I am a macroeconomist with research interests in fiscal policy and the international monetary system. I have made several applied theoretical contributions but a common theme in my research is the use of new, often micro-economic, data sources for the study of macroeconomic questions. My citation count can be found here. My ranking in the top-10% of authors (last 10 years of publications) can be found here.

Fiscal Policy: Macroeconomics and Political Economy

I have made empirical and theoretical contributions on the macroeconomics and political economy of fiscal policy.

Ilzetzki, Mendoza and Vegh (2013, Journal of Monetary Economics) is an empirical study of the effects of fiscal policy in open economies. Standard textbook treatments (a la Mundell-Flemming) have long predicted that fiscal policy is more potent in countries with fixed exchange rates and those that are less open to international trade. Surprisingly, there was previously scant empirical evidence to support these theories. In this project, we assembled fiscal data for 44 countries in high-, middle-, and low-income countries at a quarterly frequency to estimate the fiscal multiplier in various contexts. We indeed find that fiscal multipliers are higher precisely in those countries that the standard open-economy model predicts. We also find that multipliers are larger in high-income countries and countries with lower debt-to-GDP ratios. Data collection from national sources was itself a contribution because the quarterly fiscal data reported in standardized datasets such as the IMF's International Finance Statistics are often interpolated from annual data, and sometimes from GDP data, making them unsuitable for an empirical analysis of fiscal multipliers. The paper has become part of the core literature on fiscal multipliers and is cited in several review articles on the topic (Ramey, 2011, 2016, 2019; Parker, 2011) and has been included in an undergraduate textbook (Harms 2nd edition). According to IDEAS, this paper is among the top 1% most highly cited papers in economics (all time). In a complementary working paper Ilzetzki (2011) I estimate the fiscal multiplier on taxes, and the role of debt dynamics in evaluating fiscal multipliers.

Two of my early papers study why public consumption in developing countries tend to be procyclical, i.e. increase in economics booms and decline in recessions, contrary to both Keynesian (countercyclical) and neoclassical (smooth public consumption) recommendations. We document the differences between fiscal policy in high income and developing countries in Ilzetzki and Vegh (2008). Most surprisingly, I document in Ilzetzki (2011, Journal of Development Economics) that Latin American countries exhibit procyclical patterns even in their social transfers. In this paper, I provide a dynamic political economy model of public spending and show that political economy frictions (political polarization and turnover) can generate the fiscal patterns observed in developing countries. Importantly, I show that absent political frictions, the common alternative explanation of financial frictions is insufficient to explain procyclical behavior, because the precautionary savings motive makes it unlikely that financial constraints would bind in equilibrium. Those interested in my views on how institutions can be improved to address fiscal procyclicality can view my CfM public lecture on the topic.

In work with Tim Besley and Torsten Persson (Besley, Ilzetzki, and Persson, 2013), we study the long-run development of fiscal capacity. We develop a dynamic model where governments may choose to accumulate fiscal capacity—enhanced ability to tax their citizens—and expand the tax base. However, due to political polarization and government turnover, incentives are mixed in this regard. In weak states, for example,

where turnover is frequent and ethnic fractionalization is widespread, governments may fear to accumulate tax capacity lest it be used against them when the opposition takes control.

A puzzle emerges, though when considering fiscal capacity as the determinant of the tax base. Many governments appear to leave large parts of the tax base untouched—it is hard to believe that Japan cannot raise more than 20% of its GDP in taxes or that the US is unable to enforce a Value Added Tax. The biggest holes in the tax base are almost certainly by choice rather than due to limited capacity. Tax breaks, for example, amount to a third of all revenues in the US and are estimated at 6% to GDP in the UK (CBO 2013, Tyson, 2014). In Ilzetzki (2018, Journal of Public Economics), I the political causes of an incomplete tax base and the potential for reform. In the model, lobbyists vie for tax breaks and this leaves parts of the tax base untaxed. I provide a simple formula to evaluate the tax distortions created by these tax breaks and show that these distortions are increasing in public debt and as tax breaks accumulate. There comes a tipping point where tax distortions are so large that a big-bang tax reform that removes all (or many) tax breaks and may be Pareto improving, without the need to compensate losers. This is important because Coasian transfers to redress the distributional implications of tax reform are rare in practice. The model predicts and shows in the data, and through several case studies, that tax reforms tend to be "big bang" rather than incremental, and when public debt levels are elevated.

Fiscal rules have proliferated in both high-income and developing countries as a way to restrict public debt. A recent literature studies the costs and benefits of fiscal rules with a particular focus on the tradeoff between credibility and flexibility to respond to economic circumstances. In Ilzetzki and Thyssen (2024, IMF Economic Review), we investigate another aspect fiscal rules: the interaction between fiscal rules and market discipline. Markets penalize governments that overborrow and this incentivizes governments to limit their borrowing and there may be circumstances when these alone are sufficient to incentivize fiscal rectitude. At times, however, markets may be uncertain about a government's determination to repay its debt. We build a model with asymmetric information, where governments may limit their borrowing in order to signal their fiscal responsibility. This leads governments some government to over-borrow, as is commonly presumed, but also cause other governments to *under-borrow*: impose excessive austerity. This leads to an interesting interaction between market discipline and fiscal rules. By restricting irresponsible governments' borrowing, the fiscal rule also makes it more difficult for prudent governments to signal their fiscal responsibility and could lead governments to impose even harsher austerity.

In another theoretical contribution, I have studied the role of pork barrel spending in the legislative process in Ilzetzki and Drazen (2023, Journal of Public Economics). Conventional wisdom and many political economy theories view pork barrel spending as wasteful forms of rent-seeking. An opposing view (Evans 2004) in political science posits that pork greases the wheels of the legislative process, giving an additional tool for coalition building. We build a model of pork barrel spending in a legislative setting. With full information we find that it is true that pork barrel spending enables legislation that otherwise wouldn't pass but that is generally to the detriment of the public interest. Instead we propose a theory whereby legislative agenda setters posses superior information about the value of their proposed legislation and that pork barrel spending allows her to signal her private information. We show that in these circumstances, pork can be welfare enhancing.

I returned to the empirical effects of fiscal policy in Ilzetzki (2024, American Economic Review). It has long been posited that "learning by doing" allows firms to increase their productivity with experience. A post-World War II literature documented steep learning curves in aviation and shipbuilding industries in the US during the war. This evidence was one of the motivating facts for the endogenous growth literature two decades later (cf Lucas, 1993). But the evidence was based on simple correlations, the mechanisms remain unclear, and it is still uncertain whether firms become more productive through passive learning or through more active process innovation. I revisit this question through archival work of the US World War II production drive. I show that the existing literature suffers from substantial pre-trends that strongly suggest that productivity leads to accumulated experience, making it difficult to ascertain to what extent experience leads to higher productivity. I address the causal inference question with an instrument based on the shifting strategic needs of US Army Airforce over the course of the war. Importantly, I find that learning curves are far steeper when plants are operating at high levels of capacity utilization. I call this phenomenon "learning by necessity" and explain through a theoretical model how firms are incentivised to adopt in cost-reducing technologies when facing high demand and facing tight capacity constraints. This suggests that high demand may be not only inflationary but may also be an impetus for innovation and technology diffusion. With detailed archival evidence, I document the measures plants took to meet high demand relative to their existing capacity. These were active managerial interventions rather than mere passive learning.

With this paper, I entered on the ground floor of a newly (re-)emerging literature on geoeconomics and national security economics. My expertise on fiscal policy and particularly the economic effects of military buildups led to an invitation to present at the Munich Security Conference (MSC): A high-level policy conference on national security matters. I have written a review article on the economic implications of defence buildups in preparation for the conference. The MSC was not my first high-level speaking engagement. I was invited as a discussant for the 2022 Jackson Hole symposium and as a policy keynote speaker for the 2023 Asian Monetary conference (with associated paper, Ilzetzki, 2023). I have given several keynote presentations at academic conferences as well.

I was awarded a European Research Council consolidator grant in 2022 for my research agenda on fiscal policy. My research on fiscal policy has also attracted media attention, with mentions in the New York Times, Wall Street Journal, and Economist, among others.

THE INTERNATIONAL MONETARY SYSTEM

A second ongoing research agenda studies the nature of the international monetary system. Reinhart and Rogoff (2004) showed that there is a big gap between central banks' declared exchange rate regime and their de facto policy. Several additional methodologies have been proposed to classify exchange rate practices based on deeds rather than words (Shambaugh 2004, Levy-Yeyati and Sturzenegger 2005). In Ilzetzki, Reinhart, and Rogoff (2019 Quarterly Journal of Economics), we show that the global macroeconomic landscape has changed in such a way that requires modification of exchange rate classification algorithms. Using a combination of exchange rate volatility metrics and narrative evidence, we provide a new classification methodology that combines the strengths of different existing algorithms. We classify not only exchange rate practices but also the anchor currency to which each local currency gravitates. The paper documents several facts. It is no surprize that the dollar is the most dominant

currency, but the extent was surprizing: by some metrics the US dollar is more central to the international monetary system today than it was at the height of Bretton Woods, when it had an official role as the global anchor currency. Even more surprizing is that the degree of exchange rate flexibility has also converged back to levels not seen since the Bretton Woods era. We refer to the new architecture of international monetary system as the Expanded Bretton Woods II. This system has been emergent, rather than designed, and yet it has already endured longer than the original Bretton Woods system.

Our paper also gives a new algorithm for capital mobility based on dual exchange rate practices. Unlike existing algorithms (Chin and Ito 2006, 2008), it uses not only de jure controls but also market prices to measure whether the capital controls have bite. We document that capital controls have been dismantled in the 21st century, almost entirely in high income countries, and to an unprecedented extent in the developing world. (There has been a slight uptick since the 2010s.) The unrelenting desire to fix exchange rates alongside with greater capital mobility confronts policymakers with the famous Trilemma: a country cannot have free flow of capital, fixed exchange rates, and monetary autonomy simultaneously. However, foreign exchange reserve accumulation allows countries to circumvent the trilemma. We argue that the massive accumulation of foreign exchange reserves in developing countries during the 21st century is a direct consequence of these trends. We view this as a substantial long-run risk to the stability of Bretton Woods II. The increased demand for foreign reserves, predominantly US dollar assets, may eventually confront the limits of US fiscal capacity. According to IDEAS, this paper is among the top 1% most highly cited papers in economics (all time).

A series of follow up papers fleshes out some other features of Bretton Woods II. In Ilzetzki, Reinhart and Rogoff (2020a, Economic Policy) we ask why the Euro hasn't emerged as an alternative or at least a complement to the dollar as a global reserve currency. We document several metrics that indicate the euro is no more dominant in the international monetary system than the sum of the national European currencies it replaced. We discuss the reasons for this, including the lack of capital market depth and a unified fiscal capacity. We also point to a lack of coherence in ECB policy. Estimating national and Eurozone-wide Taylor rules, we show that the ECB operated more like an extension of the Bundesbank for its first decade than a bloc-wide central bank. This changed with the Eurozone crisis, but the heterogeneity of monetary needs across the union implies that the ECB has shifted from "one size fits one", in its first decade, to "one size fits none" in its second.

In Ilzetzki, Reinhart and Rogoff (2020b, Brookings Papers on Economic Activity) we show that exchange rate stability extends beyond developing countries or small economies. We show a previously undocumented secular decline in exchange rate volatility among the G3 currencies (dollar, yen and Deutschemark/euro). Surprisingly, this stability continued through 2020, despite nearly unprecedented volatility in other financial assets. We argue that increasingly synchronized monetary policy is the most likely explanation for this fact because other drivers of exchange rate (financial market shocks, real shocks) haven't diminished in the 21st century. Developments since our paper's publication have vindicated this view: G3 exchange rate volatility has re-emerged since 2022, the first period in decades when monetary policy has diverged among high-income countries, due to asymmetric effects of global inflation. The importance of monetary policy for exchange rates may sound like old news, and this was indeed the predominant view in the 1970s (Dornbusch, 1976). However, the emphasis in the literature has shifted away

from monetary policy to the real economy (Backus and Smith, 1993) and financial market shocks (Gabaix and Maggiori, 2015; Itshoki and Mukhin, 2021).

We summarize our findings and research contributions in a chapter of the Handbook of International Economics (Ilzetzki, Reinhart, and Rogoff 2022). The papers in this research agenda have received media attention including in the Economist, the FT; and policy attention, as in the US Economic Report of the President, 2025.

My research in this area remains active. I have a working paper (Chau, Ilzetzki, and Rogoff, 2022) where we show, using trillions of transactions made available through SWIFT data, that currency choice follows Zipf's law (a linear relationship between the log use of a currency and its log rank). Network externalities are a common explanation for dollar dominance: One individual choosing to transact in dollars induces her trading partners to do so too, leading to a "winner take all" dynamic in currency choice. However, using a network theory of trade and currency choice, we show that the slope of the Zipf's-law relationship arising from network externalities will be no lower than one. This is indeed the coefficient found in other settings where Zipf's law has been documented, e.g. the skewed distribution of city sizes that possibly arises due to agglomeration effects. However, we find a coefficient ranging from 0.5 to 0.7, indicating an outsized role for the dollar that goes beyond network externalities. We document that the US benefits from a unique advantage whereby nearly all transactions with the US are conducted in the US dollar. This is a phenomenon that wouldn't arise due to network externalities alone and is theoretically sufficient to explain the outsized role of the dollar.

HOUSING AND OTHER CONTRIBUTIONS TO MACROECONOMICS

I have also made contributions to our understanding of how households' propensity to borrow is affected by interest rates and house prices. My collaborators and I were among the first to gain access to comprehensive administrative UK microdata on residential owner-occupier mortgages. In a first paper (Best, Cloyne, Ilzetzki, and Kleven, 2020, Review of Economic Studies) we estimate the elasticity of intertemporal substitution using these data. The EIS is a critical behavioral elasticity in macroeconomics and public finance as it governs households' responses to interest rates and a variety of taxes, e.g. capital gains taxes. In the UK, mortgage interest rates jump discretely at critical loan-to-value thresholds. This allows us to use methods from public finance (bunching methodology as reviewed in Kleven, 2016) to estimate households borrowing response to interest rates. We build a structural model to translate these reduced-form elasticities into estimates of the EIS. We find that borrowing responds very little to interest rate jumps, despite their salience, and this implies very low elasticities of intertemporal substitution. The findings suggest that the traditional monetary policy transmission mechanism through shifts in consumption over time is weak and that interest rates affect households through different channels (e.g. cash-flow effects as in Di Maggio et al 2017).

UK mortgages are typically short-term, with durations of 2 to 5 years and with a penalizing reset rate after this initial period. Households therefore face different house price growth depending on their mortgage duration and the time of initial borrowing. This provides us with an instrument based on the interaction between mortgage duration and regional house price growth to give causal evidence of the effects of borrowing on house price growth (in Cloyne, Huber, Ilzetzki, and Kleven, 2019, American Economic Review). We find that households increase borrowing of around a quarter of their house price appreciation. We show an asymmetric response to house price increases and

decreases and additional evidence that is suggestive that the collateral channel is the main driver of the borrowing response to house price growth.

In Ilzetzki and Simonelli (2023, revise and resubmit at the Economic Journal), we evaluate the causes for productivity dispersion in Italy using a unique natural experiment. We obtain administrative data on vote counting times of poll workers in all municipalities in Italy during elections and referenda in 2013 and 2016. Poll work is voluntary, counting is a manual task that involves nearly no capital nor modern technology, the procedure is identical in all polling stations, and the process is managed at the national level. We posit that the setting isolates common explanations for productivity dispersion (capital misallocation, infrastructure, local institutional quality). Nevertheless, we find a similar degree of productivity dispersion in this uniform task as in Italian firms. Further, vote-counting productivity is strongly correlated with firms' productivity across municipalities and this correlation survives controls for common explanations for productivity dispersion. This suggests a common, labor-augmenting, factor of productivity that is common to the two settings. In a two-way-fixed effects estimate, we show that vote counting productivity is more strongly correlated with firms' productivity across municipalities in labor-intensive industries, corroborating that our measure captures a labor-augmenting component of productivity. Finally, we use features of the vote counting process to show that trust helps increase productivity when poll counters face more contentious tasks (a larger share of challenged votes). The paper sheds light on the causes for productivity dispersion and provides a new measure of productivity for every municipality in Italy.

Finally, Ilzetzki and Jin (2021, Journal of International Economics) estimates the spillovers from US monetary policy shocks to the rest of the world. Using several conventional methods to identify monetary policy shocks, we find a familiar transmission channel prior to the 1990s, whereby an increase in the US interest rate appreciates the dollar and leads to a contraction in the rest of the world. Starting in the 90s, we obtain a puzzling result: increases in US interest rates depreciate the dollar and lead to an expansion overseas. We develop a model where limited risk-taking capacity by financial institutions to rationalize these findings.

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