barcelona gse
graduate school of economics

12U006

6 ECTS

Topics in Finance I

Overview and Objectives

This course is intended for PhD students interested in doing research about the relationship between financial markets and the Macroeconomy.

The different topics will be analyzed using dynamic stochastic models with financing frictions, heterogeneous agents and incomplete markets. In particular we will focus on the aggregate consequences of financial factors that affect the economic decisions of agents, such as financing frictions, financial intermediation, and systemic crises.

The objectives of the course are:

i. To illustrate to what extent the existing theories are successful in explaining the empirical evidence
ii. To identify which relevant questions remain unanswered and to stimulate new ideas for research
iii. To provide the analytical tools to derive, analyze and solve this class of models.

Among the included topics, the course will analyze: theoretical models and empirical evidence about the aggregate consequences of financing frictions and the imperfect diversification of idiosyncratic risk; Credit crunches, liquidity, the link between banks' financial health and aggregate economic activity, contagion, welfare, and public policy.

In all the topics studies this course places strong emphasis on the theoretical and empirical analysis of recent events, and will address many of the issues that are key for understanding both the dynamics of the recent financial crisis and its implications for the global recession of 2008-2009.

Required Activities

Part 1 of the syllabus will take place during weeks 1 to 4. Part 2 of the syllabus will take place during weeks 5 to 8. During the last two weeks of the course, each student will make a presentation:

Presentations will last for 40-50 minutes, and can be chosen as follows:

i. A recent paper of his or her choice that is related to the topics seen in the lectures. All the papers under the "additional readings" and "further related papers" headers in the syllabus are eligible. Please notice that new papers **may be added in these sections in the first 2-3 weeks of the course.**
    a. A paper outside the reading list can also be presented, subject to the professors' approval.

ii. A research project, which can be one of the following:
    a. An original empirical or quantitative work, which can also be based on practice sessions and datasets uploaded on the course's website (which require either to analyze an empirical dataset using Stata, or to solve and simulate a dynamic model using Matlab), or an original theoretical work.

b. A survey of research on a topic related to the course (subject to the professors' approval).

Students need to inform the professors of the paper they choose for the presentations by Monday the 27th of May. In case more than one student wants to choose the same paper, this will be assigned on a first come-first serve basis.

The students also need to pass a final exam.

Evaluation

The final grade structure is as follows:

1) Presentation: 60%
2) Final exam: 40%

The final exam will last 2 hours. It will be a list of 8 questions, one question for each of the 8 lectures of the course (see below). Students need only to answer 3 of the 8 questions. The only restriction in choosing the questions is that at least 1 question has to be from each part of the course.

barcelona gse
graduate school of economics

12U006

Topics in Finance I

6 ECTS

References

PART 1 – Business cycle implications of Credit Frictions and Uninsurable risk

1) Credit frictions, amplification and persistence of aggregate shocks, and the business cycle: empirical evidence

- **Papers (this list is preliminary, it may be updated before the course starts with the most recent literature)**
  - Bernanke, Ben, Gertler, Mark, and Gilchrist, Simon, 1996. "The Financial Accelerator and the Flight to Quality", The Review of Economics and Statistics, MIT Press, vol. 78(1), pages 1-15, February.
  - Matías Braun, and Borja Larrain, 2005, Finance and the Business Cycle: International, Inter-Industry Evidence, The Journal of Finance, Vol. 60, No. 3, pp. 1097-1128.
  - Kroszner, Randall S. & Laeven, Luc & Klingebiel, Daniela, 2007, "Banking crises, financial dependence, and growth," Journal of Financial Economics, Elsevier, vol. 84(1), pages 187-228, April.
  - Dell'Ariccia, Giovanni, Detragiache, Enrica, and Rajan, Raghuram, 2008, "The real effect of banking crises," Journal of Financial Intermediation, Elsevier, vol. 17(1), pages 89-112.Additional Readings
- Additional Readings
  - Vermeulen, P. (2002), "Business Fixed Investment: Evidence of a Financial Accelerator in Europe", Oxford Bulletin of Economics and Statistics, 64, 3, pp. 213-231.
  - Kashyap, Anil K, Stein, Jeremy C, and Wilcox, David W, 1993. "Monetary Policy and Credit Conditions: Evidence from the Composition of External Finance," American Economic Review, American Economic Association, vol. 83(1), pages 78-98, March.
  - Kashyap, A.K., O.A. Lamont, and J. C. Stein (1994), "Credit Conditions and the Cyclical Behaviour of Inventories", Quarterly Journal of Economics, 109, N.3, August, pp.565-592.
  - Oliner, S.D., and G.D. Rudebush (1996), "Is there a Broad Credit Channel for Monetary Policy?", FRB San Francisco Economic Review, No.1, pp.3-13.
  - Kannan, Prakash, Credit Conditions and Recoveries from Recessions Associated with Financial Crises (March 2010). IMF Working Papers, Vol. , pp. 1-34, 2010. Available at SSRN: http://ssrn.com/abstract=1586672.

2) Credit frictions, amplification and persistence of aggregate shocks, and the business cycle: theory

- **Papers (this list is preliminary, it may be updated before the course starts with the most recent literature)**
  - Kiyotaki, N., and J. Moore. "Credit Cycles." Journal of Political Economy 105 (1997): 211-248.
  - Kiminori Matsuyama, Credit Traps and Credit Cycles," American Economic Review, 97, March 2007, 503-516.
- Additional Readings
  - Bernanke, B. S., M. Gertler, and S. Gilchrist, "The Financial Accelerators in a Quantitative Business Cycle Framework," in John B. Taylor and Michael Woodford, eds., Handbook of Macroeconomics, 1999, pp.1341-1393.

3) Aggregate consequence of firm level and household level credit frictions and labour marker frictions

12U006

Topics in Finance I

6 ECTS

- **Papers (this list is preliminary, it may be updated before the course starts with the most recent literature)**
  - G. Clementi, H.Hopenyain, A Theory of Financing Constraints and Firm Dynamics, Quarterly Journal of Economics, Volume 121, Issue 1, February 2006, pages 229-265.
  - Jermann, Urban J. & Quadrini, Vincenzo, 2007. "Stock market boom and the productivity gains of the 1990s," Journal of Monetary Economics, Elsevier, vol. 54(2), pages 413-432, March.
  - Caggese, A. and Perez, A., 2012, "Aggregate implications of Financial and Labour Market Frictions", Mimeo, Barcelona Graduate school of Economics.
- Additional Readings
  - Caggese, A., 2012,"Entrepreneurial Risk, Investment and Innovation", Journal of Financial Economics, n.106, November 2012, 287-307.
  - Michelacci, C., and F. Schivardi, 2012, " Journal of the European Economic Association, forthcoming.
  - Rui Castro & Gian Luca Clementi & Glenn MacDonald, 2008, Legal Institutions, Sectoral Heterogeneity, and Economic Development, Review of Economic Studies, vol. 76, no 2, pag. 529-561
  - Rampini, Adriano A., "Entrepreneurial Activity, Risk, and the Business Cycle" . Journal of Monetary Economics, Vol. 51, pp. 555-573, 2004.
  - Aghion, Philippe, George-Marios Angeletos, Abhijit Banerjee, and Kalina Manova. 2010. "Volatility and Growth: Credit Constraints and Productivity-Enhancing Investment," Journal of Monetary Economics, forthcoming.
  - George-Marios Angeletos, 2007. "Uninsured Idiosyncratic Investment Risk and Aggregate Saving," Review of Economic Dynamics, Elsevier for the Society for Economic Dynamics, vol. 10(1), pages 1-30, January.
  - Angeletos, George-Marios & Calvet, Laurent-Emmanuel, 2006."Idiosyncratic production risk, growth and the business cycle," Journal of Monetary Economics, Elsevier, vol. 53(6), pages 1095-1115, September.
  - Rui Castro & Gian Luca Clementi & Glenn MacDonald, 2004. "Investor Protection, Optimal Incentives, and Economic Growth," The Quarterly Journal of Economics, MIT Press, vol. 119(3), pages 1131-1175, August.
  - Jianjun Miao, (2005) , Optimal Capital Structure and Industry Dynamics, The Journal of Finance 60 (6), 2621--2659.
  - Meh, C., and V. Quadrini. Endogenous Market Incompleteness with Investment Risks", Journal of Economic, Dynamics and Control, 30, 2006.

4) Aggregate consequences of financial markets imperfections: empirical evidence from the 2007-2009 Great Recession

- **Papers (this list is preliminary, it may be updated before the course starts with the most recent literature)**
  - Heitor Almeida & Murillo Campello & Bruno Laranjeira & Scott Weisbenner, 2009. "Corporate Debt Maturity and the Real Effects of the 2007 Credit Crisis," NBER Working Papers 14990.
  - Murillo Campello & John Graham & Campbell R. Harvey, 2009."The Real Effects of Financial Constraints: Evidence from a Financial Crisis,"Journal of Financial Economics, forthcoming.
  - Jermann, Urban J. and Quadrini, Vincenzo, Macroeconomic Effects of Financial Shocks (September 2009). NBER Working Paper No. w15338.

- Arellano, C., Yan, Bai, and Patrick Kehoe, 2010, Financial Markets and Fluctuations in Uncertainty, Minneapolis Fed Staff report.
- A. Caggese, How important are capital markets imperfections in determining firm decisions and aggregate fluctuations? forthcoming, CREI Opuscles. Download at: http://www.econ.upf.edu/~caggese/opuscle%20rev%203.pdf

- Additional Readings
  - Duchin, Ran, Ozbas, Oguzhan and Sensoy, Berk A., Costly External Finance, Corporate Investment, and the Subprime Mortgage Credit Crisis (August 28, 2009). Journal of Financial Economics, Forthcoming.
  - Kahle, Kathleen M. & Stulz, Rene M., 2011. "Financial Policies, Investment, and the Financial Crisis: Impaired Credit Channel or Diminished Demand for Capital?," Working Paper Series 2011-3, Ohio State University, Charles A. Dice Center for Research in Financial Economics.

PART 2 - Financial Intermediation, Liquidity, Systemic Crises and Policy

5) Banks' Balance Sheets and Aggregate Economic Activity: Empirical Evidence

a. Introduction and Review of Literature
b. Shocks to bank capital and liquidity and credit supply
c. Evidence of Bank-Dependent Borrower Effects
d. The role of banks in the transmission of monetary policy
e. The macroeconomic importance of the bank lending channel
f. Empirical exercises using Stata

- Papers **(this list is preliminary, it will be updated before the course starts with the most recent literature)**
  - Adrian, Tobias & Shin, Hyun Song, 2010. "Liquidity and leverage," Journal of Financial Intermediation, Elsevier, vol. 19(3), pages 418-437, July.
  - Ashcraft, Adam. (2006) "New Evidence on the Lending Channel." Journal of Money, Credit,and Banking, 32, 751--76.
  - Bernanke, Ben S & Blinder, Alan S, 1988. "Credit, Money, and Aggregate Demand," American Economic Review, vol. 78(2).
  - Bernanke, Ben S & Blinder, Alan S, 1992. "The Federal Funds Rate and the Channels of Monetary Transmission," American Economic Review, vol. 82(4).
  - Bernanke, Ben S. and Gertler, Mark. "Inside the Black Box: The Credit Channel of Monetary Policy Transmission." Journal of Economic Perspectives, 1995, 9(4).
  - Bernanke, Ben S., 1993. "How important is the credit channel in the transmission of monetary policy? : A comment," Carnegie-Rochester Conference Series on Public Policy, vol. 39(1)-
  - Bolton, Patrick & Xavier Freixas, 2006. "Corporate Finance and the Monetary Transmission Mechanism," Review of Financial Studies, vol. 19(3).
  - Borio, C. and Zhu, H. "Capital Regulation, Risk-Taking and Monetary Policy:A Missing Link in the Transmission Mechanism." Mimeo, BIS, Basle, 2007.
  - Carvalho, D.; M. Ferreira; and P. Matos. "Lending Relationships and the Effect of Bank Distress: Evidence from the 2007-2008 Financial Crisis." Working Paper (2011).
  - Chari, V.V. & Lawrence J. Christiano & Patrick J. Kehoe, 2008. "Facts and myths

12U006

Topics in Finance I

6 ECTS

about the financial crisis of 2008," WP 666, Federal Reserve Bank of Minneapolis.

- Chava, S., and A. Purnanandam. "The Effects of Banking Crisis on Bank-Dependent Borrowers." Journal of Financial Economics, 99 (2008), 116-135.
- Chen, 2001 "Bank net worth, asset prices, and economic activity" Journal of Monetary Economics, 48 (2001), pp. 415–436
- den Haan, Wouter J. & Sumner, Steven W. & Yamashiro, Guy M., 2007. "Bank loan portfolios and the monetary transmission mechanism," Journal of Monetary Economics, vol. 54(3).
- Diamond, Douglas W & Dybvig, Philip H, 1983. "Bank Runs, Deposit Insurance, and Liquidity," Journal of Political Economy, vol. 91(3), pages 401-19, June.
- Driscoll, John C., (2004). "Does bank lending affect output? Evidence from the U.S. states," Journal of Monetary Economics, Elsevier, vol. 51(3), pages 451-471, April.
- Giannetti, Mariassunta & Simonov, Andrei, 2009. "On the Real Effects of Bank Bailouts: Micro-Evidence from Japan," CEPR Discussion Papers 7441.
- Holmstrom, B., and J. Tirole, 1997, "Financial Intermediation, Loanable Funds, and the Real Sector," Quarterly Journal of Economics 112, 663-691.
- Ivashina, V., and D. Scharfstein. "Bank Lending During the Financial Crisis of 2008." Journal of Financial Economics, 97-3 (2010).
- Jiménez, Gabriel & Steven Ongena & José Luis Peydró & Jesús Saurina, 2009. "Hazardous times for monetary policy: What do twenty-three million bank loans say about the effects of monetary policy on credit risk-taking?," WP 0833, Banco de España.
- Kahle, K., M. and Stulz, R. M. (2011). "Financial Policies, Investment, and the Financial Crisis: Impaired Credit Channel or Diminished Demand for Capital?", Fisher College of Business WP No. 2011-3.
- Kahle, K., M. and Stulz, R. M. (2012). "Access to Capital, Investment, and the Financial Crisis ", Fisher College of Business Working Paper No. 2011-3.
- Kang, J and R. Stulz (2000) "Do Banking Shocks Affect Firm Performance? An Analysis of the Japanese Experience", Journal of Business, 2000, v73(1), 1-23.
- Kashyap, Anil K. & Raghuram Rajan & Jeremy C. Stein, 2002. "Banks as Liquidity Providers: An Explanation for the Coexistence of Lending and Deposit-Taking," Journal of Finance, vol. 57(1).
- Kashyap, Anil K. & Stein, Jeremy C., 1995. "The impact of monetary policy on bank balance sheets," Carnegie-Rochester Conference Series on Public Policy, Elsevier, vol. 42(1), pages 151-195, June.
- Kashyap, Anil K. and Stein, Jeremy C. 2000. "What Do a Million Observations on Banks Say About the Transmission of Monetary Policy?" American Economic Review, 90(3)
- Khwaja, Asim and Mian, Atif. 2008. "Tracing the Impact of Bank Liquidity Shocks: Evidence from an Emerging Market." American Economic Review, 98(4)
- Kishan, Ruby P. and Opiela, Timothy P. 2000. "Bank Size, Bank Capital, and the Bank Lending Channel." Journal of Money, Credit and Banking, 32(121-141).
- Meh, Césaire A. & Moran, Kevin, 2010. "The role of bank capital in the propagation of shocks," Journal of Economic Dynamics and Control, vol. 34(3).
- Monacelli, T., Quadrini, V. and A. Trigari (2011). "Financial Markets and Unemployment", NBER WP 17389

- Ongena, S.; G. Jiménez; J. Peydro; and J. Saurina Salas. "Credit Supply: Identifying Balance-Sheet Channels with Loan Applications and Granted Loans". ECB Working Paper 1179 (2012).
- Ongena, Steven & Smith, David C. & Michalsen, Dag, (2003). "Firms and their distressed banks: lessons from the Norwegian banking crisis," Journal of Financial Economics, vol. 67(1).
- Paravisini, D., (2008), Local Bank Financial Constraints and Firm Access to External Finance, Journal of Finance 63, 2161- 2193.
- Peek, Joe & Rosengren, Eric S & Tootell, Geoffrey M B, (2003). " Identifying the Macroeconomic Effect of Loan Supply Shocks," Journal of Money, Credit and Banking, vol. 35(6).
- Peek, Joe, and Eric Rosengren, (1997), The International Transmission of Financial Shock, American Economic Review 87, 495-505.
- Peek, Joe, and Eric Rosengren, (2000), Collateral Damage: Effects of the Japanese Bank Crisis on Real Activity in the United States, American Economic Review 90, 30-45.
- Puri, Manju & Rocholl, Jörg & Steffen, Sascha, 2011. "Global retail lending in the aftermath of the US financial crisis: Distinguishing between supply and demand effects," Journal of Financial Economics, Elsevier, vol. 100(3), pages 556-578, June
- Sufi, A., 2009, "Bank Lines of Credit in Corporate Finance: An Empirical Analysis," Review of Financial Studies 22, 1057-1088.
- Van den Heuvel, Skander J. (2002). "Does bank capital matter for monetary transmission?," Economic Policy Review, Federal Reserve Bank of New York, issue May, pages 259-265.

6) Banks' Balance Sheets and Aggregate Economic Activity: Theory

a. Introduction and Review of Literature
b. Holmstrom Tirole (1997) and Meh and Moran (2010)
c. Shleifer and Vishny (2010)
d. Gertler and Kiyotaki (2011)
e. Theory and simulation exercises using Matlab

- Papers: **(this list is preliminary, it will be updated before the course starts with the most recent literature)**

- Acharya, Viral V. & Douglas Gale & Tanju Yorulmazer, 2011. "Rollover Risk and Market Freezes," Journal of Finance, vol. 66(4), pages 1177-1209, 08.
- Adrian, T. and H. S. Shin (2010). `Financial intermediaries and monetary economics', in B. M. Friedman and M. Woodford (eds.), Handbook of Monetary Economics, 3, Elsevier, Amsterdam.
- Aikman, David & Matthias Paustian, (2006). "Bank capital, asset prices and monetary policy," Bank of England working papers 305, Bank of England.
- Angeloni, Ignazio & Ester Faia, (2009). "A Tale of Two Policies: Prudential Regulation and Monetary Policy with Fragile Banks," Kiel Working Papers 1569, Kiel Institute for the World Economy.
- Chen, N.-K. . Bank net worth, asset prices and economic activity. Journal of Monetary Economics, 48:415--436, (2001).
- Curdia, Vasco & Michael Woodford, (2010). "Credit Spreads and Monetary Policy," Journal of Money, Credit and Banking, vol. 42(s1), pages 3-35, 09.
- Diamond, D.W., Rajan, R.G., 2001. Liquidity risk, liquidity creation, and financial fragility:

A theory of banking. Journal of Political Economy 109, 287-327.

- Douglas W. Diamond & Raghuram G. Rajan, 2006. "Money in a Theory of Banking," American Economic Review, vol. 96(1)
- Gerali, A., S. Neri, L. Sessa and F. Signoretti (2010). `Credit and banking in a DSGE model of the euro area', Journal of Money Credit and Banking, 42(6), 107--41.
- Gertler, Mark & Karadi, Peter, (2011). "A model of unconventional monetary policy," Journal of Monetary Economics, Elsevier, vol. 58(1), pages 17-34, January.
- Gertler, Mark, and Nobuhiro Kiyotaki. 2011. "Financial Intermediation and Credit Policy in Business Cycle Analysis." In Handbook of Monetary Economics, Vol. 3, ed. Benjamin Friedman and Michael Woodford.
- Gertler, Mark, Nobuhiro Kiyotaki and Albert Queralto (2012). "Financial Crises, Bank Risk Exposure and Government Financial Policy", Journal of Monetary Economics (forthcoming)
- Goodfriend, Marvin & McCallum, Bennett T., (2007). "Banking and interest rates in monetary policy analysis: A quantitative exploration," Journal of Monetary Economics, vol. 54(5), pages 1480-1507, July.
- He, Zhiguo and Arvind Krishnamurthy, (2012) "A Macroeconomic Framework for Quantifying Systemic Risk", mimeo Chicago Booth School of Business
- Holmstrom, Bengt & Tirole, Jean, (1997). "Financial Intermediation, Loanable Funds, and the Real Sector," The Quarterly Journal of Economics, vol. 112(3).
- Kashyap, A., R. Rajan and J. Stein, 2002. "Banks as Liquidity Providers: An Explanation for the Co-Existence of Lending and Deposit-Taking." Journal of Finance, 57, 33-73.
- Meh, C. and K. Moran (2010). `The role of bank capital in the propagation of shocks', Bank of Canada Working Paper Series No. 2008-36
- Shleifer, Andrei & Vishny, Robert W., (2010). "Unstable banking," Journal of Financial Economics, vol. 97(3), pages 306-318, September.
- Stein, Jeremy 1998. "An Adverse-Selection Model of Bank Asset and Liability Management with Implications for the Transmission of Monetary Policy," RAND Journal of Economics, vol. 29(3)

7) Supply of Liquidity: The Availability of Liquid Stores of Value and Aggregate Investment

a. Introduction: Role of stores of value (government debt, private financial securities, commodities, bubbles,...) in alleviating financing constraints and supporting investment

b. Models: Woodford (1990), Holmstrom and Tirole (1998), Saint-Paul (2005), Farhi and Tirole (2011), Kiyotaki and Moore (2012)

- Papers: **(this list is preliminary, it will be updated before the course starts with the most recent literature)**
  - Bolton, Patrick & Tano Santos & Jose A. Scheinkman, 2011. "Outside and Inside Liquidity," The Quarterly Journal of Economics, vol. 126(1).
  - Caballero, Ricardo J. & Emmanuel Farhi & Pierre-Olivier Gourinchas, 2008. "An Equilibrium Model of "Global Imbalances" and Low Interest Rates," American Economic Review, American Economic Association, vol. 98(1), pages 358-93, March.

- Caballero, Ricardo J. 2006. "On the Macroeconomics of Asset Shortages," NBER Working Papers 12753, National Bureau of Economic Research, Inc.
- Farhi, Emmanuel & Jean Tirole, 2011. "Bubbly Liquidity," NBER Working Papers 16750
- Holmstrom, Bengt, and Jean Tirole. 1998. "Private and Public Supply of Liquidity." Journal of Political Economy, 106(1): 1–40.
- Saint-Paul, Gilles 2005. "Fiscal Policy and Economic Growth: the Role of Financial Intermediation," Review of International Economics, Wiley Blackwell, vol. 13(3), pages 612-629, 08.
- Tirole, Jean 2008. "Liquidity shortages: theoretical underpinnings," Financial Stability Review, Banque de France, issue 11, pages 53-63, February.
- Tirole, Jean 2011. "Illiquidity and All Its Friends," Journal of Economic Literature, American Economic Association, vol. 49(2), pages 287-325, June.
- Woodford, Michael, 1990. "Public Debt as Private Liquidity," American Economic Review, vol. 80(2), pages 382-88, May.

8) Provision of Liquidity by Financial Intermediaries

f. Introduction

g. Provision of liquidity to corporations through lines of credit

h. The provision of lines of credit as a source of liquidity risk for banks

- Papers: **(this list is preliminary, it will be updated before the course starts with the most recent literature)**

- Acharya, VV., H. Almeida, F. Ippolito and A. Perez (2013). "Credit Lines as Monitored Liquidity Insurance: Theory and Evidence". Forthcoming, *Journal of Financial Economics*
- Acharya, VV., H. Almeida, F. Ippolito and A. Perez (2013). "Bank Lines of Credit as Contingent Liquidity: A Study of Covenant Violations and their Implications". Working Paper, UPF
- Diamond, D.W., Rajan, R.G., 2001. Liquidity risk, liquidity creation, and financial fragility: A theory of banking. Journal of Political Economy 109, 287-327.
- Diamond, Douglas W. & Raghuram G. Rajan, 2005. "Liquidity Shortages and Banking Crises," Journal of Finance, American Finance Association, vol. 60(2), pages 615-647, 04
- Diamond, Douglas W. & Raghuram G. Rajan, 2011. "Fear of Fire Sales, Illiquidity Seeking, and Credit Freezes," The Quarterly Journal of Economics, Oxford University Press, vol. 126(2), pages 557-591.
- Gatev, E. and PE Strahan, (2006) "Banks' advantage in hedging liquidity risk: Theory and evidence from the commercial paper market". The Journal of Finance 61 (2), 867-892
- Ivashina, V., and D. Scharfstein. "Bank Lending During the Financial Crisis of 2008." Journal of Financial Economics, 97-3 (2010), 319-338.
- Kashyap, A., R. Rajan and J. Stein, 2002. "Banks as Liquidity Providers: An Explanation for the Co-Existence of Lending and Deposit-Taking." Journal of Finance, 57, 33-73.