Private Enterprise Development in Low-Income Countries

Kinship Taxation in the Lab and in the Field: Constraint on Microenterprise Growth?

Munir Squires

Developing country entrepreneurs often face family pressure to share income. This pressure, a "kinship tax", can discourage the most able entrepreneurs from expanding their firms. This project uses evidence from a lab experiment in Kenya to estimate marginal kinship tax rates for individual entrepreneurs, and then estimates how these distortions reduce aggregate output by causing inputs to be misallocated across firms.

Can kinship taxation explain why so many firms in developing countries stay small?

Many successful entrepreneurs in developing countries report stories about requests for money streaming in from ever-more distant relatives as their business expands. For instance, a 40 year old woman from a slum near Nairobi recounted:

"I sell second-hand clothes without anyone knowing, far from home. My previous business, a street-side restaurant, failed due to my in-laws using me for money, yet I wanted to expand it."

Knowing that success will bring such demands, many entrepreneurs may choose to limit the size of their operations. Further, there are reasons to believe female entrepreneurs are particular affected, since they may be less able to resist demands. In this project, I explore the effect of kinship taxation on the productive decisions of micro-entrepreneurs in Garissa, Kenya[1].

Figure 1: Retail shop in Garissa County village

Methodology

Estimating the cost of kinship taxation requires two steps. First, I identify which entrepreneurs face this pressure to share income, and to what extent it distorts their productive decisions. I do this using a lab-in-the-field experiment that elicits the key parameter of interest: the marginal kinship tax rate faced by each entrepreneur in my sample.

Second, I show how productive decisions would change in the absence of distortionary kinship tax. I do this using a structural model that combines firm-level data with the tax rates from my lab experiment. I find that without distortions from kinship taxation, the most productive firms would grow substantially.

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[1] Notwithstanding the associated provision of insurance, in a world where neither government nor formal insurance firms have much presence. See for example Townsend (1994).

Step 1: Measuring kinship tax rates

We cannot observe kinship tax rates as we would with government taxation. Data on income and transfers are inadequate since distortions in productive decisions come from an entrepreneur's marginal, not their average, tax rate. (A successful entrepreneur may have already "paid her dues" and face a zero marginal tax rate on additional earnings.) In addition, the disutility of transfers to relatives may be lower than to the tax authorities, for instance because of altruism or desire for status. The relevant kinship tax rate is net of this direct utility from transfers.

To solve these problems I use a lab experiment, inspired by Jakiela and Ozier (2015), which elicits willingness-to-pay to hide income. Each participant is asked to choose whether they prefer $5 'in public' (announced to members of their community) or to receive a smaller amount of money 'in secret.' I elicit the lowest amount they are willing to accept in secret, which gives me their marginal kinship tax rate. An unconstrained entrepreneur in this context is one who either faces no demands on additional income, or whose marginal utility of transfers is equal to their marginal utility of private consumption.

I find that one in five entrepreneurs in my sample of Kenyan entrepreneurs face tax rates above 50%, while the majority face zero marginal tax rates. The share of entrepreneurs that faces kinship taxation understates the potential aggregate cost since I find that tax rates are increasing with ability.[2]

## Step 2: Distortions from kinship taxation

To calculate how these kinship tax rates affect output, I borrow from the literature on misallocation[3]. This framework describes the distortions entrepreneurs face (e.g. credit constraints, labour market frictions, kinship taxation) as a set of firm-specific wedges. It allows me to combine my experimental results with firm-level data to calculate counterfactual capital and labour choices for each entrepreneur if their kinship tax rate were zero. This provides a measure of the deadweight loss of kinship taxation.

The result of this procedure is illustrated in Figure 2, which shows the productivity (TFP residual) of each entrepreneur against her capital use. The most productive firms are not necessarily the largest; indeed, the relationship between productivity and size is almost flat, as seen in the left-hand panel. Ideally, however, more productive firms should expand at the expense of less productive firms. The right-hand panel shows what happens in the counterfactual with kinship tax rates set to zero. I find that most firms shrink while a few grow substantially, and that the more productive entrepreneurs operate much larger firms. Similarly, the share of the labour force in firms with five or more workers increases from 9% to 56%, as shown in Figure 3. The result of this concentration of inputs in the hands of the most productive entrepreneurs is that output increases by 26%. This increase in aggregate productivity arises from a more efficient allocation of inputs across entrepreneurs.

[2] Go to http://www.munirsquires.com/files/munir_squires_jmp.pdf for detailed results
[3] See in particular Hsieh, C. T., & Klenow, P. J. (2009). Misallocation and Manufacturing TFP in China and India. *The Quarterly Journal of Economics*, 124(4), 1403-1448

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Figure 2: Capital use and productivity
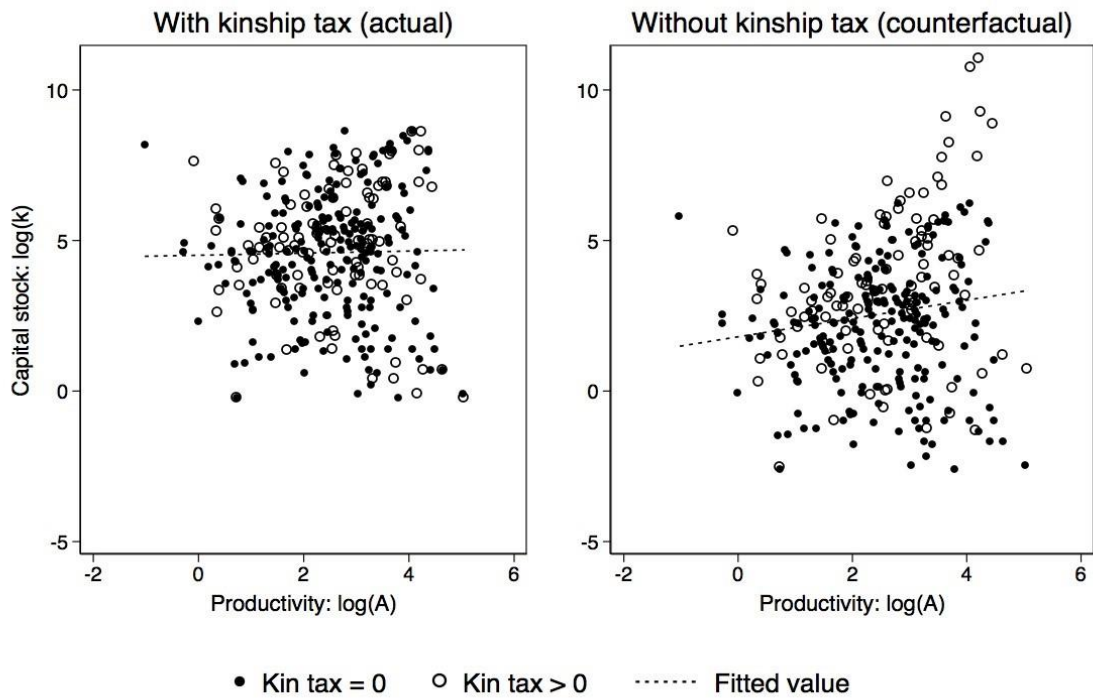
Figure 3: Distribution of employment by firm size
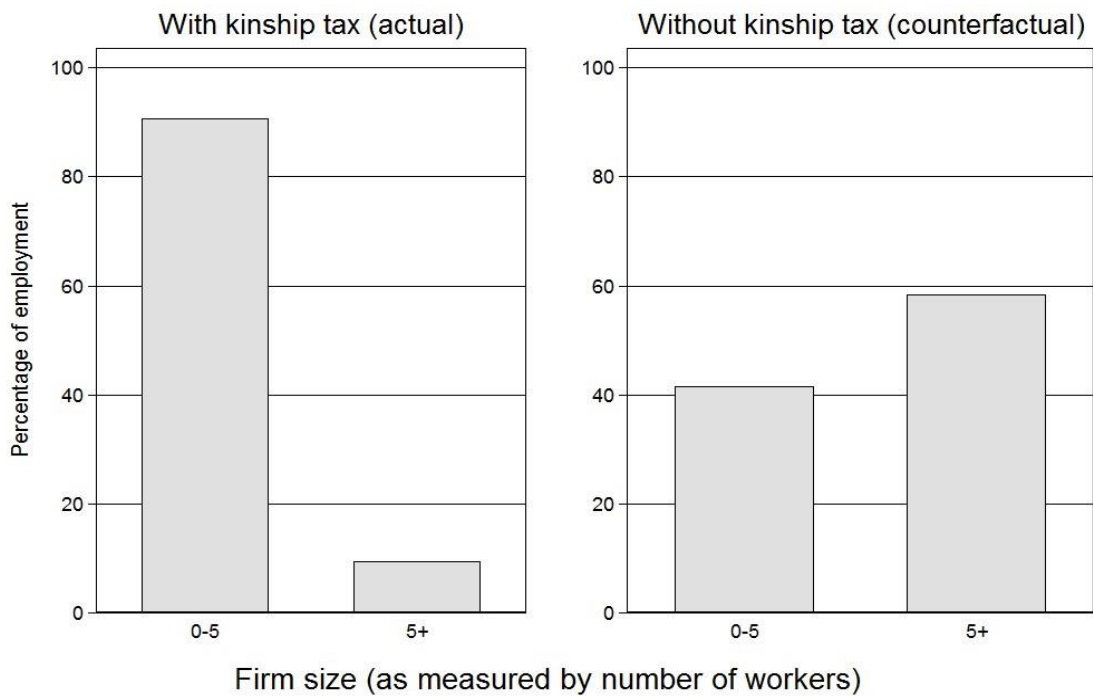
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What do we learn?

Kinship taxation may help to explain the modest gains in output coming from microcredit, as well as the uneven effect of cash grants. If the most productive entrepreneurs do not internalize the value of their output, relaxing credit constraints may lead to disappointing results. However, it does not seem to explain the particular challenges faced by female entrepreneurs. First, women in my sample face lower kinship tax rates than men. Further, exploiting a cash transfer experiment, I find that women do not invest cash grants in their businesses, whether or not they face kinship taxation. In contrast, male entrepreneurs who do not face kinship taxation do invest a large fraction of the cash in their businesses.

Moving Forward…

How are tax rates determined?
This project takes kinship tax rates as given and measures the consequences of these on productive decisions. Further research is needed to identify the causes of variation in these kinship tax rates. How do various interventions, such as formal insurance and savings, affect these patterns of kinship taxation?

Who become entrepreneurs?
How do existing patterns of kinship taxation encourage or discourage entry into entrepreneurship? Are high-ability entrepreneurs particularly discouraged from entry? Do entrepreneurs choose certain types of business to better avoid taxation?