

THOMAS DRECHSEL

LONDON SCHOOL OF ECONOMICS & POLITICAL SCIENCE

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GENDER: Male

CITIZENSHIP: German

PRE-DOCTORAL STUDIES:

2012 – 2014 MRes in Economics, London School of Economics (*with distinction*)
2010 – 2011 MSc in Economics, University College London (*with distinction*)
2006 – 2010 BSc in Economics and Business Administration, Goethe University Frankfurt
Visiting student at SciencesPo Paris in 2008/09

DOCTORAL STUDIES: London School of Economics

DATES: 2014 - 2019

THESIS TITLE: "Essays in Macroeconomic Fluctuations"

THESIS ADVISOR AND REFERENCES:

Professor Silvana Tenreyro (Advisor)
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DESIRED TEACHING AND RESEARCH:

Primary Fields: Macroeconomics, Macro-Finance
Secondary Fields: International Macro, Macroeconometrics

TEACHING EXPERIENCE:

2016 – 2017	Macroeconomics	MRes/PhD level
Summer 2016	Tools for Macroeconomists	PhD level
2015 – 2016	Monetary Economics	3 rd year undergraduate level
Summer 2015	Tools for Macroeconomists	PhD level
2014 – 2015	Monetary Economics	3 rd year undergraduate level
Summer 2014	Money and Banking	3 rd year undergraduate level
2013 – 2014	Principles of Macroeconomics	2 nd year undergraduate level
2009 – 2010	Introduction to Statistics	1 st year undergraduate level

RELEVANT POSITIONS HELD:

2015 – 2017	Research Assistant for Wouter Den Haan
Summer 2014	Internship at Fulcrum Asset Management, Macroeconomic Research Division
2011 – 2012	Traineeship at European Central Bank, Financial Research Division
Summer 2009	Internship at Deutsche Bundesbank, Statistics Division
2007 – 2008	Part-time Internship at Allianz Global Investors, Pension Investment Division

LANGUAGES

German (native), English (fluent), French (fluent/intermediate)

HONORS, SCHOLARSHIPS AND AWARDS:

2016 – 2017	LSE SC Tsiang Scholarship for Research in Monetary Economics
2012 – 2016	PhD Scholarship of Economic and Social Research Council (ESRC)
2007 – 2011	Scholarship of Studienstiftung des deutschen Volkes (German Academic National Foundation)
2016, 2015, 2014	LSE Class Teacher Award
2016, 2015	Multiple nominations for LSE Student Union Teaching Excellence Awards

REFEREEING SERVICE:

Quarterly Journal of Economics, Review of Financial Studies, Economic Journal, Economica, Journal of Applied Econometrics, Economic Modelling

COMPLETED PAPERS:

Job Market Paper: “Earnings-Based Borrowing Constraints and Macroeconomic Fluctuations”

Microeconomic evidence on US corporate credit suggests a strong connection between firms' current earnings and their access to debt. This paper formalizes this link through an earnings-based constraint on firm borrowing and studies its macroeconomic implications. In a business cycle model, the proposed constraint alters the response of firm borrowing to shocks relative to an asset-based collateral constraint, which has become a standard building block in macroeconomics. In response to a positive investment shock, corporate debt expands when the earnings-based constraint is present, while it contracts with a collateral constraint, as the shock reduces the relative value of capital. The paper empirically verifies these theoretical predictions using both aggregate and firm-level data. The positive response of aggregate debt to investment shocks in the data supports the economy-wide relevance of earnings-based constraints, and heterogeneous debt dynamics across borrower types at the firm-level are in line with the proposed mechanism. Finally, in an estimated quantitative model with nominal rigidities, earnings-based constraints dampen the output response to fiscal shocks, whereas monetary shocks have stronger but less persistent effects relative to counterfactual estimations with collateral constraints.

Published Papers:

“Commodity Booms and Busts in Emerging Economies” (with Silvana Tenreyro), Journal of International Economics, Vol. 112, May 2018, pp. 200-2018.

Emerging economies are prone to highly disruptive economic cycles. This paper proposes a small open economy model for a net commodity exporter to quantitatively study the triggers of these cycles. The economy consists of two sectors, one of which produces commodities with prices subject to exogenous international fluctuations. These fluctuations affect both the competitiveness of the economy and its borrowing terms, as higher commodity prices are associated with lower spreads between the country's borrowing rate and world interest rates. Both effects jointly result in strongly positive effects of commodity price increases on GDP, consumption, and investment, and a negative effect on the total trade balance. Furthermore, they generate excess volatility of consumption over output and a large volatility of investment. Estimating the model on Argentine data, we find that the contribution of commodity price shocks to fluctuations in post-1950 output growth is in the order of 38%. In addition, commodity prices account for around 42% and 61% of the variation in consumption and investment growth, respectively.

“Tracking the Slowdown in Long-Run GDP Growth” (with Juan Antolin-Diaz and Ivan Petrella), Review of Economics and Statistics, Vol. 99(2), May 2017, pp. 343-256.

Using a dynamic factor model that allows for changes in both the long-run growth rate of output and the volatility of business cycles, we document a significant decline in long-run output growth in the United States. Our evidence supports the view that most of this slowdown occurred prior to the Great Recession. We show how to use the model to decompose changes in long-run growth into its underlying drivers. At low frequencies, a decline in the growth rate of labor productivity appears to be behind the recent slowdown in GDP growth for both the United States and other advanced economies. When applied to real-time data, the model is capable of detecting shifts in long-run growth in a timely and reliable manner.

“Who Borrows from the Lender of Last Resort?” (with Itamar Drechsler, David Marqués Ibañez and Philipp Schnabl), Journal of Finance, Vol. 71(5), October 2016, pp. 1933-1974. Lead Article.

We analyze lender of last resort (LOLR) lending during the European sovereign debt crisis. Using a novel data set on all central bank lending and collateral, we show that weakly capitalized banks took out more LOLR loans and used riskier collateral than strongly capitalized banks. We also find that weakly

capitalized banks used LOLR loans to buy risky assets such as distressed sovereign debt. This resulted in a reallocation of risky assets from strongly to weakly capitalized banks. Our findings cannot be explained by classical LOLR theory. Rather, they point to risk taking by banks, both independently and with the encouragement of governments, and highlight the benefit of unifying LOLR lending and bank supervision.

Working Papers

“Agnostic Structural Disturbances (ASDs): Detecting and Reducing Misspecification in Empirical Macroeconomic Models” (with Wouter Den Haan), CEPR Working Paper 13145, Revise and resubmit at the Journal of Monetary Economics.

Exogenous random structural disturbances are the main driving force behind fluctuations in most business cycle models and typically a wide variety is used. This paper documents that a minor misspecification regarding structural disturbances can lead to large distortions for parameter estimates and implied model properties, such as impulse response functions with a wrong shape and even an incorrect sign. We propose a novel concept, namely an agnostic structural disturbance (ASD), that can be used to both detect and correct for misspecification of the structural disturbances. In contrast to regular disturbances and wedges, ASDs do not impose additional restrictions on policy functions. When applied to the Smets-Wouters (SW) model, we find that its risk-premium disturbance and its investment-specific productivity disturbance are rejected in favor of our ASDs. While agnostic in nature, studying the estimated associated coefficients and the impulse response functions of these ASDs allows us to interpret them economically as a risk-premium/preference and an investment-specific productivity type disturbance, but our results indicate that they enter the model quite differently than the original SW disturbances. Our procedure also selects an additional wage mark-up disturbance associated with increased capital efficiency.

RESEARCH IN PROGRESS:

“Advances in Nowcasting Economic Activity” (with Juan Antolin-Diaz and Ivan Petrella)

Dynamic factor models (DFM) have become the workhorse model for nowcasting economic activity. Exploiting recent advances in Bayesian computational methods, we extend the DFM framework along four dimensions. First, we model low-frequency movements in the growth rate and the volatility of the variables. Second, we allow for heterogeneous lead-lag patterns in the responses of the variables to the common factor. Third, we introduce automatic outlier detection by modeling fat tailed observations in the variables. Fourth, we endogenously model seasonal fluctuations, which is particularly useful whenever there is suspicion that “residual seasonality” is present. We put our modeling innovations to the test in a comprehensive out-of-sample evaluation exercise using fully real-time unrevised data for seven countries. As the model is re-estimated each time new information arrives, the sheer scale of the exercise requires massive computational power and is made possible thanks to the use of cloud computing. Paying special attention to the production of well-calibrated density forecasts, we show how low frequency movements, dynamic heterogeneity, outliers and seasonality are pervasive features of macroeconomic data and their modeling advances our understanding of the real-time assessment of macroeconomic conditions.