Quentin Vandeweyer

Professional Address
European Central Bank
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RESEARCH INTERESTS

Macroeconomics, Finance, Monetary Economics, Computational Methods

EDUCATION

Sciences Po, *Paris, France*
PhD in Economics (2013-2018, expected)

Ecole Polytechnique, *Palaiseau, France*
M.Sc. in Economics and Public Policy (joint with Sciences Po and ENSAE- 2011-2013)

Universite Catholique de Louvain, *Louvain-la-Neuve, Belgium*
Research Master in Economics (2010-2012)

Universite Catholique de Louvain, *Louvain-la-Neuve, Belgium*
BA in Political Sciences and Economics (double major, 2007-2010)

PROFESSIONAL EXPERIENCE

European Central Bank, *Frankfurt-am-Main, Germany*
Graduate (Economist) Programme (since September 2017)

National Bank of Belgium, *Brussels, Belgium*
Trainee Programme for Young Researcher, Research Department (April 2017 - July 2017)

European Central Bank, *Frankfurt-am-Main, Germany*
PhD Traineeship, DG-E/Monetary Analysis Division (MAY) (September 2016 - April 2017)

WORKING PAPER

Darracq Paries, M., Vandeweyer, Q. (2018) A Macro-Financial Model of Monetary Policies with Leveraged Intermediaries

Abstract: *This article presents a macro-financial model where leveraged intermediaries play the key role in the transmission of monetary policies. Liquidity frictions in the money markets prevent the payment system to clear every transaction with certainty and therefore creates a role for central bank reserves as the ultimate mean of settlement. By manipulating both supply and interest paid on reserves, the central bank impacts the short term money market rates as well as the liquidity risk taken by these leveraged intermediaries. The model is able reproduce and rationalize a series of stylized facts observed during the crisis and the recovery that traditional DSGE are not capturing: (i) a strong correlation between money market stresses and credit spreads (ii) a spiraling doom loop between funding and market liquidity wiping out bank capital (iii) the multiplicity of central liquidity facilities meant at alleviating wide funding needs.*

d'Avernas, A.,Vandeweyer, Q. (2017). A Model of High Risk Premia Stagnation.

Abstract: *We propose a transmission mechanism from financial cycles to aggregate productivity growth. We provide a structural macroeconomic model with heterogeneous risk aversion and endogenous productivity growth in which the financial sector is key in screening and absorbing innovation risk. Shocks to innovation levels and volatility generate financial cycles.During financial stresses, the financial sector becomes undercapitalized and reduces its exposure to innovation risk. As a consequence, willingness to take risk in the economy is reduced, and less innovation occurs. Using a large database on the U.S. financial sector from 1973 to 2014, we show that the combination of undercapitalization and heightened uncertainty generate large time-varying risk premia, safe asset shortage, and hysteresis in productivity growth following financial crises 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.*

d'Avernas, A.,Vandeweyer, Q. (2017). A Solution Method for Continuous-Time General Equilibrium Models

Abstract: *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); Silva (2015); Brunnermeier and Sannikov (2014); and Di Tella (2016).*

Vandeweyer, Q. (2016). Financial Crisis and Depressed Restructuring, a Tale of Zombies, Shadows and Banks.

Abstract: *Financial crisis have been shown to affect the dynamics of firm and productivity growth. A popular explanation of the relationship is the zombie lending hypothesis. Whenever banks are hit by large shocks, they start to misdirect funding from potential efficient entrant (the shadows) to inefficient incumbent (the zombies) thereby decreasing the rate of productivity growth. In this work we develop a model with heterogenous firms and financial intermediaries describing the whole cycle from the build up of instability to the slow recovery. In the model, undercapitalized banks slow down the pace of capital restructuration in order not to update the book value of their assets and therefore not increase their own cost of funding. The effect is magnified as low expected returns decrease asset prices and net worth of banks which feedbacks into lower innovation investment. The model generates testable predictions on the joint distribution of the balance sheet positions of firms and intermediaries .*

GRANTS AND HONORS

- Fellowship, Macro-Financial Modeling Group - University of Chicago and MIT (2017)
- Contrat Doctoral, FNSP (2013 – 2016)
- Best Master Thesis Award, Sciences Po (2013)
- Prix du centre de recherche, Ecole Polytechnique (2012)

GRADUATE TRAINING

- Financial Markets and the Macro-Economy Prof. Yulyi Sannikov, Kiel Institute for World Economics (September 2016)
- Macro Financial Modeling Summer Session for Young Scholars, Becker-Friedman Institute and Sloan Foundation, Boston (June 2016)

- Advanced Macroeconomics Methods by Prof. Wouter Den Haan, London School of Economics (August 2015)
- Financial Stability by Prof. Xavier Vives, Swiss National Bank (August 2014)

RESEARCH STAY

- National Bank of Belgium, Department des Etudes (April-July 2017)
- National University of Singapore, Department of Economics (April-June 2016)
- University of California Los Angeles, Department of Economics (October-November 2015)

TEACHING EXPERIENCE

- Fall 2015 - Quantitative Methods (graduate), Sciences Po
- Spring 2015 - Macroeconomics (undergraduate), Sciences Po
- Spring 2014 - Macroeconomics (undergraduate), Sciences Po

COMPUTER

Matlab, Dynare, Mathematica, Julia, Stata

LANGUAGES

French - Fluent, English - Fluent, Dutch - Intermediate

REFERENCES

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