Business Development Services for Female Entrepreneurship: A Think Note on Measurement Outcomes

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Is profits the ultimate measure of the performance of a firm?

Many empirical studies focus on profits as the ultimate measure to evaluate the performance of existing firms, although measuring it adequately within a household survey have proven to be elusive to say the least. McKenzie and Woodruff (2012) show that many studies have struggled with measuring profitability, and so many have abandon profits as a measure of performance. In this section, we first explore whether profits is indeed the ultimate measure of firm performance and whether we can measure it adequately within a household survey. We end up proposing a measure of firm performance that has many good properties in the context of studies evaluating the effects of business development services on firm performance.

The stream of discounted profits over a certain time period is indeed a plausible measure of the value of the firm, and in that sense a good measure of its performance. However, measuring it through a household survey has proven to be complicated, which is not surprising considering the context of the questioning. For one thing, the time expected to answer such a question is not much more than 2-3 minutes, even when including several preparatory questions such as sales and costs, which means that a good answer is connected to the capacity of the answerer to recollect such figure, and to the fact that she calculated it properly and have the figure at hand, or in mind for planning, monitoring or other purposes. These two factors are particularly worrisome in the context of an evaluation of an intervention that affects the quality of such calculation and its use for planning and monitoring purposes, as we could be attributing to the intervention an improved (reduced) profitability that does not exist, but results from improved registry of sales, or the inclusion of fixed costs.

Another factor that could affect the report of profits by the entrepreneur in the context of a household survey is the distrust about the way this information could be used. One issue may be that they would be reluctant to report high profits if they distrust the surveyor keeping this information as confidential. If this trust in the surveyor, or the program, changes by the follow up survey, we may end up attributing to the program a profit effect that is not there, and only results from improved trust or allegiance to the program.

A second point of concern is that measuring profits at a particular point in time may not reflect the real value of the firm, for instance, if the reference period is below average for the firm or the industry or if innovations or investments have been taken too recently for increased profitability to materialize. The first distortion is easily solvable in the context of the evaluation of randomized experiments, provided the treatment and control groups are aligned to face the same shocks. For the second one, it may help to define a set of intermediate outcomes, that is, measures that are beyond improved business practices but tend to materialize before an increased profit stream. The theory of change behind the intervention under analysis is a process that can clearly help identifying these intermediate outcomes. Business profits are supposed to improve through the adoption of recommended practices such as the registry of sales, costs, or inventories, the use of more aggressive marketing strategies to sell their products or more elaborated strategic planning, etc. To do so, they may need to follow certain intermediate outcomes such as the purchase or renewal of their capital stock, enhanced access to human capital resources, the expansion of sales channels to include the use of internet or exports, etc. So, I propose to follow closely the theory of change that applies to the population at hand to identify these intermediate outcomes, especially if they are rather observable to the surveyor. The examples I just mentioned resulted precisely from exploring such intermediate outcomes through some focus groups and in depth interviews with eligible beneficiaries from one recent experiment (Querol and Valdivia, 2013). But they are likely to be sensitive to the specific context (country, business size, economic activity, etc.)

The use of several indicators associated to business practices and results, however, raise some other measurement issues. For one thing, testing multiple outcomes independently increases the probability of falsely capturing an effect on one of the indicators (Duflo, Glennester and Kremer, 2007). A summary measure that help to deal with such potential bias is the mean standardized treatment effect (Kling, Liebman and Katz, 2007). Such summary measure is defined as the unweighted average of all standardized outcomes of a family, as long as all of them are defined so that a larger value is always better for the business or household. Thus, the mean and standard deviation of the coefficient in the corresponding regression allows us to test whether treatment had an overall positive effect on the corresponding family of outcomes, although it says little about the absolute magnitude of the effect. On the other hand, if effects are heterogeneous across beneficiaries, it can occur that the summary measure can show some statistically significant effects, although no individual outcome does so. This is a desirable property on our context (Valdivia, 2013).

How to measure improved business practices?

In principle, business-training interventions seek to promote growth and improve profitability by promoting the adoption of recommended business practices that are most appropriate or needed by firms. The impact evaluation studies attempt to measure it by capturing self-reported adoption of the business practices, so that estimated effects may be affected by some allegiance-based reporting bias, especially if the corresponding measures are not observable by the researcher. McKenzie and Woodruff's review indicate that practices most commonly measured refer to keeping records of key activities such as withdrawals of products/cash from businesses, sales, inventories, etc., and its use for planning purposes. Other popular measure refers to marketing practices, or ways to attract clients, or monitor their level of satisfaction.

A key element is that measuring of improvements/adjustments in business practices need to be connected to key messages in corresponding training and advising modules, and they are likely to change by context, business size among other variables. However, we can report on examples of how to define key messages for a particular study. A recent qualitative study (focus groups) for SMEs in urban Peru led to the following recommendations regarding the use of the following measures (Querol and Valdivia, 2013):

- Marketing practices. There are many options collected and they become more suitable depending on the specific economic sector or size of the business. Gifts, discount coupons for loyal clients, participations in commercial local and international fairs to capture new clients, inquiries about the level of satisfaction of current clients. Differentiation by experience and size appeared substantially with respect to web advertising, web sales (ebay, kotear, etc), export sales and branding.
- Management of inventories. Need to differentiate between finished products and inputs.
- Registry of sales, costs. Not only ask about if they keep records, either digital or manual, but also about their use for planning.
- Planning. What information they use for planning regular activities and innovations/adjustments (business records, consultation with clients/employees, external help).

Adoption of specific business practices may be highly heterogeneous, so that it would be advisable to use an aggregate index in the lines of the one described in the previous section.

What about measures of female empowerment?

Recent reviews have established that female-run businesses tend to be smaller and less profitable than those run by their male counterparts (Banco Mundial, 2010). Some of the reasons for such bias may be associated to market distortions, but we cannot discard the importance of cultural factors associated to the traditional disadvantaged position women have had in our societies, especially those in developing countries. We can imagine that such factors restrict women from creating their own businesses or segregate them out of certain activities as well as limit their capacity to grow. However, it is also true that economic success through a profitable, growing, business may help empower women within their family and community. Nevertheless, it has not been that common that studies promoting female entrepreneurship report some female empowerment effects. The question is whether that is because female business owners have been already selected from the relatively more empowered ones, or the lack of effects is actually a result of researchers measuring empowerment badly, especially within quantitative instruments.

In this section, I report the results of a recent qualitative effort to improve our capture of female empowerment within household surveys that was part of another study I am currently participating (Ekhos, 2013). This effort involved the participation of key experts in gender equity that review previous efforts, proposed a questionnaire and tested it. The objective was to include factors that are likely to affects impacts of business training kind of interventions, or that will be affected by the enhanced economic empowerment that resulted from improved profitability or business size. They identified three dimensions to measure empowerment: satisfaction with their lives, social capital and household decisions.

Satisfaction with their lives. The idea is to capture how satisfied they are about their lives, in general, and with respect to specific aspects such as work, socio-economic status, family, friends, neighborhood. Another recommendation is to include some questions about the recent occurrence of specific frames of mind (mad, motivated, stressed, happy, sad, etc.), and its frequency.

Social capital. This module includes questions of trust on people in general, but also specific institutions such as media, government, courts of justice, corporations, banks, churches, police, etc. Another dimension of interest is the perception of their ability to help solve community level issues or problems. Finally, you include questions about the size of their network of friends, and the extent to which they can partially serve as a safety net in the eventuality of a large economic shock.

Household decisions. This module includes questions about which household member generally assume specific domestic chores such as taking care of babies/kids/elderly, cook, clean the house, wash clothes, etc. or do basic repairs. The other relevant question is which household members (especially with respect to the partner) participate in key decisions regarding her own activities (work, use of her own money, participation in community activities) or those of the couple (family savings, sexual relations, use of contraceptives, number of children).

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