WORLD BANK GROUP

Interest Bearing Notes	June 2019

A Finance & Private Sector Development Research Newsletter

What's new on our website

Improving management in Colombian firms through individual and group consulting

Our own **David McKenzie**, together with **Leonardo Iacovone** and **William Maloney** worked with the Government of Colombia to test two approaches to scaling-up management improvements in firms. A new impact note summarizes how a novel group-based approach turned out to be more cost-effective than the standard approach of providing consulting to individual firms. The full working paper is available here.

World Bank research

Micro-equity for microenterprises

Our own **David McKenzie**, together with **Suresh de Mel** and **Christopher Woodruff**, describe the results of a small-scale micro-equity experiment carried out in conjunction with a chamber of commerce in Sri Lanka. David and co-authors designed a model contract for making micro-equity investments in existing microenterprises. They faced two main obstacles. First, the target enterprises were partially informal, rarely used external accountants, and often did not keep formal records. Also, most of their business transactions were in cash, making it difficult to verify income. Second, the target businesses were owner managed. There was no market for the sale of the business, which presented a serious constraint on investor exit options. To address these issues, contract payments were based on revenues, which investors find somewhat easier to monitor than profits, and firms bought back the equity investment through additional monthly payments. After describing the details of the contract, the paper presents results from a proof-of-concept pilot with nine investments made in 2013. KCG Equity, a private entity established specifically to test the contract, invested between $1,984 to $5,556 in the enterprises. Overall, the portfolio made a loss: While several of the investments worked as designed, some entrepreneurs failed even to make the fixed payments related to the return of capital called for in the contract. These defaults occurred although the project leveraged the social capital of the local chamber of commerce to decrease malfeasance and KCG Equity signaled to all parties a willingness to expand the investment program if it proved successful at the pilot stage. The paper concludes with several lessons from this experience for future efforts.

The rise of domestic capital markets for corporate financing

Regular IBN readers are familiar with the research by **Sergio Schmukler** and coauthors showing that the international capital flows to emerging and developing economies (EMDEs) have grown swiftly in recent years, but that only a handful

of large, well-established firms seem to benefit. In new work, Sergio, **Facundo Abraham**, and **Juan Cortina** examine the growth of domestic and international equity and bond financing by firms in East Asia, the developing region that has made the most progress in domestic capital market development. Using a comprehensive, transaction-level dataset on equity and corporate bonds issued in domestic and international markets from 1990 to 2016, they find that domestic capital market development coincided with smaller firms gaining access to equity and bond financing, while helping some larger corporations to diversify funding sources and obtain domestic currency financing. But why did East Asia outpace other developing regions by such a wide margin in terms of capital market development? The authors point to a diverse reform program implemented by East Asian economies over an extended period. While they acknowledge the difficulties in identifying the effects of specific reforms, they speculate that the reform process as a whole likely acted as a signal that policy makers were committed to developing domestic capital markets, which encouraged more firms and investors to use these markets.

Measuring the unmeasured: Combining technology and behavioral insights to improve measurement of business outcomes

Our own **Bilal Zia**, together with **Stephen Anderson** and **Christy Lazicky** develop a new methodology to measure business outcomes among small-scale enterprises. Outcome data on these types of firms are notoriously noisy and subject to numerous forms of measurement and recall error. The authors propose and test a new tool that is based on triangulation and dynamic adjustment to arrive at more precise estimates of business performance. The methodology follows an intuitive progression, from money in, to money out, to money left over. Estimates are based on eliciting high, low, and most recent figures for outcomes, which serve as three initial anchors. Through an iterative process, the respondents then progress toward a final estimate based on dynamic adjustment. For costs, estimates are elicited by disaggregating them into smaller easily recalled accounts, which are then automatically aggregated back up to arrive at more accurate cost figures. The authors conduct numerous validity exercises for this method and find that it consistently results in higher estimates of sales and profits compared to traditional measures, a lower coefficient of variation in the cross-section, and higher autocorrelation in panel data. The estimates also more closely match accepted administrative data. The authors have made their survey instrument files as well as enumerator training material public on their web sites, so all researchers can benefit from the survey method.

Factional competition, local accountability, and long-term development

Travelers to China often wonder why some parts look like OECD countries, while other places resemble low-income countries. In a recent paper, **Hanming Fang**, **Linke Hou**, **Mingxing Liu**, **Pengfei Zhang**, and IBN co-editor **Colin Xu** explain that part of the wide regional variation can be traced back to how each county was liberated by various factions of the Communist army, and whether there was a local guerrilla in that county before the Communist takeover. In Fujian province, the province that has grown the most in China since the reform began in 1978, some counties were liberated by the army faction that proved to be strong in the top provincial decision-making body in the coming decades, while others were liberated by another faction. The authors call the former the strong-faction counties, and the latter the weak-faction counties. And again, a local guerrilla was involved in the liberation of some counties, but not others. The authors offer a theoretical model that predicts that leaders in weak-faction counties need local grassroots support more than those in strong-faction counties, who need only to satisfy the upper echelons of government to survive politically. As a result, relative to strong-faction counties, weak-faction counties are predicted to offer more pro-local policies that are conducive to long-term development. Relatedly, counties liberated by guerillas should feature stronger local

accountability due to natural connections between guerrilla cadres and local citizens. The authors find strong and robust evidence to support the theoretical conjectures: weak-faction counties and guerrilla-liberated counties tended to have significantly higher GDP growth rates after the economic reform, much lower death rates during the Great Famine (around 1960), a higher share of GDP attributable to the private sector in 1998, and greater educational achievement for affected cohorts after the founding of People's Republic of China. They also offer direct evidence that affiliation with the strong faction and pro-grassroots policies did facilitate political survival during the Cultural Revolution. The results are robust to controlling for geography, initial conditions, and using only adjacent treatment-control pairs. The paper suggests that factional competition and local accountability are critical in inducing long-term development in authoritarian countries.

Our eclectic guide to recent research interest

Networking frictions in venture capital, and the gender gap in entrepreneurship

Sabrina Howell and **Ramana Nanda** exploit the random assignment of judges to panels at Harvard Business School (HBS)'s New Venture Competition to examine the importance of networking frictions in receiving venture capital. The panels that score startup "pitches" in the competition consist of about 6 judges, including venture capitalists, entrepreneurs and corporate executives. The number of venture capitalists ranges from less than 2 to 5 or more, leading to exogenous variation in the number of venture capitalists each participant is exposed to. By collaborating with the HBS alumni office, the authors collected career histories on 954 HBS students who participated in the competition between 2000 and 2015. This data shows that about 12 percent of these students started venture capital-backed startups after leaving HBS. This percentage is significantly higher for participants exposed to more venture capitalist judges, but only for male participants. A survey finds this is in part because male participants more often proactively reach out to venture capitalist judges after the competition than female participants. These results thus suggest that networking frictions are a key reason why men benefit more than women from exposure to venture capitalists. The authors conclude that such frictions can help explain part of the gender gap in entrepreneurship and have implications for how to design networking opportunities to facilitate financing of the best (rather than just the best networked) ideas.

Communication within banking organizations and small business lending

In an intriguing new paper, **Ross Levine**, **Chen Lin**, **Qilin Peng**, and **Wensi Xie** examine how communication within banks affects small business lending. Specifically, the authors test whether the introduction of new airline routes that reduced travels times between U.S. banks' headquarters and branches boosted lending to small firms. Their working hypothesis is that reduced travel times made it easier to transmit the sort of "soft information" on creditworthiness that facilitates lending to small businesses. They find that a new airline route connecting headquarters and a branch leads to sharp increases in the total dollar amount and number of small loans ($100,000 or less) that a bank makes in the county where the branch is located. To further support the notion that improved flows of soft information are driving the growth in small loans, the authors provide a placebo test showing that the introduction of airline routes does not affect the volume and quantity of large loans and another showing that the introduction of cargo flights (which do not facilitate in-person communication) has no effect on lending. They also confirm that significant jumps in small loans occurred only after, not before, the introduction of the airline routes and that those gains persisted. Finally, the authors show that the gains were

greatest for firms that are expected to rely most heavily on soft information to secure loans, namely young firms and those with high shares of intangible assets (which are a less useful form of collateral than tangible assets).

Microenterprises and the lure of wage work: Theory and evidence from Mexican export manufacturing

Michael Koelle studies how job prospects limit the growth of owner-operated firms. Using both theory and evidence from Mexico, the author argues that uncertain job opportunities and costly liquidations result in entrepreneurs under-performing as firm operators in hopes of a good job opening up in the near future. Using data from nearly one million microenterprises and administrative data on export-dependent jobs, the paper finds evidence to support this hypothesis. Specifically, the analysis shows entrepreneurs take up wage jobs when export manufacturing expands and their firms grow less in anticipation of this. This main result has strong implications for policy, in particular that policies aimed at supporting microenterprises should pay attention to the outside options available to entrepreneurs and to create screening mechanisms so individuals who have comparative advantage as entrepreneurs are sufficiently incentivized to invest in their firms.

Financial crisis and the spread of fascism

Asking whether "financial crises fan the flames of fanaticism," **Sebastian Doerr**, **Stefan Gissler**, **Jose-Luis Peydro**, and **Hans-Joachim Voth** examine whether the severe banking crisis in 1931 in Germany increased support for the Nazi Party, and if so, through what mechanisms. In this banking crisis, two large national banks failed, one led by a Jewish banker, and another by non-Jewish banker. The authors collect detailed data on pre-crisis bank-firm connections and show that firms affiliated with the two failed banks did not differ much from the rest of the firms. Firms linked to these failed banks experienced declines in bank lending, a drastic fall in wage bills, and those cities with strong links to these two failed banks experienced significant drops in income. The income drop due to affiliation with these failed banks is associated with much stronger Nazi support than income drops due to non-banking-crisis-related reasons. Furthermore, cities with stronger historical anti-Semitic roots (as reflected in medieval anti-Semitic events, or voting for anti-Semitic parties in 1890-1914), or with stronger connections to the failed bank led by the Jewish banker, offered much stronger Nazi support after exposure to the banking crisis. The authors offer other supporting evidence for their narrative: for example, Jews were vastly overrepresented in 1930s German high finance (relative to their share of the German population); and Joseph Goebbels instructed party propogandists to emphasize that the banking crisis supported the Nazi party's anti-Semitic view. The research suggests that financial crises can have long-term real effects partly through radicalization of voters and changes in the political system.

Upcoming events and miscellanea

Calls for papers

The Center for Financial Innovation and Stability (Federal Reserve Bank of Atlanta) and the Center for the Economic Analysis of Risk (Georgia State University), are organizing the conference "**Financial System of the Future**," to be held at the Federal Reserve Bank of Atlanta on October 31 and November 1, 2019. Long abstracts or, preferably, complete manuscripts may be submitted no later than the August 5. More details are posted here.

The fifth edition of the "**Conference on Financial Development and Stability**" previously called “Banking Development, Stability, and Sustainability Conference”, will take place in Santiago, Chile, on November 22, 2019. The conference is organized by the Financial Market Commission (CMF), the World Bank Group - Research & Development Center in Chile, the Association of Supervisors of Banks of the Americas (ASBA), and the Escuela de Negocios de la Universidad Adolfo Ibáñez. The deadline for submitting a paper is August 15. Here is the link to the conference website.

The University of Miami Business School will hold its **10th Behavioral Finance Conference** at its campus in Coral Gables, Florida on December 13-14, 2019. Papers from all areas of behavioral finance and economics will be considered and the Review of Financial Studies (RFS) is a cosponsor of the conference. Authors can therefore opt for a dual submission to the conference and to RFS. For additional information about the conference and to submit a paper see. Note, however, that the deadline to submit a paper is right around the corner (July 1, 2019).

The Competitiveness Research Network (CompNet), the European Bank for Reconstruction and Development (EBRD) and the Finance department at the Leibniz Institute for Economic Research (IWH), are organizing the **First Finance and Productivity (FINPRO) Conference** to be held at EBRD’s London HQ on December 2-3, 2019. The deadline for submitting a paper is July 31, 2019. More details are posted here.

Happy reading!

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