Interest Bearing Notes **Vol. 20 No. 3**

June 2017

Contents

The next issue of Interest Bearing Notes will appear in July 2017 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 July 7th.

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

New evidence shows way forward for SME growth and job creation
Small and medium enterprises (SMEs) employ about half of the workforce in developing countries. SME growth may thus raise incomes for many low-income households. But SMEs often face significant constraints to growth relative to large firms ranging from excessive red tape to limited access to finance. In a recent policy research talk, IBN co-editor **Miriam Bruhn** discussed empirical evidence on

commonly used policies for SME growth, covering policies that work and policies that don't in the areas of regulation, access to finance, and business practices. Click here for the full story.

II World Bank research

Can grants to consortia spur innovation and science-industry collaboration?
IBN co-editor **Miriam Bruhn** and our own **David McKenzie** collaborated with Poland's National Center for Research and Development (NCBiR) to study the effect of NCBiR's In-Tech program on innovation activities. The program provides grants to projects that are carried out by consortia of firms and research entities. Applications to the program receive a score based on peer reviewer ratings and those with a score above a threshold are offered funding. Miriam and David rely on this feature to evaluate the program's impact using a regression-discontinuity (RD) analysis. They focus on the 459 applications to the 2012 and 2013 calls for proposals with scores within eight points of the funding threshold. For these applications, NCBiR conducted a 2016 follow-up survey of the lead research institute and enterprise within each consortia, with an 87 percent response rate. Results from the RD analysis using this survey data show that In-Tech largely funds projects that would not otherwise get funded by other agencies or by the consortia themselves, increasing the probability of a project being completed by almost 60 percentage points. The results also show that the program leads to more science-industry collaboration, and increases the probability of applying for a patent related to the proposed project, as well as the probability of publishing a research paper related to the project. Most of the patent applications have been to the Polish patent office, with no significant increase in applications to the European office. The analysis also finds early effects on commercialization of products related to the proposed project, although these products currently still make up a small share of firm's sales.
http://documents.worldbank.org/curated/en/669721483975271823/Can-grants-to-consortia-spur-innovation-and-science-industry-collaboration-regression-discontinuity-evidence-from-Poland

Do foreign investors underperform? Evidence from Colombia
Our own **Alvaro Pedraza**, together with **Fredy Pulga** and **Jose Vasquez**, investigate the behavior of different types of foreign investors in Colombia, comparing passive fund managers (those that try to replicate a benchmark index) with active fund managers. Their data set is unique in that it covers all transactions on the Colombian Stock Exchange from 2006 to 2016 and provides a unique investor ID number for each transaction. This enables the authors to track deviations in shareholding from the two most popular equity indices that track overall market performance, with larger deviations indicating more active fund management. Using standard measures of trading performance, the authors show that under-performance of foreign investors in

the Colombian market is entirely attributable to passive fund managers. They purchase stocks at higher prices, sell at lower ones, and receive lower risk-adjusted returns than other investors. Moreover, they under-perform most on days when they trade multiple stocks in the same direction, buy or sell the same stock multiple times, and/or make large trades at the end of the trading session, all patterns consistent with the notion that they are trying to accommodate large flows while matching the shareholding proportions in the benchmark index. In contrast, actively managed foreign funds out-perform all other investors, including similarly actively managed domestic funds. The results may be more broadly reflective of the costs of index investing in developing countries and securities for which there is less trading activity.
http://documents.worldbank.org/curated/en/937231489425579792/Do-foreign-investors-underperform-An-empirical-decomposition-into-style-and-flows

A firm of one's own: Experimental evidence on credit constraints and occupational choice

In a new paper, **Andrew Brudevold-Newman**, **Maddalena Honorati**, **Pamela Jakiela**, and **Owen Ozier** study the impact of two labor market interventions in Kenya targeted to young women aged 18-19 through a randomized control trial. The first treatment provided both credit and business training through a micro-franchising program, while the second provided an unconditional cash grant. This study design is conducive to studying the impact of alleviating both human and physical capital constraints that may hinder microenterprise growth. The results show that both treatments led to substantial improvements in income up to a year after the interventions, however, these effects dissipate precipitously by the second year. In addition, there are no positive effects on other social outcomes such as food security, expenditures, living conditions, or empowerment. The authors interpret these findings as indicative of savings constraints, but not of binding credit constraints, and further that while both the combined treatment and the unconditional cash grants resulted in similar short-term effects on business income, the cash treatment was more cost effective. The dissipation of longer term effects may further be indicative that these types of treatments need to be better targeted.
http://documents.worldbank.org/curated/en/428361487270218330/A-firm-of-ones-own-experimental-evidence-on-credit-constraints-and-occupational-choice

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

Understanding the success and failure of new stock markets

Former IBN co-editor **Thorsten Beck** teams up with **Jose© Albuquerque de Sousa**, **Peter A.G**. **van Bergejik**, and **Mathijs A. van Dijk** to study the development of 59 "nascent" stock markets that were opened in 1975 or later during their first 40 years of activity. They use standard measures of stock market development from the

financial structure literature that regular IBN readers will be familiar with, namely the number of listings of domestic companies, aggregate market capitalization relative to GDP, and a measure of trading activity (the value of stocks traded to market capitalization). They find low correlations between those measures in the early stages of development relative among nascent markets that increase as markets mature. Thus, a market may do well on a specific measure early on, but it only becomes apparent over time which ones will thrive on all three dimensions. That said, there are two strong predictors of whether a market will succeed – high net national savings rates over time and the level of banking sector development at the time of its establishment. While recent research has also highlighted complementary growth in banks and securities markets as economies grow, this study indicates that having a well-developed banking sector in place before a market is established can be crucial for ensuring its eventual success.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2870392

Liquid milk: Cash constraints and day-to-day intertemporal choice in financial diaries

Xin Geng, **Wendy Janssens**, and **Berber Kramer** use high frequency panel data from Kenyan dairy farmers to identify cash constraints and study the implications for daily business choices made by farmers. While smallholder farmers studied in the paper typically sell collectively through agricultural cooperatives, the payments they receive through this system are deferred, hence cash constrained farmers often side sell in local markets for reasons other than price differentials. Using semiparametric estimation techniques for panel data, the authors find that farmers sell more in the local market, in particular to buyers who pay cash immediately, in weeks when they have low cash on hand. Specifically, the analysis finds that households use side selling to cope with health shocks and only in weeks when they are not covered by health insurance. Hence, these findings imply that increased flexibility in payment and the provision of insurance through agricultural cooperatives could potentially reduce side selling and improve the performance of collective marketing arrangements.
http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/131058

Can setting default options increase savings in developing countries and if yes, why?

Evidence from developed countries suggests that signing individuals up for default options can significantly increase savings. **Joshua Blumenstock**, **Michael Callen**, and **Tarek Ghani** investigate whether this finding translates to a developing country context, where the potential for savings may be lower, and they also set out to shed light on why default options work so well. The authors conducted a randomized experiment with the largest mobile phone operator in Afghanistan. Close to 1,000 employees of this firm were signed up for new mobile-phone based savings accounts that could receive automatic payroll deductions. Half of the sample was randomly assigned to have 0% of their salary deducted by default, whereas for the other half the default was 5%, but employees where then free to change their contribution rate (with a maximum of 10%). Results from administrative data and follow-up surveys show that the default assignments have large and significant impacts on contributions. Two months after the launch of the savings accounts almost all switching of contribution rates had ceased and employees with a default contribution rate of 5% were 40 percentage points more likely to contribute to the account than those with a default contribution of zero. Results from a second phase of the study suggest that the reason why setting a default contribution works is related to both present-biased preferences and cognitive costs associated with doing the match necessary for financial planning. http://www.jblumenstock.com/files/papers/BCG-MPaz-2017-01.pdf

Decentralized firms handle adversity better

An emerging literature examines what determines firms' resilience when they encounter adverse macro shocks, but little is known about the role of firm organization. Specifically, in times of crisis do firms perform better with centralized or decentralized organizational forms – for example, whether decision rights reside in headquarters or the plant? One view is that centralization enables firms to better handle cost cutting and reduces agency costs. At the same time, plant managers under decentralization may be better able to use local information and respond more nimbly in these times of rapid change. Using two large micro datasets on firm decentralization from US administrative data and 10 OECD countries, **Philippe Aghion**, **Nicholas Bloom**, **Brian Lucking**, **Rafaella Sadun**, and **John Van Reenen** find compelling evidence that firms that delegated more power from headquarters to local plant managers prior to the "Great Recession" out-performed their centralized counterparts in the sectors that were hardest hit by the crisis, for example, in terms of adverse export shocks. Their results are robust to placebo tests, various sets of controls, and an IV strategy that exploits the fact that generalized trust among people near the plant's headquarters predicts whether a firm decentralizes. Countries with more decentralized firms (like the US) weathered the 2008-09 Great Recession better: the authors estimate that these organizational differences could account for about 16% of international differences in post-crisis GDP growth. They then present a theoretical model consistent with the notion that greater turbulence benefits decentralized firms because the value of local information and urgent action increases.
http://www.nber.org/papers/w23354.pdf

Queens and war

Are states led by women less prone to conflict than those led by men? On the one hand, women are often perceived to be less aggressive than men, and if leadership

style follows individual tendencies, women should make more peaceful leaders. On the other hand, differences in individual tendencies toward aggression may not determine differences in leaders' aggression, and, like their male counterparts, female leaders have to consider the overall benefits of conflicts to their nations. **Oeindrila Dube** and **S.P. Harish** address this question by examining the effects of female rule on war using annual data from 1480 to 1903 from 18 European polities, with queens comprising 18% of the total years of reign. A key concern is that female rule could capture omitted variables and may even reflect reverse causality. The authors therefore use the gender of the first born and presence of a female sibling among previous monarchs as instruments for queenly rule, finding that polities led by queens were 27% more likely to engage in war than those led by kings. The results are robust to slight changes in sample and polities, and the instruments are shown to not affect other outcomes in a series of falsification tests. Interestingly, unmarried queens were more likely to be attacked than kings, while married queens were more likely to participate as attackers than kings, and more likely to fight alongside allies. An interpretation offered by the authors that reflects prevailing gender norms at the time is that marriages strengthened queenly reigns because married queens were more likely to secure alliances and enlist their spouses to help them rule.
http://www.nber.org/papers/w23337.pdf

IV Upcoming events and miscellanea

1st TCD/LSE/CEPR Workshop in Development Economics
Trinity College Dublin, the London School of Economics, and CEPR are organizing their first annual workshop on development economics. The aim is to bring together researchers in different fields of development economics to discuss current development issues. Topics include, but are not limited to: agriculture, climate change, conflict, education, firms' organization, finance, gender, health, migration, networks, productivity, public finance, and trade. Our own **David McKenzie** is a keynote speaker. The workshop will take place at Trinity College Dublin on September 18-19, 2017, and the deadline for submitting a paper is June 12th.
https://www.tcd.ie/Economics/research/time/workshops/

Reminder: FDIC/JFSR 17th Annual Bank Research Conference
The U.S. Federal Deposit Insurance Corporation Center for Financial Research and the *Journal of Financial Services Research* (JFSR) invite submissions for their annual fall research conference, which will be held in Arlington, VA September 7-8, 2017. Papers are sought on a wide range of topics including deposit insurance, financial sector performance, risk measurement, systemic risk and financial system resilience, and the interaction between regulation and the cost and availability of credit. Organizers are also seeking papers for a special session on technical aspects of regulatory capital and liquidity requirements under Basel III. Papers selected for

presentation may also be invited for submission to the JFSR. The deadline for submitting a paper to the conference is June 19th. https://www.fdic.gov/bank/analytical/cfr/bank_research_conference/annual-17th/17th-brc-notice.html

2017 Financial Stability and FinTech Conference

The Federal Reserve Bank of Cleveland's Office of Financial Research, the Robert H. Smith School of Business, and the *Journal of Financial Services Research* (JFSR) are jointly organizing the 2017 Financial Stability Conference to be held November 30-December 1, 2017, in Washington, D.C. The conference aims to highlight research and advance the dialogue on the implications of FinTech for financial stability. However, papers focusing on financial stability that are not necessarily FinTech-related are also welcome. Selected papers and discussions will be invited to submit to JFSR for possible publication in a special issue. Submit completed papers by July 17th to: https://umdsurvey.umd.edu/jfe3/form/SV_1GKRr6Dk6tYVSV7.

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)