Research Statement

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Why are some people and societies so much wealthier than others? The motivation behind my work is to understand the constraints and institutions that shape economic development. My work often crosses disciplinary and field boundaries to examine questions of economic development today and historically. While my research falls primarily within applied microeconomics, I also develop models of intertemporal allocation familiar to macroeconomists, as well as examine demographic questions. I primarily focus on: (1) areas of financial development to understand how financial institutions affect growth; (2) household finance to understand how and why individuals, particularly the poor, use the financial products available to them, and how these choices affect the broader economy; and (3) how migration patterns affect economic opportunities and social outcomes. What unites my broad research agenda is my focus on creating and using large new sources of data to answer important questions that are motivated by economic theory.

(1) Financial development

One constraint on economic development may be weak or non-existent financial institutions. If a good investment exists, then a bank may be able to provide credit to make the investment possible. In my work examining banks in the nineteenth century United States, I show that banks were very important in a helping a developing economy grow, but also shaped it in particular ways (Fulford, Forthcoming, Review of Economics and Statistics). National banks were the largest financial institutions at the time, and despite strict regulation and capital requirements, expanded rapidly. Using the reports of their regulator, I created the first data set on the location and size of individual banks from 1870-1900, thus creating a map of all national banks over 30 years. National banks could not branch and each bank had to have a large minimum amount of capital stock to open. I show that this minimum introduces a discontinuity in which areas banks could enter profitably, and use this discontinuity to estimate the effects of these banks. Effectively, I compare places
that could just barely support a bank of the minimum size to areas that just barely could not. A bank entering increased production per capita substantially and in rural areas increased agriculture over manufacturing, helping the economy move to geographic comparative advantage. Since the national banks were generally restricted to only making short term loans, their primary function was to provide working capital and facilitate the movement of funds. The importance of the national banks suggests that such basic financial infrastructure is a key constraint on economic development. The rapid spread of mobile banking in the developing world today illustrates that basic financial infrastructure is still lacking in many places. In related work I am currently revising with Felipe Schwartzman (Fulford and Schwartzman, 2015), we use new high-frequency data on banks around the 1896 election, which centered on whether the United States should leave the gold standard, to understand the impact of exchange rate movements on the banking system.

How and why people use financial products may change their effects. In “The effects of financial development in the short and long run: Theory and evidence from India” (Fulford, 2013b, Journal of Development Economics), I examine a rapid expansion of banking availability in India. Starting in the 1970s, India’s social banking policies encouraged banks to open branches in underserved rural areas, and the number of rural bank branches quadrupled over the next 20 years, vastly expanding access. What was the effect of this expansion? Previous work had suggested it reduced poverty, but there are reasons to be skeptical. Much of the empirical work on financial development, including on the Indian banking expansion, had ignored that finance is inherently about the ability to shift resources over time. In theoretical work, I show that in a general model of intertemporal allocation of consumption (the “buffer-stock” model, see Deaton (1991)), an expansion of credit will have very different effects over time. Since an expansion of credit removes a constraint, it immediately produce a boom in consumption and a reduction in poverty, but later consumption will fall as households adjust to the new availability of credit by holding less wealth. I show that this pattern of immediate increase followed by decreases is exactly what happened in India. Banks did reduce poverty slightly in the long-term, but by much less than had been previously thought. By ignoring that the effects of financial development should change over time, much of the liter-
nature on finance and microfinance had estimated a single effect, rather than an entire path, and so had substantially overestimated the importance of banks for reducing poverty.

(2) Household finance

Changes in access to financial products can have complicated effects on people’s lives, as my work on Indian banks showed. In “How important is variability in consumer credit limits?” (Fulford, 2015c, Journal of Monetary Economics), I examine what happens when credit limits rise and fall. Using a large panel of credit accounts from a consumer credit reporting agency in the United States, I show that credit card limits are extremely variable, much more variable than income, and individuals frequently lose access to credit altogether. This volatility matters. Since households in the United States keep very little in savings and checking accounts, losing credit can be a big problem, particularly among poorer households who are the most likely to lose credit. I show that this volatility has a large effect on household decision making. Around 60% of US households have credit card debt and pay around 14% interest on it. Around half of these households also keep liquid savings, on which they earn close to zero. Since households could reduce interest by paying off credit card debt, there is a long standing “credit card puzzle” (Gross and Souleles, 2002). I show it is not a puzzle at all, once we realize that credit may not always be there when it is needed. A household that uses all of its savings to pay off its debt, and then loses credit, has no resources in the event of an emergency. It makes sense to keep some money in the bank as a precaution. In a closely related working paper (Fulford and Schuh, 2015), we examine the impact these individual changes in credit have on debt, and establish for the first time that there is a strong life-cycle component to credit, which passes through into debt, leaving credit utilization stable. We also show that for those who revolve credit card debt from month to month, 99% of a change in credit limits is passed through to debt.

Households in the United States, particularly poor ones, keep remarkably little in savings and checking accounts. In a series of papers, I use the Survey of Consumer Finances to examine the strength of one reason households hold funds: savings for precautionary reasons. In “The surprisingly low importance of income uncertainty for precaution” (Fulford, 2015d, European Economic
Review), I show that US households want to hold much less in savings for precautionary reasons than most models assume they should, and the amount they do want is not affected by income uncertainty. Moreover, households almost never suggest that unemployment is a motivation for saving. Instead, precautionary savings seem to be all about expenditure shocks. In “The precaution of the rich and poor” (Fulford, 2015b), I document that low income households are much more precautionary than high income households, even accounting for other possible explanations such as higher income uncertainty. I show that a model of expenditure shocks that do not vary with income can explain this finding. For example, an unexpected $200 fine may matter a great deal for a poor family, while only be a minor annoyance for a rich one, and so such shocks are of much greater concern for poorer households.

(3) Migration, economic, and social development

Why are some places and people so much richer than others? Because the United States has absorbed so many migrants from different countries, it represents a unique laboratory for understanding what people bring with them that affects economic development. To understand the institutional, cultural, and educational endowments that immigrants bring with them and pass on to their descendants, Fabio Schiantarelli, Ivan Petkov, and I use individual records from the census to reconstruct the country-of-ancestry distribution for US counties from 1850 to 2010 (Fulford, Petkov, and Schiantarelli, 2015). We also develop the first county-level measure of GDP per capita over the same period. Using this novel panel data set, we investigate whether changes in the ancestry composition of a county matter for local economic development and the channels through which the cultural, institutional, and educational legacy of the country of origin affects economic outcomes in the US. Our results show that the evolution of the country-of-origin composition of a county matters. We find that culture endowments, such as trust, seem to be the most important. Diversity has two roles: more diversity in origin is good for economic development, while diversity in cultural or economic attributes is bad. For example, the Swedes, Norwegians, Germans, and English settled separate areas of the upper-Midwest, but where they did mix, their common cultural attributes produced thriving economies. We expect that this work will yield several more
papers examining the process of convergence, the creation of ethnic identities and social norms, the impact of ancestry on political institutions, and the relationship between ancestry diversity and inequality. Our paper has already received substantial interest in the data and results from economic historians, growth economists, political economists, and those interested in the formation of ethnicity. We recently submitted this paper to a top journal in economics.

My work in India further examines how people live their lives when resources are scarce. In “Returns to Education in India” (Fulford, 2014, World Development), I demonstrate that while there has been a vast increase in education in India, its economic returns have been disappointingly small. In “Marriage migration in India: Vast, varied, and misunderstood” (Fulford, 2015a), I examine the migration of Indian women for the purposes of marriage. Despite being the largest migration in the world, not much is known about this vast migration. I show that marriage migration does not contribute to risk sharing or consumption smoothing (Rosenzweig and Stark, 1989). Nor is it driven by sex ratio imbalances. I suggest instead that it is the result of the complex marriage search process and develop a geographic search model. In “The Changing Geography of Gender in India” (Fulford, 2013a), I link all 600,000 Indian villages across two censuses, and examine the evolving gender imbalances at the village level. Villages are becoming more homogenous in their tendency to have more boys, and as a consequence more than 70% of Indian girls grow up in a village where they are the minority. Moreover, neighboring villages seem to reinforce each other. Changes in village infrastructure have little relationship with changes in the fraction of children that are girls, and increases in literacy actually have a negative effect on the fraction of girls. The results suggest there are no easy policy solutions to address the growing gender imbalance.

References


Fulford, Scott L. and Scott Schuh. 2015. “Consumer revolving credit and debt over the life-cycle and business cycle.” In preparation.

