

Community networks and the growth of private enterprise in China

November 2018

China has witnessed the same degree of industrialisation in three decades as Europe did in two centuries. Strikingly, this has occurred without the preconditions that are generally believed to be necessary for economic development: effective legal systems or well-functioning financial institutions.

We, Ruochen Dai, Dilip Mookherjee, Kaivan Munshi, Xiaobo Zhang have conducted an EDI case study on the role of informal mechanisms in the growth of China's private enterprises.¹ We find that reputation and trust within hometown community networks allowed millions of rural-born entrepreneur to establish and grow their businesses during the early stages of China's development over 1990 to 2009.

The relevance of our analysis to other countries is that it illustrates the potential for community institutions to contribute to growth, a potential which can be realized if these communities are sufficiently large, homogenous and cohesive.

Study overview

China's economic transformation began in the early 1980s with the establishment of township-village enterprises (TVEs) and accelerated with the entry of private firms in the 1990s. Starting with almost no private firms in 1990, there were 15 million registered private firms in 2014, accounting for over 90% of all registered firms and 60% of aggregate industrial production.

¹ Ruochen Dai, Dilip Mookherjee, Kaivan Munshi, Xiaobo Zhang (2018), Community Networks and the Growth of Private Enterprise in China. Available at: www.edi.opml.co.uk.

Economic Development and Institutions

...

Institutions matter for growth and inclusive development, but there is little evidence on how positive institutional change can be achieved.

The Economic Development and Institutions (EDI) research programme will fill this knowledge gap, and take an innovative approach to ensuring world-class research is translated into positive policy change.

One unique aspect of this programme is its focus on policy engagement.

The research team will seek to reflect policy 'demand' when defining research questions and engage key decision-makers throughout the course of the programme. This will involve listening to the challenges encountered by in-country policymakers and looking out for opportunities to engage with and support ongoing reform processes.

While China's growth has been impressive by any yardstick, what is perhaps most striking about this growth is that it occurred without the preconditions that are generally believed to be necessary for economic development: effective legal systems or well-functioning financial institutions. While the government compensated for some of these institutional limitations by providing infrastructure and credit, we argue that informal mechanisms based on reputation and trust within hometown community networks allowed millions of rural-born entrepreneur to establish and grow their businesses. This supplements numerous case studies of production clusters showing that long-established relationships among relatives and neighbours (from the same rural origin) substituted for legally enforced contracts between firms. Our analysis confirms this hypothesis, utilizing comprehensive data covering the universe of registered firms in China between 1990 and 2009.

Our analysis focuses on variations of entry and capital investment of entrepreneurs with social connectedness of their birth county. We argue that (historical) population density is a good measure of social connectedness in a county. The reason is that the frequency of social interactions in counties is increasing in spatial proximity, proxied by population density. More frequent social interactions support higher levels of mutual help because news about deviations from cooperative behaviour travels more swiftly through the population, resulting in more effective social sanctions. This applies to rural counties and small towns which tend to be socially homogenous, but not cities which are typically composed of newcomers from a multitude of diverse communities. Consistent with these hypotheses, we show, using data from the China Family Panel Survey (CFPS), that the frequency of social interactions and the level of trust in local residents are significantly increasing with population density in counties but not in cities. Our analysis therefore focuses on county-born entrepreneurs, whose firms constitute approximately two-thirds of all registered firms in China.

Our analysis shows the following patterns in entry, concentration and firm size of entrepreneurs from all county (i.e., non-city) origins, consistent with the predictions of a theoretical model of spill-overs generated by origin-based community networks:

- The flow of entrants from each origin was increasing over time, more steeply from more socially connected (higher population density) origins.
- Entrants were increasingly concentrated in particular sectors and locations over time, with this clustering increasing in origin social connectedness.
- Firms from more socially connected origins started with smaller size but subsequently grew faster.
- Entry flows into specific sectors and locations from a given origin were positively correlated with past flows from the same origin, with a higher correlation in more socially connected origins. However these flows were uncorrelated with past flows from other origins, indicating negligible cross-origin-network spill-overs.
- In the absence of network effects, entry from county origins would have declined by as much as 64% over the 1995-2004 period (with a comparable decline in the total capital stock), which corresponds to a 40% effect for the entire country.

We use the estimated model to predict the effects of industrial policies offering temporary credit subsidies to firms entering between 1995 and 2000. We show that a growth maximising strategy would target the subsidy to firms from higher population density counties which generate large network spill-

overs. With the targeted subsidy, entrants from those counties who are relatively small to begin with would become even smaller, thereby widening existing dispersion in firm size (across birth county networks). This dispersion arises despite the absence of mark-ups in output prices or wedges in factor prices, in contrast to much existing literature on firm misallocation in developing countries. Hence, small firms and wide dispersion in firm size and productivity observed in China and India by Hsieh and Klenow (2009) can be a consequence of efficiency-enhancing community-based networks that substitute for missing markets and formal institutions, rather than inefficient taxes or regulations. An additional implication of our analysis is that subsidies should account for intra-community spill-overs over and above individual ability. Our results also illustrate the complex distributional consequences of growth-enhancing policies which targeting more connected communities: such policies are likely to exacerbate inter-community inequality while promoting intra-community equity.

These results pertain to the period 1990-2009, an early stage in the modern development of China based on private enterprise. It is possible that the role of community networks may be weakening after 2009 as market-based and state institutions develop, various resource constraints start operating, and the role of exports and high technology goods becomes more important. We also urge caution in extrapolating the relevance of the Chinese experience to other developing countries. The extent to which informal community institutions stimulate growth depends intrinsically on the social homogeneity and strength of ties within traditional communities. The Chinese experience may therefore not be replicable in countries with different social structures. The relevance of our analysis to other countries is that it illustrates the potential for community institutions to contribute to growth, a potential which can be realized only if these communities are sufficiently large, homogenous and cohesive.

Authors:

This brief was prepared by Ruo Chen Dai, Dilip Mookherjee, Kaivan Munshi, Xiaobo Zhang.

The authors gratefully acknowledge funding from the Economic Development & Institutions (EDI) and Cambridge-INET programmes.

For more information about EDI and ongoing research, please visit www.edi.opml.co.uk

Further Reading

- Allen, Franklin, Jun Qian and Meijun Qian (2005), "Law, finance, and economic growth in China", *Journal of Financial Economics*, 77(1): 57-116.
- Dai, Ruochen, Dilip Mookherjee, Kaivan Munshi and Xiabo Zhang (2018), '[Community networks and the growth of private enterprise in China](#)', Working paper.
- Fleisher, Belton, Dinghuan Hu, William McGuire and Xiaobo Zhang (2010), "The evolution of an industrial cluster in China", *China Economic Review*, 21(3): 456-469.
- Greif, Avner and Guido Tabellini (2017), "The clan and the corporation: Sustaining cooperation in China and Europe", *Journal of Comparative Economics*, 45(1): 1-35.
- Hsieh, Chang-Tai and Peter J Klenow (2009), "Misallocation and manufacturing TFP in China and India", *Quarterly Journal of Economics*, 124(4): 1403-1448.
- Long, Cheryl and Xiaobo Zhang (2011), "[Cluster-based industrialization in China: Financing and performance](#)", *Journal of International Economics*, 84(1): 112-123.
- Long, Cheryl and Xiaobo Zhang (2012), "[Patterns of China's industrialization: Concentration, specialization, and clustering](#)", *China Economic Review*, 23(3): 593-612.
- Nee, V and S Opper (2012), *Capitalism from Below: Markets and Institutional Change in China*, Harvard University Press.
- Peng, Yusheng (2004), "Kinship networks and entrepreneurs in China's transitional economy", *American Journal of Sociology*, 109(5): 1045-1074.
- Restuccia, Diego and Richard Rogerson (2008), "Policy distortions and aggregate productivity with heterogeneous establishments", *Review of Economic Dynamics*, 11(4): 707-720.
- Wu, Mark (2016), "[The "China, Inc." Challenge to Global Trade Governance](#)", *Harvard International Law Journal*, 57(2): 261-324.