# GR6216: MACROECONOMIC ANALYSIS II (Part 2)

## Matthieu Gomez

Spring 2025

Class meetings: Mondays-Wednesdays 10:10 – 11:25 pm Office hours: Mondays 11:30 am – 12:30pm 1131 IAB

**Grading** Your course grade will be based on approximately six problem sets (30% of the grade), participation (10% of the grade), and a take-home exam (60% of the grade)

**Statement on Academic Integrity** Columbia's intellectual community relies on academic integrity and responsibility as the cornerstone of its work. Graduate students are expected to exhibit the highest level of personal and academic honesty as they engage in scholarly discourse and research. In practical terms, you must be responsible for the full and accurate attribution of the ideas of others in all of your research papers and projects; you must be honest when taking your examinations; you must always submit your own work and not that of another student, scholar, or internet source. Graduate students are responsible for knowing and correctly utilizing referencing and bibliographical guidelines. When in doubt, consult your professor. Citation and plagiarism-prevention resources can be found at the GSAS page on Academic Integrity and Responsible Conduct of Research.

Failure to observe these rules of conduct will have serious academic consequences, up to and including dismissal from the university. If a faculty member suspects a breach of academic honesty, appropriate investigative and disciplinary action will be taken following Dean's Discipline procedures.

**Statement on Disabilities Accommodations** If you have been certified by Disability Services (DS) to receive accommodations, please either bring your accommodation letter from DS to my office hours to confirm your accommodation needs, or ask your liaison in GSAS to consult with me. If you believe that you may have a disability that requires accommodation, please contact Disability Services at 212-854-2388 or disability@columbia.edu.

**Course outline** The course has three main goals: (i) to introduce dynamic programming in continuous time; (ii) to present core models of consumption, savings, portfolio choice, and investment; and (iii) to assess how well these models fit the data

## Continuous-time models

## Week 1: Continuous-time processes

Avinash Dixit. The art of smooth pasting. Routledge, 2013

Chapter 15 of Samuel Karlin and Howard E Taylor. A second course in stochastic processes. Elsevier, 1981

## Week 2: Inequality

\*Jonathan Heathcote, Fabrizio Perri, Giovanni L Violante, and Lichen Zhang. "More unequal we stand? Inequality dynamics in the United States, 1967–2021". In: *Review of Economic Dynamics* 50 (2023), pp. 235–266

Daron Acemoglu and David Autor. "Skills, tasks and technologies: Implications for employment and earnings". In: *Handbook of labor economics*. Vol. 4. Elsevier, 2011, pp. 1043–1171

\*Thomas Piketty, Emmanuel Saez, and Gabriel Zucman. "Distributional national accounts: methods and estimates for the United States". In: *The Quarterly Journal of Economics* 133.2 (2018), pp. 553–609

Gerald Auten and David Splinter. "Income inequality in the United States: Using tax data to measure long-term trends". In: *Journal of Political Economy* 132.7 (2024), pp. 000–000

Matthieu Gomez. "Decomposing the growth of top wealth shares". In: *Econometrica* 91.3 (2023), pp. 979–1024

Matthieu Gomez. "Macro perspectives on income inequality". In: *The Journal of Economic Perspectives* (Forthcoming)

\*Xavier Gabaix. "Power Laws in Economics and Finance". In: Annual Review of Economics 1.1 (2009), pp. 255–294

Charles I Jones. "Pareto and Piketty: The Macroeconomics of Top Income and Wealth Inequality". In: *Journal of Economic Perspectives* 29.1 (2015), pp. 29–46

Thomas Piketty and Gabriel Zucman. "Wealth and inheritance in the long run". In: *Handbook of Income Distribution* 2 (2014), pp. 1303–1368

Xavier Gabaix, Jean-Michel Lasry, Pierre-Louis Lions, and Benjamin Moll. "The dynamics of inequality". In: *Econometrica* 84.6 (2016), pp. 2071–2111

Matthieu Gomez and Émilien Gouin-Bonenfant. "Wealth inequality in a low rate environment". In: *Econometrica* 92.1 (2024), pp. 201–246

#### Week 3: Consumption problem

Jonathan A Parker, Nicholas S Souleles, David S Johnson, and Robert McClelland. "Consumer spending and the economic stimulus payments of 2008". In: *American* economic review 103.6 (2013), pp. 2530–2553

Adrien Auclert. "Monetary policy and the redistribution channel". In: *American Economic Review* (2015)

Martin Blomhoff Holm. "Consumption with liquidity constraints: An analytical characterization". In: *Economics Letters* 167 (2018), pp. 40–42

Greg Kaplan and Giovanni L Violante. "The marginal propensity to consume in heterogeneous agent models". In: Annual Review of Economics 14.1 (2022), pp. 747–775

Yves Achdou, Jiequn Han, Jean-Michel Lasry, Pierre-Louis Lions, and Benjamin Moll. "Income and wealth distribution in macroeconomics: A continuous-time approach". In: *The review of economic studies* 89.1 (2022), pp. 45–86

Andreas Faregeng, Matthieu Gomez, Emilien Gouin-Bonenfant, Martin Holm, Ben Moll, and Gisle Natvik. "Asset Price Redistribution". Working Paper. 2022

Christina Patterson. "The matching multiplier and the amplification of recessions". In: American Economic Review 113.4 (2023), pp. 982–1012

#### Week 4: Investment problem

Pierre-Olivier Gourinchas. "Notes for Econ202A Investment". retrieved from https://eml.berkeley.edu/~webfac/gourinchas/e202a\_f14/Notes\_Investment\_pog.pdf

Robert E Hall and Dale W Jorgenson. "Tax policy and investment behavior". In: *The American economic review* 57.3 (1967), pp. 391–414

Fumio Hayashi. "Tobin's marginal q and average q: A neoclassical interpretation". In: *Econometrica: Journal of the Econometric Society* (1982), pp. 213–224

Simcha Barkai. "Declining labor and capital shares". In: *The Journal of Finance* 75.5 (2020), pp. 2421–2463

## Asset Pricing

## Week 5: Present-value identities

\*Chapter 5 of John Y Campbell. *Financial decisions and markets: a course in asset pricing.* Princeton University Press, 2017

\*Chapter 20 of John Cochrane. Asset pricing: Princeton university press, 2009

John H Cochrane. "The dog that did not bark: A defense of return predictability". In: *The Review of Financial Studies* 21.4 (2008), pp. 1533–1575

### Week 6: Stochastic Discount Factor

\*Chapter 4 and 6 of John Y Campbell. *Financial decisions and markets: a course in asset pricing*. Princeton University Press, 2017

\*Chapter 1 and 4 of John Cochrane. Asset pricing: Princeton university press, 2009

Ian WR Martin. "Consumption-based asset pricing with higher cumulants". In: *The Review of Economic Studies* 80.2 (2013), pp. 745–773