

# Research Statement

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I am a macroeconomist studying how frictions in the price system shape economic dynamics and the allocation of resources. My research is organized into three main agendas, each examining a different facet of this overarching theme. The first studies the impact of inflation, nominal rigidities, and exchange rates on labor market dynamics and inequality in emerging economies. The second agenda focuses on how frictions influence the price and wage-setting process itself and the choice of currencies as units of account. The third explores the misallocation of scarce resources across various markets and how this misallocation is reflected in, and perpetuated by, distortions in the price system. A common thread in my work is the combination of novel empirical facts, often uncovered through new data sources, with rigorous model analysis to draw insights into the macroeconomic implications of these pricing frictions.

## 1 Labor Market Dynamics and Policies

Inflation and its impact on labor market dynamics have long been a central focus in macroeconomics, with significant implications for economic policy, inequality, and welfare. The price of labor and the responsiveness of nominal wages to shocks are key factors shaping these dynamics. Conventional wisdom suggests that “inflation greases the wheels of the labor market” by allowing for real wage adjustments in the presence of downward nominal wage rigidities. While this idea is usually related to the interplay between inflation, exchange rates, wage-setting, and labor market flows, particularly during recessions, the precise mechanisms through which this narrative can operate are not well understood. In a sequence of papers, I document novel empirical facts and develop new theoretical frameworks that offer a fresh perspective on these policy-relevant issues.

My first paper, “[Labor Market Dynamics after Nominal Devaluations](#)” [13], studies the redistributive consequences of exchange rate policy. If wages are nominally more rigid in specific sectors than in others, devaluations can asymmetrically impact employment and real wages, generating winners and losers. Additionally, devaluations can affect the real value of households’ nominal asset positions. I study these effects in a quantitative small open economy model with heterogeneous workers, uninsurable idiosyncratic risk, and sectoral labor markets with varying degrees of nominal rigidities. I find that devaluations reduce the average welfare cost of a recession relative to a fixed exchange rate regime. However, workers disagree about the exchange rate policy for two reasons. With a fixed exchange rate, sectors with downwardly rigid wages reduce employment, and these newly unemployed workers put further downward pressure on sectors with more flexible wages. In contrast, a devaluation avoids these flows, stabilizing employment at the cost of reducing the real wage in rigid sectors. In addition, workers in those sectors, typically with higher earnings and savings, are more negatively affected by the revaluation of nominal assets. Quantitatively, the impact of this revaluation can significantly offset the labor market gains from a devaluation.

In a related paper, “[Nominal Devaluations, Inflation, and Inequality](#)” [9] (with Andrés Blanco and Emilio Zaratiegui), we exploit large nominal devaluations as a laboratory to study the dynamics of the labor income *distribution* during significant inflation surges. Our cross-country analysis reveals that real

wages fall by 12% during these episodes, as average nominal wages remain constant while inflation increases post-devaluation. More importantly, labor income inequality falls significantly during the recovery of real income. Two years post-devaluation, the Gini coefficient drops by 3% relative to its pre-devaluation level—as a benchmark, the Gini coefficient has increased by 12% over 40 years in the U.S. To dissect the mechanisms, we use administrative data around the 2002 devaluation in Argentina. We find that heterogeneity across the income distribution in labor mobility and bargaining power—captured by union coverage—are critical drivers of the drop in income inequality, while heterogeneous trade exposure plays a minor role. In a nutshell, high-income workers, less likely to move across firms for better wages and less protected by union bargaining, experience a slower recovery in their real incomes. A back-of-the-envelope calculation shows that these two mechanisms can account for 42% of the overall inequality decline.

In “[The Evolution of the Earnings Distribution in a Volatile Economy: Evidence from Argentina](#)” [1] (with Andrés Blanco, Bernardo Diaz de Astarloa, Christian Moser and Danilo Trupkin) we study earnings inequality and dynamics in Argentina between 1996 and 2015 when the economy transitioned from a low- to a high-inflation regime. This transition opens a rare window to understand how the earnings distribution and the nature of wage rigidity evolve as an economy undergoes a significant shift in its inflation regime. To shed light on the changing nature of wage rigidity, we follow the price-setting literature and decompose wage changes into their transitory and permanent components. We document two main facts regarding the dynamics of the latter. First, during low-inflation periods, the annual frequency of wage changes is 0.64—as in other low-inflation developed economies. The frequency of wage changes falls significantly with workers’ earnings ranks and is largely heterogeneous across sectors. By comparison, the frequency spikes to 0.95 in high-inflation periods. Second, the shape of the wage change distribution differs across inflation regimes. When inflation is low, this distribution exhibits (i) asymmetry, with a missing mass of negative wage changes, and (ii) a significant spike at small positive changes. In contrast, when inflation is high, the distribution becomes symmetric around a mean close to the annual inflation rate. This project is part of the [Global Repository of Inflation Dynamics](#) initiative, which provides open access to a database of micro statistics on global income dynamics and inequality.

The facts documented in these papers, along with new evidence linking wage rigidity to the sensitivity of labor market flows to nominal shocks, suggest that wages might be allocative. That is, the *distribution* of the surplus between firms and workers could affect labor market flows. In “[A Theory of Labor Markets with Inefficient Turnover](#)” [14] (with Andrés Blanco, Christian Moser, and Emilio Zaratiegui), we develop a parsimonious model of a frictional labor market with sticky wages and two-sided lack of commitment between firms and workers to explore the consequences of allocative wages. In the presence of idiosyncratic shocks, sticky nominal wages fail to track a worker’s revenue productivity. Consequently, inefficient job separations are unilaterally initiated whenever a worker’s wage-to-productivity ratio moves outside an inaction region. Thus, the wages of incumbent workers are allocative. Our contribution is threefold. First, leveraging the theory of stochastic differential games with stopping times, we characterize separation and job-finding policies. We find that delaying a separation resembles an investment choice for each agent, and the lack of commitment reduces their willingness to invest in the match. Second, we analytically show how to recover the unobserved distribution of wage-to-productivity ratios, enabling us to infer the prevalence of inefficient separations using readily available data. Third, we characterize the employment dynamics after an aggregate monetary shock. Surprisingly, we discover that in stable economies with

low trend inflation—such as the U.S. during the Great Moderation period—monetary shocks might not affect aggregate employment, despite wages being allocative at the micro-level. However, deviations from stable and low-inflation economies amplify the labor market’s response to aggregate shocks. We explain these mechanisms and provide sufficient statistics for these effects.

In macroeconomics, the conventional wisdom that “inflation greases the wheels of the labor market” emerges as both a tantalizing proposition and a perplexing enigma. While evidence has supported this idea, the mechanisms through which inflation affects labor market flows remain not well understood. In ongoing work, “[How Does Inflation “Grease the Wheels” in a Frictional Labor Market?](#)” [15], Andrés Blanco and I extend the framework in [14] by incorporating on-the-job search and costly wage renegotiation under mutual agreement. These features enable us to have a model in which wage adjustment and the probability of job-to-job transitions are state-contingent, allowing the model to match the empirical distribution of wage changes both within and across jobs. The new framework reproduces the anatomy of labor market dynamics during episodes of inflation surges.

In ongoing work with Hassan Afrouzi, Andrés Blanco, and Erik Hurst, “[The Distributional Effects of Inflation on the Labor Market](#)” [16], we study how inflation affects the *distribution* of real labor income by focusing on the distributional aspect of the framework developed in [15]. In the model, workers’ wage adjustment probabilities and labor flows are a function of the ratio of their real wages to productivity. By affecting this distribution, inflation causes heterogeneous pass-through across the income distribution.

Moreover, my work in this area also addresses the consequences of labor market policies. As labor markets become less regulated, the share of workers in alternative work arrangements has risen sharply in the last decade. In “[Paying Outsourced Labor: Direct Evidence from Linked Temp agency-worker-client Data](#)” [2] (with Simon Jäger, Pascuel Plotkin and Benjamin Schoefer), we draw on unique administrative data that allows us to observe workers in temporary work arrangements, their temp agency, and the user firms that rely on their services. This unique feature, combined with matched employer-employee data, permits us to estimate how rent-sharing differs for workers within the same workplace who are separated only by the firm’s boundary, as some are in regular and others in temporary work arrangements at the same workplace. We find that a high-wage user firm that pays a regular worker a 10% premium pays a temp worker on average only a 4.9% premium, compared to what these workers would earn in a low-wage user firm in their respective work arrangements—the midway between the benchmarks of full pass-through for insiders and zero pass-through in a competitive spot-labor market.

A large body of work argues that fairness concerns are important for understanding redistributive policies. In “[Sympathy for the Diligent and the Demand for Workfare](#)” [3] (with Ricardo Perez-Truglia), we study the role of fairness concerns in shaping the demand for social programs with work requirements relative to unconditional assistance programs. We first present new survey evidence showing that individuals are more generous towards poor people whom they perceive as diligent workers compared to those perceived as non-diligent—a social preference that we label “sympathy for the diligent”. In addition, survey respondents with higher sympathy for the diligent are more likely to demand work requirements in social programs and agree with the notion that work requirements effectively prevent the high cost-of-effort poor from benefiting from these programs. Building on these findings, we incorporate them into a model of income redistribution, in which a benevolent government with fairness concerns prioritizes the well-being of individuals who exert greater effort. Even if wasteful, work requirements can be optimal

as they allow for a better screening between individuals who exert great effort and those who do not. However, if the government lacks commitment, the availability of screening through work requirements leads to a lower equilibrium effort and, potentially, a Pareto-dominated allocation.

## 2 Price-setting and Units of Account

Prices serve as crucial signals about the relative scarcity or abundance of resources, guiding the efficient allocation of these resources in an economy. However, various frictions can affect the price-setting process itself, leading to distortions in these signals. My research in this area explores the role of information frictions, nominal rigidities, lack of commitment, and other market imperfections in the determination of prices across different contexts, from goods markets to international labor markets, and the choice of currencies as units of account in private contracts.

A significant strand of research proposes that limited information when setting prices can have substantial economic effects. However, empirically testing these theories is challenging. In [“Price Setting under Uncertainty about Inflation”](#) [4] (with Diego Perez), we empirically test the relevance of public information about the inflation rate on firms’ pricing decisions, and quantify the welfare effects of changes in public information availability. Exploiting the manipulation of official inflation statistics in Argentina and using data from Latin America’s largest e-commerce platform, we find increased price dispersion in environments with less accurate inflation statistics. We then formulate a general equilibrium model of price setting with information frictions, calibrate it to our empirical evidence, and show that reliable inflation statistics can significantly enhance welfare, especially in economies with unpredictable monetary policy.

In economies with a history of monetary instability, local currencies often coexist with a stable currency, usually the US dollar. The most common expression of this is the use of dollars as a store of value [as we briefly document in 5]. Our paper [“Domestic Price Dollarization in Emerging Economies”](#) [6] (with Diego Perez), investigates the use of dollars as a unit of account in *domestic* markets. Analyzing the aforementioned data, we document significant heterogeneity in dollar pricing linked to the dollar’s role in other functions such as store of value. Furthermore, we observe that the choice of pricing currency is influenced by the nature of the goods and the characteristics of the sellers. For example, more tradable goods and those sold by larger sellers are more likely to be priced in dollars. Since prices are sticky, we empirically show how the currency choice affects the pass-through of nominal exchange rate shocks in the short run, which impacts sales volumes differently based on the pricing currency. In follow-up work [“Dollar Pricing, Inflation, and Search Frictions”](#) [17], we explore the determinants of price dollarization by focusing on the role of demand-side characteristics and search frictions. Here, we document that more expensive goods, which take longer to sell and are more likely to be purchased by buyers with easier access to dollars, tend to be priced in dollars. We rationalize these findings by developing a search model of currency choice in which firms price in dollars to avoid the erosion of their real value due to inflation.

Another key aspect of currency is its role as a unit of account in *credit contracts*. In [“Currency Choice in Contracts”](#) [7] (with Rishabh Kirpalani and Diego Perez), we theoretically study the determinants of the currency choice of contracts among private agents and its impact on monetary policy. We develop a model where agents choose the currency to denominate bilateral contracts while the government sets the

inflation rate. The optimal currency choice trades off the price risk of a currency with how this risk covaries with the relative consumption needs of each signing agent. When private contracts predominantly use the local currency, the government uses inflation to redistribute resources more effectively, enhancing the local currency’s attractiveness. However, when governments lack commitment and are subject to policy risk affecting a currency’s price risk, multiple equilibria can emerge. Some of these can be constrained-inefficient, suggesting potential benefits in regulating the currency choice of private contracts.

In “[The International Price of Remote Work](#)” [10] (with Agostina Brinatti, Alberto Cavallo and Javier Cravino), we study wage-setting in global markets for remote work using data from a leading online job platform. Our goal is to understand whether wages for remote workers across different countries will converge and how they react to global economic shocks. Despite the global nature of the platform, we document significant wage disparities among remote workers from different countries aligned with differences in GDP per capita. To understand these disparities, we develop a model of a global remote labor market where equilibrium remote wages vary by location due to productivity or local wage differences. To disentangle these factors, we estimate exchange rate pass-through to remote wages, finding that the partial elasticity of dollar wages to the exchange rate between the dollar and the worker’s local currency is low. This result suggests that remote wages are more closely tied to local labor market conditions.

### 3 The (Mis-)Allocation of Scarce Resources

The observation that resources often fail to flow to where they are most productive or valued, as would be expected if prices were allocating resources efficiently, represents a fundamental puzzle in economics. This question underscores the importance of understanding the causes and consequences of resource misallocation. This research agenda investigates the mechanisms behind resource misallocation across various contexts, from capital and credit markets to the distribution of market share among firms. A key insight that emerges from these papers is that the degree of resource misallocation can be indirectly inferred from its footprint on the price system.

In “[Concentration, Market Power, and Misallocation: The Role of Endogenous Customer Acquisition](#)” [11] (with Hassan Afrouzi and Ryan Kim) we explore how different margins of market share are related to markups. By merging individual product-level consumption data with producer-level data, we find that firms’ markups correlate only with their average sales per customer but not with the overall size of their customer base. Yet, only about 20% of the variation in firms’ market share is tied to the margin associated with markups. Then, we develop a model of firm dynamics incorporating endogenous customer acquisition and variable markups. In the model, a firm’s customer base merely shifts its demand, with the demand elasticity determined by each customer’s individual demand curve. Thus, the model generates a comovement between markups and average sales per customer, but not between markups and the number of customers, as in the data. The calibrated model predicts an equilibrium relationship between market share and market power as in standard models; however, it generates noticeably higher variation in markups across firms relative to models with a fixed customer base. This increased markup dispersion hints at larger efficiency losses due to misallocation of demand. In examining the first-best allocation within our model, we find that the social planner can significantly increase aggregate productivity and output by reallocating more customers to more productive firms while equalizing relative demand per

customer across weakly substitutable varieties, compared to the decentralized equilibrium.

Information asymmetries are a prominent feature of real asset markets. However, given their nature, quantifying their consequences has proven elusive. In [“Illiquid Lemon Markets and the Macroeconomy”](#) [12] (with Aime Bierdel, Juan Herreño and Pablo Ottonello) we develop a quantitative capital-accumulation model to study the effects of information asymmetry on the terms of trade in real asset markets. The model predicts that sellers with more information about the quality of capital distort prices and trading probabilities to signal their unobserved type. Using a unique dataset of nonresidential structures listed for sale in Spain, we provide supporting empirical evidence for the model: Units with higher predicted prices based on observed characteristics have shorter durations on the market, while units with higher residual prices have longer durations. Calibrating the model with these cross-sectional patterns, we assess the macroeconomic impact of asymmetric information. In the steady state, the economy features moderate levels of asymmetric information, with the probability of a lemon going unnoticed being close to 2%. However, the economy displays significant aggregate responses to changes in information technologies. Notably, an unanticipated decline in the accuracy of information technologies, akin to that measured during the Euro crisis, leads to a more than 2% decline in economic activity.

A standard feature of consumer credit markets is that borrowers can apply sequentially for loans from new lenders, potentially imposing an externality on prior lenders. In [“The Extension of Credit with Nonexclusive Contracts and Sequential Banking Externalities”](#) [8] (with Giacomo De Giorgi and Enrique Seira), we use data on all loans in Mexico to show that sequential banking is pervasive. Second, to understand its consequences, we combine data on rejected and accepted credit card applications from one of Mexico’s largest banks together with data on the universe of formal loans and exploit the bank’s approval rules in a regression discontinuity design. Our results indicate that the additional credit induces default on previous loans only for borrowers with lower credit scores who increase their total debt but not for customers with higher scores who use the new credit to smooth payments on preexisting loans. These results help to understand the consequences of “no-universal-default” regulation, which prohibits creditors from changing the terms of a loan when informed that their customers have defaulted on loans from unrelated lenders.

## Published papers

- [1] Andrés Blanco, Bernardo Diaz de Astarloa, Andrés Drenik, Christian Moser, and Danilo R Trupkin. The Evolution of the Earnings Distribution in a Volatile Economy: Evidence from Argentina. *Quantitative Economics*, 13(4):1361–1403, 2022.
- [2] Andrés Drenik, Simon Jäger, Pascuel Plotkin, and Benjamin Schoefer. Paying Outsourced Labor: Direct Evidence from Linked Temp Agency-Worker-Client Data. *Review of Economics and Statistics*, 105(1):206–216, 2023.
- [3] Andrés Drenik and Ricardo Perez-Truglia. Sympathy for the Diligent and the Demand for Workfare. *Journal of Economic Behavior & Organization*, 153:77–102, 2018.
- [4] Andrés Drenik and Diego J Perez. Price Setting under Uncertainty about Inflation. *Journal of Monetary Economics*, 116:23–38, 2020.

- [5] Andrés Drenik, Gustavo Pereira, and Diego J Perez. Wealth Redistribution after Exchange Rate Devaluations. In *AEA Papers and Proceedings*, volume 108, pages 552–556, 2018.
- [6] Andrés Drenik and Diego J Perez. Domestic Price Dollarization in Emerging Economies. *Journal of Monetary Economics*, 122:38–55, 2021.
- [7] Andrés Drenik, Rishabh Kirpalani, and Diego J Perez. Currency Choice in Contracts. *The Review of Economic Studies*, 89(5):2529–2558, 2022.
- [8] Giacomo De Giorgi, Andrés Drenik, and Enrique Seira. The Extension of Credit with Nonexclusive Contracts and Sequential Banking Externalities. *American Economic Journal: Economic Policy*, 15(1):233–271, 2023.

## Papers under revision

- [9] Andrés Blanco, Andrés Drenik, and Emilio Zaratiegui. Nominal Devaluations, Inflation and Inequality. Working Paper 32494, National Bureau of Economic Research. *Revise and Resubmit, American Economic Journal: Macroeconomics*, 2022.
- [10] Agostina Brinatti, Alberto Cavallo, Javier Cravino, and Andrés Drenik. The International Price of Remote Work. Working Paper 29437, National Bureau of Economic Research. *Revise and Resubmit, The Review of Economic Studies*, 2023.
- [11] Hassan Afrouzi, Andrés Drenik, and Ryan Kim. Concentration, Market Power, and Misallocation: The Role of Endogenous Customer Acquisition. Working Paper 31415, National Bureau of Economic Research. *Revise and Resubmit, Econometrica*, 2023.
- [12] Aimé Bierdel, Andrés Drenik, Juan Herreño, and Pablo Ottonello. Illiquid Lemon Markets and the Macroeconomy. Working Paper 31711, National Bureau of Economic Research. *Revise and Resubmit, Journal of Political Economy*, 2023.

## Working papers

- [13] Andrés Drenik. Labor Market Dynamics after Nominal Devaluations. *Manuscript*, 2016.
- [14] Andrés Blanco, Andrés Drenik, Christian Moser, and Emilio Zaratiegui. A Theory of Labor Markets with Inefficient Turnover. Working Paper 32409, National Bureau of Economic Research, 2024.
- [15] Andrés Blanco and Andrés Drenik. How Does Inflation “Grease the Wheels” in a Frictional Labor Market? *Manuscript*, 2023.
- [16] Hassan Afrouzi, Andrés Blanco, Andrés Drenik, and Erik Hurst. The Distributional Effects of Inflation on the Labor Market. *Manuscript*, 2024.
- [17] Andrés Drenik and Diego J Perez. Dollar Pricing, Inflation, and Search Frictions. *Manuscript*, 2024.