

Ec 980GG Junior Seminar

Inequality, Leverage, and Crises

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Spring 2020
Harvard University

Course Logistics

- **Teaching Fellow:** Armando Miano, amiano@g.harvard.edu
- **Hours:**
 - Class: Tuesday, 9.45 - 11.45 am, Littauer M-17
 - Sections: Monday 7pm, exact dates TBA
 - Office hours Ludwig (schedule on my website): Mondays, 4.30 pm - 5.45 pm
 - Office hours Armando: Email Armando for appointments

Course description

This course provides students with a unique perspective connecting three global macroeconomic phenomena: the rise in income and wealth *inequality*, the surge in household *leverage*, and credit boom-bust cycles. We will attempt to answer questions such as: What is behind the recent increases in income and wealth inequality? Does income inequality have a role to play in explaining credit booms? How are credit booms linked to global capital flows? What happens if credit booms go bust, and which credit booms end worse than others? Which policies can be used to prevent the next crisis? Should monetary policy lean against a credit boom?

The course is entirely based on current research and familiarizes students with the ideas that are shaping current debates on these topics among macroeconomists and finance economists in academia, policymaking and industry. Along the way, the course will expose students to important sources for macroeconomic data and the necessary tools to analyze it, such as regression analysis in cross-sectional and panel data in Stata. The ultimate goal of the class is to endow students with the ability to critically digest and conduct research on current topics in global macroeconomics and finance.

General Course Requirements and Expectations

The course goal is to start preparing students for academic writing, including an honor's thesis. Heavy emphasis will hence be placed on reading and critically discussing existing literature, developing own research ideas, and mastering the empirical tools required to do so. Every student will have to develop their own research proposal in the course of the semester. Classes will usually consist of a combination of lectures and discussions. Before each class, students will have to submit short critical evaluations of previously assigned research papers. Each week, 1-3 students will initiate and lead the discussion.

Prerequisites

Students must have taken Econ1010a (Microeconomic Theory), Ec1010b (Macroeconomic Theory) and Econ1123 (Introduction to Econometrics). The class operates at a maximum capacity of 18 students. In allocating slots, economics concentrators will be prioritized.

Assignment List

- Weekly (starting week 2, except when discussion leader): 2-page discussion note; due on **Monday noon (12 pm) before class**. Please send via email to Armando amiano@g.harvard.edu and myself.

The 2-page discussion note should be a critical evaluation of one or more of the required readings. It should include a summary of the key results and their interpretation, a critical reflection (what did you like / not like?), and some open questions raised by the paper(s).

- Once: Discussion leader in lecture, prepare slides for 20-30 minutes explaining a required paper on the reading list. Allocation happens in the second week of class.
- 3-5 page proposal, due Monday 3/23. I will reserve time for you to present preliminary ideas in front of the class before the deadline.
- Research paper due Friday, 5/1. Please inform Armando regularly of your progress on the project. Please also try to see me in my office hours at least once in the semester.
- Final two weeks: 20-30 minute presentation of project in class.

Grading

The course grade will be determined as follows:

- Class participation, discussion leadership (25%)
- Weekly responses to readings (10%)

- 3-5 page proposal (10%)
- 15-minute presentation (15%)
- Final research paper (40%)

Note: There will be no exams.

Research Project

The main requirement for the class is a research paper of length ≤ 15 pages, including all figures and tables, but excluding references. The paper must be at the intersection of macroeconomics and finance, defined quite broadly. There are many ways to write an excellent paper for the class, including but not limited to:

1. Using the number of macroeconomic and financial data sources that will be discussed in class and in the sections.
2. Creating your own dataset by pulling together data from a novel source, such as scraping data from the web. Of course, you still need an interesting question to ask.
3. Replicating and extending an existing paper, using the dataset posted by the authors (these are not always available, but can often be found on journal websites or on the authors' own websites).
4. A novel theoretical model of a macroeconomic or financial phenomenon broadly related to the course topics.

Sections with Armando will help you to get started on this, both in terms of content and methodologically (where to find datasets, how to analyze them in Stata).

Late Policy

Students are expected to provide assignments on time (by 8 pm on the due dates). If assignments are turned in late, they will lose 1/3 of a letter grade per 24 hours late. Exceptions are given in case of medical or personal emergencies, if certified by a doctor or resident dean.

Collaboration Policy and Citing Your Sources

You are encouraged to discuss with your classmates the choice of paper topics, to share information about data sources, and to help each other understand the papers better. Indeed, the exchange of knowledge, and making connections between different ideas and tools is at the heart of most research. But you must ensure that any written work you submit is original, and reflects your thoughts and understanding. You must follow standard academic citation practices, and properly

cite your sources. Please familiarize yourself with the Harvard College Academic Integrity Policies, which will fully apply in this course: <http://handbook.fas.harvard.edu/book/academic-integrity>

Course Outline

Date	Topic
Topic 1: Global Macroeconomic Trends	
1/28	Class 1: Course introduction
2/4	Class 2: Income and wealth inequality
2/11	Class 3: Distributional national accounts and wealth taxation
2/18	Class 4: Secular stagnation and household debt
Topic 2: Inequality and the Macroeconomy	
2/25	Class 5: Inequality, saving and growth
3/3	Class 6: Inequality and debt
Topic 3: The Role of Debt in the Business Cycle	
3/10	Class 7: Does debt amplify the business cycle?
3/17	<i>No class: Spring Break</i>
3/24	Class 8: Household debt and aggregate demand
3/31	Special Class 9: The Corona Crisis
4/7	Class 10: Theories of the credit cycle
Topic 4: The Role of Fiscal and Monetary Policy	
4/14	Class 11: Monetary policy, fiscal policy and debt
4/21	Student presentations of research proposals
4/28	Student presentations of research proposals

List of papers

Note:

- Papers marked with a [DN] are options that can be used for the weekly discussion notes. If there is more than one option in a given week, feel free to choose whichever you prefer.
- Papers marked with an [LD] will be assigned to individual students for their roles as lead discussants.
- This syllabus may grow as we go along. All readings will be posted on the course website.

Week 1: Overview and introduction

– no papers required –

Topic 1: Global macroeconomic trends

Week 2: Income and wealth inequality

Required:

1. [DN] Atkinson Piketty Saez 2011 JEL: Top Incomes in the Long Run of History
2. Piketty Saez 2003 QJE: Income Inequality in the United States, 1913 - 1998
3. Autor 2014 Science: Skills, education, and the rise of earnings inequality among the 'other 99 percent'
4. [DN] Saez Zucman 2016 QJE: Wealth Inequality in the United States since 1913: Evidence from capitalized income tax data

Optional:

1. Smith Yagan Zidar Zwick 2019 QJE: Capitalists in the Twenty-First Century
2. Smith Zidar Zwick 2019 Working Paper: Top Wealth in the United States: New Estimates and Implications for Taxing the Rich
3. Auten Splinter 2019 Working Paper: Income Inequality in the United States: Using Tax Data to Measure Long-term Trends
4. Guvenen Kaplan Song Weidner 2018 Working Paper: Lifetime Incomes in the United States over Six Decades
5. Piketty 2014 Book: Capital in the Twenty-First Century

Week 3 [new]: Distributional national accounts and wealth taxation

Required:

- We will have a classroom debate on the pros and cons of wealth taxation. I will send out material by email. A 2-page note stating your (assigned) position should be sent to Armando and Ludwig by the new deadline (Monday 12pm). In the note, you can already anticipate and counter some of the arguments that will be made by the other side. Your 2-page note should give you enough material to give a 5-minute spiel on why you think your (assigned) position is the right one.
- No other discussion note is required for this week.

Optional:

1. Piketty Saez Zucman 2018 QJE: Distributional National Accounts: Methods and Estimates for the United States

2. Saez Zucman 2019 Book: The Triumph of Injustice – How the Rich Dodge Taxes and How to Make Them Pay
3. Saez Zucman 2019 Working Paper: Progressive Wealth Taxation

Week 4 [new]: Secular stagnation and household debt

Required:

1. [DN, LD1] Rachel, Summers 2019 Brookings Papers on Economic Activity: On Falling Neutral Real Rates, Fiscal Policy, and the Risk of Secular Stagnation
2. Summers 2013 speech: IMF Fourteenth Annual Research Conference in Honor of Stanley Fischer. Watch here: <https://www.youtube.com/watch?v=KYpVzBbQIX0> Read transcript here: <http://larrysummers.com/imf-fourteenth-annual-research-conference-in-honor-of-stanley-fischer>
3. [DN, LD2] Bartscher Kuhn Schularick Steins 2019 Working Paper: “Modigliani Meets Minsky: American Household Debt, 1949-2016”
4. Jorda Schularick Taylor 2016 NBER Macroannual: Macrofinancial History and the New Business Cycle Facts

Optional:

1. Rachel, Smith 2017 IJCB: “Are Low Real Interest Rates Here to Stay?” incl. discussion by P.O. Gourinchas
2. Gourinchas Rey 2017: “Real Interest Rates, Imbalances and the Curse of Regional Safe Asset Providers at the Zero Lower Bound”
3. Gourinchas Rey 2019: “Global Real Rates: A Secular Approach”
4. Jorda Knoll Kuvshinov Schularick Taylor 2019 QJE: The Rate of Return on Everything, 1870-2015
5. Stephanie Lo, Ken Rogoff 2015 BIS Working Paper: Debt supercycle, not secular stagnation
6. Laubach Williams 2003 ReStat, “Measuring the Natural Rate of Interest”
7. Holston Laubach Williams 2017 JIE: “Measuring the Natural Rate of Interest: International Trends and Determinants”

Topic 2: Inequality and the Macroeconomy

Week 5: Inequality, saving and growth

Required

1. [DN, LD3] Dynan Skinner Zeldes 2004 JPE: Do the Rich Save More?
2. Straub 2019: Consumption, Savings, and the Distribution of Permanent Income
3. [DN, LD4] Banerjee Duflo 2003 Journal of Economic Growth: Inequality and Growth: What Can the Data Say?

Optional:

1. Barro 2000 Journal of Economic Growth: Inequality and Growth in a Panel of Countries
2. Kuznets 1955: Economic Growth and Income Inequality
3. Fagereng Holm Moll 2019: Saving Behavior Across the Wealth Distribution: The Importance of Capital Gains
4. Bertola Follmi Zweimuller 2006 Book: Income Distribution in Macroeconomic Models

Week 6: Inequality and debt

Required:

1. [DN, LD5] Mian Sufi Straub 2019 Working Paper: The Saving Glut of the Rich and the Rise in Household Debt
2. Bertrand Morse 2016 ReStat: Trickle-Down Consumption
3. Kumhof Ranciere Winant 2015 AER: Inequality, Leverage, and Crises

Topic 3: The role of debt in the business cycle

Week 7: Does debt amplify the business cycle?

Required:

1. [DN, LD6] Mian Sufi Verner 2017 QJE: Household Debt and Business Cycles Worldwide
2. [LD7] Barron Xiong 2017 QJE: Credit Expansion and Neglected Crash Risk
3. Jorda Schularick Taylor 2013 JMCB: When Credit Bites Back

4. [DN, LD8] Lopez-Salido Stein Zakrajsek 2017 QJE: Credit Market Sentiment and the Business Cycle

Optional:

1. Gilchrist Zakrajsek 2012 AER: Credit Spreads and Business Cycle Fluctuations
2. Schularick Taylor 2012 AER: Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008
3. Borio and Lowe 2002 BIS: Asset prices, financial and monetary stability: exploring the nexus
4. Greenwood and Hanson 2013 RFS: Issuer Quality and Corporate Bond Returns
5. Mian Sufi 2009 QJE: The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis
6. Reinhart Rogoff 2008 Book: This Time is Different: Eight Centuries of Financial Folly
7. Mendoza Terrones 2008: An Anatomy Of Credit Booms: Evidence From Macro Aggregates And Micro Data

Week 8: Household debt and aggregate demand

Required:

1. [DN, LD9] Mian Sufi Straub 2019: Indebted Demand
2. [DN, LD10] Gyongyosi Verner 2019 Working Paper: Household Debt Revaluation and the Real Economy: Evidence from a Foreign Currency Debt Crisis
3. [DN, LD11] Mian Sufi 2014 Econometrica: What Explains the 2007–2009 Drop in Employment?

Optional:

1. Eggertsson Krugman 2012 QJE: Debt, Deleveraging, and the Liquidity Trap
2. Dynan 2012 Brookings Papers on Economic Activity: Is a Household Debt Overhang Holding Back Consumption?

Week 9: The Corona crisis

Required: TBA.

Week 10: Theories of the credit cycle

Required:

1. [DN, LD12] Bordalo Gennaioli Shleifer 2018 JF: Diagnostic Expectations and Credit Cycles
2. Greenwood Hanson Jin 2019 Working Paper: Reflexivity in Credit Markets
3. [DN, LD13] John Geanakoplos 2009 NBER Macro. Annual: "The Leverage Cycle"

Optional:

1. Kindleberger 1978 Book: Mania, Panics and Crashes
2. Minsky 1986 Book: Stabilizing an unstable economy

Topic 4: The role of policy

Week 11: Monetary policy, fiscal policy and debt

Required:

1. [DN, LD14] Blanchard 2019 AER: Public Debt and Low Interest Rates
2. [DN, LD15] Cloyne Ferreira Surico 2020 REStud: Monetary Policy When Households Have Debt: New Evidence on the Transmission Mechanism
3. Stein 2013 speech: Overheating in Credit Markets: Origins, Measurement, and Policy Responses
4. Svensson 2017 JME: Cost-benefit analysis of leaning against the wind

Optional:

1. IMF 2015 Staff Report: Monetary Policy and Financial Stability
2. Borio 2013: "Macroprudential Policy and the Financial Cycle: Some Stylized Facts and Policy Suggestions"
3. Aladangady 2014 Working Paper: Homeowner balance sheets and monetary policy

List of useful datasets

Note: Many of the papers on the reading list have replication data and codes posted online, either on authors' websites, on journal websites, or posted by someone who replicated the results. These are a valuable resource to get started on a project!

At the country level:

1. Jorda Schularick Taylor Macrohistory database: <http://www.macrohistory.net/data/>
2. Piketty Saez Zucman World Inequality Database: <https://wid.world/>
3. BIS Statistics Explorer on global banking, debt, asset prices: <https://stats.bis.org/statx/>
4. Basic cross-country national accounting statistics: Penn World Tables <https://www.rug.nl/ggdc/productivity/pwt/> [see also EU KLEMS]
5. BEA data on US national and international accounts: <https://www.bea.gov/data>
6. Financial data on balance of payments and capital flows: <https://data.imf.org/IFS>
7. UN Trade data: <https://comtrade.un.org/>
8. OECD data: <https://data.oecd.org/>
9. World Bank database: <https://data.worldbank.org/>
10. **Very useful data aggregators:**
 - (a) <https://db.nomics.world/>
 - (b) <https://data.nber.org/data/international-finance/>
 - (c) <https://sites.google.com/site/medevecon/development-economics/devecondata/macro>
 - (d) <https://sites.google.com/site/md4stata/linked>
11. Each country has individual statistical agencies and central banks

At the sub-national level:

1. Piketty-Saez-Zucman micro files: <https://www.dropbox.com/s/9spftlusgce41cz/PSZ2017Dinafiles.zip?dl=0>
2. NBER IRS micro files: <http://users.nber.org/~taxsim/gdb/>
3. NBER CPS: <http://data.nber.org/data/current-population-survey-data.html>
4. BEA data on US regional accounts: <https://www.bea.gov/data>
5. BLS data, e.g. state and county employment and wages from QCEW: <https://www.bls.gov/data/>
6. Census data, e.g. County Business Patterns or American Community Survey: <https://www.census.gov/programs-surveys.html>

7. FHFA House price data <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index.aspx>
8. NYFed debt data <https://www.newyorkfed.org/data-and-statistics>

Other:

1. US household level survey data on income, spending, assets from CEX, PSID, SCF [reach out to me]
2. US firm-level data on public firms from Compustat: <https://guides.library.harvard.edu/economics/wrds>