Research Statement

I am a macroeconomist specializing in labor economics with a focus on firm dynamics. My research seeks to understand the behavior of heterogeneous firms and how they interact with labor markets, particularly the decision-making processes that affect their growth and employment strategies and their aggregate consequence. I approach these questions through dynamic model, incorporating heterogeneous firms. My research aims to contribute to a deeper understanding of how firms' decisions aggregate to influence macroeconomic trends, with particular attention to policies that stabilize labor markets and promote long-term growth.

In my job market paper, *Going Public over the Business Cycle - Implications for the Employment Dynamics*, I explore the role of Initial Public Offerings (IPOs) in firm dynamics and employment after the aggregate productivity shock hits. Using a heterogeneous firm dynamics model incorporating endogenous IPO decision, I investigate how firms' transitions from private to public ownership impact the aggregate labor demand. First, I empirically show that the number of IPOs is procyclical, and that IPO firms during contractions not only are fewer but also grow slower post-IPO on average. Based on this stylized fact and my empirical findings, I build a heterogeneous firm model that incorporates endogenous IPO decisions, reflecting the transition from private to public firms. This model successfully replicates both the procyclical number of IPOs and the impact of IPOs on individual firm growth. The model suggests that the IPO margin amplifies the propagation of aggregate productivity shocks on aggregate employment through two channels: the procyclical number of IPOs (extensive margin) and heterogeneous post-IPO growth (intensive margin), which is driven by varying levels of capital injection discounted differently over the business cycle.

In Firm Expectations, Innovation and Growth, a coauthored project with Georg Duernecker, Marek Ignaszak, and Leo Kaas, we investigate the relationship between firms' subjective expectations and their R&D investment decisions, as well as its implications for aggregate productivity. Empirically, we find that German firms' subjective expectations regarding employment growth are widely dispersed but tend to be pessimistic on average, and these expectations influence firms' decisions, particularly in terms of R&D investment. We develop a heterogeneous firm model with imperfect information, where firms form subjective expectations and learn about their productivity over time. The model successfully replicates the overall pessimism observed in the data, driven by the higher likelihood of exit for optimistic firms. Our findings suggest that information frictions enhance business dynamism through increased entry and exit, but also lower the average level of innovation, as pessimistic firms tend to invest less in R&D. This, in turn, slows aggregate productivity growth.

Furthermore, while assisting the project Job Ladder and Wealth Dynamics in General Equilibrium of Leo Kaas, Etienne Lalé and Nawid Siassi, I developed a strong interest in job search and matching models, which has shaped my future research plans on the role of working from home on job search and matching. One key motivation for this research is the observation that agglomeration in megacities is driven by firms seeking access to a large pool of applicants, which also draws young job

seekers. Promoting working from home could encourage firms to choose locations independent of this labor pool, potentially alleviating the agglomeration problem. While there is already a significant body of literature that explores the welfare and productivity implications of remote work from the workers' perspective, there is still a long way to go in understanding how firms approach remote work. In my future research, I aim to investigate how remote work might reshape firms' hiring practices and location choices, and furthermore how it interacts with workers' searching behavior. By integrating job search and matching models with spatial considerations, I hope to provide new insights into how remote work can influence firm behavior and regional economic dynamics.