.uchicago.edu/research/working-paper/analyzing-real-estate-financial-sector-and-sovereign-risks-and-economic>

Tuesday, April 11, L–6, L-8: Overview and Developments in Solvency Stress Testing

International Monetary Fund (2016), “Solvency Stress Testing Framework: User Guide. Version 2.0”.

Supplementary Reading:

Basel Committee on Banking Supervision (2009): Principles for sound stress testing practices and supervision, May.

<https://www.bis.org/publ/bcbs155.pdf>

Bank of England (2015), “The Bank of England’s approach to stress testing the UK banking system”, October.

<https://www.bankofengland.co.uk/financialstability/Documents/.../2015/approach.pdf>

CEPR Press (2016), “Stress Testing and Macroprudential Regulation - A Transatlantic Assessment”, edited by Ronald W. Anderson.

https://risk.econ.queensu.ca/wp-content/uploads/.../Anderson-Stress_testing_eBook-2016.pdf

Hardy, Daniel C., and Christian Schmieder, (2013), “Rules of Thumb for Bank Solvency Stress Testing,” IMF Working Paper 13/232

<http://www.imf.org/external/pubs/cat/longres.aspx?sk=41047.0>

International Monetary Fund, Monetary and Capital Markets Department, Guidance Notes on Stress Testing (2016): Note 1-12 will be provided in class.

———, (2012). *Macrofinancial Stress Testing—Principles and Practices*.

www.imf.org/external/np/pp/eng/2012/082212.pdf

Tarullo D. K., (2014), “Stress Testing after Five Years”, June.

<https://www.federalreserve.gov/newsevents/speech/tarullo20140625a.htm>

Wednesday, April 12 L-9: Sovereign Risk Analysis and Banking-Sovereign-Macro Interactions

Gray, Dale F., 2009, “Modeling Financial Crises and Sovereign Risk” in Annual Review of Financial Economics, ed. by Robert Merton and Andrew Lo, *Annual Reviews*, (Palo Alto: California), Vol 1, pp. 117–144.

Gray, Dale F., and Samuel Malone, 2008, *Macrofinancial Risk Analysis*, Chapters 13 and 14 (London: Wiley Finance).

Gray, Gross, Paredes, Sydow, “Modeling Banking, Sovereign, and Macro Risk in a CCA Global VAR” IMF WP 13/218.

<http://www.imf.org/external/pubs/ft/wp/2013/wp13218.pdf>

Gray, D. F., and A. A. Jobst, 2013, “Systemic Contingent Claims Analysis –Estimating Market-Implied Systemic Risk” IMF Working Paper 13/54 (Washington: International Monetary Fund).

Supplementary Reading:

Gray, Dale F., A. A. Jobst, and S. Malone, 2010, “Quantifying Systemic Risk and Reconceptualizing the Role of Finance for Economic Growth,” *Journal of Investment Management*, Vol. 8, No. 2, pp. 90–110

Wednesday, April 12, L–11: Modeling Contagion and Graph Representation

Diebold, Francis X., and Kamil Yilmaz (2014), “On the network topology of variance decompositions: Measuring the connectedness of financial firms”, *Journal of Econometrics* 182, No. 1: 119-134.

Diebold, Francis X., Liu, L. and Kamil Yilmaz (2015), “Estimating Global Bank Network Connectedness”, Koç University-TUSIAD Economic Research Forum, Working Paper No: 1512, July. <http://financialconnectedness.org/indices.html>

Gephi: The Open Graph Viz Platform. *Gephi is the leading visualization and exploration software for all kinds of graphs and networks. Gephi is open-source and free.*
<https://gephi.org/>

Supplementary Reading:

Acemoglu, D, A Ozdaglar and A Tahbaz-Salehi (2015): “Systemic risk and stability in financial networks”, *American Economic Review*, vol 105, no 2, pp 564–608.

Chen, Q., D. Gray, P. N’Diaye, and H. Oura, (2010) “International Transmission of Bank and Corporate Distress” IMF Working Paper No. 10/124.
<http://www.imf.org/external/pubs/ft/wp/2010/wp10124.pdf>

Node XL: NodeXL Basic is a free, open-source template for Microsoft® Excel® 2007, 2010, 2013 and 2016 that makes it easy to explore network graphs.
<https://nodexl.codeplex.com/>

Wednesday, April 12, L–12: Modeling Interconnections and Feedbacks in Stress Testing and Systemic Risk Analysis

Basel Committee of Banking Supervision (2015), “Making supervisory stress tests more macroprudential: Considering liquidity and solvency interactions and systemic risk”, Working Paper 29, November.

Espinosa-Vega, Marco A., and Juan Solé, (2011), “Cross-border Financial Surveillance: A Network Perspective,” *Journal of Financial Economic Policy*, Vol. 3, No. 3, pp. 182–205.

European Central Bank (2017), “STAMP€: Stress-Test Analytics for Macroprudential Purposes in the euro area”, edited by Stéphane Dees, Jérôme Henry and Reiner Martin, February.
<https://www.ecb.europa.eu/pub/pdf/other/stampe201702.en.pdf>

Supplementary Reading:

Bookstaber, R (2012): “Using agent-based models for analyzing threats to financial stability”, Office of Financial Research Working Paper No. 03, December.

Valderrama, L. (2017), “Agent-Based Modeling for Stress Testing”, IMF Working Paper (forthcoming)

Thursday and Friday (no required readings)