Honors and

AWARDS

2018

2017

2007 - 2012

Contact dbrizhatyuk.github.io Information dmitry.brizhatyuk@gmail.com FIELDS Macroeconomics; International economics; Applied time series Moody's Analytics, London **EMPLOYMENT** Assistant Director in Research 2020 - ... **EDUCATION** University of Washington Ph.D., Economics 2020 Paris School of Economics M.Res., Economics 2013 Novosibirsk State University B.A & M.A., Economics 2011, 2013 Professor Yu-chin Chen Professor Fabio Ghironi (chair) References University of Washington University of Washington Department of Economics Department of Economics fabio.ghironi.1@gmail.com yuchin@uw.edu Professor Mu-Jeung Yang Dr. Debra Glassman (teaching reference) University of Utah University of Washington Eccles School of Business Foster School of Business mujeung.yang@utah.edu dg2854@uw.edu

Buechel fellowship, U of Washington

Best Second-year Paper Award, U of Washington

Merit scholarship, Novosibirsk State University

#### RESEARCH

## · Housing market cycles, productivity growth, and household debt [Link]

Housing market crashes are associated with household deleveraging and a very persistent decline in economic activity in an unbalanced panel of 50 countries. The persistence of the output response is driven by a slowdown in productivity growth and capital accumulation and is increasing in the amount of preexisting household debt. To interpret these stylized facts, I construct a two-agent (borrower-saver) dynamic general equilibrium model with occasionally binding collateral constraint tied to housing equity. Productivity grows endogenously in the model through forward-looking innovation investment. When the preexisting level of debt is sufficiently high, negative housing demand shocks cause collateral constraint to bind and trigger deleveraging. Endogenous slowdown in TFP growth emerges as one of the adjustment margins during this process, prolonging the real effects of a crisis. The initial shock is amplified by a negative feedback loop between deleveraging, borrowers' housing wealth and growth. I use the calibrated model to draw implications for macroeconomic policy during episodes of deleveraging.

## · Medium-term cycles, the role of occasionally binding constraints [Link]

Why are emerging small open economies are more prone to swings in trend growth than developed? This paper emphasizes the role of occasionally binding credit constraints that cause state dependence and asymmetry in the link between economic activity and endogenous growth. Negative shocks are more detrimental to TFP growth in financially vulnerable economies prone to leverage-deleverage cycles than in economies that can optimally borrow through the cycle.

# · Scarring effects of trade policy uncertainty (with Fabio Ghironi)

This paper studies the macroeconomic consequences of trade policy uncertainty with an emphasis on its effects on productivity growth. We build a small open economy model with nominal rigidity, endogenous growth through the introduction of new products, and time-varying volatility of import tariffs. Import tariff uncertainty shocks act as aggregate supply shocks. They cause a temporary improvement of the current account along with the real exchange rate appreciation in the medium run. In addition, an increase in import tariff uncertainty causes a sharp decline in the introduction of new intermediate products, which is detrimental to productivity growth and prolongs the effect of the shock. We show that endogenous risk premia is the key channel transmitting the shock to the broader economy and study role monetary policy in shaping it.

#### Research at Moody's Analytics

#### · Assessment of Financial Impacts of Climate-related Hazard Events

This empirical study quantifies corporate valuation and credit impacts of climate-related hazard events, particularly cyclones, storms, and droughts. We find statistically and economically significant negative impacts of hazard events on the subsequent valuation of affected firms, which increase with firms facility exposure to impacted geographical areas. The effect on firm valuation, measured by asset or equity returns, can be as large as 2.9% over the first ten weeks post-event. Our analysis relies on historical event data and facility exposures from Moodys climate risk assessment affiliate Four Twenty Seven and external sources, as well as on Moodys Analytics corporate valuation data and EDF<sup>TM</sup> (Expected Default Frequency) credit measures. Relative to the existing literature, our study has a broader firm and hazard type coverage expanding to non-U.S. firms and events.

### · A framework to identify, quantify, and manage climate hazard concentration risk

A novel framework to tackle credit concentration risks arising from physical damage from climate hazard events, such as cyclones and storms. The framework can be used to satisfy regulatory (BoE, ECB) and disclosure (TCFD) requirements, as well as internal risk management.

Presentations 2021: Irish Economic Association Annual Conference; Annual Meeting of the European Research Group on Money Banking and Finance; Warsaw Money-Macro-Finance Conference; European Economic Association Annual Congress; Money Macro and Finance Society Annual Conference

> 2020: University of Surrey; Moody's Analytics; European Economic Association Annual Congress

2019: Higher School of Economics Moscow

2018: University of Surrey; Washington University in St. Louis

#### TEACHING

University of Washington, Foster School of Business

Macroeconomics (MBA), TA 15 quarters

University of Washington, Department of Economics

Intro to Macroeconomics 5 quarters Intro to Microeconomics 2 quarters

Novosibirsk State University

Intermediate Macroeconomics 1 semester OTHER Citizenship: Russia; UK Tier-2 visa

Technical Skills: Matlab, Dynare, Stata, Phyton, R, LATEX Languages: English (fluent), Russian (native), French (basic)