Research Proposal: "THE SOCIETAL VALUE TO FORECLOSURES"

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The ability to foreclose on a house is a fundamental feature of the mortgage contract. Recently, in the wake of the housing crisis in the United States, much has been said about the ex post costs of foreclosures and their externalities, (e.g., Campbell, Giglio and Pathak (2011), Mian, Sufi, and Trebbi (2011)). However, the empirical discussion has been scarce on the ex ante benefit of collateralization in home lending (Pence, 2006). We take up a very basic question: what is the ex ante value to society that financial institutions have the power to foreclose?

The theoretical answer to this question traces back at least to seminal work by Stiglitz and Weiss (1981) and Bester (1985). Without being able to use collateral in contracting, loan officers face a pool of borrowers, some risky and some not. The rate that loan officers must charge to accommodate the average risk in the pool of borrowers forces the low risk borrowers out of the market. Rationing and price increases occur. Collateral serves the role of sorting individuals, allowing the good types to expose themselves to collateral risk by putting larger downpayments..

What would happen if collateral is suddenly removed from home lending? Financial institutions' recourse on home lending would be reduced to punishing individuals through credit blacklisting and non-home recourse mechanisms. Would this cause a cessation of lending altogether? Or would rates massively increase and maturities drastically shorten? Without some observations in history or an experiment, we can only speculate as to how supply and demand would react in this multi-dimensional contract.

In 2010, Greece halted foreclosures for most primary homes, allowing us to study the supply reaction of banks facing an indefinite suspension of all foreclosure activities. We use micro-level data on all home loan applications and home loan contracts from one of the large banks in Greece to provide direct evidence on the effect of the foreclosure suspension. One of the challenges in answering our question is that we need to properly incorporate shifts in demand and shifts in bank supply unrelated to the foreclosure moratorium.

We tackle this question using matching and difference-in-difference techniques and by estimating a consumption transmission via the car market through engel curve transformation. More specifically, we being by measuring the internal margin, i.e., for the same applicant, what was the price impact on rates charged. We appeal to the collateralized new car market for a counterfactual under the assumption that the time change in the percentage spread over euribor experience over our treatment period is an unbiased counterfactual for the how the house market spread would have evolved. Our preliminary results show that the effects were moderate in the internal margin as the effect of the moratorium was a 33 basis point increase in interest rate spreads for new home loans which represents a 14.13% percentage change relative to the pre-reform period.

Second, we examine the effect on the external margin: What is the decrease in home loan demand that was met by supply of mortgages. In this instance, we must be concerned with demand shifts as well as (bank capital) supply shifts not related to home loans. We show that we can use rejected mortgage application demand as a conservative benchmark for demand shocks. To capture the non-linear aspect of application acceptance and loan amounts given conditional on acceptance, we appeal to the intuition in the original Heckman model of estimating women's wages as a function of education and the selection of women staying at home. Again, we benchmark the difference over time against the collateralized car market.

Consistent though with the theoretical predictions, we find a large effect on the external margin. The foreclosure moratorium resulted in large rationing in credit. Our conservative estimates show a 30% decrease in approval rates due to the foreclosure freeze. A more aggressive technique estimates the demand for home loans via a transmission from the demand for car loans via Engel curve relationships. This more aggressive technique produces a rationing of two thirds of the demand.

We then will generalize the discussion to outside of Greece. In Greece and Europe in general strategic default is almost non-existent. Borrowers do not have large incentives to default on their mortgage since there is recourse, and they are personal liable for any difference between the value of the property and the loan amount (European Central Bank (2009)). Recourse is probably one of the main distinctions between US and European mortgage contracts (Jaffee (2011). Although the law in Greece altered the ability of the lender to foreclose on the property, it did not change recourse. We hypothesize that this might be one of the main reasons that probably explain why the banks did not cut 100% of the lending after the foreclosure halt. Given that the reform of the US mortgage market continues to be an important policy issue studying the response in the changes in the European mortgage markets might give us helpful insights .

Funds Requested

Total Funds Requested: $13,500

Analysis of Expenses:

Task Description	Hours Needed	Estimated Cost
Research assistance for analyzing mortgage and auto loans applications	200 hours (1 RA for 5 weeks and for 40 hours per week)	200*$25=$5,000
Research assistance on institutional information from Greek newspapers and the Government Gazette	120 hours (1 RA for 3 weeks and for 40 hours per week)	120*$25=$3,000
Research assistance on creating credit repayment histories and customer quality scores	160 hours (1 RA for 4 weeks and for 40 hours per week)	150*$25=$4,000
Travel for Paper Presentation		$1,500
	Total Estimated Cost	**$13,500**

ADAIR MORSE

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POSITIONS

Booth School of Business, University of Chicago
Associate Professor of Finance, July 2012 -
Assistant Professor of Finance, 2007- July 2012

University of California at Berkeley, Haas School of Business
Visiting Assistant Professor of Finance, July 2012 -

OTHER AFFILIATIONS
Faculty Research Fellow, National Bureau of Economic Research, 2012 – present
Small and Medium Enterprise Affiliate, Innovations for Poverty Action (IPA), 2012 – present
Member of Working Group on Behavioral Economics and Consumer Finance, Alfred P. Sloan Foundation and the Russell Sage Foundation, 2012 – present

EDUCATION

Ph.D., Finance, Ross School of Business, University of Michigan, August 2007
M.S., Statistics, Purdue University, May 2001
M.S., Agricultural Economics, Purdue University, December 2002
B.A., Colgate University, May 1990

RESEARCH INTERESTS

Household Finance, Entrepreneurship, Corruption & Governance, Asset Management, Development

TEACHING

Global Entrepreneurial Finance, Haas School, University of California at Berkeley, 2013
Global Entrepreneurial Finance, Booth School, University of Chicago, 2012
Entrepreneurial Finance and Private Equity, Booth School, University of Chicago, 2008-2011
Corporate Financial Analysis (undergraduate), University of Michigan, 2003
Macroeconomics (undergraduate), Purdue University, 1999 (awarded teaching prize)

PUBLICATIONS and FORTHCOMINGS

"**Information Disclosure, Cognitive Biases and Payday Borrowers**" (with Marianne Bertrand)
Journal of Finance, 2011, Vol. 66 (6), p. 1865-1893.
Lead Article.
Brattle Prize (first prize) winner for best paper in corporate finance in the *Journal of Finance* for 2012.

"Payday Lenders: Heroes or Villains?"
Journal of Financial Economics, 2011, Vol 102 (1), p.28-44.

"Are Incentive Contracts Rigged by Powerful CEOs?" (with Vikram Nanda and Amit Seru)
Journal of Finance, 2011, Vol. 66 (5), p. 1779–1821.

"Who Blows the Whistle on Corporate Fraud?" (with Alexander Dyck and Luigi Zingales)
Journal of Finance, 2010, Vol. 65(6), p. 2213-2253
Main result on bounty payments for whistleblowing implemented in Dodd-Frank financial reform law.

“Are Elite Universities Losing Their Competitive Edge?” (with E. Han Kim and Luigi Zingales).
Journal of Financial Economics, 2009, Vol. 93(3), p. 353-381.
Lead Article.
Winner of 2nd Prize, 2009 Journal of Financial Economics *Jensen Prize for Corporate Finance and Organizations*

“Indebted Households and Tax Rebates” (with Marianne Bertrand)
American Economic Review, Papers and Proceedings, May 2009, Vol. 99(2), p. 418-423

“Comment on `Financially Fragile Households’ by A. Lusardi & P. Tufano”
Brookings Papers on Economic Activity, Spring 2011

“What Has Mattered To Economics Since 1970?” (with E. Han Kim and Luigi Zingales)
Journal of Economic Perspectives, 2006, Vol. 20(4), p. 189-202.

“Patriotism in Your Portfolio” (with Sophie Shive).
Journal of Financial Markets, 2010, Volume 14 (2), p. 411-440

WORKING PAPERS with Abstracts

“**Activist Investors and Performance in Private Equity Funds**”
Recent anecdotal evidence suggests that large, activist investors (in particular, large pension funds and sovereign wealth funds) influence the decisions private equity (PE) fund managers make. I identify deal and exit linkages between Sovereign Wealth Funds (SWFs) direct holdings and the portfolio companies of PE funds in which the SWF passively invest via PE funds. Linkages occur in over 6 percent of portfolio companies, and well over half of PE funds. PE funds with deal linkages perform 2.3 percentage points worse in IRR, and those with exit linkages perform 5.8 percentage points better. These results are robust across return selection tests and using varying benchmarks and placebo tests. I discuss the magnitude of the results to individual portfolio companies and offer portfolio company exit distribution tests to understand the mechanism. SWFs seem to offer floors to bail out poorly-performing companies, but hurt other investors in influence portfolio company choices (not in the same PE funds).

“Tax Evasion across Industries: Soft Credit Evidence from Greece” (with Margarita Tsoutsoura)
Income tax evasion in developed economies does not preclude individuals from the benefits of formal finance and credit products. Banks adapt credit scoring models, adjusting households' reported income to reflect their perception of true income. We use detailed individual credit product application data in Greece to quantify the extent of tax evasion country-wide. Our estimates reveal 20 to 26 billion euros of unreported taxable income. The foregone revenues for the tax authorities amount to 30% to 41% of the deficit. We then document the incidence of tax evasion by occupation and posit four theories making sense of the industry distribution. We find no evidence for labor supply stories of optimal tax evasion supporting apprenticeship or of enforcement differences geographically. We find support for the industry distribution reflecting paper trail mandates and for political economy stories of politicians protecting their own industry association. We comment on the implication to banks’ providing credit in light of De Soto entitlement arguments.

“Trickle-Down Consumption” (with Marianne Bertrand)
While incomes in the lower and middle portions of the US income distribution have only been rising slowly over the last three decades, incomes in the upper part of the income distribution have risen sharply. At the same time, the average saving rate in the US has been in constant decline since the early 1980s. We ask whether these two trends are related. In particular, we ask whether rising consumption among (increasingly) richer households induces the relatively worse off to spend a higher share of their disposable income. We find evidence consistent with this, suggesting that up to a quarter of the decline in the savings rate over the last three decades could be attributed to rising top income levels. We argue

against a permanent income explanation for this finding; we also fail to find evidence that this higher consumption level out of disposable income is driven by upwardly-biased biased expectations about future income. Consistent with our core finding of higher expenditure to income ratios among non-rich households exposed to higher top income levels, we find that households exposed to more spending by the rich self-report more financial duress. Likewise, in a state-year panel, higher top income levels in a state are predictive of a higher number of personal bankruptcy filings in a state. Finally, we investigate the political economy implications of our findings. Looking at both federal and state legislations, we find evidence that, holding ideology constant, legislators that represent areas where income inequality is higher are more likely to vote in favor of policies that increase credit availability or decrease the cost of credit.

"Sovereign Wealth Fund Portfolios?" (with Alexander Dyck)
Using a novel, hand-collected dataset of Sovereign Wealth Fund (SWF) investments in public equities, private firms, and real estate, we establish what SWF portfolios look like. SWF allocations are balanced across risky asset classes, very home-region biased, and very biased toward certain industries, in particular, toward finance (owning 4.8% of world equity) and transportation, energy and telecommunication. SWFs invest actively (with control rights) in both public and private sectors, but mainly in these industries in their home regions. We use these allocations to understand better the objectives that drive SWF investment decisions. We find evidence for financial portfolio investor benchmarking and for hedging of income covariance risk. We introduce and test an industrial planning hypothesis as an alternative objective and find this has considerable explanatory power. We find that both measures to capture financial portfolio and industrial planning objectives together explain 14.4% of SWF portfolio variation. Of this, industrial planning accounts for 45%. There is significant variation in the power of industrial planning objectives across SWFs revealing important heterogeneity in this investor class. Industrial planning helps to explain active ownership, predicting higher ownership stakes.

"How Pervasive is Corporate Fraud?" (with Alexander Dyck and Luigi Zingales)
After building a dataset of all corporate frauds in large corporations that impact shareholder value and are caught, we infer the unconditional probability that a fraud is committed, whether or not it is subsequently caught. Our identification comes from observing situations in which the incentives for fraud detection are high. Using the quasi natural experiment of the forced turnover of auditors following Arthur Andersen's demise we find between 4.7 and 9.7% of firms initiate a fraud. Using a broader set of circumstances that enhance activism by other fraud detectors, we arrive at an alternative estimate of 7%. By using industry multiples, we estimate the median cost of a fraud is 40.7 percent of the pre-fraud enterprise value of the company. Hence, taking into account the overall incidence of fraud, we estimate that in publicly-traded companies with more than 750M in assets, corporate fraud costs 2.85 percent of enterprise value.

REASEARCH IN PROGRESS

"Asset Managers" (with Joseph Gerakos and Juhani Linnainmaa).

"**Sovereigns as Asset Managers: Incentives, Asset Allocations and Performance**" (with Alexander Dyck and Lukasz Pomorski)

NON-FINANCE PUBLICATIONS

"Tariff Rate Quota Implementation and Administration by Developing Countries," (joint with Philip Abbott). *Agricultural and Resource Economics Review*, Volume 29 (1), April 2000. Reprinted in *Agriculture and the New Trade Agenda*, edited by Melinda Ingco and L. Alan Winters, Cambridge University Press, 2004.

2001 World Bank Report: *Rural Development Strategy in the Middle East & North Africa*. (Contributor)

PRESENTATIONS OF WORK

2007: FDIC, Conference on Empirical Legal Studies (NYU), Gerzensee/CEPR European Summer Symposium in Financial Markets, London School of Economics Finance Seminar, Federal Reserve Bank of Cleveland Conference on Predatory and Payday Lending, Federal Reserve Bank of NY

2008: AEA, NYU Law & Economics Colloquium, University of Texas Law School, Federal Reserve Bank of Chicago, University of Virginia Olin Conference: Law and Economics of Consumer Credit, Stockholm School of Economics, Norwegian School of Management, Copenhagen Business School, Payment System and Consumer Credit Market Innovations Conference: European University Institute

2009: AEA, NBER Spring Behavioral, University of Illinois at Chicago, Milton Friedman Center Conference on Finance and Development, Russell 20/20 Annual Meeting on Asset Management, NBER Summer Corporate Finance; European Finance Association Annual Meeting, FDIC Annual Research Conference, Federal Reserve Bank of Philadelphia Conference on Recent Developments in Consumer Credit and Payments; NBER Household Meeting; Federal Reserve Board; Washington University/Olin Conference on Corporate Finance; World Bank/Bureau of International Settlements/European Central Bank Conference on Asset Management for Central Bankers; Loyola University; Columbia University

2010: AEA, Federal Trade Commission, Microfinance USA, CEPR/Gerzensee Summer Conference in Asset Pricing, NBER Asset Pricing, Columbia University Conference on Sovereign Wealth Funds and Other Long-Term Investors, Microfinance Impact and Innovation Conference, Federal Reserve Board Forum on Consumer Research & Testing, University of Illinois Symposium on Auditing Research, Purdue University

2011: AEA, University of Michigan, NBER Entrepreneurship, NBER Economics of Household Savings, EFA, NBER Public Economics, Yale University, Emory University, Brookings

2012: Econometric Society, AEA, University of California at Berkeley-Haas, Oxford University, Northwestern-Kellogg, NBER Summer Corporate Finance, London Business School Private Equity Conference, NBER Summer Monetary Economics, WorldBank/Ideas42 Conference on Behavioral Consumer Finance, EFA, Copenhagen Business School, NBER Household Finance Fall, UC Berkeley – Public Finance , Depaul/Chicago Federal Reserve Workshop, UC Davis Household Finance Conference, Georgia Tech, MIT Sloan, Berkeley Haas Accounting, Berkeley Public Finance, World Bank/BIS Conference on Sovereign Investments

PEER REVIEW & SERVICE

DISCUSSIONS

2007: National Poverty Center Conference on Access, Assets and Poverty (Georgetown). Discussed: R. Mann "Surveying the Risks of Credit Card Debt"

2008: AFA. Discussed: J. M. Karpoff , D. S. Lee , G.S. Martin – "The Consequences to Managers for Financial Misrepresentation"

University of British Columbia Winter Conference. Discussed: R. Iyer and M. Puri – "Who Runs? The Importance of Relationships in Bank Panics"

UNC-Duke Corporate Finance Conference. Discussed: E. Ravina – "Love and Loans"

2009: AEA. Discussed: A. Lusardi and P. Tufano – "Debt Literacy, Financial Experiences and Overindebtedness"

CEPR/Gerzensee Summer Conference in Asset Pricing. Discussed: S. Agarwal, G. Amromin, I. Ben-David, S. Chomsisengphet, and D. Evanoff – "Do Financial Counseling Mandates Improve Mortgage Choice and Performance? Evidence from a Natural Experiment"

2010: NBER Economic Fluctuations and Growth. Discussed: Parker, Souleles, Johnson and McClelland – "Consumer Spending and the Economic Stimulus Payments of 2008"

2011: AEA: Discussed E. Cohen-Cole – "Risk and Default: Understanding Macro Drivers of Bankruptcy"

AFA: Discussed: S. Jayaraman and T. Milbourn – "Financial Misreporting and Executive Compensation: The Qui Tam Statute"

Brookings: Discussed: A. Lusardi & P. Tufano – "Financially Fragile Households"

2012: NBER Household Summer Institute: Discussed: N. Bhutta, P. Skiba, and J. Tobacman – "How Do Payday Loans Affect Creditworthiness? Evidence from Matched Payday Applicant-Credit Bureau Data"

JOURNAL REFEREE

Referee for: American Economic Review, AER: Applied Economics, American Law and Economics Review, Critical Finance Review, Journal of Empirical Finance, Journal of Empirical Legal Studies, Journal of European Economic Association, Journal of Finance, Journal of Financial Economics, Journal of Financial Intermediation, Journal of Human Capital, Journal of Law & Economics, Journal of Legal Studies, Journal of Political Economy, Journal of Public Economics, Oxford Economic Papers, Quarterly Journal of Economics, Review of Economics and Statistics, Review of Finance, Review of Financial Studies

PROGRAM COMMITTEES

EFA, 2011, 2012
AFA, 2012
Corporate Finance Conference at Olin Business School (Washington University), 2010, 2011, 2012
Western Finance Association, 2010, 2011, 2012, 2013

RESEARCH GRANTS

Goult Faculty Research Endowment, 2012
Fama-Miller Center, 2011, 2012
Polsky Center 2009, 2011, 2012
Hultquist Foundation, 2009, 2011
Kauffman Foundation, 2009
National Poverty Center, 2008
Templeton Foundation, 2008
Initiative on Global Markets, 2007-2010, 2012

PROFESSIONAL EXPERIENCE

Volunteer, Development Finance Projects for Winrock International, Haiti and Guinea; 2001
Assistant Controller (subcontracted), National Employer Solutions, Inc., Atlanta, GA; 1997
District Accounting Manager/Auditor, Browning-Ferris Industries (BFI), Fort Lauderdale, FL; 1995-1996
Founder and Partner, Bascule Leather International, Atlanta & Poland; 1992-1995
English Teacher, State School System, Krakow, Poland; 1991
Intern, U.S. Department of Commerce, Washington, DC; 1987

HONORS

James S. Kemper Foundation Faculty Scholar, 2010-2011
William Ladany Faculty Scholar, 2008-2009
Olin Law and Economics Fellow, 2003-2004
Mitsui Life Financial Research Center Fellow, 2001 & 2003
Ludwig-Kruhe Graduate Fellowship, 2000
National Science Foundation, Summer Institute in Korea Fellow, 1999
Purdue University Andrews Fellowship, 1997-1999
Gamma Sigma Delta Honor Society in Agriculture, 1997
Omicron Delta Epsilon Honor Society in Economics, 1990
Magna Cum Laude, 1990

Phi Beta Kappa, 1990

MARGARITA TSOUTSOURA

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Chicago, Illinois 60637
tsoutsoura@chicagobooth.edu

ACADEMIC APPOINTMENT

Assistant Professor of Finance — July 2010 - Present
University of Chicago, Booth School of Business

EDUCATION

Ph.D. in Finance and Economics (with Distinction) — 2010
Columbia University, Graduate School of Business

M.Sc. in Financial Engineering — 2004
Haas School of Business, University of California Berkeley

B.Sc. in Economics — 2001
University of Piraeus, Greece. *Summa Cum Laude*

RESEARCH INTERESTS

Empirical Corporate Finance, Entrepreneurial Finance, Family Firms, Financial Intermediation

RESEARCH

Working Papers

- "The Effect of Succession Taxes on Family Firm Investment: Evidence from a Natural Experiment", Revise and Resubmit
- “Tax Evasion across Industries: Soft Credit Evidence from Greece” with Nikolaos Artavanis and Adair Morse (December 2011)
- “The Ex-Ante Value of Foreclosures” with Adair Morse (January 2013)

TEACHING EXPERIENCE:

- Corporation Finance — Winter 2011, Spring 2012, Spring 2013
- Options and Futures (Columbia University) — Spring 2008

PRESENTATIONS OF WORK

- 2013:

AEA 2013

- 2012:

Northwestern University, NBER Household Finance, University of Illinois, Urbana-Champaign, University of British Columbia, NBER Corporate Finance, Athens University of Economics and Business, 8th Csef-Igier Symposium, CEPR Gerzensee Summer Symposium, IDC Summer Finance Conference

- 2011:

Yale School of Management, NOVA School of Business and Economics and Católica Lisbon School of Business and Economics, INSEAD, NBER Public Economics, Political Economy in the Chicago Area conference, Deutsche Bank/Chicago Booth Symposium

- 2010:

Stockholm School of Economics, Duke University (Fuqua), CEPR European Summer Symposium in Financial Markets, Boston College (Carroll), Cornell University (Johnson), Harvard Business School, INSEAD, MIT (Sloan), Northwestern University (Kellogg), NYU (Stern), Rice University (Jones), University of Florida (Warrington), University of North Carolina (Kenan-Flagler), University of Pennsylvania (Wharton), University of Virginia (Darden), Washington University in St. Louis (Olin), University of Piraeus, WFA Victoria

- 2009:

Columbia University (GSB), Thammasat International Conference

HONORS AND AWARDS:

• Polsky Center for Entrepreneurship and Goult Faculty Endowment Grant	2012
• Fama-Miller Grant	2011-2012
• PCL Faculty Scholar	2011-2013
• IGM Grant	2011-2013
• Trefftzs Award for the Best Student Paper, Western Finance Association	2010
• SAC Capital PhD Candidate Award for Outstanding Research (WFA)	2010
• Kauffman Foundation Dissertation Fellowship	2009
• Kauffman Foundation Sponsored Seat to NORC data enclave	2008
• American Finance Association (AFA), Doctoral Travel Award	2008
• Financial Management Association (FMA), Doctoral Travel Award	2008
• A.G. Leventis Foundation Fellowship	2007-2009
• Gerondelis Foundation Fellowship	2007
• Center for International Business Education and Research (CIBER) Grant	2006
• University of Notre Dame, Conference Scholarship	2006
• Columbia Business School Doctoral Fellowship	2004-2010
• Fulbright Graduate Fellowship	2003
• Alexander S. Onassis Foundation Scholarship	2003-2008
• PricewaterhouseCoopers Scholarship	2003
• Petrola Hellas (Current Hellenic Petroleum) Scholarship	2003
• Fellow of the Greek National Scholarships Foundation	1997-2001

PEER REVIEW & SERVICE

Discussions

- 2011
  WFA, Santa Fe. Discussed: V. Nagar, S. Bharath and S. Jayaraman - “Exit as Governance: An Empirical Analysis”
  European Summer Symposium in Financial Markets. Discussed: X. Giroud, H. Mueller and A. Stomper - “Snow and Leverage”
- 2010
  NBER Entrepreneurship. Discussed: L. Branstetter, F. Lima, L. Taylor, and A. Venâncio - “Do Entry Regulations Deter Entrepreneurship and Job Creation? Evidence from Recent Reforms in Portugal”

Committees

Western Finance Association (2013, 2012 & 2011)
10th Rothschild Caesarea Center Conference

Refereeing

Quarterly Journal of Economics, Journal of Finance, Journal of Financial Economics, Journal of Economic Theory, Review of Finance, Journal of Accounting Research, Small Business Economics: An Entrepreneurship Journal

Conferences

Co-organizer of Chicago Booth/Deutsche Bank Symposium, 2011 & 2012

NON-ACADEMIC WORK EXPERIENCE

- Petrola Hellas S.A. (Current Hellenic Petroleum S.A.) 2002-2003
- Procter & Gamble Hellas 2001-2002