Introduction

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In November 2015, the Federal Reserve Bank of Dallas and Southern Methodist University jointly sponsored a conference entitled, "Intent versus Impact: Evaluation of Individual- and Community-Based Programs." The aim of the conference was to bring together researchers to present and discuss the latest empirical research on the evaluation of programs and policies that impact the financial well-being of individuals and communities. The conference audience also included policymakers and community practitioners. A selection of the papers presented appear in this special issue. We are grateful to the editorial board at *Empirical Economics* for their enthusiasm and support, as well as the much appreciated assistance of Liane Wolf.

The motivations for the conference and special issue are twofold. First, in the aftermath of the Great Recession, many individuals and communities remain significantly worse off than prior to the crash. According to the Center on Budget and Policy Priorities, aggregate US employment returned to its pre-recession levels in 2014 and

The views in this paper are those of the authors and do not necessarily represent those of the Federal Reserve Banks or the Federal Reserve System.

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the unemployment rate returned to its pre-recession level in late 2015.¹ However, the employment–population ratio and the long-term unemployment rate (defined as the share of the labor force unemployed for 27 weeks or more) have yet to return to their pre-recession levels. Moreover, the aggregate statistics mask substantial heterogeneity at the individual and community levels. According to the National Association of Counties, as of 2015 only 214 (of 3,069) counties, or 7%, have returned to pre-recession levels in terms of output, employment, unemployment rate, and housing prices.² At the individual level, the impact of the Great Recession has been dramatically different by education level. According to the Center on Education and the Workforce at Georgetown University, aggregate US employment of individuals with a high school education or less fell by 5.6 million during the Great Recession and by 1.8 million for individuals with an associate’s degree or some college.³ In contrast, employment fell by only 66,000 for those with a bachelor’s degree and actually rose by 253,000 for individuals with a master’s degree or higher. Between the end of the Great Recession and January 2016, employment of individuals with a high school education or less increased by only 80,000, leaving employment of low education individuals still more than 5.5 million below the pre-recession level. In contrast, employment of individuals with an associate’s degree or some college increased by 3.1 million over this time period, while employment of individuals with a bachelor’s degree or more grew by 8.4 million.

The result of these changes during and after the Great Recession is a growing division in the US labor market and a marked increase in income inequality. According to the Economic Policy Institute, income inequality has risen in every state since the 1970s, and in many states since the end of the Great Recession.⁴ Across the entire USA, the richest 1% captured more than 85% of total income growth between 2009 and 2013. In 10 states over this time period, the richest 1% experienced income growth in excess of ten percent, while the remaining 99 percent suffered a decline in income. This division makes it perhaps more imperative than ever to understand the complex relationships between the current economic environment, public policies, and the well-being of individuals and communities.

The second motivation for the conference and special issue is to highlight and illustrate the tremendous growth in the econometrics of program evaluation. Understanding the factors affecting the well-being of individuals and communities requires answering questions that are inherently causal in nature. Fortunately, according to (Imbens and Wooldridge (2009), p. 5), “In the past two decades, much research has been done on the econometric and statistical analysis of such causal effects,” elevating this literature to a “level of maturity.” Many of the research papers in this special issue utilize methods drawn from this literature.

¹ See <http://www.cbpp.org/research/economy/chart-book-the-legacy-of-the-great-recession>. Accessed 18 August 2016.

² See <http://www.naco.org/articles/county-economies-recovery-continues-2015>. Accessed 18 August 2016.

³ See <https://cew.georgetown.edu/wp-content/uploads/Americas-Divided-Recovery-web.pdf>. Accessed 18 August 2016.

⁴ See <http://www.epi.org/files/pdf/107100.pdf>. Accessed 18 August 2016.

The first set of papers in the issues examine various aspects of the housing market on individual and community well-being. In the paper, “Local Housing Costs and Basic Household Needs,” Aaron Yelowitz assesses the ability of the Supplemental Poverty Measure (SPM), introduced in 2010 as a complement to the official poverty rate, to serve as an indicator of economic well-being. Unlike the official poverty rate, the SPM explicitly adjusts for geographic differences in the cost of living, with housing costs being a major driver of the spatial variation in cost of living. Although straightforward, there is actually a dearth of direct evidence concerning the impact of housing costs on household well-being. Here, Yelowitz examines the impact of local housing costs on household well-being using data on a variety of measures of well-being from the Survey of Income and Program Participation (SIPP). The measures range from food adequacy to the ability to meet monthly expenses to health status. Across a wide variety of specifications, no evidence is found that housing costs impact well-being. However, local labor market conditions do impact the well-being measures as one might expect. One interpretation is that housing costs are correlated with the provision of other local public goods that enhance well-being. The findings lead one to question the usefulness of the SPM, relative to the official poverty measure, to capture spatial differences in household well-being.

In the next paper, “Assessing the Evidence on Neighborhood Effects from Moving to Opportunity,” Dionissi Aliprantis revisits existing evidence on the importance of neighborhood quality to household well-being. It has long been conjectured that residing in a low quality neighborhood has negative consequences on households. However, causal evidence supporting (or refuting) this conjecture is notoriously difficult given the non-random sorting of households to neighborhoods. However, the Moving to Opportunity (MTO) experiment overcomes this difficulty by randomly assigning housing vouchers to residents in public housing that could be used to relocate to low-poverty neighborhoods. Consistent with the literature, Aliprantis first documents that receiving an MTO voucher had no effect on well-being, as measured by earnings, employment, and test scores. However, after studying the assumptions identifying neighborhood effects with MTO data, this paper reaches an interpretation markedly different from that found in the literature. Specifically, Aliprantis shows that inducing households to move to low-poverty neighborhoods does not actually imply that neighborhood quality has improved since quality is a multi-dimensional concept. Moreover, simply reducing the poverty level in one’s neighborhood of residence is not sufficient to improve household well-being. The importance of the author’s message cannot be overstated. Interpreting the MTO experiment as indicative of a lack of neighborhood effects is not necessarily correct, nor is it sufficient to implement relocation policies that focus only on the poverty rate of a neighborhood in order to improve the well-being of current residents of low-quality neighborhoods.

Finally, in the paper, “Neighborhood Price Externalities of Foreclosure Rehabilitation: An Examination of the Neighborhood Stabilization Program,” Tammy Leonard, Nikhil Jha, and Lei Zhang examine the federal Neighborhood Stabilization Program (NSP), first implemented during the Great Recession to mitigate the negative externalities associated with foreclosed properties. The NSP provides funds to state and local governments to acquire and develop foreclosed properties that might otherwise be abandoned. Here, Leonard, Jha, and Zhang examine the impacts of NSP-funded fore-

closure rehabilitations undertaken by Habitat for Humanity in Dallas County, Texas, on the prices of nearby houses. The results indicate positive externalities from the foreclosure rehabilitation projects. Specifically, homes within 0.1 miles of a rehabilitation project and sold within 30 months of the completion of the project witnessed a 15% increase in price on average. Foreclosure rehabilitation projects that involved significant exterior repairs are associated with even larger price increases. This evidence indicates the presence of significant negative externalities created by the housing market crash during the Great Recession, as well as an important role of governments in the recovery process.

The next two papers investigate individual interactions with the credit market. In the paper, “Borrower Credit Access and Credit Performance After Loan Modifications,” Lei Ding provides a detailed assessment of how mortgage loan modifications affects the financial well-being of individuals. Such modifications typically entail changes in the contract terms of an existing mortgage designed to enable borrowers to retain their homes. Not surprisingly, during the Great Recession and its recovery, many loan modification programs were implemented, with the federal Home Affordable Modification Program (HAMP) being one of the most important. According to Ding, more than 3.6 million mortgages were modified from 2008 to June 2014; roughly 1.4 million under the HAMP program. Using unique loan-level data, combined with the credit profiles of borrowers, Ding is able to document exactly how homeowners manage their credit before and after receiving loan modifications. Perhaps most importantly, Ding finds that loan modifications improve borrowers’ financial well-being as measured by their overall credit standing and access to credit. However, loan modifications also lead to a marginal increase in debt, primarily through home equity line of credit (HELOC) accounts and auto loans. Other non-mortgage accounts are not negatively impacted by modifications.

In the paper, “Cash-on-Hand and Demand for Credit,” Can Cui examines the demand for small dollar credit products, such as payday loans. Such financial products are often used by consumers with poor credit ratings to meet short-term financial needs over pay cycles. While there are advantages to credit access via payday loans, the high costs associated with such loans have also been shown to harm the financial well-being of borrowers. Regardless of the pros or cons of payday loans, there is little evidence about the income sensitivity of demand for credit in this market. Here, Cui provides causal estimates of the effect of income on the demand for small dollar credit using a unique proprietary loan-level dataset. Specifically, Cui exploits cross-border variation in state Earned Income Tax Credit (EITC) generosity within commuting zones that span multiple states. The results show that a \$100 increase in EITC benefits leads to an 8.3% reduction in the number of loan applications and a 6.6% reduction in the number of borrowers. This is consistent with lower-income individuals—those eligible for EITC benefits—being liquidity constrained. It also highlights a secondary benefit of the EITC, a program that has become one of the most important means-tested transfer programs within the USA.

The next set of papers examine specific, individual-level programs aimed at improving well-being. In the paper, “The Impact of Computer-Based Tutorials on High School Math Proficiency,” Ian McDonough and Constant Tra examine the efficacy of a Nevada program designed to improve mathematics proficiency in secondary school. Students

in Clark County School District (CCSD), the largest district in the state, have historically struggled attaining proficiency in mathematics. However, Nevada requires students to pass the state-mandated High School Proficiency Exam (HSPE) in mathematics (as well as exams in two other subjects) to successfully graduate high school. As a result, the CCSD made available to students a computer-aided math tutorial prior to taking the exam in the 2006–2007 academic year. McDonough and Tra utilize a novel data set to assess the impact of computer-aided learning on mathematics proficiency rates for 10th and 11th graders. The results are suggestive of a causal effect of tutorial participation on proficiency in mathematics, especially for minority students.

In the paper, “Food Assistance Programs and Food Insecurity: Implications for Canada In Light of the Mixing Problem,” Craig Gundersen, Brent Kreider, John Pepper, and Valerie Tarasuk are interested in the role of safety net programs on levels of food insecurity. In the USA, the two main food assistance programs are the Supplemental Nutrition Assistance Program (SNAP) and the National School Lunch Program (NSLP). In Canada, no such programs exist, yet some have suggested that such programs are needed in order to combat food insecurity. Here, Gundersen, Kreider, Pepper, and Tarasuk set out to estimate the impacts of introducing these programs in Canada on the food insecurity rate in the country. To do so, they first estimate the causal effect of these programs on the food insecurity rate in the USA, according to the definition of food insecurity used in Canada, using data from the Current Population Survey (CPS). Next, they combine these estimated impacts for the USA with data from the Canadian Community Health Survey (CCHS) to predict the program impacts in Canada under various assumptions concerning the participation decisions of eligible Canadian households. Under the strongest set of assumptions, the results suggest that food insecurity rates would decline by at least 16% under SNAP and 11% under NSLP. Not only are these results informative for policymakers, but the paper illustrates a method of predicting the effects of a program in an area where no such program currently exists under different sets of explicit assumptions.

The final two papers differ from the preceding papers in that they evaluate the causal effect of spatial treatments. In the paper, “Impact of Oil Booms and Busts on Human Capital Investment in the U.S.,” Anil Kumar uses data from 1970 to 2010 to assess the causal impact of oil booms and busts on wages and human capital formation in the USA. Specifically, oil booms differentially affect the local labor markets across regions within the USA, depending on their resource endowments, and thereby change incentives to invest in human capital. Not only is the analysis timely given that the position of the USA in the global oil economy is poised to grow in importance in the near future, but it also informs policymakers of the expected effects of interventions that alter the relative returns to human capital. Here, Kumar finds that the oil boom between 1970 and 1980 was associated with slower growth in the relative demand for skills and a modest decline in college wage premium in regions with a prominent oil and gas sector. Consistent with the lower college wage premium, the cohort attending high school during the oil boom was less likely to have a college degree by 2000 and 2010 relative to cohorts attending high school during the pre-oil boom period. Thus, not only can resource booms have unintended consequences, but the results also point to a significant human capital response to changing investment incentives.

In the final paper, “Targeted Business Incentives and the Debt Behavior of Households,” Wenhua Di and Daniel Millimet assess the causal effects of a place-based tax incentive scheme designed to aid low-income communities in Texas. Specifically, Di and Millimet analyze the impact of the Texas Enterprise Zone Program (TEZP) on the financial well-being of households. The TEZP provides tax incentives to businesses to engage in projects generating new employment in or around economically distressed areas. Despite the popularity of such policies, the theoretical impact of place-based policies such as the TEZP is unclear since the benefits may be captured by local landowners, rather than the intended beneficiaries. To identify the impact of the TEZP on the financial well-being of households, Di and Millimet exploit the institutional rules of the program and utilize detailed data on the credit histories of individuals. The results indicate a modest positive impact on the repayment of retail loans, but also an increase in the delinquency rates of auto loans and in Chapter 13 bankruptcy filings. The lack of significant improvement in the financial well-being of residents in areas covered by the program is consistent with higher land prices, but more importantly suggests that state funds might be better utilized elsewhere.

Reference

- Imbens GW, Wooldridge JM (2009) Recent developments in the econometrics of program evaluation. *J Econ Lit* 47:5–86