Adrien d'Avernas February 2017

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| PLACEMENT COMMITTEE | Placement Director:Prof. John Askerjohnasker@econ.uPlacement Director:Prof. Ariel Bursteinarielb@econ.uPlacement Coordinator:Joshua Harrisjharris@econ.u | cla.edu $+1$ (310) 206-6732 |
| RESEARCH INTERESTS | Primary: Macroeconomics, Finance, Asset Pricing Secondary: Information and Learning | |
| EDUCATION | PhD in Economics University of California, Los Angeles (UCLA) Dissertation: Essays on Macroeconomics and Financial Markets Committee: Andrew Atkeson (Co-Chair), Lee Ohanian (Co-Chair) Olivier Weill | 2011 - 2017 r), Andrea Eisfeldt, Pierre- |
| | MA in Economics University of California, Los Angeles (UCLA), Los Angeles, CA | 2011 - 2012 |
| | MRes in Econometrics, with high honors Université Catholique de Louvain, Louvain-la-Neuve, Belgium | 2009 - 2011 |
| | BA in Business Engineering, with honors Université Catholique de Louvain, Louvain-la-Neuve, Belgium | 2006 - 2009 |
| Professional Experience | ů – i – i – i – i – i – i – i – i – i – | |
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| SELECTED | BlackRock Applied Research Award (Finalist) | 2016 |
| Honors and Awards | Dissertation Intern Fellowship, Federal Bank of Richmond | 2016 |
| | UCLA Dissertation Year Fellowship | 2016 |
| | UCLA Graduate Fellowship | 2012 - 2015 |
| | NBER Research Assistant Fellowship | 2015 - 2016 |
| | Firmin van Bree Fellowship, Belgian American Educational Foundat | ion 2011 |
| | Honorary Acknowledgment from UCLouvain | 2010 |
| TEACHING | Teaching Assistant University of California, Los Angeles (UCLA), Los Angeles, CA Graduate Macroeconomics I, II, & III, Microeconomic Theory, In | 2012 - 2016 atroduction to Econometrics |
| | Teaching Assistant Université Catholique de Louvain, Louvain-la-Neuve, Belgium Political Economy | 2011 |
| Job Market | Disentangling Credit Spreads and Equity Volatility | |

Paper

In this paper, I provide a structural approach to quantify the forces that govern the joint dynamics of five financial indicators: (i) default risk, (ii) corporate bond credit spreads, (ii) aggregate and (iv) idiosyncratic equity volatility, and (v) corporate bond bid-ask spreads. I build a dynamic structural model and estimate fundamental shocks using a large firm-level database on credit spreads, equity prices, accounting statements, and bond recovery ratios in the U.S. from 1973 to 2014. The model accurately accounts for the historical levels and dynamics of the financial indicators, both over time and in the cross-section. A structural decomposition reveals that the joint dynamics of these financial indicators is driven by fluctuations in firms' asset values and firms' aggregate asset volatility. I find that the informational content of the financial indicators for predicting economic activity is captured by fluctuations in firms' aggregate asset volatility. All together, my results suggest that fluctuations in firms' aggregate asset volatility are key for the transmission channel that links the fundamental drivers of financial indicators to the real economy.

Work in Progress

A Model of High Risk Premia Stagnation

with Quentin Vandeweyer

This paper investigates how productivity growth interacts with financial cycles. We show that movements in stochastic discount factor is a strong predictor of aggregate productivity growth. We rationalize this finding in a macro-finance model with heterogenous risk aversion and endogenous productivity growth in which the financial sector is key in screening and absorbing innovation risk. During financial stresses, the financial sector becomes undercapitalized and reduces its exposure to innovation risk. As a consequence, aggregate willingness to take risk in the economy is reduced, and less innovation occurs. We show that the combination of undercapitalization and heightened uncertainty generates large time-varying risk premia, safe asset shortage, and hysteresis in productivity growth that are quantitatively consistent with empirical observations. We derive macro-prudential policy implications of the arising trade-off between short-run growth and financial stability.

A Solution Method for Continuous-Time General Equilibrium Models with Quentin Vandeweyer

We propose a robust method for solving a wide class of continuous-time dynamic general equilibrium models. We rely on a finite-difference scheme to solve systems of partial differential equations with several endogenous state variables. This class of models includes the frameworks (among others) of He and Krishnamurthy (2013); Brunnermeier and Sannikov (2014); Silva (2015); and Di Tella (2016).

New Keynesian versus Neoclassical Aggregate Fluctuations with Lee Ohanian and Gary Hansen

We describe standard neoclassical and New Keynesian stochastic growth models that differ from each other only by the absence or presence of frictions that include sticky prices and wages. We then feed exogenous shocks measured from U.S. data and compute the time series for endogenous real variables including output, hours worked, investment, and consumption. We compute high frequency and low-frequency components from this data using a band pass filter and compare the fluctuations exhibited by the two classes of models. The exogenous shocks considered include an aggregate technology shock identified using TFP, an investment specific shock identified by the relative price of investment, and a monetary policy shock obtained from a Taylor rule. Preliminary results indicate that nominal wage and price-setting imperfections are relatively unimportant in accounting for the very large medium and long-run fluctuations that are observed in the data. This suggests that neoclassical mechanisms reflecting long-run equilibrium responses to technology and policy changes, rather than short-run nominal stickiness, are key factors in driving fluctuations.

Optimal Corporate Structure with Information Asymmetries with Semih Uslu

In this paper, we explore the importance of information asymmetries between investors and issuers of corporate debt and equity in a model with endogenous information acquisition. We highlight two of the puzzles our model is able to rationalize: high equity-risk elasticity of leverage, and the zero leverage puzzle. Standard corporate finance models imply that for reasonable tax shield levels, the sensitivity of leverage to asset volatility is marginal. Our model introduces an informational wedge between firms' and markets' valuation of debt to explain the discrepancy between the empirical findings and standard corporate finance models. Investors are asking an informational premium to price corporate bonds, therefore reducing the firms' incentives to leverage. This premium arises only for corporate debt and not equity, as the former is dominated by downside

risk. The firms whose projects are perceived to be too risky are facing a stronger premium to issue corporate bonds, and do not succeed to trigger investors' information acquisition incentives. Therefore, a fraction of firms with zero leverage arises as an equilibrium outcome, and optimal level of firms' leverage is highly sensitive to asset volatility. We present strong empirical evidence of the mechanism at play using data on public firms from CRSP and Compustat.

SEMINAR AND CONFERENCE PRESENTATIONS

2017 Wisconsin School of Business, Carlson School of Management, Johns Hopkins Carey Business School, Desautels Faculty of Management, Stockholm School of Economics, Collegio Carlo Alberto, BI Norwegian Business School, City University of Hong Kong, Midwestern Finance Association

2016 UCLA Macro Proseminar, Becker Friedman Institute, Federal Reserve Bank of Richmond, Federal Reserve Bank of Atlanta, UCLA Anderson School of Management, Federal Reserve Bank of San Francisco, BlackRock, HEC Lausanne

2015 UCLA Macro Proseminar, Federal Reserve Bank of Minneapolis

2014 UCLA Macro Proseminar

INVITED Workshops

2016 Becker Friedman Institute Macro Financial Modeling Summer Camp, Macro Finance Society Tavel Award for PhD Students

2015 Princeton Initiative

Referee

Journal of Monetary Economics, Journal of Economic Theory

References

Andrew Atkeson (Co-chair)

UCLA Department of Economics

Lee Ohanian (Co-chair)

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