WORLD BANK GROUP

Interest Bearing Notes

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A Finance & Private Sector Development Research Newsletter

What's new on our website

Financial innovation and additionality

Facundo Abraham, **Sergio Schmukler**, and **José Tessada** have a new note on measuring whether financial innovation results in products and services that add to financial usage, and thus create value for an economy, or rather substitute for similar products that consumers are already using. In the course of laying out key concepts and methodological issues, the authors describe a number of papers that have been done within our group.

World Bank Research

The impact of mobile money on poor rural households: Experimental evidence from Uganda

IBN co-editor **Miriam Bruhn**, together with **Christina Wieser**, **Johannes Kinzinger**, **Christian Ruckteschler**, and **Soren Heitmann** ask whether rolling out mobile money agents can improve the livelihoods of households in remote rural areas. They collaborated with the mobile phone provider Airtel to activate mobile money agents in 168 randomly selected rural areas in Northern Uganda. Before this rollout, mobile money agents in these areas were on average 6km away, making it costly to reach these agents for sending or receiving money. Administrative data from Airtel show that the agent rollout increased the probability of receiving money. Data from a follow-up survey, conducted about six months after the agent rollout, confirm that the agent rollout reduced the costs of sending and receiving money. The data further suggest that households used the cost-savings and additional money they received to start businesses: the rate of non-farm self-employment doubled in treatment areas, compared to control areas (going from 3 to 6 percent of households). Importantly, the agent rollout had a significant effect on food security. The fraction of households with a very low food security index dropped from 63 percent in the control group to 47 percent in the treatment group. All these findings are driven by the most remote areas, i.e. those that were more than 25km away from a bank branch, with no effect on any of the outcomes in areas closer to a bank branch.

Learning to grow from peers: Experimental evidence from small retailers in Indonesia

In a new paper on small firm growth, IBN co-editor **Bilal Zia**, along with **Patricio Dalton**, **Julius Ruschenpohler**, and **Burak Uras** study whether learning best practices of successful peer businesses can help improve entrepreneurship outcomes. Through a field experiment, the authors first map out the range of business practices employed among a large sample of retail shops in Jakarta, and then conduct both quantitative and qualitative analysis to identify a set of practices that contribute the most to business growth. These practices are compiled in a

professionally developed handbook, along with specific implementation guidance and norms that are informed by successful peers. Instead of offering formal training or in-depth counseling, this handbook is simply distributed to a randomly selected sample of shop owners and complemented with three experiential learning modules: one group is invited to watch a documentary video on experiences of highly successful peers, another is offered light in-shop assistance on the implementation of the handbook, and a third group is offered both. Eighteen months after the intervention, the study finds no effect of offering the handbook alone, but significant impact on practice adoption when the handbook is coupled with experiential learning. On business performance, the study finds sizable and significant improvements as well, up to an increase of 35 percent in profits and an increase of 16.7 percent in revenues. The types of practices adopted map these performance improvements to efficiency gains rather than other channels. The findings suggest that these interventions are simple, scalable, and highly cost-effective.

Beyond the S-curve: Insurance penetration, institutional quality and financial market development

Our own **Xavier Gine**, along with **Bernardo Ribeiro** and **Peter Wrede** use twenty years of insurance premium data from 180 countries to study which factors other than GDP per capita contribute to the development of insurance markets. The evidence suggests that the quality of institutional governance and the degree of financial market development are important factors to consider by policymakers. Specifically, the study finds that the development of a country's economic institutions and financial sector, as measured by indicators such as credit to the private sector, bank account ownership rates, and the financial reform index, are important to insurance market development. In addition, financial reform matters to insurance even when the reforms are not meant to directly affect insurance markets. The study also shows a strong relationship between insurance penetration and rule of law, and that this holds for both life and non-life insurance. The authors are careful not to claim causality in their analysis, however, their study does highlight factors other than income growth that can explain insurance penetration and market development.

Searching for yield among large international corporate bonds

In the wake of the Global Financial Crisis (GFC), interest rates on safe assets in advanced economies remained persistently low, leading investors to expand the range of investments they would consider. In a new paper, **Charlie Calomiris**, **Mauricio Larrain**, **Sergio Schmukler**, and **Tomas Williams** investigate how those changed market conditions interacted with aspects of market structure to affect the size and pricing of U.S. dollar-denominated bonds issued by emerging market corporations. They start with the observation that the institutional investors from advanced economies that were searching for yield typically had little experience with bond issues from developing countries, and they posit that those investors therefore had strong incentives to purchase bonds that were included in major indexes. Such bonds are both more liquid than non-indexed bonds and make it easier for institutional investors to perform as well as market benchmarks. However, the most relevant benchmark indexes for emerging market bonds include only debt issues with a face value of at least US$500 million, a market feature that the authors exploit in their empirical analysis. Using a large sample of bond issuances from the Thomson Reuters SDC Platinum database, they find that increased preferences for bonds that were included in indexes led to a substantial

increase in their prices, and thus a substantial decline in their yields – for example, they estimate that issuing a $500 million bond instead of a $400 million bond would have enabled an emerging market corporate to pay about 100 basis points less after the GFC than the differential they paid prior to 2008. In their parlance, the 'size yield discount' on emerging market bonds of $500 million or more increased substantially after 2008. They go on to show that a disproportionate share of these debt issues had a face value of exactly $500 million, and that the companies that issued those bonds ended up holding larger cash reserves than others, which suggests that the issuance size exceeded their financing needs. And indeed, they show that the increased holding of cash was greater for small firms that issued large bonds than for large firms that issued them. In all, the authors provide a compelling analysis of how use of indexes by institutional investors can have important effects on the financing decisions and financial costs of firms in emerging markets.

Our eclectic guide to recent research of interest

The impact of soft-skills training for entrepreneurs in Jamaica

In a recent paper, **Diego Ubfal**, **Irani Arraiz**, **Diether Beuermann**, **Michael Frese**, **Alessandro Maffioli**, and **Daniel Verch** measure the effects of soft-skills and traditional business training on microenterprises in Jamaica. The authors randomly assigned 945 entrepreneurs to one of two treatment arms and a control group. One treatment arm was offered ten classes of soft-skills training. This training used psychology-based content that aimed to help entrepreneurs develop a proactive mindset for overcoming problems. The other treatment arm was offered combined training: five soft-skills classes and five classes on traditional business practices. Results from two follow-up surveys show that the soft-skills training significantly increased sales and profits three months after the training, but only for men. This effect did not last and was zero 12 months after training. The combined training did not have a statistically significant effect on sales and profits in any of the follow-up surveys, reinforcing findings from the previous literature that soft-skills training works better than traditional business training. Interestingly, the data show a lasting positive effect of soft-skills training on measures of soft-skills 12 months after training. It is thus not clear why the effect on sales and profits did not persist. The 12-months follow-up survey suffered from a 40-percent attrition rate, but even after correcting for attrition in different ways, the authors find no effect of the soft-skills training on sales and profits at that time.

Fertility and modernity

England's role in facilitating modern development is well-known, but less well-known is the role of its archrival, France, in facilitating modernity. **Enrico Spolaore** and **Romain Wacziarg** examine how cultural distance to France affected fertility transition in European countries. They take advantage of rich data from the Princeton European Fertility Project, which covers regional fertility data and related measures from 1830 to 1970. They measure cultural distance using a measure of linguistic distance to French. The standard economic approach pioneered by Gary Becker implies that variables capturing costs and benefits of having children must be controlled for in explaining fertility decisions, which the authors do, but they also add the regional linguistic distance to French to explain fertility transition dates, defined as the date that a region experienced a drop in marital fertility by 10 percent or

more. They find that linguistic proximity to French is robustly related to fertility declines and a faster transition to modern fertility rates. Thus, societies that were linguistically and culturally closer to the French were quicker to adopt new social norms and attitudes towards fertility control. The paper demonstrates the critical importance of culture in influencing long-term development.

Property rights protection and capital structure

The microeconomic literature of the effects of property rights on firms has experienced a resurgence in the last two decades, starting with Johnson, McMillan and Woodruff's paper in 2002 in the American Economic Review. The literature has examined the effects of property rights protection on firms' reinvestment rates and corporate valuations, but little research has examined how property rights affect a key aspect of corporate decision making, namely the capital structure. Using panel data, **Yixin Liu**, **Yu Liu**, **William L. Megginson**, and **Zuobao Wei** investigate how the enactment of the Property Rights Law in China in 2007 affected the leverage ratios of a large sample of non-listed firms. The Property Rights Law featured stronger protection of both firms' and creditors' property rights. They therefore examine two hypotheses: the reinvestment hypothesis, which posits that secure property rights for firms would result in greater confidence of reaping benefits from reinvestment (Johnson et al. 2002), and the financial constraint hypothesis, which posits that stronger protection of creditors would result in greater willingness by banks to lend to firms (Djankov et al. 2008). They apply a difference-in-difference framework to examine the effects of the Law and find support for both hypotheses. On average, firms reduced their leverage ratios, relying more on retained profits for reinvestment after the law was enacted. However, firms that were facing more severe financial constraints (smaller firms and firms with fewer tangible assets) benefitted more than other firms from greater access to credit after the law's passage (i.e., their leverage ratios increased). The results are robust after accounting for potentially confounding events such as WTO accession and the global financial crisis, among others.

The disruptive power of RCTs

In a new essay, **Jonathan Morduch** tackles the importance of RCTs in development economics and for policy. He begins by making a distinction between RCTs for evaluation and RCTs for exploration. Evaluation RCTs focus on evaluating government or NGO programs and policies and assessing whether something "works." In most cases, researchers design the evaluations but not the interventions themselves. In contrast, in RCTs for exploration researchers participate actively in the design of the actual programs and policies and focus not only on whether an intervention "worked" but also on how and why it worked, and what other interventions might work. While he acknowledges well-known criticisms of the RCT approach related to generalizability of results and heterogeneity of effects, and a tendency to give too much prominence to RCTs over other methods of evaluation in some circles, Jonathan still sees great value in the experimental mindset that underlies RCTs for exploration and their potential to yield new insights on how markets, institutions, and processes work. To illustrate, he describes RCTs that examine the effects of changing the timing of payments for crop insurance to coincide with the harvest, modifying payment schedules and interest rates on microcredit contracts, and teaching migrants to use mobile money to send

remittances. In each case, there was little existing variation in the contracts that were offered or in how services were explained to consumers, and thus the RCTs were designed to create the relevant variation. And in each case, interventions based on intuition and grounded in simple theory had significant positive effects on outcomes for consumers. By tinkering with and rethinking existing terms and conditions, these types of studies help us to better understand economic possibilities and constraints.

Upcoming Events and Miscellanea

Calls for papers

The **1st Annual Conference of the Private Sector Development Research Network: Private Enterprise and Inclusion** will take place in Geneva on December 12-13, 2019. The conference will focus on two key actors – the private sector and development finance institutions – and aim for research that contributes with actionable insights on the ways businesses affect inclusion, either proactively or not, and the ways development finance institutions and other actors can promote inclusion through private sector activity. The deadline for submitting a paper is approaching quickly: September 1, 2019. More details are posted here.

The Consumer Financial Protection Bureau (CFPB) is now accepting submissions for the **4th CFPB Research Conference on Consumer Finance**, which will be held at Catholic University in Washington, DC, also on December 12-13, 2019. Authors may submit complete papers or detailed abstracts that include preliminary results by September 3, 2019. The call for papers is posted here.

Happy reading!

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