## SERIAL ENTREPRENEURS IN CHINA

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Little is known is about the role of serial entrepreneurs, which we define as individuals who establish more than one firm. In this paper, we draw on the business registry of the Ministry of Industry and Commerce in China to examine the role and contribution of serial entrepreneurship, and differences between regions. The business registry includes information on the identity of investors for the universe of firms ever established in China and for 2015 includes data on nearly 18 million "active" firms. In principle, serial entrepreneurs (SEs) may be either the most capable of entrepreneurs or those that are best connected

We first document how important quantitatively SEs is in China. Between 1995 and 2015, the percentage of firms in operation controlled by serial entrepreneurs increased from 6.3 percent to 28.1; over the same period, their share of registered capital increased from 9.7 percent to 47.6 percent. We show that this increase reflects the larger average size of these firms at the time of their establishment, as well high rates of entry of firms started by serial entrepreneurs. Exit rates of serial and non-serial firms are similar. We also examine sector choices of SEs: Downstream and upstream linkages as well as risk pooling loom important.

We next examine regional differences in the rate of new firm start-ups and serial entrepreneurship, with an eye to the link with the local (prefecture-level) business environment. Figure 1 captures at the prefecture level the density of entrepreneurship, measured by the number of firms per 1000 workers, while Figure 2 measures the percentage of entrepreneurs that are serial. Prefectures color-coded red in the two figures are those with the highest levels of entrepreneurship and serial entrepreneurship, respectively. Both are significantly higher in coastal areas.

Drawing on Brandt, Kamborouv and Storesletten (2018), we measure differences in the local business environment by differences in the capital and output frictions (wedges) and entry wedges. Capital and output frictions are standard in the literature and directly affect the profitability of new firm entry. The novel entry wedge, on the other hand, represents the probability that an entrepreneur for whom entry is profitable can actually receive a business license. Higher entry wedges reflect larger barriers to entry. In the cross-section, new firm entry and SE are positively correlated with lower capital wedges and larger subsidies (larger output wedges), and lower barriers to entry.

Using clustering methods, we sort prefectures into three bins (H, M and L) based on their wedges. L prefectures are those with both low entry and capital wedges, and low subsidies (higher net taxes), while H prefectures are those in which firms face high entry and capital wedges but receive higher subsidies. Figure 3 reveals that the L-type prefectures are concentrated in coastal areas and H-type prefectures are in the interior area. Figure 4, on the other hand, groups prefectures into four bins on the basis of our measures of entrepreneurship and serial entrepreneurship. Especially noteworthy are those coastal prefectures color-coded red in which we observe high rates of both. In contrast, prefectures in central China, as well as the northwest and the far northeast color-coded blue exhibit low entrepreneurship and serial entrepreneurship. The link between the local business environment and entrepreneurship and SE is fairly clear.

Finally, drawing on supplementary data on firm output, assets, etc. collected by the Ministry of Industry and Commerce, we examine the relative productivity of serial and non-serial firms by the type of local business environment. In all three environments (L, M and H), we find that "first" firms of serial entrepreneurs enjoy significantly higher productivity than those of non-serial entrepreneurs. This finding points to the superior capability of these entrepreneurs. In addition, in prefectures classified as L or M, productivity of 2nd or 3rd firms of serial entrepreneurs is as high as their first firm. In contrast, in prefecture with weaker business environments, productivity of these firms is actually lower than the first. These differences speak to differences between regions in the selection process into entrepreneurship and serial entrepreneurship. Consistent with these findings, we also observe that party membership by serial entrepreneurs is much more likely in environments in which barriers to entry are higher.

In summary, our results suggest that the local business environment greatly influences economic development through selection into entrepreneurship and serial entrepreneurship. In environments with fewer constraints on entrepreneurs, we observe both more entrepreneurs, and more of the "good" entrepreneurs establishing additional firms. Both contribute to higher productivity and growth.

Figure 1: New Firm Entrants by Prefecture

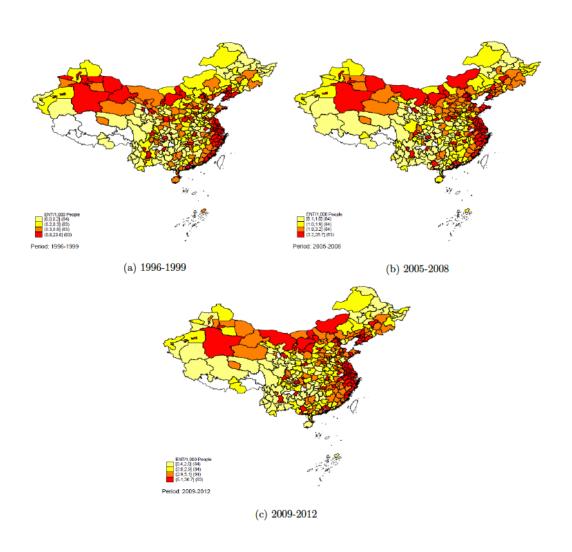


Figure 2: Serial Entrepreneurship by Prefecture

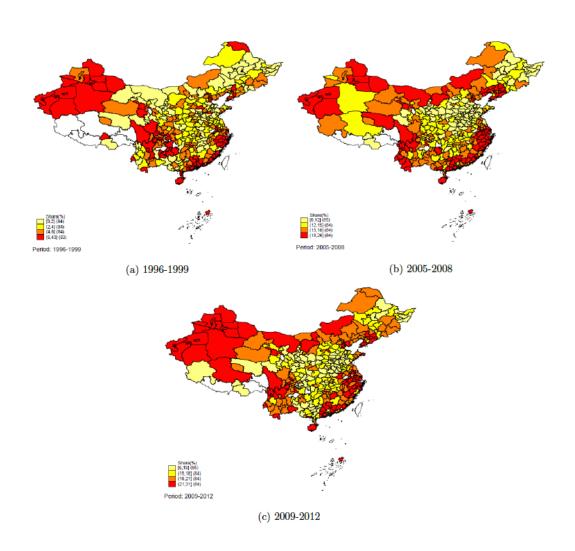


Figure 3: Grouping of Prefectures by Business Environment



Note: Prefectures with the darkest (lightest) coloring are L (H) type prefectures.

Figure 4: Grouping of Prefectures by Entrepreneurship and SE

