

Entrepreneurship: An instrument for economic growth*

(for *Entrepreneurship: Theory and Practice*)

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Abstract

This paper attempts to demonstrate how entrepreneurial activities affect a developing country's socioeconomic development at the household level. The results are based on longitudinal survey data that compares the entrepreneurs' economic and socio-economic status from 2003 to 2004. It was conducted on randomly selected entrepreneurs who received business loans in Cebu, Philippines. An explanation of the variables, the dataset, statistical analyses and results are explained subsequently.

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This paper attempts to demonstrate how entrepreneurial activities affect a developing country's socioeconomic development at the household level. The results are based on longitudinal survey data that compares the entrepreneurs' economic and socio-economic status from 2003 to 2004. It was conducted on randomly selected entrepreneurs who received business loans in Cebu, Philippines. An explanation of the variables, the dataset, statistical analyses and results are explained subsequently.

An Economic Tool

Over the last 20 years, entrepreneurship has been lauded as one of the most successful tools in spurring economic development and job creation in the developing world (Pisani & Patrick, 2002; Portes & Schaufler, 1993; W. P. Woodworth, 2000). In fact, the emergence of small and medium enterprises are considered essential in any market economy (Neace, 1999; Wells, Pfantz, & Bryne, 2003). Neace (1999:149) has stated, "Long-term success in economic development, particularly in developing economies, depends to a significant degree on a growing network of small entrepreneurial enterprises."

Data from the newly independent states and former communist countries indicate entrepreneurship as an important key to providing employment and spurring local economic development. In these countries, small and medium businesses have largely outpaced growth of large firms (Danis & Shipilov, 2002). An example of this is Hungary, where small and micro businesses made up 35.4 percent of the country's GDP (ibid). Empirical research in Latin America has also shown that entrepreneurship is the driving force behind jobs and income (Brau, Hiatt, & Woodworth, forthcoming; De Soto, 1989). Small and micro businesses make up about one half of Latin America's urban workforce and accounts for one third of its urban income (De Soto, 2000). It has been argued that in Africa, the only way to achieve

economic growth is to create employment, and the only way to create employment is to have entrepreneurs who perform and achieve growth (Nieman, 2001).

However, while many researchers extol entrepreneurship as the cure for poverty and economic depression, the opinions among researchers still remain split. Harper (2003) states that entrepreneurship is omnipresent, and all societies exhibit some degree of alertness to opportunities. Nevertheless, he argues that societies with policies which fail to protect private property through rule of law, with high levels of taxation and regulation, and with monetary policy bound more by the discretion of politicians than by rules, suffocate, to a certain extent, entrepreneurship (*ibid*). Giamartino (1991), Busch (1989), and Dana (1988) argue that problems associated with undeveloped countries (high taxes and government regulation, poor infrastructure, low education and training, low trust in social networks, colonization effects, etc.) hinder entrepreneurship and small business creation. Moreover, research in Asia has shown that among many underdeveloped countries that collectiveness cultures and government interference stifle entrepreneurship (L. P. Dana, 2000; Pandey et al., 2003).

Although the opinion pendulum may swing either direction in the future, empirical data have shown that entrepreneurship remains an important tool for economic growth in developing countries and in the informal labor markets (Brau et al., forthcoming; De Soto, 1989; De Soto, 2000; Hiatt & Woodworth, forthcoming; Woodworth, 1997). The informal sector has been defined as “income earning activities unregulated by the state in a context where similar activities are so regulated” (Portes & Schaffler, 1993:48). They are essentially, small and micro businesses operated by individuals or families that do not pay taxes nor respond to governmental regulations. As Woodworth (2000:20) has put it, entrepreneurs in the informal sector subsist by “hustling, or other forms of sweat equity, making up for the lack of formal jobs.”

The informal sector itself is a reliable measurement of entrepreneurship as most entrepreneurial activities in underdeveloped countries take place within the realm of the informal labor sector (De Soto, 1989; De Soto, 2000; Portes, 1994) The informal sector has been described as the most robust sector within the developing world (Yamada, 1996), and there is growing recognition that the informal labor

market can be an outstanding source of entrepreneurial energy and innovation (De Soto, 2000; Marquez, 1994). In Latin America, Africa, Asia, and former communist countries on average, the informal sector makes up 42, 41, 26, and 38 percent of the countries' GNP respectively (Schneider, 2002). As such, many researchers believe encouraging entrepreneurial activities in the informal sector would likely accelerate the developing country's socioeconomic development (Pisani & Patrick, 2002; Portes & Schaufler, 1993).

Dimensions, Measures, and Tests

In evaluating the impact of entrepreneurship, a question arises: What are the socio-economic dimensions that can be used to assess the impact of entrepreneurship on the lives of their families? A number of measures have been used by the World Bank, the United Nations, the Consultative Group to Assist the Poorest (CGAP) and other agencies to measure the economic and social well-being of entrepreneurs. Some socio-economic dimension measures include food availability, family health access, children's access to education, housing, women's empowerment, and women's social capital status (Littlefield et al., 2003; UNICEF, 2003); economic dimensions include the daily per capita income (DPCI) and the daily per capita expenditure (DPCE).

A survey instrument can be created to measure the aforementioned socio-economic dimensions by assigning entrepreneur's potential answers to an ordinal-based scale. This survey instrument can then be evaluated to reliably assess the impact of entrepreneurship by asserting that if entrepreneurship had a positive impact, an improvement should be observable in social and economic measures of well-being as entrepreneurs progressed. In addition, survey responses can be examined based upon entrepreneur characteristics to determine success factors. This paper's research team developed and pre-tested such an instrument in 2002 in Mexico and Ecuador and used it for 2003 in Guatemala, and then made further adjustments for research in the Philippines in 2004. The data collected for this paper comes from the enhanced survey instrument used in 2004.

Research Methods

Sampling and Data Collection

In summer 2004, we conducted an entrepreneurship impact assessment in the city of Cebu. These entrepreneurs participated in small business loans termed microfinance from a locally managed NGO named Visayas Enterprise Foundation.

To measure the financial and social impact of microfinance on participants, we randomly interviewed 134 people who received loans from the microfinance institution (MFI) Visayas Enterprise Foundation. The members of the study were selected at random from the total clientele of the NGO to represent the overall demographic profile. The sample was 7.5 percent men, 92.5 percent women with 60 percent of the sampling coming from urban locations and 40 percent from rural settings.

After arriving in the country and making initial contact with the NGO, the field research team randomly selected groups from both rural and urban areas. Clients were randomly selected from the total NGO's clientele; thus, this sample closely represented the current client demographics of the NGO.

Two Financial Dimensions

The research team measured economic well-being based on two measures of financial condition: 1) the daily per capita expenditures (DPCE) as a percentage of the daily minimum wage in Guatemala adjusted for the cost of living and 2) the Poverty Rank metric. The first economic measure, the daily per capita expenditure, represents the traditionally used poverty indicator—the daily per capita income (DPCI)—the measurement of how much a person earns daily. Through extensive field-testing by the United Nations, the World Bank, and other development institutions, it was found that the poor usually do not know exactly how much they earn, but they do know how much they spend in a day, a week, or a month (Hatch, 2002; UNFPA, 2002). This is because the poor usually have many different sources of income to sustain the family (e.g., children's income, remittances, etc.), and once received, the income is immediately spent on food, education, housing, and other expenses. To accurately reflect how much money the poor earn, the research team decided to use the daily per capita expenditure—how much a

person spends per day—to accurately represent the DPCI. In addition, since the purchasing power of the dollar differs from country to country, the examiners adjusted the DPCE using the local daily minimum wage as a baseline.

The second economic measurement the team members used to gauge poverty was the Poverty Rank. Using the classifications set by the United Nations and the Filipino government, the researchers took the daily household income (i.e., the monthly income divided by 30) and standardized it using the Filipino definition of poverty for the area—185 pesos per day. Those with scores of less than 1.00 were the “poorest of the poor” as designated by the Filipino government, those households with scores between 1.00 and 2.00 were classified to be in universal poverty, and those families who scored higher than 2.00 were not considered to be poor.

To measure the DPCE and the Poverty Ranking, the financial dimension questions requested the sum of the microenterprise owner’s total daily household expenditures and the owner’s household size for scaling.

Six Socio-economic Dimensions

To measure the social well-being of the participant families, the research team examined four socio-economic measurements: Food Availability, Access to Medical Services, Housing, and Children’s Education. Two additional measures of social well-being were examined for women: Empowerment and Social Capital. The socio-economic measurements were designed to measure the social impacts of poverty that are usually overlooked when doing economic analyses. These six measurements were chosen because of their usage as poverty indicators by the World Bank, the Consultative Group to Assist the Poor (CGAP), the International Labor Organization (ILO), and the United Nations Development Program (UNDP) and other major development agencies (ILO, 2003; Littlefield et al., 2003; Maxwell, 1999; CGAP, 2003).

The six social dimension measures used in this study are as follows:

Food Availability: According to FAO (2003), some 22 percent of Filipinos are malnourished—a figure more than any other Southeast Asian country. Poor families are unable to grow sufficient food resources for themselves, or they do not receive adequate incomes with which to shop for food. Food availability was measured on a scale from 1 to 4. A 4 meant the respondents reported that they always had enough food and the kinds of food they wanted, whereas a 1 signified they never had enough to eat.

Access to Medical Services: Filipinos suffer from numerous problems of physical well-being. According to sources such as the CIA World Factbook (2005) life expectancy for Filipinos is 69.6 years. Infant mortality data in the Philippines show an average of 24.24 deaths for every thousand live births (Anonymous, 2005). Access to medical services was measured by a 1-4 likert scale, 4 meaning the entrepreneur's family could always afford medicine and healthcare services to treat sicknesses and 1 indicating that they never could afford medicine or healthcare services.

Housing: Filipino families struggle in their quest for adequate housing. Much of the citizenry dwell in shacks and shanties built by one's own hands and with material scavenged from the streets. Various factors exacerbate the housing problem: Lack of capital to purchase building supplies, the high cost of land, and huge problems of unemployment and/or underemployment. The plight of trying to subsist in temporary, hand-built shelters in the informal economy is a serious issue. The housing variables in this study assessed the entrepreneur's access to running water, electricity, and indoor sewage on a binary scale.

Children's Education: Lack of educational opportunities is a severe challenge facing the poor. Studies have shown how educational opportunities are strongly linked with family economic levels (R. H. Frank & Cook, 1996; R. Frank, 2000). The variables used to measure education assessed the entrepreneur's children's access to primary and secondary school education on an ordinal scale of 1-4.

Empowerment: These last two constructs deal with women entrepreneurs. Much of the literature that evaluates developmental entrepreneurship supposes that small capital loans to start or expand a woman's microenterprise are of increasing importance to Third World development. Good development strategies lead to a "better deal" for females, yielding positive benefits, "mainly on women's well-being"

(Sen, 2000: 189). In The Philippines, as elsewhere, a dimension of effective development may target women's empowerment, which is to say that women are more able to exercise agency, have greater access to resources, experience reduced marital subordination, increase voice in family decision-making, and enjoy more control over household income and assets (Amin and Pebley, 1994; Dabeer, 2001; Goetz and Gupta, 1996; Hashemi et al., 1996; Kantor, 2003; Mahmud, 2003; Myrada, 2002; World Bank, 2003).

Empowerment in this study was measured by the woman's ability to participate in financial decisions in the home, measured on a likert scale (1-4).

Social Capital: The final inquiry of this study is the extent to which entrepreneurship not only gives clients financial capital, but social capital as well (Ismawan, 2000). This variable has to do with the degree of trust and supportive relationships that microentrepreneurs experience as a result of obtaining credit, growing a business, generating an income, and so forth. An underlying assumption of the relatively new notion of social capital is that increased financial success fosters greater support from others (Van Bastelaer, 1999). It is also seen as interpersonal ties and connections (Kasinitz & Rosenberg, 1996), relationships, trust, and support (Portes, 1995; Crowell, 2004). Indeed, the president of the World Bank, James Wolfensohn, has declared that social capital is the "glue" that "holds societies together (World Bank, 2000: 1).

Molyneux (2002) suggests the importance of a gender-centered form of development. With respect to social capital, she argues that it already exists to a considerable degree: "Women among low-income groups are frequently those with the strongest community and kin ties; many such women do network, they do engage in reciprocal supportive relations" (2002:177). According to Adler and Kwon (2000:93), "Social capital is a resource for individual and collective actors located in the network of their more or less durable social relations." Best-selling author, Francis Fukuyama in his 1999 book, *The Great Disruption*, simply sees the concept as an explanation of how values and norms impact economic activity. Additionally, extensive reviews of the literature on social capital in this context are those of Foley and Edwards (1999), Fine (2001), and the critique of Putzel (1997). In this study, social capital

was measured by the woman's ability to count on help with others within the proximity of her home on a 1-4 likert scale.

Data, Tests, and Results

We report the summary statistics for the sample in Table 1. Thirty percent of the sample lives in rural areas....

Table 2 reports the industry frequency of the sample. Food vendors dominate ...

Table 3 reports the pair-wise correlations between the outcome variables....

Table 4 reports the difference tests over time. A positive mean represents an improvement in the outcome variable. The results strongly support the efficacy of microentrepreneurship in increasing the quality of life among six of the eight dimensions. Interpret means here, for example 2% increase...

Table 5 helps us interpret the means reported in Table 4. We find that although improvement is detected in the aggregate as reported in Table 4, most of the improvement is driven by a few observations. For example, in Education Change, 169 report the same as in the previous year and only eight report an improvement. In some instances, such as Light Change, seven entrepreneurs actually are worse off than in the prior period, with 14 better off and 191 the same.

Overall conclusion – microfinance loans to help entrepreneurs do show more social benefit than cost. The benefit, however, seems to be fairly isolated.

We also have descriptive stats for Visayas vs. PEDF and OLS models for each of the outcome variables. Only 3 of the models are significant and they don't seem to address the central theme of the paper. We have difference tests between PEDF and OLS too, but again, they don't seem to fit this version of the front end.

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Table 1. Descriptive Statistics

| Variable | N | Mean | Median | Std Dev | Minimum | Maximum |
|----------------------------|-----|-------|--------|---------|---------|---------|
| Rural (0 = no; 1 = yes) | 213 | 0.30 | 0 | 0.46 | 0 | 1 |
| Type of business | 213 | 3.82 | 4 | 1.02 | 1 | 6 |
| Monthly household expenses | 212 | 6,674 | 6,000 | 3,636 | 500 | 20,300 |
| Months of participation | 213 | 19.44 | 10 | 17.48 | 2 | 57 |
| Number of loans received | 213 | 3.36 | 2 | 2.16 | 1 | 10 |
| Size of last loan | 213 | 6,122 | 5,000 | 3,801 | 2,000 | 36,000 |
| Household size | 213 | 4.97 | 5 | 2.02 | 1 | 11 |
| Current food security | 211 | 3.27 | 3 | 0.56 | 2 | 4 |
| Previous food security | 211 | 3.17 | 3 | 0.59 | 1 | 4 |
| Current health | 211 | 3.24 | 3 | 0.72 | 0 | 4 |
| Previous health | 211 | 3.20 | 3 | 0.72 | 0 | 4 |
| Current education | 177 | 3.27 | 3 | 0.64 | 2 | 4 |
| Previous education | 177 | 3.21 | 3 | 0.65 | 2 | 4 |
| Current empowerment | 198 | 3.81 | 4 | 0.56 | 1 | 4 |
| Previous empowerment | 199 | 3.77 | 4 | 0.63 | 1 | 4 |
| Current social capital | 201 | 3.64 | 4 | 0.78 | 1 | 4 |
| Previous social capital | 201 | 3.64 | 4 | 0.78 | 1 | 4 |
| Current light | 213 | 0.95 | 1 | 0.21 | 0 | 1 |
| Previous light | 212 | 0.92 | 1 | 0.27 | 0 | 1 |
| Current water | 213 | 0.27 | 0 | 0.45 | 0 | 1 |
| Previous water | 213 | 0.23 | 0 | 0.42 | 0 | 1 |
| Current bathroom | 213 | 0.66 | 1 | 0.47 | 0 | 1 |
| Previous bathroom | 213 | 0.64 | 1 | 0.48 | 0 | 1 |

Table 2. Industry Frequency

| | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|----------------------|-----------|---------|-------------------------|-----------------------|
| Farmer | 6 | 2.8 | 6 | 2.8 |
| Food Processer | 16 | 7.5 | 22 | 10.3 |
| Nonfood Manufacturer | 37 | 17.4 | 59 | 27.7 |
| Food Vendor | 118 | 55.4 | 177 | 83.1 |
| Nonfood Vendor | 24 | 11.3 | 201 | 94.4 |
| Service Vendor | 12 | 5.6 | 213 | 100 |

Table 3. Pair-wise Correlations of Outcome Variables

| | Health Change | Education Change | Empowerment Change | Social Capital Change | Light Change | Water Change | Bath Change |
|-----------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|--------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Food Change | 0.290 0.00 210 | 0.309 0.00 176 | 0.324 0.00 192 | 0.082 0.25 200 | 0.193 0.01 210 | 0.246 0.00 211 | 0.047 0.50 211 |
| Health Change | | 0.143 0.06 175 | -0.017 0.81 192 | 0.045 0.53 200 | -0.010 0.88 209 | 0.144 0.04 210 | 0.048 0.49 210 |
| Education Change | | | 0.266 0.00 162 | -0.023 0.77 167 | -0.016 0.83 176 | 0.068 0.37 177 | 0.092 0.22 177 |
| Empowerment Change | | | | -0.122 0.09 193 | 0.081 0.26 192 | 0.074 0.31 193 | 0.106 0.14 193 |
| Light Change | | | | | -0.094 0.19 200 | -0.061 0.39 201 | -0.043 0.55 201 |
| Social Capital Change | | | | | | -0.016 0.82 212 | 0.056 0.42 212 |
| Water Change | | | | | | | 0.207 0.00 213 |

Table 4. Difference Tests of Outcome Variables

| Variable | N | Mean | Std Dev | t-value | p-value |
|------------------------------|------------|-------------|-------------|-------------|------------------|
| Food Change | 211 | 0.05 | 0.19 | 3.8 | 0.0002 |
| Health Change | 210 | 0.02 | 0.14 | 2.2 | 0.0327 |
| Education Change | 177 | 0.02 | 0.11 | 2.6 | 0.0102 |
| Empowerment Change | 193 | 0.02 | 0.14 | 2.0 | 0.0477 |
| Social Capital Change | 201 | 0.30 | 0.13 | 32.6 | <.0001 |
| Light Change | 212 | 0.03 | 0.31 | 1.5 | 0.1269 |
| Water Change | 213 | 0.04 | 0.27 | 2.0 | 0.0452 |
| Bath Change | 213 | 0.02 | 0.24 | 1.2 | 0.2491 |

Table 5. Frequency Distributions of Outcome Variables

| | | Frequency | Percent | Cumulative Frequency | Cumulative Percent |
|-----------------------|--------|-----------|---------|-------------------------|-----------------------|
| Food Change | Worse | 7 | 3.3 | 7 | 3.3 |
| | Same | 179 | 84.8 | 186 | 88.2 |
| | Better | 25 | 11.9 | 211 | 100 |
| Health Change | Worse | 7 | 3.3 | 7 | 3.3 |
| | Same | 187 | 89.1 | 194 | 92.4 |
| | Better | 16 | 7.6 | 210 | 100 |
| Education Change | Same | 169 | 95.5 | 169 | 95.5 |
| | Better | 8 | 4.5 | 177 | 100 |
| Empowerment Change | Worse | 2 | 1.0 | 2 | 1.0 |
| | Same | 185 | 95.9 | 187 | 96.9 |
| | Better | 6 | 3.1 | 193 | 100 |
| Social Capital Change | Better | 201 | 100 | 201 | 100 |
| Light Change | Worse | 7 | 3.3 | 7 | 3.3 |
| | Same | 191 | 90.1 | 198 | 93.4 |
| | Better | 14 | 6.6 | 212 | 100 |
| Water Change | Worse | 4 | 1.9 | 4 | 1.9 |
| | Same | 197 | 92.5 | 201 | 94.4 |
| | Better | 12 | 5.6 | 213 | 100 |
| Bath Change | Worse | 4 | 1.9 | 4 | 1.9 |
| | Same | 201 | 94.4 | 205 | 96.2 |
| | Better | 8 | 3.8 | 213 | 100 |