

IN THIS ISSUE

St. Louis Fed-Wash U-LAEF Macro-Labor Conference
Conference held March 27-28, 2025

4th Labor Markets and Macroeconomic Outcomes
Conference held April 4-5, 2025

Demographic Heterogeneity in Aggregate Economics
Conference held April 11-12, 2025



FROM THE LAB

Table of Contents

1. Director's Message - Finn Kydland & Nick Pretnar

2025 St. Louis Fed-Wash U-LAEF Macro-Labor Conference

Note: speakers are highlighted in author listings

3. Capitalism at Work: Labor Reallocation and Wage Growth in East Germany

Tim Lee, Sebastian Findeisen, Wolfgang Dauth, and Tomasso Porzio

3. Spatial Sorting of Workers and Firms

Ryungha Oh

4. Job Search and the Gender Wage Gap

Andreas Mueller, Ayşegül Sahin, and Jason Faberman

4. Neighborhood Segregation and Endogenous Racial Bias

Martín García Vázquez, Veronica Guerrieri, Marta Prato, and Alessandra Fogli

5. To Grandmother's House We Go: Informal Childcare and Female Labor Mobility

Joanna Venator

5. The Lifecycle Origins of Inequality

Luigi Pistaferri, David Price, and Fatih Guvenen

6. Equilibrium Evictions

Dean Corbae, Michael Nattinger, and Andrew Glover

6. The Value of a Job

Christopher Tonetti

4th Labor Markets and Macroeconomic Outcomes

Note: speakers are highlighted in author listings

8. Micro-Macro Turnover Links Over the Business Cycle

Yusuf Mercan and Benjamin Schoefer

8. The Adoption of Non-Rival Inputs and Firm Scope

Xian Jiang and Hannah Rubinton

8. Intra-Household Risk Sharing and Aggregate Consumption Inequality

Paula Calvo Ilse Lindenlaub, Ben Lochner, Ana Reynoso, Lindsay Uniat

9. Rising Income Risk at the Top and Falling Interest Rates: Evidence from 50 Years of Tax Returns

Kyle Herkenhoff, Chengdai Huang, Michael Nattinger, Jonathan Rothbaum, Lawrence Schmidt, and J. Carter Braxton

9. Labor Market Power with Worker Heterogeneity

David Berger, Kyle Herkenhoff, Jaehun Jeong, and Simon Monge

10. Parents, Patience, and Persistence: A Theory of Intergenerational College Attainment

David L. Fuller and Guillaume Vandenbroucke

11. A Theory of How Workers Keep Up With Inflation

Hassan Afrouzi, Andres Blanco, Andres, Drenik, and Erik Hurst 20.

11. Labor Market Beliefs and the Gender Wage Gap

Christine Braun and Ana Figueiredo

12. Financial Incentives to Fertility: From Short to Long Run

Lidia Cruces and F. Javier Rodriguez-Roman

12. Parental Leave: Economic Incentives and Cultural Change

James Albrecht, Per-Anders Edin, Raquel Fernández, Jiwon Lee, Peter Thoursie and Susan Vroman

Demographic Heterogeneity in Aggregate Economics

Note: speakers are highlighted in author listings

14. What explains wealth and portfolio differences between Black and White Americans?

Ellen Lu, James Paron, and Sylvain Catherine

14. Macroeconomics of Racial Disparities: Discrimination, Labor Market, and Wealth

Srinivasan Murali and Guanyi Yang

15. Signals, Interviews, and Hiring: Statistical Discrimination in Labor Market Equilibrium

Piero Gottardi, Benjamin Lester, Ryan Michaels, and Ronald Wolthoff

16. Lifetime Work Hours and the Evolution of the Gender Wage Gap

Oksana Leukhina and Guillaume Vandenbroucke

- 16. From Preschool to College: The Impact of Education Policies over the Lifecycle**
Angela Zheng and Jacob Wright
- 17. The Implications of Family Structure, Education Prices, and Policy Reforms for Inequality and Intergenerational Mobility**
Joseph Pedtke
- 18. Implications of Eviction Enforcement for Household Formation and Home-Ownership**
Natalia Kovrijnykh, Jacob Shepard, and Igor Livshits
- 19. Intergenerational Mobility and Credit**
J. Carter Braxton and Nisha Chikhale
- 19. Working Hours and the Child Penalty in an Equilibrium Household Search Model**
Alessandro Di Nola, Chiara Lacava, Haomin Wang, and Leo Kaas
- 20. The Autumn of Patriarchy**
Anson Zhou
- 20. Female Employment and Structural Transformation**
Moritz Kuhn, Xincheng Qiu, and Iouri Manovskii

From the Lab

Director's Message

Finn Kydland and Nick Pretnar



In this issue of FROM THE LAB, we have decided to write a joint message to highlight all of the wonderful new initiatives and collaborations that LAEF has begun to undertake. The conferences featured in this issue are from spring of 2025. We joined teams with economists at the Federal Reserve Bank of St. Louis, Washington University in St. Louis, Vanderbilt University, and the University at Albany to help fund three joint conferences featuring impactful talks and prestigious presenters.

The 2025 St. Louis Fed-Wash U-LAEF Macro-Labor Conference was hosted over two days with day one at the Federal Reserve Bank of St. Louis and day two at Washington University in St. Louis. This conference was well-attended by faculty at Wash U and members of the STL Fed research department. LAEF is proud to help fund this particular initiative again in spring of 2026, and we look forward to many future collaborations with both institutions.

The Labor Markets and Macroeconomic Outcomes took place for the fourth consecutive year overall and second consecutive year at Vanderbilt University. LAEF has developed a wonderful relationship with the economics faculty at Vanderbilt to help bring high-quality macroeconomic research to the southern United States. The annual Nashville conference has become a high-demand attraction with a competitive submission and review process, featuring many submissions from high-profile researchers and journal editors. We look forward to helping Vanderbilt host this conference again for the fifth annual version in April of 2026.

Finally, the Demographic Heterogeneity in Aggregate Economics conference at the University at Albany (SUNY) was co-sponsored by LAEF, the SUNY system, and the Federal Reserve Bank of Cleveland. Multiple prominent economists from three continents were in attendance for two days of seminars. This coming spring LAEF and the University at Albany will engage in a new one-time collaboration examining the intersection of Artificial Intelligence and the Macroeconomy, while LAEF and the Federal Reserve Bank of Cleveland will co-sponsor an initiative for research examining contemporary demographic issues.

Our events from the spring of 2025 showcase the new and impactful direction LAEF has taken since the end of the pandemic. By partnering with many research departments in both academic and policy institutions, we are able to amplify the impact of our immense resources to help advance the frontier of knowledge and add prestige to UCSB reputation as a leading academic research institution.



2025 St. Louis Fed-Wash U-LAEF Macro-Labor Conference

March 27-28, 2025; St. Louis, Missouri, Conference Participants

Alexander Bick — *FRB of St. Louis*

Serdar Birinci — *FRB of St. Louis*

Victoria Gregory — *FRB of St. Louis*

Serdar Ozkan — *FRB of St. Louis*

Yongseok Shin — *Washington University in St. Louis*

Nick Pretnar — *LAEF, UCSB*

Tomasso Porzio — *Columbia University*

Ryungha Oh — *Northwestern University and University of Chicago*

Jason Faberman — *FRB of Chicago*

Joanna Venator — *Boston College*

Fatih Guvenen — *University of Minnesota*

Andrew Glover — *FRB of Kansas City*

Christopher Tonetti — *Stanford University*

Alessandra Fogli — *FRB of Minneapolis*



Capitalism at Work: Labor Reallocation and Wage Growth in East Germany

Presenter: *Tomasso Porzio*

Coauthors: *Tim Lee, Sebastian Findeisen, Wolfgang Dauth*

How do institutions affect economic performance? We exploit a unique historical episode, the German Reunification, to investigate how this radical change transformed East Germany's labor market allocation, igniting wage growth in the early years after reunification. Using matched employer-employee data constructed from the universe of German social security records, we show that the sharp growth in East German wages strongly correlates with a rapid reallocation of workers across plants within East Germany. Moreover, reallocation was disproportionately larger among older cohorts, suggesting that longer exposure to communist institutions led to more severe misallocation: In a competitive market, these older workers would have switched jobs or been fired at a younger age. By the same token, only East German plants that already existed at the time of reunification display different re-allocation patterns compared to their Western counterparts: Large plants downsize, indicating that they had previously been inefficiently large, while all plants experience significant levels of worker turnover. We find that plants with larger levels of



Spatial Sorting of Workers and Firms

Presenter: *Ryungha Oh*

Why do productive workers and firms locate together in dense cities? I develop a new theory of two-sided sorting in which both heterogeneous workers and firms sort across space. The location choices of workers and firms affect each other and endogenously generate spatial disparities in the presence of three essential forces: complementarity between worker and firm productivity, random matching within frictional local labor markets, and congestion costs. I demonstrate that the decentralized equilibrium exhibits excessive concentration of workers and firms, and dispersing them away from dense locations can mitigate congestion without reducing output. I then provide direct empirical evidence of the two-sided sorting mechanism using German administrative micro-data. An exogenous increase in the quality of the workforce in a location results in more productive firms choosing that location. Finally, to quantify the implications of the model, I calibrate it to U.S. regional data and show that policies that relocate workers and firms toward less dense areas can increase welfare.



Job Search and the Gender Wage Gap

Presenter: Jason Faberman

Coauthors: Andreas Mueller, Ayşegül Sahin

We use data on earnings, job search effort, and labor market outcomes to examine the contribution of gender differences in the job search and job offer process to the gender wage gap. We show that women exert more job search effort than men, but are generally equally successful in generating job offers per unit of search. The offers women receive, however, tend to pay lower wages, offer fewer hours, and offer less benefits. We also show that women tend to have lower reservation wages than men, but have stronger preferences for non wage job amenities (location, commuting, hours), and the scope of jobs they search for differs considerably, with a greater focus on finding part-time work. Women's search effort is also less elastic (with respect to the wage) than men's job search, consistent with the greater weight they place on job amenities. Additional survey responses suggest the disproportionate burdens of child rearing on women drive the observed gender differences in job search preferences. We develop an equilibrium model of labor market search where individuals can search while employed or unemployed and where they value both the wage and nonwage aspects of a job. We allow for gender differences in search costs, offer arrival rates, separation rates, outside options, and preferences for job amenities. We use the model to evaluate how much gender differences in each of these factors contribute to the overall wage gap. Preliminary estimates suggest that the model can account for a nontrivial fraction of the observed wage gap, with gender differences in amenity preferences and job turnover each accounting for roughly half the contribution. We also analyze how productivity shocks and changes in amenity values of jobs affect men and women differentially. Since women value amenities more, an increase in amenity values of jobs increases gender wage gap while a positive productivity shock has the opposite effect. We plan to analyze this further by examining how requirements for minimum amenity provisions such as paid family leave can change the observed gender wage gap.



Neighborhood Segregation and Endogenous Racial Bias

Presenter: Alessandra Fogli

Coauthors: Martín García Vázquez, Veronica Guerrieri, Marta Prato

No summary.



To Grandmother's House We Go: Informal Childcare and Female Labor Mobility

Presenter: *Joanna Venator*

We study how childcare costs and the location of extended family influence the labor supply and mobility of U.S. women. We observe women returning to their home locations immediately before fertility events, suggesting that the desire for informal childcare is a motivator of home migration. Moreover, women who live nearby their parents have lower child earnings penalties. We then build a dynamic model of labor supply and migration to assess the impacts of counterfactual policies. We find that childcare subsidies increase earnings and mobility among U.S. women and that ignoring geography can understate the welfare benefits of these policies considerably, especially for women of relatively high socioeconomic status and those whose parents live in locations with poor amenities.



The Lifecycle Origins of Inequality

Presenter: *Fatih Guvenen*

Coauthors: *Luigi Pistaferri, David Price*

This project challenges an accepted finding in economics on the lifecycle pattern of inequality—namely, that inequality increases with age within a birth cohort. The research team builds on existing research from the Global Repository of Income Dynamics database to develop a model to explain an observation in the data that inequality is generated more from differences in childhood experiences such as parental income or school quality than from labor market experiences.



Equilibrium Evictions

Presenter: *Andrew Glover*

Coauthors: *Dean Corbae, Michael Nattinger*

We develop an equilibrium model of rental housing and evictions. Both landlords and tenants lack commitment: landlords evict if they don't expect future rents to cover costs, while tenants move to new housing if asked to pay too much rent. Evictions due to non-payment are never socially efficient and lead to inefficiently low quantity and quality of rental housing. Restricting landlords' ability to evict can improve welfare relative to laissez-faire, but a complete eviction moratorium raises welfare only when temporarily adopted during a crisis. Finally, even partial rent support can eliminate evictions and delivers significantly larger gains than eviction restrictions.



The Value of a Job

Presenter: *Christopher Tonetti*

We estimate the present discounted value of earnings for a particular worker having a job at a particular firm, using a nonparametric statistical model that nests many rich structural models. We assume a stationary Markov structure conditional on a vector of idiosyncratic states, where states determine payoffs and transitions. We use rich employer-employee matched data from Denmark, cluster workers and firms into types, define a parsimonious set of state variables, and estimate type- and state-specific payoffs and transition probabilities directly from their empirical counterparts. We then compute values by iterating over a Bellman equation. We decompose the value into its components, including earnings on the current job, the probability of staying or moving to a new job of a particular type and the earnings growth associated with staying or moving, and transitions to nonemployment with associated payoffs. We also compare the distribution of job value changes upon job-to-job moves to the wage change distribution and show how patterns of worker and firm sorting differ when using values instead of wages.



4th Labor Markets and Macroeconomic Outcomes

April 4-5, 2025; Nashville, Tennessee, Conference Participants

Adam Blandin — *Vanderbilt University*

Kathleen McKiernan — *Vanderbilt University*

Nick Pretnar — *LAEF, UCSB*

Benjamin Schoefer — *UC Berkeley*

Hannah Rubinton — *FRB of St. Louis*

Christopher Carroll — *Johns Hopkins University*

J. Carter Braxton — *University of Wisconsin, Madison*

Simon Mongey — *FRB of Minneapolis*

Guillaume Vandenbroucke — *FRB of St. Louis*

Erik Hurst — *University of Chicago*

Paula Calvo — *Arizona State University*

F. Javier Rodriguez-Roman — *University of Barcelona*

Raquel Fernandez — *New York University*

Christine Braun — *Warwick University*



Micro-Macro Turnover Links Over the Business Cycle

Presenter: Benjamin Schoefer

Coauthors: Yusuf Mercan



The Adoption of Non-Rival Inputs and Firm Scope

Presenter: Hannah Rubinton

Coauthors: Xian Jiang

Custom software is distinct from other types of capital in that it is non-rival—once a firm makes an investment in custom software, it can be used simultaneously across its many establishments. Using confidential U.S. Census data, we document that while firms with more establishments are more likely to invest in custom software, they spend less on it as a share of total capital expenditure. We explain these empirical patterns by developing a model that incorporates the nonrivalry of custom software. In the model, firms choose whether to adopt custom software, the intensity of their investment, and their scope, balancing the cost of managing multiple establishments with the increasing returns to scope from the non-rivalrous custom software investment. Using the calibrated model, we assess the extent to which the decline in the rental rate of custom software over the past 40 years can account for a number of macroeconomic trends, including increases in firm scope and concentration.



Intra-Household Risk Sharing and Aggregate Consumption Inequality

Presenter: Paula Calvo

Coauthors: Ilse Lindenlaub, Ben Lochner, Ana Reynoso, Lindsay Uniat



Welfare and Spending Consequences of Consumption Stimulus Policies

Presenter: *Christopher Carroll*

Coauthors: *Edmund Crawley, Ivan Frankovic, Hakon Tretvoll*

Using a heterogeneous agent model calibrated to match measured spending dynamics over four years following an income shock (Fagereng, Holm, and Natvik (2021)), we assess the effectiveness of three fiscal stimulus policies employed during recent recessions. Unemployment insurance (UI) extensions are the clear “bang for the buck” winner, especially when effectiveness is measured in utility terms. Stimulus checks are second best and have the advantage (over UI) of being scalable to any desired size. A temporary (two-year) cut in the rate of wage taxation is considerably less effective than the other policies and has negligible effects in the version of our model without a multiplier.



Rising Income Risk at the Top and Falling Interest Rates: Evidence from 50 Years of Tax Returns

Presenter: *J. Carter Braxton*

Coauthors: *Kyle Herkenhoff, Chengdai Huang, Michael Nattinger, Jonathan Rothbaum, Lawrence Schmidt,*

We estimate the evolution of permanent and transitory income risk across the income distribution and over time using newly-digitized and longitudinally-linked Census-IRS tax returns. Since the 1970s, the variance of permanent income shocks (i.e., permanent income risk) has increased by over 65% for those in the top 5% of the income distribution. Using capitalized interest and dividend income, we also document that high income households save significantly more in response to increases in permanent income risk compared to lower income households. To examine the implications of rising permanent income risk among high income households we integrate our income process into a Bewley-Huggett-Aiyagari model and calibrate the model to be consistent with our savings elasticities. We find that increasing permanent income risk among high income households has put downward pressure on interest rates and increased wealth inequality.



Labor Market Power with Worker Heterogeneity

Presenter: *Simon Mongey*

Coauthors: *David Berger, Kyle Herkenhoff, Jaehun Jeong*



Parents, Patience, and Persistence: A Theory of Intergenerational College Attainment

Presenter: *Guillaume Vandenbroucke*

Coauthors: *David L. Fuller*

We present a theory of intergenerational persistence in college attainment (a Bachelors degree, BD) guided by two well-documented empirical regularities: (i) patient individuals are more likely to be college graduates and (ii) patience persists across generations because parents choose to transmit it to their children, among other non-cognitive traits. To the best of our knowledge, we are the first to formalize and evaluate these mechanisms in a general equilibrium model. In the model, (i) and (ii) are endogenous outcomes implying college persistence. Standard mechanisms, i.e., credit constraints, parental investments, or exogenous persistence in cognitive ability are not necessary. Theoretically, we characterize the conditions for college persistence and show that patience persistence is necessary for college persistence. Empirically, the baseline model without ability persistence, calibrated to U.S. data, matches college persistence and cross-sectional inequality moments while accounting for 30% of earnings persistence. An augmented model, with exogenous ability persistence, reveals that ability persistence accounts for 80% of earnings persistence and 10% of college persistence. The remainder of college persistence is accounted for by endogenous persistence in patience. Ability persistence in the augmented model is a reduced form for the combined effects of the standard mechanisms. So, our finding that the standard mechanisms matter for earnings persistence is in line with the literature, while our finding that they matter little for college persistence, once patience is modeled, is new. We implement a policy experiment in which a college subsidy is financed via a proportional tax on labor income. The policy distorts intertemporal trade-offs and, hence, affects people differently depending on their patience. Overall college attainment and its persistence increase. Specifically, the policy raises the likelihood of a BD for individuals whose parents have a BD and it lowers that likelihood for individuals whose parents do not have a BD. This result differs from that of the existing literature where college subsidies alleviate credit constraints and reduce persistence.



A Theory of How Workers Keep Up With Inflation

Presenter: Erik Hurst

Coauthors: Hassan Afrouzi, Andres Blanco, Andres, Drenik,

In this paper, we develop a model that combines elements of modern macro labor theories with nominal wage rigidities to study the consequences of unexpected inflation on the labor market. The slow and costly adjustment of real wages within a match after a burst of inflation incentivizes workers to engage in job-to-job transitions. Such dynamics after a surge in inflation lead to a rise in aggregate vacancies relative to unemployment, associating a seemingly tight labor market with lower average real wages. Calibrating with pre-2020 data, we show the model can simultaneously match the trends in worker flows and wage changes during the 2021-2024 period. Using historical data, we further show that prior periods of high inflation were also associated with an increase in vacancies and an upward shift in the Beveridge curve. Finally, we show that other “hot labor market” theories that can cause an increase in the aggregate vacancy-to- unemployment rate have implications that are inconsistent with the worker flows and wage dynamics observed during the recent inflationary period. Collectively, our calibrated model implies that the recent inflation in the United States, all else equal, reduced the welfare of workers through real wage declines and other costly actions, providing a model-driven reason why workers report they dislike inflation.



Labor Market Beliefs and the Gender Wage Gap

Presenter: Christine Braun

Coauthors: Ana Figueiredo

We study how labor market beliefs shape the gender pay gap within an equilibrium search model that incorporates subjective expectations about wage offers, arrival rates, and separation rates. Using the Survey of Consumer Expectations to estimate the model, we find that biased beliefs account for 23% of the gender wage gap. While correcting beliefs reduces the wage gap, the effect is small compared to equalizing women’s true labor market parameters to those of men. Moreover, only the latter reduces gender disparities in both wages and welfare.



Financial Incentives to Fertility: From Short to Long Run

Presenter: *F. Javier Rodriguez-Roman*

Coauthors: *Lidia Cruces*

Are financial incentives effective in increasing fertility rates? Empirical evidence suggests they are, primarily in the short run (around implementation). Can such policies also increase the total number of children in the long run? We address this question by using a structural life-cycle model of fertility and labor supply, calibrated to replicate the short-run effects of a cash transfer paid at childbirth implemented in 2007 in Spain. The model incorporates labor market duality, a defining feature of Spanish labor markets that negatively impacts fertility. Our calibrated model replicates a 6% increase in fertility rates in the short run but only generates a 3% rise in completed fertility over women's lifetimes — the long run. Eliminating labor market duality increases lifetime fertility by 6.62%, but the discrepancy between short- and long-run effects of the incentive persists. These results highlight the limited impact of financial incentives alone to sustain fertility gains.



Parental Leave: Economic Incentives and Cultural Change

Presenter: *Raquel Fernández,*

Coauthors: James Albrecht, Per-Anders Edin, Jiwon Lee, Peter Thoursie and Susan Vroman

The distribution of parental leave uptake and childcare activities continues to conform to traditional gender roles. In 2002, with the goal of increasing gender equality, Sweden added a second "daddy month," i.e., an additional month of pay-related parental leave reserved exclusively for each parent. This policy increased men's parental leave uptake and decreased women's, thereby increasing men's share. To understand how various factors contributed to these outcomes, we develop and estimate a quantitative model of the household in which preferences towards parental leave respond to peer behavior. We distinguish households by the education of the parents and ask the model to match key features of the parental leave distribution before and after the reform by gender and household type (the parents' education). We find that changed incentives and, especially, changed social norms played an important role in generating these outcomes whereas changed wage parameters, including the future wage penalty associated with different lengths of parental leave uptake, were minor contributors. We then use our model to evaluate three counterfactual policies designed to increase men's share of parental leave and conclude that giving each parent a non-transferable endowment of parental leave or only paying for the length of time equally taken by each parent would both dramatically increase men's share whereas decreasing childcare costs has almost no effect.



Demographic Heterogeneity in Aggregate Economics

April 11-12, 2025; Albany, New York, Conference Participants

Benjamin Griffy — *University at Albany*
Karen Kopecky — *FRB of Cleveland*
John Bailey Jones — *FRB of Richmond*
Eric Young — *University of Virginia*
Nick Pretnar — *LAEF, UCSB*
Sylvain Catherine — *Wharton*
Guanyi Yang — *Colorado College*
Ryan Michaels — *FRB of Philadelphia*
Oksana Leukhina — *FRB of St. Louis*
Jacob Wright — *University of Minnesota*
Joseph Pedtke — *Clemson University*
Igor Livshits — *FRB of Philadelphia*
Nisha Chikhale — *University of Delaware*
Leo Kaas — *Goethe University Frankfurt*
Anson Zhou — *University of Hong Kong*
Iouri Manovskii — *University of Pennsylvania*

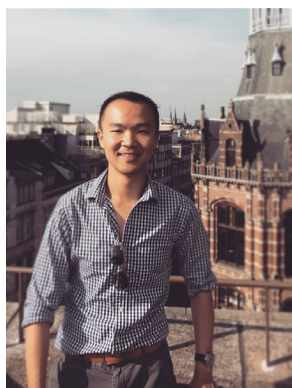


What explains wealth and portfolio differences between Black and White Americans?

Presenter: *Sylvain Catherine*

Coauthors: *Ellen Lu, James Paron,*

We study how economic and social disparities between Black and White Americans shape the composition of their balance sheets and contribute to the racial wealth gap in a life-cycle model. Our analysis yields three main results. First, environmental disparities fully explain differences in portfolio composition. Second, in a dynamic setting where consumption and portfolio choices are endogenous, negative economic conditions increase saving demand and therefore have a limited impact on the racial wealth gap. In other words, the overall consequence of these disparities on Black wealth is smaller than their direct monetary and welfare costs. Third, progressive programs like Social Security can only explain one-third of the racial wealth gap.



Macroeconomics of Racial Disparities: Discrimination, Labor Market, and Wealth

Presenter: *Guanyi Yang*

Coauthors: *Srinivasan Murali*

This paper examines the impact of racial discrimination in hiring on employment, wages, and wealth disparities between black and white workers. Using a labor search and matching model with racially prejudiced and non-prejudiced firms, we show that labor market frictions sustain discriminatory practices as an equilibrium outcome. These practices account for 44% to 52% of the average wage gap and 16% of the median wealth gap. Discriminatory hiring also amplifies unemployment and wage volatility for black workers, increasing their labor market risks over business cycles. Eliminating prejudiced firms reduces these disparities and improves the welfare of black workers, though it slightly decreases overall economic welfare.



Signals, Interviews, and Hiring: Statistical Discrimination in Labor Market Equilibrium

Presenter: *Sylvain Catherine*

Coauthors: *Ellen Lu, James Paron,*

In an effort to reduce the undesirable effects of discrimination and enhance the labor market opportunities of disadvantaged job seekers, policymakers have introduced various regulations that restrict the type of information that employers can collect from (or ask of) job candidates. A recent, well-known example is the so-called “Ban the box” (BTB) initiative, implemented in several states, which prohibits firms from asking workers about their criminal records at the application stage of the hiring process (though does not prohibit collecting this information at later stages). More generally, a variety of laws restrict the extent to which firms can collection information about applicants—including credit checks and drug tests—when determining who to interview and/or hire. Advocates of these initiatives argue that they will increase the likelihood of disadvantaged workers advancing through the early stages of the interview process, and thus having the opportunity to showcase their (otherwise hard-to-observe) skills and abilities. Since gainful employment is known to, e.g., decrease recidivism rates and increase credit scores, these goals are understandably relevant for improving outcomes of certain disadvantaged workers. However, a number of empirical studies have documented that these initiatives can have harmful, unintended consequences. In particular, when firms cannot observe certain pieces of information about an applicant, they may use the information they can observe to make inferences about the applicant’s productivity, trustworthiness, and overall job-readiness. As a stark example, Agan and Starr (2018) found that firms who could not observe criminal record relied more heavily on race to determine whom to interview: in states that implemented BTB, they report that the callback rate of fictitious applicants with distinctly black names fell dramatically relative to applicants with otherwise identical resumes containing a distinctly white name. Complementing this audit study, Doleac and Hansen (2020) exploit variation in the timing and adoption of BTB across locations to estimate the effects of the policy on actual employment outcomes for a subset of the population. In particular, they find that BTB had a net negative effect on the employment outcomes of young, low-skilled black men. These types of empirical findings raise a number of crucial, yet largely unanswered questions. How does restricting the information available to firms affect their willingness to post vacancies, who they interview, and who they ultimately hire? How do these choices depend on and affect the composition of the pool of unemployed workers? What are the subsequent implications for the call-back rates, job-finding rates, unemployment rates, and welfare of workers with different characteristics? Is restricting information more or less effective than other policies designed to improve the labor market outcomes of workers with a criminal record, such as subsidizing hiring of such workers?



Lifetime Work Hours and the Evolution of the Gender Wage Gap

Presenter: *Oksana Leukhina*

Coauthors: *Guillaume Vandenbroucke*

The gender wage gap expanded between 1940 and 1975 but narrowed sharply between 1980 and 1995. We use a human capital accumulation model introduced in Ben-Porath (1967) to assess the role of gender differences in life-cycle profiles of market time and occupation sorting in explaining the gender wage gap dynamics over the long run. Men's aggregate hours profiles changed little across cohorts, but women's profiles converged to those of men, and especially so in higher-paying occupations. We calibrate the model to wage data by age, year, gender and occupation, and find that changing time allocation patterns induced human capital investments that account for nearly all of the gender wage gap dynamics. Occupation-specific human capital rental rates played a small role in helping close the gender gap since 1980. The roles of cohort-specific endowments, however, were less pronounced.



From Preschool to College: The Impact of Education Policies over the Lifecycle

Presenter: *Jacob Wright*

Coauthors: *Angela Zheng*

While the United States and Canada share many similarities, there are stark differences in their levels of income inequality and intergenerational earnings persistence. This paper investigates college quality distributions, tuition subsidies, student loan systems, and tax policies as possible sources of these differences. A heterogeneous agent model is developed where human capital investments occur over the lifecycle and across generations. The model is calibrated to the U.S. economy and is able to match key moments on intergenerational mobility, lifetime inequality, and higher education. The benchmark counterfactual exercise finds that the system of higher education accounts for approximately 22% of the differences in income inequality and 11% of the differences in intergenerational mobility between the U.S. and Canada. The distribution of college qualities accounts for the majority of differences in inequality, whereas its net effect on intergenerational mobility is small.



The Implications of Family Structure, Education Prices, and Policy Reforms for Inequality and Intergenerational Mobility

Presenter: *Joseph Pedtke*

Parents devote considerable resources towards their children's development, making trade-offs between time and education investments and working, consumption, and leisure. In recent decades, families in the United States experienced rising rates of single parenthood, increasing education prices, and changes to taxes and transfers, which altered available resources and trade-offs to investments across families. This paper explores the implications of these trends for inequality and intergenerational mobility. After documenting changes in family resources and parental investments over time, I develop a dynastic model of human capital investment to quantify the contributions of these trends to increases in inequality and intergenerational persistence. I find that single parenthood is a major contributor through two channels: (1) less available time for single parents limits work hours, family income, and investments for their children's human capital development and (2) the resulting lower human capital comes with a greater probability of becoming a single parent as an adult, as single parents tend to have less education and lower wages. Education prices, on the other hand, had only minimal effects as families reduce investments at similar rates in response to price increases. Moreover, changes to taxes and transfers had heterogeneous impacts on parental investments by producing differing income and substitution effects depending on family characteristics. The results highlight the importance of considering family structure and parental investments when designing assistance programs.



Implications of Eviction Enforcement for Household Formation and Home-Ownership

Presenter: Igor Livshits

Coauthors: Natalia Kovrijnykh, Jacob Shepard

Designing an optimal eviction regime faces a basic trade-off between insurance and commitment (akin to that of designing a bankruptcy rule): On the one hand, missing rent payments in the event of adverse income shocks can serve as a form of consumption smoothing for a tenant, an informal “loan” from their landlord. On the other hand, the landlords need to be paid regularly in order to be willing to rent out the units in the first place. We offer a parsimonious model, in which rental rates (prices) reflect the endogenous probability of missed rental payments, and point out some key empirical predictions and policy implications arising from the model. The key insight is that the effects of policy differ dramatically across the income distribution of renters. The poorest prospective tenants benefit from a “tough” eviction regime, since such regime lowers the default rate and thus lowers rental prices, allowing these individuals to afford their own rental units (and facilitating household formation). Tenants in the middle of the income distribution are less concerned with the basic affordability of their rental unit but value the insurance aspect of being able to miss a rental payment. A tough eviction regime may push them out of the rental market and into home-ownership. We use these model predictions to motivate our empirical analysis, which relies on a novel measure of the severity of eviction regimes across U.S. states. We find that the severity of the eviction regime is negatively correlated with familial cohabitation among young people and positively correlated with share of renters, particularly among young households, both consistent with our model predictions.



Intergenerational Mobility and Credit

Presenter: Nisha Chikhale

Coauthors: J. Carter Braxton

We combine the Decennial Census, credit reports, and administrative earnings to create the first panel dataset linking parent's credit access to the labor market outcomes of children in the U.S. We find that a 10% increase in parent's unused revolving credit during their children's adolescence (13 to 18 years old) is associated with 0.28% to 0.37% greater labor earnings of their children during early adulthood (25 to 30 years old). Using these empirical elasticities, we estimate a dynastic, defaultable debt model to examine how the democratization of credit since the 1970s – modeled as both greater credit limits and more lenient bankruptcy – affected intergenerational mobility. Surprisingly, we find that the democratization of credit led to less intergenerational mobility and greater inequality. Two offsetting forces underlie this result: (1) greater credit limits raise mobility by facilitating borrowing and investment among low-income households; (2) however, more lenient bankruptcy policy lowers mobility since low-income households dissave, hit their constraints more often, and reduce investments in their children. Quantitatively, the democratization of credit is dominated by more lenient bankruptcy policy and so mobility declines between the 1970s and 2000's



Working Hours and the Child Penalty in an Equilibrium Household Search Model

Presenter: Leo Kaas

Coauthors: Alessandro Di Nola, Chiara Lacava, Haomin Wang,

Recent research identifies parenthood as an important explanation for persistent gender earnings gaps, largely driven by a divergence of male and female labor supply at extensive and intensive margins after childbirth. To quantify the separate role of labor-supply and labor-demand forces for this phenomenon, we build and estimate an equilibrium labor market model featuring decision making in single and couple households and hiring decisions of firms into full-time and part-time jobs. Workers decide job acceptance, job quitting and parental leave after childbirth events, while firms anticipate the joint household choices and adjust their hiring and wage policies accordingly. We decompose gender gaps in hours and wages before and after childbirth into worker skill, household preference and discrimination effects. We further use the model to analyze the effects of parental leave and parental allowance policies.



The Autumn of Patriarchy

Presenter: Anson Zhou

This paper develops a unified theory to explain the concurrent declines in fertility, marriage, and gender income gaps observed during the grand gender convergence (Goldin 2014). The model integrates these phenomena through two mechanisms: (1) fertility reduces the labor supply of females relative to males; and (2) equilibrium fertility and within-household transfers clear the marriage market. The analysis offers three new insights. First, there exists a tension among high fertility, widespread dual-parenthood, and gender income equality, making it difficult for all three to coexist simultaneously in an economy—an insight supported by data. Second, rising total factor productivity alone is sufficient to drive all three phenomena, without requiring factor- or gender-biased technological changes. Third, the pace of this transition varies significantly across countries, shaped by differences in social norms governing marriage. These findings provide a cohesive framework for understanding the economic and social forces reshaping family structure and gender dynamics in the modern era.



Female Employment and Structural Transformation

Presenter: Lourii Manovskii

Coauthors: Moritz Kuhn, Xincheng Qiu

Two prominent secular trends characterize the transformation of labor markets in industrialized countries in recent decades. First, employment has shifted from manufacturing to services. Second, the share of female employment in total employment has risen sharply. This paper documents a novel fact linking these two trends: female employment shares within manufacturing and within services have remained virtually constant over time and across developed economies. Constant sectoral gender shares imply that an exogenous increase in female labor supply can by itself induce structural change. We provide empirical evidence for the presence of this effect in the data. We then propose a quantitative theory of structural change with nonhomothetic preferences, differential sectoral productivity growth, gender complementarity in sectoral production, and rising female employment, and calibrate it to the U.S. economy. Quantitatively, we find that the rise in female employment accounts for about two-thirds of structural change in the U.S. over the past five decades.



LAEF

Laboratory for Aggregate Economics and Finance

Director – *Finn Kydland*

Assistant Director – *Nick Pretnar*

Design and Production – *Thill Creative*

UC **SANTA BARBARA**

Laboratory for Aggregate
Economics and Finance

LAEF

Laboratory for Aggregate Economics and Finance

2112 North Hall

University of California, Santa Barbara

Santa Barbara, CA 93106–9215

U.S.A.

econ-laef@ucsb.edu

www.laef.ucsb.edu