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Office Contact Information

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Personal Information: DOB: Jan 21, 1985, Marital status: Married, Citizenship: United States

Employment:

Assistant Professor, Purdue University, 2015-present

Undergraduate Studies:

B.S., Mathematics, University of Chicago, 2008

Graduate Studies:

M.A., Economics, The University of Chicago, 2011
Ph.D., Economics, The University of Chicago, 2015

Teaching and Research Fields:

Primary fields: Public Economics, Macroeconomics
Secondary fields: Labor Economics

Teaching Experience:

2015-2018,	Intermediate Macroeconomics, Purdue University
2015-2018	Graduate Computational Economics, Purdue University
Winter, 2013-15	Honors Macroeconomics, Univ. of Chicago, College Lecturer
Fall, 2013-2014	Computational Economics for Grad. Students, Univ. of Chicago, Lecturer

Research Experience and Other Employment:

2012-2013	Becker Friedman Institute, Research Assistant to Lars Hansen
2012-2013	Special Sworn Status, U.S. Census Bureau (Security Clearance)
2012	University of Chicago, Research Assistant to Erik Hurst
2008-2009	Becker Center, Research Professional for Steven Levitt and John List
2007-2008	World Bank/National Opinion Research Center, Research Assistant

Honors, Scholarships, and Fellowships:

2018	Richard. A Musgrave Price, Best Article Published in 2018 National Tax Journal
2016	Distinguished Teacher, Ph.D.
2015	Distinguished Teacher, Ph.D
2014-2015	Morgenthau Public Economics Fellowship
2011	Lee Prize, highest performance in the Macro Fields
2010-2011	Department of Economics Munk Prize

Published Papers:

“Wedges, Labor Market Behavior, and Health Insurance Coverage under the Affordable Care Act” with Casey Mulligan (National Tax Journal, vol. 71 (1), pp. 75-120 (March 2018)) (Winner of the Richard A. Musgrave Prize for Best Article Published in 2018)

The Affordable Care Act’s taxes, subsidies, and regulations significantly alter terms of trade in both goods and factor markets. We use an extended version of the classic Harberger model to predict and quantify consequences of the Affordable Care Act for the incidence of health insurance coverage and patterns of labor usage. If and when the new exchange plans are competitive with employer-sponsored insurance (ESI), more than 21 million people will leave ESI as a consequence of the law. Behavioral changes are expected to add 2 million participants to the new exchange plans: beyond those that would participate solely as the result of employer decisions to stop offering coverage and beyond those who would have been uninsured. We find large differences in coverage-pattern impacts based on the benefit (including tax incentives) of joining exchange plans and degree to which statutory penalties on individuals and firms are implemented. Industries and regions will grow, decline, and change coverage on the basis of their relative demand for skilled labor.

“Is the labor wedge due to rigid wages? Evidence from the self-employed” (Journal of Macroeconomics 2018, vol. 55 184-198)

A central goal of labor economics is explaining cyclical variation in hours worked. Procyclical hours can always be explained in a market clearing model with a residual tax wedge, the “labor wedge.” Convincing progress has been made in reducing the cyclical volatility in the labor wedge and therefore explaining movements in hours worked by amplifying technology shocks with endogenously rigid wages (Hall, 2005; Shimer, 2010), and rigid wages in general. This paper demonstrates that the cyclical component of labor hours for the self-employed, who are not vulnerable to such frictions, is of comparable cyclical and volatility as the cyclical component of labor hours for wage and salary workers, even conditional on wages, consumption, and occupation-industry composition. This finding calls into question rigid wages and bargaining frictions as amplification mechanisms, suggesting a common friction (such as rigid prices) may be a more fruitful explanation of the cyclical labor wedge.

Working Papers

“A General Equilibrium Model of Transportation Infrastructure Spending” with Clifford Winston (submitted)

This paper analyzes the effect of the transportation system on U.S. economic activity by building a general equilibrium model with a publicly provided transportation capital stock. Transportation capital affects firm productivity, worker and shopping commute times, and government expenditures, thereby affecting households' labor and consumption decisions. Calibrating our model to the U.S. economy, we find that \$40 billion in additional annual spending on the transportation capital stock increases annual net welfare \$18 billion, but that the annual welfare gains from more efficient policy that improves the capital stock are much greater. Importantly, a dynamic extension of the model that accounts for the time and delay costs to build magnifies the difference between the welfare effects of spending and more efficient policy, and even suggests that the welfare effects of additional infrastructure spending could have a negative present value.

“Are income differences driven by talent or tastes? Implications for Redistributive Taxation” with Ian Fillmore

What are the sources of earnings inequality? A social planner facing a given distribution of income would behave differently if all of this inequality was driven by heterogeneous tastes for consumption instead of heterogeneous talent. In both cases, he would move resources to agents with the highest marginal utility from consumption, but in the first case this may translate to a regressive tax system, while in the case of heterogeneous talent, the most un-lucky agents would receive positive transfers. An implicit assumption in most Mirrleesian models is that unchosen “luck” or “talent” are the sole determinant of earnings inequality, and the problem is redistribution is one of maximizing utility while maintaining incentives to work. However, utilitarian calculus may change dramatically if an important determinant of earnings variation comes from taste: for instance, because the consumption bundle that some households prefer is heavy on expenditure, while for others it is heavy on non-labor time. This paper asks the question “How much of earnings inequality in the United States is due to tastes, rather than talent?” We find that a simple parameterized model suggests a significant role in tastes, and that that

small shifts in the sources of earnings heterogeneity can yield significant changes in a utilitarian optimal tax rate.

“Incentives, Distortions, and Peers” with Yana Gallen, Steven Levitt, and John List

In this paper, we present the results of a natural field experiment in which workers operated telephones soliciting funds for a major charity in the US. We find that incentives increase targeted performance at the cost of other dimensions of a worker's task. Incentivized workers were paid for the fraction of pledges--promises to donate at a later date--which they secured. Pledges were 50% higher for callers paid a commission relative to callers paid a flat rate. However actual donations (excluding outliers) were 17% lower when a donor was called by a caller paid a commission rather than a flat rate. Incentives also caused workers to break the rules of their employment in order to increase their pay. Commission-based pay caused rule-breaking to nearly double. Finally, in our experiment, workers with different types of compensation worked at the same time and could observe one another's performance. We use the randomization-induced variation in worker performance to study whether incentives benefit firms via peer-effects. We find no evidence that productivity increases spill over onto peers, however, we find that rule-breaking generated by incentives does spill over onto peers.

“Bridging the gap between representative agent and heterogeneous agent models”

This paper derives and discusses a set of formulas to help researchers bridge the gap between heterogeneous-agent and representative agent models. Even studying the same phenomenon with the same basic setup, these two types of models can generate significantly different quantitative predictions for agent behavior. However, understanding the reasons for difference has been largely model specific, relating to economic, rather than mathematically mechanical reasons. This paper shows that differences in responsiveness can be closely modeled by a second-order approximations to heterogeneous- and representative-agent response functions, which yields a convenient analytical formula that describing the mechanical causes of divergence. Applying the toolkit to four common models in Macroeconomics, I find mis-calibration (different initial elasticities with respect to a shock), covariance between agent responsiveness and magnitude of the shock, and differences in the response of endogenous macroeconomic aggregates are first-order sources of divergence between these two models. I argue that the types of models are unlikely to be reconciled as a consequence.

“Using Participant Behavior to Measure the Value of Social Programs: The Case of Medicaid”

Social programs frequently have two effects on labor supply: an income effect and a wage effect. Programs produce a wage effect by linking benefits or program premiums to income, generating an implicit marginal tax rate on labor. Programs produce an income effect through the actual cash or in-kind transfer they provide. Conditional on wage and nonwage income elasticities, labor market responses to program structure (or the lack thereof) reveal the value of program participation to beneficiaries. I study a public policy change in Tennessee that disenrolled 12% of its Medicaid population, and use simple calculations to estimate a cash value to beneficiaries of \$0.26 cents per dollar spent. Using this same policy change, I estimate a richer model that allows for heterogeneity in family structure, wages, property income, and preferences over healthcare types. This method yields a value of Medicaid of \$0.35 per dollar of spending. I find a high variance in the implied distribution of Medicaid's value to beneficiaries, but this high variance can be almost fully explained by the large variation in Medicaid expenditures across recipients.

“The Labor Market Effects of the Affordable Care Act”

I study four provisions of the Affordable Care Act (ACA) in a calibrated computable general equilibrium model of labor markets with heterogeneous agents and firms: 1) the individual mandate to purchase health insurance 2) the size-based, healthcare-offering based levy on firms, 3) the income-contingent non group insurance subsidies, and 4) the Medicaid expansion. I find that the large sectorally dispersed implicit and explicit marginal tax rates imposed by the ACA reduce employer sponsored insurance by 6.3 million individuals, while increasing high-quality healthcare coverage by 50 million, slightly less than double the Congressional Budget Office's current estimate. These tax rates reduce aggregate hours by 9.22 million full time equivalent workers, particularly among low-skilled workers. Equivalent variation of the ACA displays dramatic variation within population, with the ACA's 10% worst off households losing by \$1568 and the ACA's 10% best off gaining by \$2472. An unpaid-for ACA is valued at \$25 per capita, driven by a large number of people who are relatively indifferent to the ACA.

Research in Progress:

“*Understanding selection into undergraduate majors: evidence from a natural field experiment*”

“*Bad Instruments*” (with Benjamin Raymond)

“*Did Access to Broadband Internet Contribute to a Supply-Driven Decline in LFP since 2000?*” (with Yana Gallen and Ioana Marinescu)

Conferences and Seminars:

2015: National Tax Association Meetings (Boston).

2016: Midwest Economics Conference (Evanston), Midwest Macroeconomics Conference (Purdue), National Tax Association Meetings (Baltimore).

2017: American Economics Association (Chicago, (poster session)), Midwest Economics Conference (Cincinnati), University of Kentucky (seminar), National Tax Association Meetings (Philadelphia).

2018: University of Chicago (seminar), DePaul University (seminar), Midwest Economics Conference (Chicago), NBER Summer Session (Urban), National Tax Association Meetings

Professional Activities:

Referee for *Health Affairs*, *Journal of Human Resources*, *European Economic Review*, *Journal of Public Economics*, *Social Choice and Welfare*. Member, American Economic Association, 2008–Present. Member, National Tax Association, 2015-Present. Member, Midwest Economics Association 2015-2017.