Interest Bearing Notes

December 2020

A Finance & Private Sector Development Research Newsletter

What's new on our website

Bank lending for inclusive growth: Incentives matter

In a recent Policy Research Talk, our own **Claudia Ruiz-Ortega** discussed how access to novel datasets from banks, credit bureaus, and credit registries can help us understand the dynamics of bank lending, as well as the intended (and unintended) effects of public policies affecting banks.

World Bank research

The role of gender in agent banking: Evidence from the Democratic Republic of Congo

In collaboration with FINCA DRC, a microfinance institution in the Democratic Republic of Congo (DRC), our own **Xavier Giné**, together with IBN co-editor **Bob Cull**, **Richard Chamboko**, **Soren Heitmann**, **Fabian Reitzug**, and **Morne Van Der Westhuizen**, study the effects of gender on transaction activity at FINCA DRC's agents (as opposed to their branches) from April 2017 to March 2018 (over a million transactions). Controlling for other relevant factors, they find that female customers are 7.5 percentage points more likely to transact with a female agent than with a male agent and that their transactions at female agents are for substantially larger amounts than at male agents. Moreover, female clients are more likely to transact with a female agent when the value of their transaction and the size of their account balances are higher – note that agents can see both. To further validate their findings, the authors search for, and find, similar patterns in a smaller dataset from an RCT in Senegal. The findings suggest that women seek out female agents when they are particularly concerned about disclosing financial information. Thus, the availability of female agents, and services and products that protect female clients' personal financial information, may be important for deepening financial participation among women.

Financial constraints and fraud victimization in China

In China, fraud victimization has grown at an annual rate of 20 to 30 percent in the past decade. **Nan Gao**, **Yuanyuan Ma**, and IBN co-editor **Colin Xu** use the urban sub-sample from a novel nationally representative data set on household finance to show that credit constraints are a key determinant of fraud victimization. Controlling for other relevant factors, those who are credit constrained are 2.3

percentage points more likely to be a victim of fraud and suffer 20.4 percent more in total subsequent economic losses after being approached. To deal with potential endogeneity of credit constraints, the authors use exposure to the nationwide Property Privatization Reform and the availability of local bank finance as instruments. Their IV estimates confirm that credit constraints lead to higher probability of fraud victimization and higher subsequent economic losses, and they are able to rule out the potentially confounding effects of information acquisition and financial literacy on fraud outcomes. Further analysis indicates that personal discount rates (impatience) and a limited social network are important pathways through which credit constraints lead to fraud victimization.

The interplay of policy, institutions, and culture during COVID-19

Confronting COVID-19 is a daunting challenge and governments need all the weapons at their disposal, including policies, formal institutions, and cultural norms. In a recent paper, **Sheng Fang**, **Yuanyuan Yi**and IBN co-editor **Colin Xu** provide cross-country evidence linking the spread of COVID-19 with preexisting vulnerabilities, mobility restriction policies, democratic institutions, an individualistic culture and societal trust levels. Preexisting vulnerabilities, such as the population share of the elderly, urbanization rates, and the prevalence of obesity and air pollution, are all significantly linked to the spread of the virus and/or the associated mortality rates. Delay in imposing mobility restrictions and the authors' cultural indicators (individualism and trust) are not directly associated with pandemic outcomes. However, some of their indirect effects appear to be large. For example, government delay in restricting mobility drastically amplifies the positive association between preexisting vulnerabilities and pandemic mortality and has more pronounced adverse effects in democratic countries. In addition, individualistic culture and general trust both tend to amplify the positive links between pandemic mortality and the share of elderly people or urbanization.

Estimating the demand for business training: Evidence from Jamaica

In a new paper, our own **David McKenzie** along with **Alessandro Maffioli** and **Diego Ubfal** estimate the demand for business training through two field experiments in Jamaica. In the first setting, the authors use a version of the Becker-DeGroot-Marschak (BDM) mechanism to elicit willingness to pay for training and subsequently randomize offered prices. In the second setting, the authors offer take it or leave it offers that are randomized at four price points. The general finding is that demand for business training is price-inelastic, with significant reductions in demand when the training is not offered for free. The study further finds that willingness to pay for business training is correlated with wealth, younger age, riskiness, and business size; however, it is not correlated with gender. These results help identify which types of entrepreneurs would be screened out if business training is not subsidized down to zero. Finally, charging a positive price does have a positive impact on attendance, with higher rates of attendance among those who paid for the course. Given that many business training programs suffer from low attendance, the authors conclude that the optimal price for business training may lie slightly above zero, which helps boost attendance with moderate levels of screening.

The impact of COVID-19 on formal firms: Micro tax data simulations across countries

In a new paper on the impact of COVID-19, **Pierre Bachas**, **Anne Brokmeyer** and **Camille Semelet**model the impact of the pandemic on firm profits and tax payments using administrative tax records from 10 low- and middle-income countries around the world. Based on simple and transparent modeling assumptions, the authors predict that the pandemic is likely going to have significant negative consequences for formal firms – a decline in profitability for more than half the firms, a 5-10% reduction in annual payrolls, and a doubling of firm exit rates. Therefore, tax revenue is likely to decline by at least 1.5 percent of baseline GDP. The authors argue that wage subsidies are likely to be ineffective as even a 90% wage subsidy can only prevent 30% of the predicted payroll cuts. On the fiscal side, these findings imply a likely high demand for borrowing to cover tax shortfalls, which can be challenging for developing countries that already operate with limited access to international capital markets.

Our eclectic guide to recent research of interest

Is mobile money changing rural Africa? Evidence from a field experiment

Catia Batista and **Pedro C. Vicente** conducted a randomized experiment in rural areas of Mozambique to measure the effect of mobile money on consumption and investment. They collaborated with Carteira Movel, the only mobile money provider in the country at the time. The study sample consists of 102 enumeration areas (EAs) that had a strong mobile phone signal, but no preexisting mobile money agents. Half of these EAs were randomly selected to receive mobile money agents in 2012. At least one local vendor was recruited and trained to become an agent. After agents were in place, a community meeting was held to disseminate information about mobile money services. Campaigners distributed leaflets and helped individuals self-register for the service. Individuals also received free trial money to practice using the service. Administrative data for 2012 through 2015 show that almost no mobile money transactions took place in control EAs. In treatment EAs, individuals performed four mobile money transactions per year, on average. Most of these transactions were airtime purchases, followed by cash deposits and transfer receipts. Despite this rather low number of transactions, data from follow-up surveys conducted in 2013 and 2014 reveals large effects. Among households that experienced negative shocks, households in the treatment group were more likely to receive remittances and had 40% higher consumption than households in the control group. While treatment households were not more likely to save than control households, they shifted some of their savings into mobile money accounts. The treatment led to reduced investment in agriculture, but increased out-migration, presumably because mobile money lowered the transaction costs associated with migrant remittances.

Shaming microloan delinquents: Evidence from a field experiment in China

Di Bu and **Yin Liao** examine the effect of publicly disclosing loan delinquency on repayment behavior in 40 villages in western China. The authors partnered with a microfinance institution (MFI) to conduct a randomized experiment, dividing 2,731 loan applicants into three groups. The control group received the MFI's standard application form. The first treatment group received the standard application form with an attached one-page consent letter on village information sharing (VIS), stating that "overdue payments (40 days after each installment's due date) will be considered for public disclosure among the village by showing debtors' names on a blackboard outside the village office of the MFI." In practice, for legal and ethical reasons, the authors publicized delinquents who, first, did not face financial hardship, as determined by a home visit, and, second, failed to repay after a series of debt collection interventions. The second control group received a consent letter with a lender information sharing (LIS) message, stating "overdue payments (40 days after each installment's due date) will be considered for reporting to the credit registry of the central bank and shared among formal financial lenders." About 30% of applicants in each experimental group were approved and ended up taking out a loan. Administrative data shows that, in the control group 80% of borrowers made at least one overdue payment over the course of the loan. This percentage dropped to 61% in the VIS group, and to 69% in the LIS group. A supplementary experiment, where the VIS and LIS information was given to loan applicants after they were granted a loan (with an option of immediate repayment) shows similar results, suggesting the effects on repayment operate through reducing moral hazard instead of changing who selected into the loan. Additional analysis suggests that the VIS treatment is effective because borrowers fear losing informal risk insurance from the village society if their name appears on a publicly disclosed "blacklist" of delinquents.

Financial fragility and COVID-19

In April-May 2020, **Robert Clark**, **Annamaria Lusardi**, and **Olivia Mitchell** surveyed U.S. residents age 45-75 to find out how COVID-19 had exacerbated the fragility of their finances during the early stages of the crisis. They define financial fragility as the capacity to meet an unexpected $2,000 expense within a month's time and find that 18.9% of respondents indicated that they certainly or probably could not cover the expense. Financial fragility is substantially higher for some groups than others: 25.8% of women reported themselves as fragile compared to 15.6% for men, while African Americans and Hispanics were 15 and 10 percentage points more likely, respectively, to be fragile than whites. Financial fragility also declines with age – those older than 70 were 12 percentage points less likely to report fragility than people age 55-59, which the authors attribute to heavier reliance on Social Security income and hence lower susceptibility to earnings and unemployment risk. Finally, greater financial literacy is associated with less financial fragility, even after controlling for sociodemographic characteristics including education and income. The authors speculate that the more financially literate may have made better saving and spending decisions in the past, so they could more easily withstand economic shocks and make better decisions in times of crisis.

Upcoming events and miscellanea

VoxDevLit on Training Entrepreneurs

VoxDev recently launched **VoxDevLits**, dynamic literature reviews edited by a community of scholars working in the field. The first VoxDevLit, edited by our own **David McKenzie**, together with **Chris Woodruff** and seven co-editors (Kjetil Bjorvatn, IBN co-editor Miriam Bruhn, Jing Cai, Juanita Gonzalez-Uribe, Simon Quinn, Tetsushi Sonobe, and Martin Valdivia), was published this month. It reviews research on entrepreneurship training.

Call for papers: NBER-RFS Inequality, Discrimination, and the Financial System Virtual Conference

The National Bureau of Economic Research (NBER), in collaboration with the Review of Financial Studies (RFS), will host a virtual research conference on April 1 and 2, 2021. The conference will explore the extent to which areas of finance such as mortgage lending, credit scoring, and commercial lending to small businesses have had a disparate impact on different groups, and the extent to which implicit or explicit bias and discrimination have operated through business practices and policies. The deadline for submitting a paper is January 24, 2021.

Call for papers: 2021 Sixth Biennial IADI Research Conference "Navigating the New Normal for Financial Stability, Deposit Insurance and Bank Resolution"

The Bank for International Settlements in Basel, Switzerland, will host the Sixth Biennial International Association of Deposit Insurers (IADI) Research Conference virtually from May 10 to 14, 2021. The conference will explore how, a decade after the global financial crisis, international crises continue to shape the landscape for financial stability, deposit insurance and bank resolution. Paper submissions must be received by the end of January 2021.

Happy reading!

Your editors Miriam Bruhn (mbruhn@worldbank.org), Bob Cull (rcull@worldbank.org), Colin Xu (lxu1@worldbank.org), and Bilal Zia (bzia@worldbank.org)