Research proposal: How Sensitive is Entrepreneurial Investment to the Cost of Equity? Evidence from a UK Tax Relief

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What is the marginal return of investment in entrepreneurial firms? Conventional wisdom amongst academics and policymakers alike seems to coincide in that the potential returns are high, but financing frictions prevent capital from flowing towards profitable projects. This is the rationale behind a myriad of policies aimed at lowering the cost of financing or increasing the availability of funds to entrepreneurial firms around the world. Aside from field experiment evidence from micro-entrepreneurs in developing countries, however, we still know surprisingly little about what entrepreneurial marginal returns are.[1]

In this research project we attempt to take a further step in filling this gap by answering the question in the title: how sensitive is entrepreneurial investment to the expected return to equity? In a well functioning capital market, funds flow from investors to entrepreneurs until investors' expected return and the projects' marginal return on investment are equalized. If one could exogenously manipulate the expected return by investors, this would trace out the slope of the investment return curve for the firm.

Take for example a firm that has exhausted most of its investment opportunities, such that the marginal return of investing an additional dollar in it would be very low. Put differently, the marginal return of investment for this firm drops rapidly with invested capital. This implies that a change in the expected return by investors will bring about very small changes in investment by this firm in equilibrium. Consider the opposite case: a firm that can expand its investment substantially without suffering a severe decline in the marginal return on investment. The same change in the expected return by investors above will bring about a large change in the equilibrium investment by this firm. In other words, the elasticity of a firm's investment to an exogenous change in the expected return by investors is informative about how profitable the marginal investment of the firm is.

Our research proposal consists on estimating this elasticity by exploiting a natural experiment induced by two tax relief programs in the U.K. that changed the expected return by equity investors in small entrepreneurial firms. The Enterprise Investment Scheme (EIS) and the Seed Enterprise Investment Scheme (SEIS) are tax relief programs for UK shareholders. The programs' main objective is to help smaller, higher-risk, trading companies raise finance by offering a range of tax reliefs to investors who purchase new full-risk ordinary shares in those companies. Since 1994, over 21,000 companies have benefited from the schemes and over £10.7 billion funds have been raised in closed private equity placements, and more recently, through the growing equity crowdfunding platforms in the UK (e.g., SEEDRs and Crowdcube).

Investors in EIS- and SEIS-qualifying companies, benefit from income tax relief of 30 and 50 per cent, respectively. For example, an investment of £10,000 in a company that is eligible for EIS (SEIS) would allow the investor to deduct £3,000 (£5,000) off the income tax bill in the year of the investment. In addition investors pay no capital gains tax, no inheritance

[1] See for example De Mel, McKenzie and Woodruff (Quarterly Journal of Economics, 2008

tax, and can offset losses from their investment.[23] Currently, companies with gross assets below £15 million (£200 thousand) and less than 250 (50) employees qualify for the EIS (SEIS).[4] However, between 2006 and 2012, companies with more than £7 in gross assets where temporarily excluded from the EIS, and while EIS has been around since 1994, it was only until 2012 that SEIS was launched.

We use the change in qualifying asset threshold for EIS and the launch of the SEIS program as a source of variation in investors expected return on equity. This approach allows us to evaluate the causal effect of the change in expected return by investors on investment in high-risk firms while holding constant investment opportunities. This is the key contribution of our approach relative to research based on cross-sectional comparisons, e.g. between private equity and non-private equity backed companies (e.g., Cowling et al., 2008).

Although our primary interest is to evaluate the impact on entrepreneurial investment, innovation, and output, the research design also allows evaluating the effect on capital structure. A subsidy to equity investment reduces the tax advantage of using debt, and thus provides useful variation to identify the effect of taxes on capital structure. The novelty of our setting is that we focus on private companies, in contrast to most of the related empirical research based on public firms (see for example the evidence in Panier, Pérez-González, and Villanueva for Belgium).

The estimated elasticity parameter will also allow us to inform policy design. While several countries seek to sponsor entrepreneurship using supply-side, "start-up nation" oriented programs (e.g., publicly funded accelerators), the UK is one of the few countries to implement demand-side, "investor nation" oriented policies. Our research will provide the first direct evaluation of whether such tax incentives have been successful in sponsoring private equity investment in entrepreneurial ventures

We have purchased FAME data that has information on accounting statements (e.g., balance sheet, income statement, etc.) for private and public companies in UK to construct our sample. Preliminary results suggest the incentives had only a very minor impact on equity issuance, investment and innovation for early-stage firms.

To explore potential explanations behind the limited impact of this policy, we have applied—and been granted permission—to use the HMRC Datalab records of companies using these tax incentives in the UK. We are applying for grant in the area of Entrepreneurship. We are seeking funds to employ an RA to visit the HMRC Datalab, where the data can be accessed. We have also purchased information on ownership structure for the firms in the sample. We are now seeking funds to clean and organize the information, especially the ownership files. This information will allow us to trace ownership changes at a very detailed level, which due to well-known data limitations, is of novelty for the entrepreneurship literature. We plan to send our work to multiple entrepreneurship-related conferences. We are thus also seeking funds to finance associated travel.

[2] The tax reliefs available through SEIS were so generous that they added a potential 100.5 per cent of the investment in a situation where that investment was a complete failure. In other words, investors could literally not lose (provided they had paid enough tax to offset the SEIS investment against).

[3] There is an extra relief for SEIS investors called capital gains reinvestment relief. This relief is useful to investors who have recently paid capital gains tax on other investments. These investors can reclaim up to 50 per cent of the tax paid if the money is reinvested into SEIS.

[4] Businesses must also be less than two years old to qualify for the SEIS.

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Education

Ph. D. Economics and Finance , Columbia University GSB	2013
M. Phil., Columbia University GSB	2009
M.Sc. in Economics, Universidad de los Andes	2006
B.A., Mathematics, Universidad de los Andes	2006
B.A., Cum Laude, Economics, Universidad de los Andes	2004

Research Experience

Assistant Professor in Finance, London School of Economics	2013-present
Research Assistant Columbia University GSB	2009-2012
Specialized Professional, Banco de la Republica Colombia	2006-2007
Research Assistant, Department of Economics, Universidad de los Andes	2005-2006
Junior Researcher, Banco de la Republica Colombia	2003-2004
Research Assistant, Department of Economics, Universidad de los Andes	2000-2003

Fields

Empirical Corporate Finance, Entrepreneurial Finance, Private Equity and Innovation

Teaching

Corporate Finance	2013-present

Conferences and Seminar Presentations

University of Michigan-Ross Business School, University Pompeu Fabra, Universidad de los Andes, Planned: University of Exeter, Copenhagen Business School, LBS Coller Institute Conference, Stockholm School of Economics,	2016
University of Illinois, University of Lugano, University of California in Los Angeles, Cavalcade Finance Conference, FIRS, Adam Smith Conference, Duke/UNC Conference,	2015

Emory Accelerators Colloquium, European Summer Symposium in Financial Markets, Global Entrepreneurship Week, WFA, Entrepreneurial Finance and Innovation around the World Conference Program, AIEA-NBER conference on innovation and entrepreneurship, Berkeley Crowdfunding Conference	
NBER entrepreneurship, Fifth Entrepreneurial Finance and Innovation Conference (Brandeis), Deloitte Institute of Innovation and Entrepreneurship Conference, Summer Conference University of Washington, EFA, NBER Innovation, Gerzensee, LBS Conference Private Equity, Banco de la Republica Colombia, Oxford Said Business School, Internal seminar LSE, Frontiers of Finance Conference-Warwick University	2014
Copenhagen Business School, Duke University, University of North Carolina at Chapel Hill, University of Hawaii at Manoa, Harvard Business School, Wharton, London School of Economics, London Business School, Foster Business School, Federal Reserve Board, Universidad de Chile	2013
9th Annual Corporate Finance Conference Washington University in St. Louis Ph. D. Poster Session, New York FED/NYU Stern Conference on the Role of Private Equity in the U.S Economy, 5th Annual Searle Center Conference on Innovation and Entrepreneurship. USPTO-Ewing Marion Kauffman Foundation-Northwestern University, Columbia GSB Finance, Universidad de los Andes Business, Universidad de los Andes Economics, Universidad Católica de Chile Business, Universidad Católica de Chile Economics, Columbia Ph D. Finance	2012

Publications

"On the Benefits and Costs of Job Reallocation in Colombia", Revista Desarrollo y Sociedad No.57, Centro de Estudios sobre Desarrollo Económico (CEDE).
This article measures gross creation, destruction, and reallocation of jobs inside the Colombian Manufacturing Industry between 1982 and 1998. We characterize job reallocation as a source of adjustment both in productivity dynamics and on workers welfare. Consistent with previous research, we find evidence of productivity enhancing factor reallocation. However, we also find evidence of significant welfare losses for displaced workers. Our most novel results are the negative effect of displacement, sector change and unemployment duration on post-job-change wages. The event of sector change seems to spur considerable sector specific skills losses which offset any potential positive effects of sector change, such as the purge of the displacement stigma. In brief, our results show that on balance, depreciation and stigma effects dominate productive search outcomes in the determination of post-unemployment wages. We conclude that at least a fraction of job reallocation is socially inefficient.

2006

Research Papers

Venture Capital and the Internalization of Innovation Spillovers

Venture Capital (VC) investors distinguish themselves from other types of early stage financiers in their emphasis on building connections among companies in their investment portfolios. I show that these connections facilitate the internalization of innovation spillovers inside VC portfolios. This internalization is partially explained by reallocation of inventors and executives across portfolio companies, and is present even in instances where the timing of VC financing is arguably exogenously determined. I am currently revising the paper to take into account referee feedback.

CEO Contract Horizon and Innovation (Joint with Moqi Xu)

This paper documents a striking new fact about U.S. corporate innovation: innovative activity in public firms follows a cyclical pattern, with the length of each cycle matching the duration of the Chief Executive Officer (CEO)'s employment contract. Whichever way the data are cut, CEOs with more years remaining in their contract are seen to pursue more influential, broad and varied innovations. Different interpretations are offered for this result, but the most plausible interpretation appears to be that incentives to innovate decrease as CEO contracts reach expiration. We are currently revising the paper to take into account referee feedback.

Information Sharing and Credit Outcomes: Evidence from a Natural Experiment (Joint with Daniel Osorio)

We explore the effect of information sharing among lenders on credit outcomes in the unsecured consumer credit market. To advance in isolating the causal effect, we exploit a natural experiment in Colombia made possibly by the "fresh-start" provision of Law 1266/2008, which erased from Private Credit Bureaus detailed information about past defaults that had been settled exogenously sufficiently long before the Law's enactment. Using a Differences-in-Differences approach, we find a significant decrease in debt issuance for clean borrowers who had not defaulted prior to the Law's enactment, relative to borrowers whose negative information was not removed by the provision. After the negative information removal, clean borrowers are also found to switch banks at a lower rate and to issue less debt with pre-existing lenders, most likely because outside banks can no longer distinguish them from past default borrowers whose records were cleaned by the provision, and because the information removal increases the informational hold-up of inside banks.

Business Accelerators and New-Venture Performance: Evidence from Start-Up Chile

Do business accelerators add value? If so, how? We investigate these questions by focusing on Start-Up Chile, an accelerator sponsored by the Chilean government. Using a regression discontinuity design, we show the mentoring services of accelerators can significantly increase new-venture performance by improving the managerial capital of participants. We speculate about the existence of two performance-enhancing mechanisms: the increase in the start-up's social capital by enabling access to mentor networks, and the provision of an accountability structure in the form of board oversight. We find no support for the causal effect of basic services of cash and co-working space.

Professional Activities and Consultancies

Ad-hoc referee:

Journal of Finance, Review of Financial Studies, Review of Economic Studies, Review of Finance, American Economic Review, Management Science, Strategic Entrepreneurship Journal, Small Business Economics, Organization Science

Conference discussions:
Universidad Catolica de Chile conference (2013), Frontiers of Finance- Warwick (2014), SIFR conference (2014, could not accept) European Finance Association Annual Meeting (2014), FIRS (2015), Duke/UNC conference (2015), FMA (2015, could not accept), EFA (2015, could not accept), Entrepreneurial Finance and Innovation Conference at Brandeis University (2015, could not accept), AFA (2016, could not accept), 7th Annual Conference of the European Banking Center (2015, could not accept), Simposio de Expertos en Finanzas Universidad Javeriana in Colombia (2015, could not accept)

Case studies:
"El Caso de Start-up Chile: Programa de Atracción de Talento Para Fomentar el Emprendimiento" Banco de Desarrollo de América Latina, 2015

"Liquidity Adjusted Value-at-Risk in Colombia" with Daniel Osorio, Financial Stability Report, Central Bank of Colombia, March 2007

"A Liquidity-Risk Measurement, Monitoring and Regulation Proposal for Colombia" with Daniel Osorio, Financial Stability Report, Central Bank of Colombia, September

February 2016

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EDUCATION

Ph. D., Economics, Massachusetts Institute of Technology, Cambridge MA, U.SA., 2005.
M.B.A., Instituto de Estudios Superiores de Administración (IESA), Caracas, Venezuela. 1997.
B.S. Cum Laude, Mechanical Engineering, Universidad Simón Bolívar, Caracas, Venezuela. 1994.

ACADEMIC APPOINTMENTS

2011 –	Associate Professor with Tenure, London School of Economics and Social Sciences, London, U.K.
2011 – 2012	G. Winnick and M. Granoff Associate Professor of Business, Columbia University GSB, New York, U.S.A.
2009 – 2011	Associate Professor of Finance, Columbia University GSB, New York, U.S.A.
2005 – 2009	Assistant Professor of Finance, Columbia University GSB, New York, U.S.A.
1997 – 1999	Researcher/Lecturer, IESA, Public Policy Department, Caracas, Venezuela

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Affiliations

Bureau for Research and Economic Analysis of Development, Junior Affiliate
Centre for Economic Policy Research, Research Affiliate
Financial Markets Group Research Center – LSE, Research Affiliate
Innovations for Poverty Action, SME Initiative, Affiliate
International Growth Centre, LSE, Affiliate
National Bureau of Economic Research, Faculty Research Fellow (2011 - 2014)

Co-Editor

Journal of Law, Economics and Organization (2014 -)

Associate Editor

Journal of Finance (2012 -)
Journal of Financial Intermediation (2011 -)
North American Journal of Economics and Finance (2011 -)
Review of Corporate Finance Studies (2011 -)
Review of Economic Studies (2013 -)
Review of Finance (2011 -)

Ad Hoc Referee and Reviewer

American Economic Review; American Economic Journal: Applied Economics; Econometrica; Economic Journal, The; European Research Council; Finance Research Letters; International Journal of Central Banking; International Review of Finance; Journal of Applied Econometrics; Journal of Banking and Finance; Journal of

Development Economics; Journal of Economics and Management Strategy; Journal of Empirical Finance; Journal of Finance; Journal of Financial Intermediation; Journal of Financial Services Research; Journal of Institutional and Theoretical Economics; Journal of Money, Credit and Banking; Journal of the European Economic Association; Journal of Political Economy; Journal of Public Economics; Management Science; RAND Journal of Economics; Review of Economics and Statistics; Review of Finance; Review of Financial Studies; Science.

Committees and Organizer

Financial Intermediation Research Society (FIRS) Conference (2015)
Capri Conference on Bank performance, financial stability and the real economy (2015)
CEPR European Summer Symposium in Financial Markets, Corporate Finance Week (2014-2015)
CEPR European Summer Symposium in Financial Markets, Empirical Banking Focus Session (2012)
FMA Competitive Paper Awards Committee (2008)
New York Fed/NYU Stern Conference on Financial Intermediation Committee (2008, 2009, 2012, 2013)
Rothschild Caesarea Center Annual Academic Conference Committee (2012, 2014, 2015)
SFS Finance Cavalcade Committee (2011, 2013)
Western Finance Association Committee (2010, 2011)

ACADEMIC SEMINAR PRESENTATIONS

2005 Board of Governors of the Federal Reserve Bank, Carnegie Mellon Tepper, Columbia GSB, Maryland Smith, New York Federal Reserve Bank, Northwestern Kellogg, NYU Stern, Stanford GSB, Stockholm School of Economics, Stockholm University, Universitat Pompeu Fabra, UT Austin McCombs, Yale SOM.

2006 Boston University, University of Amsterdam, Tilburg University.

2007 Duke Fuqua School of Business, London Business School, London School of Economics – Economics Department, San Francisco Federal Reserve Bank, Stanford GSB, UC Berkeley Haas.

2008 Chicago GSB, Harvard/MIT Development Economics, Harvard/MIT Organizational Economics, Wharton, World Bank Research Group Financial Economics.

2009 Board of Governors of the Federal Reserve Bank, DePaul University/Chicago Federal Reserve Bank, New York Federal Reserve Bank, Northwestern Kellogg, San Francisco Federal Reserve Bank, Rochester Simon GSB, Yale SOM.

2010 Binghampton SOM, Federal Reserve Bank of Philadelphia, London School of Economics – Finance Department, Michigan Ross School of Business, Minnesota University – Carlson, Princeton University, New York University – Stern.

2011 Central Bank of Norway (Norges Bank), London School of Economics – Development, Norwegian Business School, Norwegian School of Economics and Business

Administration, Stockholm School of Economics, UCLA – Anderson, Universidad de Chile – Economics Department, USC – Marshall, U.T. Austin – McCombs, Vienna University of Economics and Business.

2012 Duisenberg School of Finance/Tinbergen Institute, HEC School of Management, Imperial College Business School, INSEAD, La Caixa Research Department, Nottingham University Business School, European Bank for Reconstruction and Development, Nova School of Business and Economics, Queen Mary School of Economics and Finance, Swiss Finance Institute – USI, University of London – Royal Holloway College, University of Piraeus, Universitat Pompeu Fabra, University of Toulouse.

2013 Arizona State University, Bank of Italy, Boston University, Erasmus University, Federal Reserve Bank of New York, Helsinki Center of Economic Research, Helsinki Finance Seminar, Leuven University, New York University – Stern, University of Chicago – Booth, University of Illinois Urbana-Champaign, University of Lausanne, University of Oxford – SAID, University of Namur, University of Rotterdam, University of Tilburg.

2014 Bank of Canada, Cambridge University - Judge, Carlos III Madrid, CEMFI, ESMT – Berlin, Massachusetts Institute of Technology – Sloan, Northwestern University – Kellogg, Stanford University GSB, University of Alberta, UC Berkeley Haas, University of Zurich.

2015 Bank of France, Bocconi University, Chinese University of Hong Kong, Dartmouth University (Tuck), Federal Reserve Bank of New York, Hong Kong University, Hong Kong University of Science and Technology, Pompeu Fabra University, University of British Columbia, University of Melbourne, University of New South Wales, University of Sydney, University of Texas - Dallas.

2016 (Scheduled) Copenhagen Business School, Essex University, European Central Bank, New York Federal Reserve Board, University of Amsterdam.

CONFERENCES AND WORKSHOPS

Bank of Italy Workshop on Multinational Banks (2013)
CEPR Development Economics Workshop (2008)
CEPR European Summer Symposium in Financial Markets, Gerzensee (2007, 2012, 2013)
CEPR Workshop on Incentives, Management and Organization (2012)
CEPR/AMID Development Economics Symposium (2012)
CEPR–EBC–HEC–NYSE/Euronext–Review of Finance Conference on Financial Intermediation and the Real Economy (2011)
CFS-EIEF Conference on Household Finance (2011)
Econometric Society – Latin American (2008)
Econometric Society – European (2011)
Econometric Society – World Congress (2010)
FDIC Center for Financial Research Workshop (2006)
Financial Intermediation Research Society, FIRS (2015)
IPA Impact and Policy Conference, Thailand (2012)

IPA-African Development Bank SME Conference, Paris (2015)
London School of Economics Financial Markets Group Conference (2009)
MIT/Harvard Organizational Economics Workshop (2009)
MIT Sloan Finance and Economics Workshop (2009)
NBER Productivity, Innovation and Entrepreneurship (2013 Spring)
NBER Corporate Finance (2007 Spring, 2008 Summer Institute, 2009 Fall, 2011 Spring, 2011 Fall, 2013 Spring, 2014 Fall)
NBER Organizational Economics (2013 Spring)
Oxford Centre for Corporate Reputation Symposium (2012)
Paris Spring Corporate Finance Conference (2009)
Rothschild Caesarea Center Annual Conference (2011, 2012, 2015)
Society for Economic Dynamics (2009)
Universidad Católica de Chile International Finance Conference (2011)
University of Minnesota Corporate Finance Conference (2014)
Washington University Corporate Finance Conference (2006, 2009)
Western Finance Association (2006, 2009, 2010, 2013)
Yale Behavioral Science Conference (2010)

TEACHING

2016	Empirical Corporate Finance (graduate – Ph.D.), CEMFI – Madrid, Spain.
	Empirical Corporate Finance (graduate – Ph.D.), Universitat Pompeu Fabra – Barcelona, Spain.
2015	Empirical Corporate Finance (graduate – Ph.D.), Swiss Finance Institute - Università della Svizzera italiana.
2014 –	Financial Econometrics (graduate – M.Sc.), London School of Economics.
2013 –	Empirical Corporate Finance (graduate – Ph.D.), London School of Economics.
2011 –	Corporate Finance (graduate – M.Sc.), London School of Economics.
2006 – 2011	Corporate Finance (graduate – M.B.A.), Columbia University GSB.
2002 – 2004	Microeconomics (undergraduate). Lecturer for Professor Paul Joskow. MIT.
1997 – 1999	Microeconomics (graduate – M.B.A.), Lecturer, IESA (Venezuela).

HONORS, SCHOLARSHIPS, AND AWARDS

2013	Initiative on Global Markets (IGM) Visiting Fellow, University of Chicago
2012	Norges Forskingsråd Grant
2011	Brattle Award, Distinguished Paper
2011	Rothschild Caesarea Center Annual Academic Conference Best Paper Award
2010	Brattle Award, First Prize
2010	Jerome A. Chazen Institute of International Business Research Grant
2010	Columbia Business School Dean's Award for Teaching Excellence in a Core Course
2010	Charles River Associates Award, Best Paper on Corporate Finance at the WFA
2008	Brattle Award, Distinguished Paper
2006	FDIC's Center for Financial Research, Research Grant
2004	George Schultz Fund Research Grant, MIT
2003	Corporación Andina de Fomento, Research Grant
2001	MIT World Economy Lab Scholarship
1999 – 2001	MIT Graduate Fellowship

February 2016

DANIEL PARAVISINI

REFEREED PUBLICATIONS

"Risk Aversion and Wealth: Evidence from Person-to-Person Lending Portfolios," with V. Rappoport and E. Ravina. *Management Science*, forthcoming.

"Dissecting the Effect of Credit Supply on Trade: Evidence from Matched Credit-Export Data," with V. Rappoport, P. Schnabl, and D. Wolfenzon. *Review of Economic Studies*, 2014, 82(1), 333-359.

"The Effect of Financing Constraints on Risk," with H. Lin., September 2013. *Review of Finance*, 17 (1): 229-259.

"Public Information and Coordination: Evidence from a Credit Registry Expansion," with A. Hertzberg and J. Liberti. *Journal of Finance*, 66(2): 379-412. April 2011. **Brattle Award: Distinguished Paper**.

"Information and Incentives inside the Firm: Evidence from Loan Officer Rotation", with A. Hertzberg and J. Liberti. *Journal of Finance,* 65(3): 795-828. June 2010. **Brattle Award: First Prize**.

"Local Bank Financial Constraints and Firm Access to External Finance", *Journal of Finance,* 63(5): 2161-2193, October 2008. **Brattle Award: Distinguished Paper**.

WORKING PAPERS

"High Cost Debt and the Financial Health of the Urban Poor: Evidence from the U.K.," with A. Liberman and V. Pathania. February 2016.

"Specialization in Bank Lending," with V. Rappoport, and P. Schnabl. February 2016.

"Cultural Proximity and Loan Outcomes," with R. Fisman and V. Vig (*Revise and Resubmit*). NBER Working Paper #18096. February 2016.

"The Incentive Effects of Scores: Randomized Evidence from Credit Committees," with A. Schoar, NBER Working Paper #18096. May 2013. Latest version: January 2016.

"Adverse Selection and Loan Maturity: Evidence from Consumer Credit," with A. Hertzberg and A. Liberman. July 2015. Revise and Resubmit.

"Delegated Monitoring of Fraud: The Role of Non-Contractual Incentives," with H. Lin. August 2011 (*Revise and Resubmit*). **Charles River Associates Award: Best Paper on Corporate Finance 2010** (under the title: "What's Bank Reputation Worth? The Effect of Fraud on Financial Contracts and Investment").

OTHER WORK

"Wages, Capture and Penalties in Venezuela's Public Hospitals," with M. H. Jaen. In *Diagnosis Corruption – Fraud in Latin America's Public Hospitals*, Di Tella, R. and W. Savedoff (Eds.). 2001. Inter-American Development Bank, Washington, D.C..

"Dissecting the Effect of Credit Supply on Trade," with V. Rappoport, P. Schnabl, and D. Wolfenzon., *VoxEU.org*, 27 July 2011.

CASE STUDIES

General Motors – Capital Structure and the Costs of Financial Distress, with T. Harris, D. Wolfenzon, and A. Hertzberg. January 2011. Columbia CaseWorks ID# 112101, Integrated Auto Case Series. Columbia Business School.

Telecom Argentina, with M. De Guzman and G. Werthein. March 2011. Columbia CaseWorks, CIBER Case Series. Columbia Business School.