

The Nexus Between Sovereign and Financial Sector

Viral V. Acharya
NYU Stern Finance
Ph.D. Elective Course (FINC.GB.4309)
Fall 2021

Meetings:

- Thursday, September 2, 10am-11am, **ORGANIZATIONAL** meeting via Zoom
- Thursdays, September 9 – December 9, 10am-1pm, room to be determined + Zoom
- Wednesday, December 15, 10am-1pm, room to be determined + Zoom

Overview:

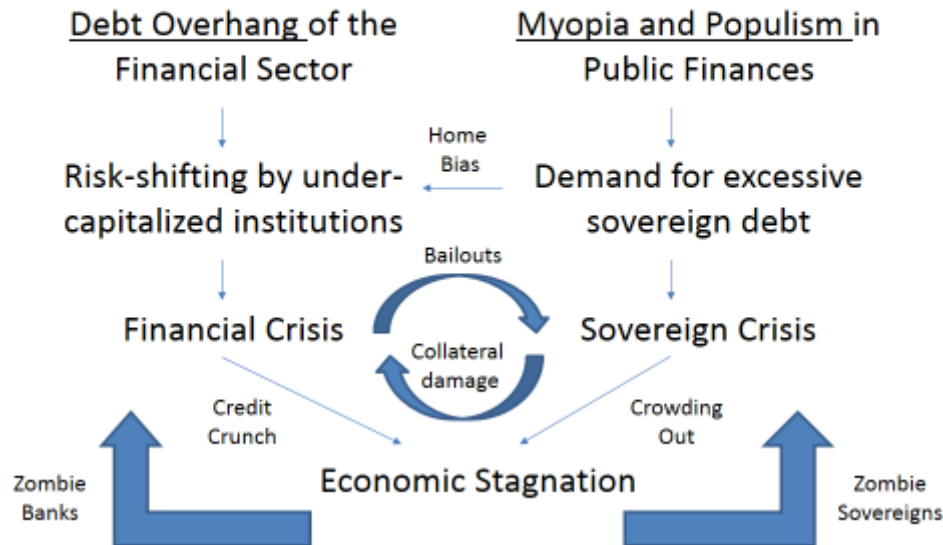
The objective of this course is to provide theoretical and empirical foundation for the nexus of credit risk between financial sector and sovereigns. This nexus has recently been at the heart of the ongoing sovereign and financial sector crises in Europe, while historically having been a greater focus in emerging market debt crises and Japan.

The course will focus on

- (1) Providing micro-foundations of sovereign debt given that there is no explicit institutional structure such as bankruptcy code which allows creditors to extract repayments, and how political economy considerations such as government myopia and populism affect the demand and nature of sovereign debt ;
- (2) Understanding how credit risk migrates from the financial sector to the sovereign and vice-versa, in what is increasingly being called the “unholy nexus” or “doom loop” or the “diabolical loop”;
- (3) Tying this nexus to micro-foundations of sovereign debt repayments as well as to incentives of highly-leveraged intermediaries such as banks;
- (4) Tracing out the real-sector consequences of this nexus and isolating the channel through which it affects the real-sector;
- (5) Studying the efficacy of regulatory interventions that have been designed such as the regulatory stress tests of banks, design of risk weights in bank capital requirements, and unconventional monetary policy and lender-of-last-resort actions of central banks; and,
- (6) Finally, examining this nexus during and after the outbreak of COVID-19.

The ultimate objective is to make sense of the following flow-chart of risks and their sources, from my Toulouse Lectures in Economics on “The Nexus Between Financial Sector and Sovereign Credit Risks”.

Summary



Structure of Meetings and Evaluation:

Several of the in-class presentations will be done by Viral Acharya, especially on the theory and models; the rest by the doctoral students enrolled in the course. We will sort out who presents what at the organizational meeting. Quirin Fleckenstein will serve as an administrative aide.

Regardless of the presentation, all enrolled or attending the course will be required to write a high-quality literature survey of up to 10 pages covering any one of the topics and the related papers (included below or otherwise). The survey will be due one week after the course is over.

The grade for the course will be based on assessment of this survey.

I will give some OPTIONAL homework in the form of exercises and/or open questions around the theoretical models we discuss. Those who submit these will receive EXTRA credit towards the grade based on quality of their work.

Those presenting and actively participating in the class will get a dinner out of me! ☺

Student Accessibility

If you will require academic accommodation of any kind during this course, you must notify me at the beginning of the course (or as soon as your need arises) and provide a letter from the Moses Center for Student Accessibility (212-998-4980, mosescsa@nyu.edu) verifying your registration and outlining the accommodations they recommend.

For more information, visit the CSA website:

<https://www.nyu.edu/students/communities-and-groups/student-accessibility.html>

Student Wellness

Classes can get stressful. I encourage you to reach out if you need help. The NYU Wellness Exchange offers mental health support. You can reach them 24/7 at [212 443 9999](tel:2124439999), or via the “NYU Wellness Exchange” app. There are also drop in hours and appointments. Find out more at:

<http://www.nyu.edu/students/health-and-wellness/counseling-services.html>

Name Pronunciation and Pronouns

NYU Stern students now have the ability to include their pronouns and name pronunciation in Albert. I encourage you to share your name pronunciation and pronouns this way. Please utilize this link for additional information:

<https://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/forms-policies-procedures/pronouns-and-name-pronunciation.html>

Religious Observances and Other Absences

NYU’s [Calendar Policy on Religious Holidays](#) states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. You must notify me in advance of religious holidays or observances that might coincide with exams, assignments, or class times to schedule mutually acceptable alternatives. Students may also contact religiousaccommodations@nyu.edu for assistance.

Except for religious observances or other absences that may be required in compliance with nondiscrimination law, this class otherwise requires attendance and participation and cannot accommodate conflicts. Please review all class dates at the start of the semester and review all course requirements to identify any foreseeable conflicts with exams, course assignments, projects, or other items required for participation and attendance. If you are aware of a potential conflict, it is strongly recommended that you do not take this class.

Inclusion Statement

This course strives to support and cultivate diversity of thought, perspectives, and experiences. The intent is to present materials and activities that will challenge your current perspectives with a goal of understanding how others might see situations differently. By participating in this course, it is the expectation that everyone commits to making this an inclusive learning environment for all.

Week 1-2: Micro-foundations for Sovereign Debt Repayment

Course overview by Viral Acharya

Students will present:

Week 1 (9/9):

- EATON, J. AND M. GERSOVITZ (1981), "Debt with Potential Repudiation: Theoretical and Empirical Analysis", *The Review of Economic Studies*, 48, 2, 289-309.
- BULOW, J. AND K. ROGOFF (1989), "A Constant Recontracting Model of Sovereign Debt", *Journal of Political Economy*, 97, 11, 155-178.
- BULOW, J. AND K. ROGOFF (1989), "Sovereign Debt: Is to Forgive Forget? ", *American Economic Review*, 79, 1, 43-50.

Week 2 (9/23):

- BRONER, F., A. MARTIN, AND J. VENTURA (2010), "Sovereign Risk and Secondary Markets", *American Economic Review*, 100, 1523-1555.
- DU, W. AND J. SHREGER (2016), "Sovereign Risk, Currency Risk, and Corporate Balance Sheets", (*being revised for resubmission, Review of Financial Studies*)

Week 3-4: Sovereign and Financial Sector Nexus: Role of Government Myopia

Viral Acharya will present:

Week 3 (9/30):

- ACHARYA, V. V. AND R. G. RAJAN (2013), "Sovereign Debt, Government Myopia, and the Financial Sector", *Review of Financial Studies*, 26, 1526-1560.

Week 4 (10/7):

- ACHARYA, V. V., R. G. RAJAN, AND J. SHIM (2020), "When Is Debt Odious? A Theory of Repression and Growth Traps", *Working Paper, NYU Stern*

Recommended related literature:

- BOLTON, P. AND O. JEANNE (2011), "Sovereign Default Risk and Bank Fragility in Financially Integrated Economies", *IMF Economic Review*, 59, 162-194.
- GENNAIOLI, N., A. MARTIN, AND S. ROSSI (2014): "Sovereign Default, Domestic Banks, and Financial Institutions", *Journal of Finance*, 69, 819-866.
- UHLIG, H. (2013), "Sovereign Default Risk and Banks in a Monetary Union", *German Economic Review*, 15, 23-41.

Week 5 (10/14): Sovereign and Financial Sector Nexus: Banking Crises and Bailouts

Viral Acharya will present:

- ACHARYA, V. V., I. DRECHSLER, AND P. SCHNABL (2014), "A Pyrrhic Victory? Bank Bailouts and Sovereign Credit Risk", *Journal of Finance*, 69, 2689-2739.

Maximilian Jager will present:

- ACHARYA, V. V., L. BORCHERT, M. JAGER AND S. STEFFEN (2018), "Kicking the Can Down the Road: Government Interventions in the European Banking Sector", *forthcoming, Review of Financial Studies*

Recommended related literature:

- CROSIGNANI, M. (2021): " Bank capital, government bond holdings, and sovereign debt capacity " *Journal of Financial Economics*, 141, 693-704
- FARHI, E. AND J. TIROLE (2018), "Deadly Embrace: Sovereign and Financial Balance Sheets Doom Loops," *Review of Economic Studies*, 85, 3, 1781-1823
- BRUNNERMEIER, M.K. (2015), "Diabolic Loop between Sovereign and Banking Risk", *G7 Bundesbank and BMF Panel Discussion*.
- GENNAIOLI, N., A. MARTIN, AND S. ROSSI (2018): "Banks, Government Bonds, and Default: What Do the Data Say?" *Journal of Monetary Economics*, 98, 98-113

Week 6 (10/21): Sovereign and Financial Sector Nexus: Bank and Regulatory Moral Hazard

Sascha Steffen will present:

- ACHARYA, V. V. AND S. STEFFEN (2015), "The Greatest Carry Trade Ever? Understanding Eurozone Bank Risks", *Journal of Financial Economics*, 115, 215-236.

Diane Pierret will present:

- ACHARYA, V. V., D. PIERRET, AND S. STEFFEN (2021), "Lender of Last Resort, Buyer of Last Resort, and a Fear of Fire Sales in the Sovereign Bond Market", *Financial Markets, Institutions, and Instruments*

Recommended related literature:

- ACHARYA, V. V., R. ENGLE, AND D. PIERRET (2014), "Testing Macro-prudential Stress Tests: The Risk of Regulatory Risk Weights", *Carnegie-Rochester Public Policy Conference Volume of the Journal of Monetary Economics*, 65, 36-53.
- KIRSCHENMANN, K., J. KORTE, AND S. STEFFEN (2020), " A zero-risk weight channel of sovereign risk spillovers ", *Journal of Financial Stability*, 51, 100780

Week 7 (10/28): Real Effects of Sovereign Crises: Active and Passive Banking Channels

Tim Eisert will present:

- ACHARYA, V. V., T. EISERT, C. EUFINGER, AND C. HIRSCH (2015): "Real Effects of the Sovereign Debt Crisis in Europe: Evidence from Syndicated Loans," *Review of Financial Studies*, 2018, 31(8), 2855-2896 (lead article).

Students will present:

- CABALLERO, R. J., T. HOSHI, AND A. K. KASHYAP (2008): "Zombie Lending and Depressed Restructuring in Japan," *American Economic Review*, 98, 1943–77

Recommended related literature:

- PEEK, J. AND E. ROSENGREN (2005): "Unnatural Selection: Perverse Incentives and the Misallocation of Credit in Japan," *American Economic Review*, 95, 1144–1166
- BOCOLA, L. (2016), "The Pass-Through of Sovereign Risk", *Journal of Political Economy*, 124, 4, 879-926
- PEREZ, D. J. (2018), "Sovereign Debt, Domestic Banks and the Provision of Public Liquidity", (being revised for resubmission, *Review of Economic Studies*).

Week 8 (11/4): The Impact of Central Bank Interventions During Sovereign Crises

Tim Eisert will present:

- ACHARYA, V. V., T. EISERT, C. EUFINGER, AND C. HIRSCH (2015): "Whatever it Takes: The Real Effects of Unconventional Monetary Policy", *Review of Financial Studies*, 2019, 32(9): 3366-3411.

Students will present:

- BLATTNER, L., L. FARINHA, AND F. REBELO (2019): "When Losses Turn Into Loans: The Cost of Undercapitalized Banks," *Conditional Accept at the American Economic Review*

Recommended related literature:

- BANERJEE, R. AND B. HOFMANN (2018): "The rise of zombie firms: causes and consequences," *Working Paper*
- BORIO, C. E. AND B. HOFMANN (2017): "Is monetary policy less effective when interest rates are persistently low?" *Working Paper*
- CROSIGNANI, M., M. FARIA-E-CASTRO, AND L. FONSECA (2015), "The (Unintended?) Consequences of the Largest Liquidity Injection Ever", *Journal of Monetary Economics*, 112, 97-112.

Week 9 (11/11): Zombie Lending

Matteo Crosignani will present:

- ACHARYA, V. V., M. CROSIGNANI, T. EISERT AND C. EUFINGER, "Zombie Credit and (Dis-)Inflation: Evidence from Europe" (2020), *(being revised for resubmission, Journal of Finance)*

Students will present:

- Gopinath, Gita, Şebnem Kalemli-Özcan, Loukas Karabarbounis and Carolina Villegas- Sanchez (2017), "Capital Allocation and Productivity in South Europe."

Recommended related literature:

- Bonfim, Diana, Geraldo Cerqueiro, Hans Degryse and Steven Ongena (2020), "On-site Inspecting Zombie Lending.", Working Paper
- Gopinath, Gita, Şebnem Kalemli-Özcan, Loukas Karabarbounis and Carolina Villegas- Sanchez (2017), "Capital Allocation and Productivity in South Europe." Quarterly Journal of Economics, 132 (4): 1915-1967.
- Passalacqua, Andrea, Paolo Angelini, Francesca Lotti and Giovanni Soggia (2020), "The Real Effects of Bank Supervision.", Working Paper

Week 10 (11/18): Zombie Lending

Olivier Wang will present:

- ACHARYA, V.V., S. LENZU AND O.WANG (2021), "Zombie Lending and Policy Traps.", *Working Paper*

Students will present:

- ASRIYAN, V., L. LAEVEN, A. MARTIN, A. VAN DER GHOTE AND V. VANASCO (2021), "Falling Interest Rates and Credit Misallocation: Lessons from General Equilibrium", *Working Paper*

Recommended related literature:

- Bonfim, Diana, Geraldo Cerqueiro, Hans Degryse and Steven Ongena (2020), "On-site Inspecting Zombie Lending.", Working Paper
- Gopinath, Gita, Şebnem Kalemli-Özcan, Loukas Karabarbounis and Carolina Villegas- Sanchez (2017), "Capital Allocation and Productivity in South Europe." Quarterly Journal of Economics, 132 (4): 1915-1967.
- Passalacqua, Andrea, Paolo Angelini, Francesca Lotti and Giovanni Soggia (2020), "The Real Effects of Bank Supervision.", Working Paper

Week 11 (12/2): Unintended Consequences of Ultra-Accommodative Monetary Policy

Viral Acharya will present:

- ACHARYA, V. V. AND G. PLANTIN, "Monetary Easing, Leveraged Payouts and Lack of Investment", *Working Paper*
- ACHARYA, V. V. AND R. RAJAN, "Liquidity Injections", *Working Paper*

Recommended related literature:

- ACHARYA, V. V. AND G. PLANTIN, "Monetary Easing, Lack of Investment and Financial Instability", *Working Paper*
- MARTINEZ-MIERA, D. AND R. REPULLO (2017). "Search for Yield, *Econometrica*, 85, 2

Week 12 (12/9): Unintended Consequences of Ultra-Accommodative Monetary Policy

Students will present:

- BRUNNERMEIER, M. K. AND Y. KOBY (2018) "The Reversal Interest Rate," (*being revised for resubmission, American Economic Review*)

Recommended related literature:

- ACHARYA, V. V. AND G. PLANTIN, "Monetary Easing, Lack of Investment and Financial Instability", *Working Paper*
- MARTINEZ-MIERA, D. AND R. REPULLO (2017). "Search for Yield, *Econometrica*, 85, 2

Week 13 (12/15) [Wednesday!]: COVID-19 and Sovereign Credit Risk

Patrick Augustin and Davide Tomio will present:

- AUGUSTIN, P., V. SOKOLOVSKI, M. G. SUBRAHMANYAM AND D. TOMIO (2021), "In sickness and in debt: The COVID-19 impact on sovereign credit risk", *forthcoming Journal of Financial Economics*

Loriana Pelizzon will present:

- JAPPELLI, R., L. PELIZZON AND A. PLAZZI (2021), "The Core, the Periphery, and the Disaster: Corporate-Sovereign Nexus in Covid Times", *Working Paper*

Recommended related literature:

- GERDING, F., T. MARTIN, AND F. NAGLER (2020), "Sovereign debt and equity returns in the face of disaster", *Working Paper*
- VADIM ELENEV, TIM LANDVOIGT, AND STIJN VAN NIEUWERBURGH (2020), "Can the Covid Bailouts Save the Economy?", *Working Paper*
- GREPPMAIR, S., S. JANK AND E. SMAJLBEGOVIC (2021), "On the Importance of Fiscal Space: Evidence from Short Sellers during the COVID-19 Pandemic", *Working Paper*