Interest Bearing Notes **Vol. 21, No. 1**

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The next issue of Interest Bearing Notes will appear in March 2018 so please send comments, suggestions (such as your own or others' interesting research), and requests to be added to our distribution list, to Bob Cull (mailto:rcull@worldbank.org) by March 9th.

IBN is a product of the Finance and Private Sector Development Team in the World Bank's Development Research Group. Our working papers and descriptions of research projects in progress can be found, along with a list of forthcoming seminars and conferences, on our web page (http://www.worldbank.org/en/research/brief/finance-private-sector).

I What's new on our website

Failing to disclose information to consumers about financial products
In a new Impact Evaluation Policy Note, our own **Xavier Giné**, together with **Rafael Mazer**, summarize results from mystery shopping exercises in multiple countries showing that financial services providers tend not to disclose all information relevant

to consumers in choosing products appropriate for them. Worse yet, the mismatch is especially pronounced for customers that staff perceive as less financially knowledgeable: http://documents.worldbank.org/curated/en/132911510224489929/You-get-what-you-ask-for-testing-information-disclosure-in-a-multi-country-study

For a more detailed description of their research in this area in Mexico and Peru, see their recent working paper: http://documents.worldbank.org/curated/en/513631507130361973/Information-disclosure-and-demand-elasticity-of-financial-products-evidence-from-a-multi-country-study

II World Bank research

Are psychometric tools a viable screening method for small and medium enterprise lending?

IBN co-editor **Miriam Bruhn** and our own **Claudia Ruiz**, together with **Irani Arráiz** and **Rodolfo Stucchi** collaborated with a large bank in Peru to study the use of psychometrics for small and medium enterprise (SME) lending. The bank piloted a psychometric credit application, developed by the Entrepreneurial Finance Lab (EFL), starting in March 2012, with the goal of expanding its SME portfolio. At the time, the bank was not very active in the SME market and they were interested in testing whether the EFL tool could help them improve their conventional screening method, which relied on a credit score from Equifax Peru and a site visit to the SME. During the pilot exercise, SME loan applicants were screened by the EFL tool, and all applicants who achieved a score higher than a threshold set by the partner bank were offered a loan. The authors study the causal impact of the EFL tool on SME loan use and repayment behavior using several regression discontinuity (RD) methods around the EFL score threshold. For this analysis, they obtained data on formal credit usage and credit scores from Equifax Peru. The results show that, for applicants without a credit history, the EFL tool increased the probability of taking out a new SME loan without leading to worse repayment behavior, suggesting psychometric credit scoring is a viable screening method for these applicants. The increase in borrowing resulted primarily from financial institutions other than the partner bank, which is consistent with staff from the bank stating that applicants used their loan approval letters to secure more advantageous loans from other institutions. For applicants with a credit history, receiving a loan offer based on the EFL tool did not significantly increase SME loan use, but it led to worse repayment behavior (one reason for this finding is that the bank offered loans even to those applicants with bad credit histories).
http://documents.worldbank.org/curated/en/729911513262009360/Are-psychometric-

tools-a-viable-screening-method-for-small-and-medium-size-enterprise-lending-evidence-from-Peru

Microfinance and economic development
IBN co-editor **Bob Cull** and **Jonathan Morduch** take a step back to review the broader literature on microfinance to assess its impact on development. Results from recent influential field experiments indicate that microcredit has only modest effects on household income, which casts doubt on microfinance as a tool to alleviate poverty. But there are well-known reasons why those experiments cannot paint a full picture of microcredit's effects -- for example, they tend to focus on marginal borrowers (so potentially larger effects for infra-marginal borrowers are not captured) and some occurred in settings where microcredit was already well established. Beyond concerns about external validity, widespread heterogeneity in effects across borrowers suggests that microcredit could be better targeted and the microcredit contracts themselves (and their rigid repayment schedules) could be relaxed and better tailored to the incomes of the poor. More generally, the authors argue against the unrealistic expectation that microcredit should alleviate poverty given its multi-dimensional nature. Rather than narrowly construed as entrepreneurial finance, microfinance is more helpfully construed as improving household finance in a broader sense. Bob and Jonathan also show that modest income benefits coincide with modest subsidies, because microfinance is largely financially self-sustaining, and thus benefit-cost ratios are favorable for microcredit, even in comparison with other development interventions. Given the demonstrated success of microfinance in cost-effectively achieving scale, adapting the model to better meet the needs of the poor and continuing to expand services beyond credit clearly makes more sense than casting it an abject failure.
http://documents.worldbank.org/curated/en/107171511360386561/Microfinance-and-economic-development

Corporate debt maturity in developing countries
Using transaction-level data on syndicated loans and bonds issued in domestic and international markets from 1991 to 2014, **Juan Cortina**, **Tatiana Didier**, and **Sergio Schmukler** describe the maturity of borrowing by firms from developing versus developed countries. Firms from developing countries that borrow using syndicated loans or international corporate bond markets do so at maturities very similar to those for firms from developed countries. Because the vast majority of firms from developing countries are unable to access these markets, they must rely on shorter-term debt instruments such as bank loans and bonds issued in domestic markets. This therefore accounts for the lower ratios of long-term debt to total liabilities for firms from developing countries found previously in the literature and confirmed in this study. A part of the challenge for those firms is that sources of local debt are

underdeveloped. For example, the authors show that firms from developing countries that issue debt in domestic bond markets tend to be larger than their counterparts in developed countries and, despite their larger size, the maturities on their locally-issued debt tend to be shorter. To enable smaller, lower-rated firms to access bond markets, the authors suggest policies aimed at reducing the costs associated with issuance and the development of capital markets specialized in SMEs.
http://documents.worldbank.org/curated/en/795161508437504068/Corporate-debt-maturity-in-developing-countries-sources-of-long-and-short-termism

SME finance
In a new working paper, our own **Asli Demirguc-Kunt** along with **Meghana Ayyagari** and **Vojislav Maksimovic** summarize the existing empirical evidence on financing challenges faced by small and medium enterprises (SMEs) in developing countries. Although SMEs make up a large part of the emerging private sector in most countries, they are also more constrained in their access to financial services than larger firms. This paper combines firm level surveys with surveys of bankers to understand both the supply and demand constraints related to accessing bank and non-bank finance. The paper further discusses institutional constraints such as lack of reliable credit information, lack of collateral, and weak legal systems. Finally, the paper summarizes the various policies and reforms that have been shown to be effective in improving access to credit for SMEs, and discusses gaps in the research where future work can focus.
http://documents.worldbank.org/curated/en/860711510585220714/SME-finance

Mission and the bottom line: performance incentives in a multi-goal organization
In this field experiment, our own **Xavier Giné** along with **Ghazala Mansuri** and **Slesh Shrestha** examine how workers in a mission oriented non-profit organization respond to different bonus pay schemes. The study design involved two treatment arms, one where workers were incentivized for performance on microcredit loans and another where they were incentivized for strengthening community institutions of the poor. Results show that the credit bonus improved credit-related outcomes, but at the expense of social outcomes. On the other hand, the social bonus advanced both the social mission as well as the micro-credit program, yet these results are only significant for employees working alone. For those employees working in teams (rather than individually) the paper finds negative impacts of the social bonus on both credit and empowerment outcomes. The authors attribute this difference in findings to a drop in intrinsic motivation and the propensity for employees working in teams to free-ride. These results suggest that fixed wages may be a better solution than incentivizing social tasks especially among worker teams. Interestingly, employees working alone under the social bonus improved credit outcomes just as much as those working under the credit bonus. These results indicate both production

and cost complementarities, since cost complementarities alone cannot explain why the social bonus group improved credit outcomes.
http://documents.worldbank.org/curated/en/757341513086147069/Mission-and-the-bottom-line-performance-incentives-in-a-multi-goal-organization

III "FYI": Our eclectic guide to recent research of interest

Which features of formal jobs do workers value most?

Formal and informal jobs differ along several dimensions and while policymakers often assume that formal jobs are more desirable than informal jobs, it's not clear which aspects of formal jobs workers value most. **Minhaj Mahmud**, **Italo Gutierrez**, **Krishna Kumar**, and **Shanthi Nataraj** conducted a survey of about 2,000 workers in Bangladesh to shed light on this issue. Survey respondents were asked to choose between two hypothetical employment opportunities, each with different levels of the following attributes: a written contract, termination notice, paid leave, access to a retirement fund, number of working hours, and monthly income. The survey contained 48 different choice sets that were randomly assigned to its respondents. The authors used the survey responses to calculate willingness to pay (WTP) for each job attribute. The results suggest that workers most value job stability. The average worker would be willing to give up 19 percent of monthly income for a 6-month contract, 27 percent for a 1-year contract and 44 percent for a permanent contract (relative to no contract). Thirty days of termination notice and access to a retirement fund were valued at 12 and 18 percent of monthly income, respectively. The least popular feature, paid leave of 10 days (a standard level required by the Bangladesh Labor Law), was only valued at around 5 percent of monthly income.
https://www.rand.org/content/dam/rand/pubs/working_papers/WR1100/WR1197/RAND_WR1197.pdf

Weak states and the Mafia

Building state capacity is a key challenge for development but a difficult issue to study, in part because it is hard to find data that allow researchers to examine of the causes of weak states and their long-term consequences. Daron Acemoglu, Giuseppe De Feo, and Giacomo De Luca circumvent this obstacle by turning to a detailed study of a weak state, Sicily, starting from the end of the 19th century. Due to strong appropriation of peasants by the rural elites, socialist 'Peasant Fasci' organizations spread quickly, aided by an exceptionally severe drought in 1893. To counter this threat, the rural elite resorted to the Mafia to control the spread of the Peasant Fasci. The authors first show that the severe drought in 1893 (but not in other years) was positively associated with the presence of Peasant Fasci -- —so that severe drought and the spread of the Peasant Fasci movement were complementary. Using information on the severity of the 1893 drought as their instrumental variable, they then try to identify the causal effects of the presence of the Mafia in a region on

medium-term (one to two decades later) and long-term (between a half and a full century later) outcomes. The presence of the Mafia is found to have caused lower literacy rates, less state capacity (as measured by infant mortality rates and per capita development expenditure), and greater concentration of political power in the medium term. The effects on long-term outcomes are generally weaker, but concentration of political power remains robust.
http://www.nber.org/papers/w24115

The development effects of the extractive colonial economy
The literature tends to emphasize the negative long-term effects of extractive colonial activities. In an interesting and important paper, **Melissa Dell** and **Benjamin Olken** provide evidence that the extractive colonial economy could also generate positive long-term effects through its impacts on local infrastructure, organization of production, and human capital. The setting for their study is the Dutch Cultivation System in mid-19th century Java. There the Dutch established 94 sugar factories, and organized surrounding rural areas to plant cane to support those factories. The authors then carefully identify as treatment groups the sugar-producing areas supporting the Dutch factories, and construct their own control groups with similar characteristics (i.e., sugarcane-suitable, with similar geographical and transport conditions). Using regressions and a spatial regression discontinuity design, they find that, compared to other areas with similar geographical features, the areas close to the Dutch factories today are more industrialized, have better infrastructure, and have higher income. The villages forced to grow sugar cane also have more schools and higher education levels, both historically and now. The authors provide suggestive evidence that potential channels include the construction of infrastructure and the development of related industries to support the factories. The authors also note that the agglomeration literature on colonial history tends to find diverse long-run impacts. A key insight from this paper is that the impact of an extractive colonial economy depends on the specifics of how the extractive activity was organized and governed.
http://www.nber.org/papers/w24009

IV Upcoming events and miscellanea

Calls for papers

The 7th of the MoFiR Workshop on Banking will be held in Ancona on June 13-15, 2018. It is organized by the Money and Finance Research group (MoFiR) together with the Joint Research Centre of the European Commission and the Department of Economics and Social Sciences of the Universitá Politecnica delle Marche. The organizing committee invites submissions of high-quality theoretical and empirical research on financial intermediation. Scholars in the fields of banking and finance will meet to discuss current issues in banking, financial stability, and financial regulation, focusing on policy reforms for a stable global financial environment. The deadline for submitting a paper is January 31, 2018. More information is posted here.

DIW Berlin will host a workshop on "Financial inclusion of households and entrepreneurs in developing countries" to be held in Berlin on April 26-27, 2018. The program committee includes former IBN co-editor Thorsten Beck and current IBN co-editor Bilal Zia, among others. The submission deadline is February 4, 2018. More details on topics and logistics are available here.

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)