### **Asset Price Bubbles and Macroeconomics**

Instructor: Gadi Barlevy Tel Aviv University May 20-31, 2021

Course Evaluation: Students will be asked to pick a paper from the reading list below (or a relevant paper on not on the list but which is approved in advance by the instructor) and write a 2-3 page referee report on it. The report must (a) briefly summarize the key results of the paper (this should take no more than a page) and (b) provide a thoughtful discussion on the contribution of the paper to the literature on bubbles and policy questions about bubbles. If students think there are relevant issues in the paper, e.g. if it mischaracterizes other papers or uses terminology in a problematic way, they can point that out too. Reports can feature bullet points and/or enumerated lists.

<u>Reading List</u>: The list includes all papers mentioned in each lecture. Starred articles will be discussed in more detail during the lecture, and students are encouraged to read them before class. List is subject to change before class (current version: 2/21/2021)

#### Introduction

- Allen, Franklin, Stephen Morris, and Andrew Postlewaite, 1993. "Finite Bubbles with Short Sales Constraints and Asymmetric Information" Journal of Economic Theory, 61, p206-229.
- Brunnermeier, Markus and Martin Oehmke, 2013. "Bubbles, Financial Crises, and Systemic Risk". *Handbook of the Economics of Finance*. Amsterdam: Elsevier.
- Jordà, Òscar, Moritz Schularick, and Alan Taylor, 2015. "Leveraged Bubbles" Journal of Monetary Economics, 76, pS1-S20.
- Kindleberger, Charles, 1978. *Manias, Panics and Crashes: A History of Financial Crises*, New York: Palgrave Macmillan.
- Martin, Alberto and Jaume Ventura, 2018. "The Macroeconomics of Rational Bubbles. A User's Guide" Annual Review of Economics, 10, p505-539.

## Non-existence results

- Santos, Manuel and Michael Woodford, 1997. "Rational Asset Pricing Bubbles" Econometrica, 65, p19-57.
- \* Tirole, Jean, 1982. "On the Possibility of Speculation under Rational Expectations" Econometrica, 50, p1163-1182.

Tirole, Jean, 1985. "Asset Bubbles and Overlapping Generations" Econometrica, 53, p1499-1528.

## **Dynamic Inefficiency Bubbles**

- Abel, Andrew, Greg Mankiw, Lawrence Summers, and Richard Zeckhauser, 1989. "Assessing Dynamic Efficiency: Theory and Evidence" Review of Economic Studies, 56, p1-19.
- Allais, Maurice, 1947. Economie et Interet. (two volumes) Paris: Imprimerie Nationale.
- Bewley, Truman, 1980, "The optimum quantity of money," in Models of Monetary Economies, John H. Kareken and Neil Wallace (eds.), p169–210.
- Diamond, Peter, 1965. "National Debt in a Neoclassical Growth Model" American Economic Review, 55, p1126-50.
- Galí, Jordi, 2014. "Monetary Policy and Rational Asset Price Bubbles" American Economic Review, 104, p721-52.
- Geerolf, Francois, 2018. "Reassessing Dynamic Inefficiency" Working Paper
- \* Grossman, Gene and Noriyuki Yanagawa, 1993. "Asset Bubbles and Endogenous Growth" Journal of Monetary Economics, 31, p3-19.
- King, Ian and Don Ferguson, 1993. "Dynamic Inefficiency, Endogenous Growth, and Ponzi Games" Journal of Monetary Economics, 32, p79-104.
- Saint Paul, Gilles, 1993. "Productivity Growth and the Structure of the Business Cycle" European Economic Review, 37, p861-90.
- Samuelson, Paul, 1958. "An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money" Journal of Political Economy, 66, p467-482.
- \* Tirole, Jean, 1985. "Asset Bubbles and Overlapping Generations" Econometrica, 53, p1499-1528.

## **Credit Market Frictions and Bubbles**

Biswas, Siddhartha, Andrew Hanson, and Toan Phan, 2020. "Bubbly Recessions" American Economic Journal: Macroeconomics, 12, p33-70.

- \* Hirano, Tomohiro and Noriyuki Yanagawa, 2017. "Asset Bubbles, Endogenous Growth, and Financial Frictions" Review of Economic Studies, 84, p406-43.
- Kocherlakota, Narayana, 1992. "Bubbles and Constraints on Debt Accumulation" Journal of Economic Theory, 57, p245-56.
- \* Martin, Alberto and Jaume Ventura, 2012. "Economic Growth with Bubbles" American Economic Review, 102, p3033-58.
- Matin, Alberto and Jaume Ventura, 2016. "Managing credit bubbles" Journal of the European Economic Association, 14, p753-89.
- Miao, Jianjun and Pengfei Wang, 2018 "Asset Bubbles and Credit Constraints" American Economic Review, 108, p2590-2628.
- Santos, Manuel and Michael Woodford, 1997. "Rational Asset Pricing Bubbles" Econometrica, 65, p19-57.

### **Greater Fool Bubbles**

- Allen, Franklin, Stephen Morris, and Andrew Postlewaite, 1993. "Finite Bubbles with Short Sales Constraints and Asymmetric Information" Journal of Economic Theory, 61, p206-229.
- \* Awaya, Yu, Kohei Iwasaki, and Makoto Watanabe, 2020. "Rational Bubbles and Middlemen" University of Wisconsin working paper.
- Blanchard, Olivier and Mark Watson, 1982. "Bubbles, Rational Expectations, and Financial Markets," *Crises in the Economic and Financial Structure*, Lexington, MA: Lexington Books.
- Conlon, John, 2004. "Simple Finite Horizon Bubbles Robust to Higher Order Knowledge" Econometrica, 72, p927--36.
- Conlon, John 2015. "Should Central Banks Burst Bubbles? Some Microeconomic Issues" Economic Journal, 125, p141-61.
- Doblas-Madrid, Antonio, 2012. "A Robust Model of Bubbles with Multidimensional Uncertainty" Econometrica, 80, p1845--93.
- Giglio, Stefano, Matteo Maggiori, and Johannes Stroebel, 2016. "No-Bubble Condition: Model-Free Tests in Housing Markets" Econometrica, 84, p1047-91.

Liu, Feng and John Conlon, 2018. "The Simplest Rational Greater-Fool Bubble Model" Journal of Economic Theory, 175, p38-57.

# Beliefs, Disagreements, and Bubbles

- Bailey, Michael, Ruiqing Cao, Theresa Kuchler, and Johannes Stroebel, 2018. "The Economic Effects of Social Networks: Evidence from the Housing Market" Journal of Political Economy, 126, p2224-76.
- Barberis, Nicholas, Robin Greenwood, Lawrence Jin, and Andrei Shleifer, 2018. "Extrapolation and Bubbles" Journal of Financial Economics, 129, p203-27.
- \* Barlevy, Gadi, 2015 "Bubbles and Fools" Economic Perspectives, 39, p54-76.
- Bordalo, Pedro, Nicola Gennaioli, Spencer Kwon, and Andrei Shleifer, 2020. "Diagnostic Bubbles" forthcoming in Journal of Financial Economics,
- Brunnermeier, Markus, Alp Simsek, and Wei Xiong, 2014. "A Welfare Criterion for Models with Distorted Beliefs" Quarterly Journal of Economics, 129, p1711-52.
- Caballero, Ricardo and Alp Simsek, 2020. "Prudential Monetary Policy" MIT Working Paper.
- Case, Karl, Robert Shiller, and Anne Thompson, 2012. "What Have They Been Thinking? Homebuyer Behavior in Hot and Cold Markets." Brookings Papers on Economic Activity, p265-315.
- Farhi, Emmanuel and Ivan Werning, 2020. "Taming a Minsky Cycle" MIT Working Paper.
- Giglio, Stefano, Matteo Maggiori, Johannes Stroebel, and Stephen Utkus. "Five Facts About Beliefs and Portfolios" American Economic Review, forthcoming.
- \* Harrison, Michael and David Kreps, 1978. "Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations" Quarterly Journal of Economics, 92, p323-36.
- Hong, Harrison, Jose Scheinkman, and Wei Xiong, 2006. "Asset Float and Speculative Bubbles" Journal of Finance, 61, p1073-1117.
- Miller, Edward, 1977. "Risk, Uncertainty, and Divergence of Opinion" Journal of Finance, 32, p1151-68.

- Morris, Stephen, 1995. "The Common Prior Assumption in Economic Theory," Economics and Philosophy, 11, p227-53.
- Scheinkman, Jose and Wei Xiong, 2003. "Overconfidence and Speculative Bubbles" Journal of Political Economy, 111(6), December, p1183-1220.
- Simsek, Alp, 2021. "The Macroeconomics of Financial Speculation" forthcoming in Annual Reviews of Economics.

# **Risk-Shifting Bubbles**

- \* Allen, Franklin, Gadi Barlevy, and Douglas Gale, 2021. "Asset Price Booms and Macroeconomic Policy: a Risk-Shifting Approach" forthcoming in American Economic Journal: Macroeconomics.
- Allen, Franklin and Douglas Gale, 2000. "Bubbles and Crises" Economic Journal, 110, p236-55.
- \* Allen, Franklin and Douglas Gale, 2009. "Chapter 9: Bubbles and Crises" *Understanding Financial Crises*, Oxford: Oxford University Press.
- Allen, Franklin and Gary Gorton, 1993. "Churning Bubbles" Review of Economic Studies, 60, p813-36.
- Barlevy, Gadi, 2014. "A Leverage-Based Model of Speculative Bubbles" Journal of Economic Theory, 153, p459-505.
- Barlevy, Gadi and Jonas Fisher, 2020. "Why were Interest-Only Mortgages so Popular During the U.S. Housing Boom?" forthcoming in Review of Economic Dynamics.
- Dow, James and Jungsuk Han, 2015. "Contractual Incompleteness, Limited Liability and Asset Price Bubbles" Journal of Financial Economics, 116, p383-409.
- Jordà, Òscar, Moritz Schularick, and Alan Taylor, 2015. "Leveraged Bubbles" Journal of Monetary Economics, 76, pS1-S20.

### Conclusion

- Fama, Eugene, 2020. "Two Pillars of Asset Pricing" American Economic Review, 104, p1467-85.
- Greenwood, Robin, Andrei Shleifer, and Sang You, 2019. "Bubbles for Fama" Journal of Financial Economics, 131, p20-43.