

Research Statement

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I am a macroeconomist with broad interests in banking, international macro, monetary policy, and public finance. Most of my research studies the impact of financial frictions and heterogeneity on the real economy. I build general-equilibrium models and use micro-data to inform them.

Heterogeneous Financial Institutions

A dominant view in macroeconomics is that financial frictions have persistent effects on the broader economy. Modelling the balance sheet of financial intermediaries in an empirically consistent manner is paramount for informed policy evaluation. However, most of the literature abstracts from the cross-sectional distribution of financial intermediaries by assuming a representative agent. In my job market paper, I proposed a tractable macroeconomic model with heterogeneous banks (Jamilov, 2021). In subsequent work, I have extended my framework to account for business-cycle fluctuations, monetary policy, and wholesale funding.

In “Bewley Banks” (Jamilov and Monacelli, 2025, ReStud), we study the role of ex-ante and ex-post bank heterogeneity in business-cycle fluctuations. When we model the cross-section of banks properly, the distribution of bank net worth becomes an endogenous, time-varying *state* variable. We solve the model with numerical methods, also allowing for deviations from perfect banking competition and counter-cyclicalities in bank returns. Using a sufficient statistic approach, we find that ex-ante heterogeneity in the banks’ rate of return and the Marginal Propensity to Lend (MPL) can substantially amplify aggregate fluctuations. Micro-data using bank-level balance sheets in the U.S. is provided to support the model’s mechanisms.

In “HBANK: Monetary Policy with Heterogeneous Banks” (Bellifemine et al., 2023b), we extend the benchmark model with New Keynesian frictions and endogenous bank default risk in order to study the impact of non-systematic and systematic monetary policy. We solve the model with sequence-space methods and obtain convenient decompositions of the bank lending channel of monetary policy transmission into *direct* and *indirect* effects. The combination of MPL heterogeneity and endogenous default can substantially amplify the impact of monetary shocks. There is a trade-off between macroeconomic and financial stability for the central bank: the monetary authority can not simultaneously control inflationary pressure and maintain financial stability. We

show that automatic micro-prudential regulation that targets only the largest banks can mitigate the trade-off without jeopardizing the inflation stability mandate.

In “Assortative Matching, Interbank Markets, and Monetary Policy” (Bittner et al., 2025), we augment the benchmark framework with endogenous interbank trading. Using detailed proprietary data from Germany that encompasses the universe of bank-to-bank linkages, we document assortative matching by bank size, i.e. large banks lend to and borrow from other large banks. The model can reproduce assortative interbank matching with a combination of fixed and variable trading costs. We study the stability and efficiency properties of our equilibrium concept as well as its implications for the financial sector and the real economy.

International Macroeconomics

The Heterogeneous Agent New Keynesian (HANK) framework is the key paradigm of modern macroeconomic thinking. The standard model, bar a handful of exceptions, abstracts away from persistent spatial differences and assumes a representative region. “The Regional Keynesian Cross” (RKC) (Bellifemine et al., 2023a, ReStud R&R) studies the aggregate and distributional effects of monetary policy in a HANK model of monetary union with *asymmetric* regions. Our framework features 3,000+ regions with within-region household heterogeneity as well as across-region heterogeneity in the Intertemporal Marginal Propensity to Consume (iMPC) and non-tradable employment shares. The joint geographic distribution of local iMPCs and tradability affects the monetary transmission mechanism. This joint distribution is shown to substantially amplify the aggregate effects of monetary policy in Italy with mute effects in the U.S. The model is solved with sequence-space methods and allows for an analytic characterization of the aggregate consumption response to monetary policy shocks. To validate our theory, we construct novel empirical measures of regional MPCs using U.S. and Italian micro-data.

We extend our RKC framework to the case of Europe in “Monetary Unions with Heterogeneous Fiscal Space” (Bellifemine et al., 2025, JIE). The first-order issue in the context of the Eurozone is the lack of a formal fiscal union to complement the monetary union. We now allow for cross-regional heterogeneity in national fiscal space as a proxy for the fiscal capacity to respond asymmetrically to symmetric aggregate demand shocks such as from monetary policy. Heterogeneity in fiscal capacity creates endogenous fragmentation of economic activity. The monetary authority faces a non-trivial trade-off between inflation stabilization and synchronization of unionwide economic activity. We discuss how policy instruments such as deficit caps and political unions can be leveraged to navigate this trade-off.

In an ongoing project “The Geography of the Financial Accelerator” (Haas and Jamilov, 2024), we study the aggregate and distributional implications of cross-country heterogeneity in firms’ financing frictions in Europe. This project is sponsored by the European Central Bank’s Lamfalussy

Fellowship 2024. As part of the project, we have obtained access to granular data from the European Central Bank’s Survey on the Access to Finance of Enterprises (SAFE).

In another ongoing project “Banking Unions” (Haas and Jamilov, 2025), we study how fragmentation in the European deposit insurance architecture impacts credit allocation and macroeconomic policy. We have received access to granular loan-level data from the ECB as part of their new Pilot Project for Research Access to Confidential Data.

Banking and Finance

Cyber risk consistently ranks as one of the biggest risk factors for firms worldwide. However, measuring cyber risk exposure beyond *realized* cyber attacks is complicated. In “The Anatomy of Cyber Risk” (Jamilov et al., 2023, JF, R&R), we make progress by employing natural language processing tools and measure exposure to cyber risk in the texts of earnings calls of U.S. listed firms. Our firm-level dataset spans 2003-2025 and is available for 13,000+ firms and over 80 countries. Exposure to cyber risk is shown to be priced in the stock and option markets. It also affects firms’ balance sheet outcomes. The impacts spill over from the affected to the unaffected firms and persist also at the sectoral level.

Bank runs have been a critical source of financial instability for many decades. Isolating the measurement of bank runs from other sources of banking and financial crises is challenging. In “Two Centuries of Systemic Bank Runs” (Jamilov et al., 2024b), we assemble a novel historical narrative database of retail bank runs that covers 184 countries over 1800-2023. The narrative evidence is combined with new statistical indicators of aggregate deposit contractions from 503 sources. *Systemic* runs—narrative events that coincide with deposit withdrawals—are associated with substantial macroeconomic losses, more than after non-systemic runs or deposit contractions alone. These impacts persist even when there is no clear evidence of micro or macro fundamental triggers.

Wholesale markets are an increasingly important source of funding for banks. In our follow-up work “Wholesale Funding Runs, 1800-2024” (Jamilov et al., 2025b), we assemble a new historical dataset of wholesale runs in 140+ countries and over 1800-2024. We discuss how wholesale and retail runs differ in terms of frequency, recent trends, and associations with macroeconomic conditions.

Granularity

The canonical Pareto principle states that 80% of outcomes result from 20% of causes. In “Granular Credit Risk” (Galaasen et al., 2023, JF, R&R), we show that this principle also extends to loan portfolios of commercial banks. Using an administrative loan-level database from Norway, we find that the average loan portfolio is highly concentrated. Idiosyncratic shocks to large loans, therefore,

may survive aggregation and impact portfolio-level outcomes. With the Granular Instrumental Variable, we identify and document precisely this result. Granular credit risk affects banks, who then cut lending and increase loan prices on other firms. The affected firms, in turn, reduce capital spending and default more often.

In “Granular Sentiments” (Jamilov et al., 2024a), we apply the Pareto principle to Pigouvian business cycles. The sentiment of just 50 firms accounts for over 60% of the variation in aggregate U.S. sentiment and macroeconomic outcomes. The granular sentiment index is dominated by downstream firms. In a general-equilibrium macroeconomic model with multiple sectors and endogenous information choice, we obtain information centrality endogenously because downstream firms are natural agglomerators of information. In the calibrated model, shocks to the 20% most downstream firms explain 70% of sentiment-driven (and 20% of aggregate) fluctuations.

Public Finance

The elasticity of intertemporal substitution (EIS) is one the most important behavioral parameters in macroeconomics and finance. Identifying the EIS remains an active literature. In “Estimating the Elasticity of Intertemporal Substitution using Dividend Tax News” (Holm et al., 2024), we show that the EIS can be credibly identified by estimating the spending response to *news* about future changes in the stream of dividends. We leverage a unique quasi-natural experiment from Norway, i.e. the 2004-2006 dividend tax reform where a tax increase was credibly pre-announced two years in advance. We show that the affected households increased spending in response to the news shock, a result that is consistent with an EIS of above unity. A structural two-agent macroeconomic model that is calibrated to match empirical impulse responses yields a point estimate for the EIS of around 1.6.

Mental health is deteriorating worldwide, especially in the West. In an ongoing project “Quantifying Mental Health” (Jamilov et al., 2025a), we document the global rise of mental health risk over the past decade using medical data from 26 advanced economies, as well as text data from major news outlets in 39 countries. We develop a macroeconomic model that departs from Full Information Rational Expectations (FIRE) and analyze the aggregate and distributional effects of rising mental ill-health on the economy.

Inflation and Monetary Policy

The 2021-2023 inflation surge has fueled academic interest in the new and old theories of inflation. An old conjecture by Bob Rowthorn states that inflation is the outcome of disagreement and conflict between economic agents (e.g. households or firms) on relative prices (e.g. real wages or profit margins). In “Measuring Conflict Inflation” (Jamilov, 2025a), I leverage state-of-the-art tools in generative artificial intelligence and build a novel Price Conflict Index (PCI) that spans 1860-2023.

The PCI is shown to be strongly associated with realized inflation—both contemporaneously and dynamically. Topical analysis reveals that disagreement over wages plays a particularly key role. This paper has thus provided evidence for conflict as an important channel of propagation for aggregate price fluctuations.

The elusive notion of *trust* has been the subject of extensive research in economics and the broader social sciences for decades. The relationship between institutional trust and central banking remains poorly understood but is important to study, particularly in light of the global rise of populism and the crisis of dis-trust. In “Trust and Monetary Policy” (Jamilov, 2025b), I show that U.S. states with higher levels of trust towards institutions exhibit a greater response to identified monetary policy shocks. A “trust block” is added to the standard New Keynesian model. Dis-trust is shown to both dampen the effects of monetary shocks—as in the data—and reduce the region of determinacy. A simple calibration of the model suggests that U.S. monetary policy may have become less effective by up to 20% due to the decline of trust.

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