Linking the Basic Elements of Economic Growth: The Effect of Social Capital on Entrepreneurial Activity

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Introduction

What is the significance of the discovery of the atom? The knowledge that everything in the universe can be broken down into these fundamental particles, the smallest units of matter, has revolutionized the scientific community. If we understand what affects the foundations of the world, we can better understand how it functions as a whole. The same principle can be applied to economic development. The atom of an economy is the entrepreneur—the individual who sees an opportunity in a problem, has an idea on how to improve it, and creates her own small enterprise. One of the issues with trying to promote economic growth within developing countries is we do not often focus our analysis and efforts on the atoms, which in this research is entrepreneurial activity. The work of microfinance organizations has highlighted the benefits of small business on individual welfare and overall economic growth, but there has not been enough emphasis on what drives those individuals to begin such ventures. If we can better learn what impacts the individual decisions of entrepreneurs, whose ventures comprise the aggregate economy so often studied in development, we can gain additional tools for improving the quality of life for all those living in poverty.

One of the greatest factors impacting entrepreneurship is risk. As Venkataraman states, “bringing new products or markets into existence always involves some element of downside risk” (1997). Indeed, risk often provides the opening for an entrepreneur to capitalize on others’ aversion. Risk is the very force that propels developed economies; stock markets, future prices, and investment capital all center on the prospect of high-risk, high-yield ventures. In developing nations, however, these driving
forces of growth are generally nonexistent. The capacity to deal with risk is underdevel­
oped. This risk aversion often extends to the individual level. Many individuals
are unable or unwilling to engage in crucial poverty-reducing entrepreneurship, be­
cause such activities involve levels of risk that reach beyond the scope of their coping
abilities and resources. The communities in which those individuals live, however,
offer important mechanisms by which social safety nets may be administered, both in
the formal and informal sector. Social risk management is, at this level, intertwined
with social capital and the underpinnings of community life. In turn, entrepreneur­
ship is related to both risk and, as entrepreneurs are individuals living within com­
munities, social capital. This paper seeks to explore the impact that social capital has
on levels of risk-taking and hence, entrepreneurship. It thus provides insight into the
basest elements of economic growth.

Literature Review

To understand the basic unit of economic growth, the entrepreneur, it is impor­
tant to understand the context in which an entrepreneur goes about her business;
measurements of social capital operationalize the strength of social bonds between
people, providing a way to empirically describe an entrepreneur’s context. Social
capital is measured by the basic notion of social exchange, which encompasses trade,
the sharing of experiences, and all human contact that takes place over the vast in­
terpersonal networks created by these exchanges (Fafchamps 2006). The strength of
these networks can facilitate economic growth.

In determining the most important elements of the study of social capital, two
trends have been established; measuring social capital either in terms of network re­
lationships, i.e. membership in clubs or organizations (Putnam 1993, Eroglu 2009),
or measuring social capital in terms of trust in other individuals or legal institutions,
thus manifesting itself in civic cooperation (Fafchamps 2006, Knack and Keefer 1997).
However, the reach of social capital is not limited to the social sphere. Nations that
have more social capital, according to the second definition, have been shown to have
better overall economic growth (Ibid.); thus, it is appropriate to expect the same to be
true of individual economic endeavors.

Social capital reduces the costs of doing business; this includes facilitating trade
by reducing the transaction costs of contract enforcement. It also reduces search costs
of exchange, with interpersonal networks providing a circuit for information circula­
tion (Fafchamps 2006). Social capital can in itself be considered an asset, accumulated
throughout an individual’s lifetime and subject to depreciation; thus, the individual
can expect a degree of return on their social capital, although the extent is unknown
(Gertler 2006, Garcia et al. 2008).

Risk is daunting to the individual entrepreneur because they are constantly faced
with situations where the outcome is unknown. Holzmann describes this risk aver-
sion, or the reluctance of individuals to engage in high-risk or even medium-risk activities, as prevalent among the poor (2001). The most critical aspect of risk aversion for those in the developing world is the problem of consumption smoothing. Risky situations can lead to income variability, which leads to shocks in consumption, assuming there are no smoothing mechanisms. In this setting, even small shocks can lead to severe destitution (Holzmann 2001). Krishna shows that income diversification (reducing risk) is the greatest factor in the ascent from poverty, while vulnerability to risk, particularly for illness, is the greatest factor in the descent into poverty (2010). For this reason, those in poverty are extremely risk averse. Additionally, research on income risk among rural communities demonstrates that poorer households pursue less risk-intensive options, impacting their production and investment decisions (Morduch 1990, Alderman and Paxson 1992, Rozenwieg 1993). These tendencies toward risk aversion have been shown to have negative consequences for both individuals and the economies of developing countries. Ventures with the highest risk are also generally associated with the highest yields, both on a macro-level, where high-risk capital fuels economic growth (Obstfeld 1994) and for individual returns, as risk aversion deters the adoption of the most rewarding technologies and practices for production (Rosenweig 1993, Holzmann 2001).

Developing countries, because of their particular vulnerability to risk, must seek out ways to manage risk. Recent literature has been keen on identifying the mode of risk management among people in poverty. As may be expected, comprehensive government welfare programs and formal insurance institutions have failed to reach the majority of citizens of the developing world. Budget insolvency, political instability, and lack of infrastructure have blocked access for those who need it most (Morduch 2006). Morduch and Conning (2002) describe how individuals often rely instead on informal risk-sharing activities, particularly those centered on communities. Plateau shows that informal insurance can be successful in reducing risk because of the quality of connections that are established within communities (1997). Reciprocal gift giving is one major aspect of these activities, but they also include remittances from migrants, family dowries, and social norms for care of the elderly and sick. Morduch and Conning also describe more private insurance mechanisms, such as individual savings, which can take the form of either monetary or physical stocks like cattle or land (2002). Morduch argues that this level of informal insurance can often be more effective than other means, because it solves the classic issue of asymmetrical information common with insurance and risk management everywhere. Social risk mitigation can also result in the generation of new social capital through networking and bonding (Conning 2002).

Social capital aids entrepreneurs by mitigating risk in community settings; however, some problems may arise in ways that weaken the protection of strong social capital levels in a community. For example, an earthquake or another type of disaster
may occur and wipe out large portions of a community, leaving no collective pool for insurance provision (Holzmann 2001, Morduch 1996). These types of challenges have been investigated in empirical studies, which conclude that social capital and social risk mitigation are not always effective in decreasing poverty, mainly due to a lack of resources to reciprocate help, personal pride, and widespread, covariant shocks (Eroglu 2009, Morduch 1996, Alderman and Paxson 1992). One example, involving health risks, showed that measured elements of informal social insurance are unable to cover low-frequency and high-loss events such as adult disability; those within well-established, well-connected communities fared no better than those without (Gertler 2006). However, research involving child nutrition showed that in cases involving idiosyncratic risks, even large ones, households with greater social capital were better able to cope with losses (Carter 2003). These varied studies demonstrate the difficulty of measuring social capital, and of constructing social safety nets on an informal basis that can mitigate large or covariant risks.

One purpose of strong social capital is the anticipated increase of entrepreneurial activity. Aside from research related to general risk taking, the direct literature on entrepreneurship is as varied and unique as the businesses of entrepreneurs. Yet, from a business standpoint entrepreneurship involves the endowment of existing resources with new wealth-producing capacity (Drucker 1985). Innovation is a key part of economic growth; entrepreneurs have traditionally been associated with innovation (Venkataraman 1997). While any business activity should help lift individuals out of poverty through increased income and economic output, lasting and long-term growth can only come through innovation and technological improvement (as per the Solow growth model). Venkataraman points out that despite the lack of agreement on a definition for entrepreneurship, it follows from the premise that markets are most often inefficient to some degree, and it is on these inefficiencies that entrepreneurs seek to capitalize (1997). In this manner, entrepreneurship not only creates wealth and economic growth for individuals, but improves the market functionality of the economy as a whole.

Many scholars of entrepreneurship have also discussed the inherent relationship of entrepreneurship and risk. There is a high level of uncertainty surrounding any new idea or venture, which often concerns its feasibility, desirability, marketability, and so forth (Amit et al. 1990, Henrekson 2010). As levels of risk increase, holding entrepreneurial skill constant, entrepreneurs seek more and more to spread that risk throughout their network, mainly through seeking investors (Amit et al. 1990). If entrepreneurs are more confident in their own abilities, they will seek less risk-sharing, wishing to capture as much of the profits for themselves as possible. The tie here to social capital is evident: The larger and stronger the social network, the more investment options an entrepreneur has at her disposal to mitigate risks as necessary.
Two recent publications have explicitly examined the role of social capital on entrepreneurship. The first, by Bauernschuster et al. (2010), looks at the effect of club membership on the likelihood of being an entrepreneur. As entrepreneurs face resource constraints (i.e., a lack of capital for new ventures), they must find ways to involve others and utilize their capital. Bauernschuster’s study highlights the importance of informal social networks in small communities (and likewise, in the developing world) that lack more formal venture capital institutions. The second study focuses not on the effects of social capital on financing a small business, but on identifying the opportunity to create one in the first place. Ramos-Rodriguez et al. find that, despite the importance of an entrepreneur’s own skill and know-how, external knowledge is also essential for business creation. Individuals with more access to social capital—i.e. those who know more people—will be exposed to more ideas and possible business opportunities (2010). Interestingly, weak ties to individuals outside an entrepreneur’s immediate circle are more likely to produce opportunity than strong, inner-circle ties (Singh 1999). In each of these studies, social capital has been shown to have a positive effect on the incidence of entrepreneurship.

While this is encouraging, the current research has not yet made a sufficient empirical link between social capital and entrepreneurship in terms of the promotion of risk taking. Holzmann comes closest, claiming that good social risk management programs should accomplish two things: the enhancement of livelihood and the encouragement of risk-taking (that is, entrepreneurship)(2001). The purpose of this paper is to expand on that latter goal, and to explore the consequences of individual risk-taking, in particular the risks associated with small business start-ups. These higher risk ventures can make a substantial difference in the trajectory of poverty for the poorest of the poor, contributing to economic success and chronic poverty alleviation. Thus, we seek here to address the gap in current literature of social capital’s effects on risk-taking ventures, connecting the realm of community driven social security with potential growth-fueling entrepreneurship.

**Theory and Hypothesis**

We argue that social capital mitigates risk. Before testing this relationship, we must define two types of risk: exogenous and endogenous. The failures of community-based and informal social insurance to help individuals cope with shocks are caused by exogenous risks—random, unforeseen events caused by circumstances beyond an individual’s control and not related to an individual’s choices or actions. Examples of exogenous risk include both idiosyncratic shocks, like accidents, illness, or sudden unemployment, and covariant shocks such as epidemics, famines, or general economic crises.

The other type of risk we identify is endogenous risk, that is, risk associated with actions deliberately undertaken by the individual, and of which the individual
is at least partially aware prior to the action. Shocks classified under endogenous risk include the potential for a new business to fail or for a new type of crop or technique to yield less than the expected amount. Of course, some of the exogenous shocks are correlated to an individual’s choices—the propensity to become ill is affected by nutritional choices or by how often one visits the doctor; however, consideration of these risks are not generally incorporated into decision making, and furthermore, most households in developing countries have little leeway in such choices in the first place. True endogenous risks must be associated with calculated decisions.

The utility of classifying endogenous risk allows for the ability to assess a cost-benefit (risk-benefit) analysis. However, without the benefits of social capital, many individuals would not be able or want to undertake such endogenous risks, because they are otherwise vulnerable to exogenous shocks and do not have sufficient coping mechanisms in the case of endogenous failures.

Drawing from the literature discussed above, it is easy to see the first link in the entrepreneurship chain begins with social capital: social interactions create resources that individuals may utilize in times of variability and need. Although levels of support are varied, and not all informal insurance schemes are successful, social capital creates a better safety net than would exist for a single individual. Considering the often corrupt state of many developing countries, even access to most government welfare programs is based on some degree of personal connections. In general, if an individual feels more secure and less vulnerable to exogenous shocks, he or she will be less risk averse, and more likely to undertake ventures with a degree of endogenous risk. If, as was found in much of the literature, community or family connections satisfy this need for risk management, then social capital has an important impact on encouraging risk-taking behavior. There is also the potential for community-based insurance against the failure from endogenous risk; however, in this analysis, the most beneficial role for social, capital-based safety nets is the peace of mind that results in a greater willingness to take on new ventures.

A second and more direct impact of social capital on entrepreneurship uses trust as a measure of social capital (Knack and Keefer 1997). As stated in the earlier discussion on the definitions of social capital, trust in other individuals, as well as in national institutions and cooperation, facilitates trade. Trust, if appropriately placed, reduces the transaction costs associated with exchange, namely, the risk of nonpayment or deception, that must usually be made up for by formal enforcement and contracting. Thus, if there is more trust in a community, there should be more trade, providing more opportunity and demand for small businesses and other non-farm risk-taking endeavors. Similarly, social capital is inherently networked nature provides a larger and more accessible market for these ventures, adding yet another direct effect on entrepreneurship. This also corresponds to an improved degree of endogenous risk-management: The more people in an individual’s network, and the stronger the social
capital bonds between them, the availability of potential investors increases (Amit et al. 1990, Bauernschuster et al. 2010), thus dividing the impact of possible failure. This concept fits well with Platteau’s model of balanced reciprocity (1997): If one invests in others’ opportunities, one can more easily expect an eventual return on investment. While low-income levels and lack of formal mechanisms may hinder this type of investment in many situations, the possibility remains for even a minor positive impact of social capital on risk-taking.

Entrepreneurship is an enigmatic phenomenon that is thought to be based more on natural-born instinct and intuition than on outside factors. Yet a systemic study of entrepreneurs, the vital atoms of economic growth, and what affects them cannot be neglected if we are to understand this key element of economic development. We assert that external factors affect entrepreneurship, not the least of which is social capital. Thus it is our hypothesis that increasing social capital will result in higher levels of entrepreneurship.

Methods and Measures

Social capital is most commonly measured by calculating associational membership and/or trust. This type of measurement quantifies social capital as a cause or consequence resulting from attitudes of cooperation. The majority of literature focuses solely on these two aspects; however, economic activity and interactions can be a critical source of social capital (Garcia et al. 2008). Relationships of trust can be generated in these experiences, specifically in developing countries, because individuals recognize that the efficiency attained in economic activity cannot be reached without the cooperation of the majority. Therefore, we feel it necessary to use a more encompassing definition of social capital. Also, in many measures of social capital, true capital is not accounted for. In order for something to be considered capital it must be produced, it must be productive, and it must be lasting (Garcia et al. 2008). Therefore, in our model we use a measure of social capital that incorporates both economic activity and the measurement of true capital.

As our theory states, social capital should have a positive effect on entrepreneurial activity. In the broader sense, entrepreneurial activity is activity of people who undertake innovative ventures, financing and engaging in business in an effort to create economic goods. In order to quantify such activity we are using the variable total early stage entrepreneurial activity (TEA) from Global Entrepreneurship Monitor (GEM), which uses survey data to capture economic activity. TEA is the percentage of the adult population (18–64) that are currently nascent entrepreneurs or owners-managers of a new business that has operated for at least three but no more than forty-two months. This measurement allows us to capture all people who are in pursuit of new ventures and people who have recently engaged in new ventures, capturing a larger range of our definition of entrepreneurial activity. Most commonly within the
literature, entrepreneurial activity only encompasses the number of newly registered businesses as a measurement of entrepreneurial activity. This does not capture any informal activity, which is most common in developing countries, nor does it capture nascent activity. By only measuring the number of newly registered companies, we would fail to capture the full effect of social capital on entrepreneurial activity. We are not attempting to demonstrate that businesses' success is dependent on social capital; rather, we posit that social capital facilitates entrepreneurship. By including nascent entrepreneurs, we can accurately measure this activity.

Various controls are used in this model to more fully isolate the effect of social capital on entrepreneurial activity. To control for fear of risk taking, we include a fear of failure variable. GEM captures this and is measured as the percent of the adult population who indicate that fear of failure would prevent them from starting a venture. We define informal investment as the percent of the adult population that has provided money or economic assistance for new businesses started by someone else in the past three years. The Human Development Index (HDI) allows us to control for the internal conditions of the state. HDI is a composite measure of achievements in three basic dimensions of human development: a long and healthy life, access to education, and a decent standard of living. For ease of comparability, the average value of achievements in these three dimensions is put on a 0 to 1 scale. Though our measurement of entrepreneurial activity encompasses more than just state monitored activity, it is important to control for state regulations on starting new businesses. State regulations may create impediments at certain levels of business, thus deterring activity. Therefore, we include the number of start-up procedures required to start a business, as measured by the World Bank. Start-up procedures are those required to start a business, including interactions to obtain necessary permits and licenses and to complete all inscriptions, verifications, and notifications to start operations. In the same vein, we include a variable for the average number days required for someone to complete these procedures, controlling for increased opportunity costs of lengthy start-up procedures and bureaucratic backlog. This has been observed by de Soto to have a negative effect on rates of business creation (2000). Both variables are included because, while a state may not have a large number of regulations, if the processing time is unreasonably long, the result will be the same in discouraging entrepreneurship.

To test whether social capital has an effect on entrepreneurial activity, we use a regression model. With entrepreneurial activity as our dependent variable and social capital as our independent variable, we are able to examine and measure their relationship. Fifty-six countries, both from the global north and global south, are used in our analysis. Because of missing and inconsistent data by year, we are unable to execute time series data. Thus, we use an average from 1996 to 2005 of both social capital and entrepreneurial activity. Taking the average smooths the effects of an isolated incidence that may have happened on a given year, such as 9/11 in 2001. In
time series data, we would be able to control for such events; however, because of inconsistent data, we are unable to use such analysis, which led us to use an average over nine years.

In addition to these two variables, we use a number of controls. If a country has too many procedures, regardless of the strength of social capital, it has the potential to impede entrepreneurial activity; therefore, we hold number of start-up procedures constant. If a country has too few procedures it may be a sign of an inept bureaucracy, which taking the logic further exhibits systemic problems within the country. Thus, we use a quadratic formula for specifying the number of start-up procedures. The number of days it takes, on average, to start a business is controlled for as well. It is also squared, because, as with number of start-up procedures, there is likely to be an optimal minimum number of days that will best encourage business start-up and entrepreneurship. Fear of failure is included to control for personal attitudes toward entrepreneurship. For example, if I have score high in social capital but my fear of failing in an endeavor is also high, I will not start a business despite my level of social capital. Thus, by holding fear constant, we come closer to isolating social capital and entrepreneurial activity. HDI allows us to control for poor conditions in general. A broken system will impede entrepreneurial activity no matter how high social capital ranks in the community. Thus, by including HDI, we hold internal conditions constant. Finally, controlling for informal investment removes wealth of the community constant. A community that is wealthy will be more prone to lend money, making entrepreneurship easier; thus, these countries would inevitably have more entrepreneurial activity despite their social capital scores. Therefore, by controlling for this, we see how social capital affects entrepreneurial activity despite the cash flow of a community.

Analysis and Discussion

The primary results of the test of our model show a significant positive effect of social capital on entrepreneurial activity, holding all else constant, this supports our hypothesis. We use a robust least squares regression model with variables for entrepreneurship and social capital, and with control variables for the number of start-up procedures, for the fear of failure in society, for informal investments, and for average time it takes to start a business in days. Our unit of analysis is countries, encompassing a total of fifty-six countries with comprehensive data. The summary of each of these variables is shown in Table 1. It is interesting to note that the mean percentage of adults engaged in nascent entrepreneurship is 11 percent, which is quite high and may indicate a high turnover rate for new businesses.

In forming the final model, we tested several variations of regressions to determine the individual roles of each variable. An initial simple regression showed resulted in an R-squared of 0.004, suggesting that social capital explains 0.4 percent
of the variation in entrepreneurial activity. The slope coefficient for social capital was 0.00653, with a standard error of 0.0112, meaning that with a unit increase in our measure of social capital, a 0.681 percent increase in entrepreneurial activity is expected; however, this standard error does not generate a p-value that is low enough to allow us to reject the null hypothesis, indicating that this relationship is statistically insignificant (see Table 3, Regression 1).

Next, a multivariate regression was run between social capital and entrepreneurial activity, including all of the control variables in this research. Because we expect that there will be an optimal number of start-up procedures and number of days to start a business (as explained in the previous section), we also include the quadratic measure for both variables. This model showed a statistically significant positive relationship between social capital on entrepreneurial activity, holding all else constant (see Table 3, Regression 2). This regression resulted in an R-squared of 0.679, meaning that the independent variables used explain 67.9 percent of the variance in entrepreneurial activity. In this model, the slope coefficient for social capital was 0.0198, meaning that with a one standard deviation increase in our measure of social capital, there is an expected 1.208 percent increase in entrepreneurial activity (that is, 1.208 percent more adults would be engaged in new small businesses) holding all else constant. The standard error for this relationship is 0.00748, from which a p-value of 0.011 is produced, allowing us to reject the null hypothesis that there is no relationship between social capital and entrepreneurial activity with 99.9 percent confidence.

In checking for multicollinearity, we found a high correlation between for the number of start-up procedures and average time to start a business. This is a logical result, given both are measures of similar restrictions on the ease of doing business. To determine which is a more accurate predictor of entrepreneurship, we ran two models, each including only one of these measures (Table 3, Regressions 4 and 5). Both the linear and quadratic measures for both variables were included in each test. Given the results of these regressions, and the lack of significance of the number of days required to start a business, we decide to keep only the significant measure of number of start-up procedures for our final model. These results imply that the combined monetary and opportunity costs of additional start-up procedures outweigh the simple opportunity costs of the additional days required for business creation.

Our final model is then Regression 5 (Table 3) showing the relationship between social capital and entrepreneurial activity, with the following controls: Number of start-up procedures, number of start-up procedures squared, fear of failure, and informal investment. This model supports our hypothesis and demonstrates the high significance of the effect of social capital on entrepreneurship but also demonstrates the importance of other business-related factors. The slope coefficient for social capital is 0.0192, meaning that for a unit increase in social capital there is an expected 0.0192 percent increase in entrepreneurial activity. To understand this substantively, a move-
ment of one standard deviation in social capital will result in a 1.17 percent increase in entrepreneurial activity. This is a modest, but substantively significant change: If an additional 1 percent of individuals are engaging in small business activity, additional jobs are created, and the economy as a whole will increase proportionally.

The multicollinearity test also revealed high levels of correlation for the Human Development Index (Table 2). To address this issue, we used the HDI to parse out the data between high and middle-to-low-developed countries instead of a control variable, providing a more comparable and interesting frame of analysis. We used our final model and ran it using the two sets of observations, first for countries with above high human development levels and then for those with below middle human development (using the HDI distinctions). The results are shown in Table 4.

While dividing the sample results in a loss of statistical significance for the second group (below middle), some of the coefficients still illustrate an interesting difference in effects. The parsed out regressions show that social capital has nearly twice the effect on entrepreneurship for those countries that have below middle human development. One potential implication of this result is that entrepreneurship in less-developed countries is more dependent on informal social connections for its success. This supports our theory and hypothesis in that area with less comprehensive social institutions, including those that contribute to risk management, social capital is the crucial mechanism to prompting entrepreneurship.

Conclusion

As with all observational analysis, we acknowledge there is a potential problem with endogeneity present in our model. There are reasons to believe that increased entrepreneurship actually leads to increased social capital, reversing the causal chain we have presented. While business relationships undoubtedly increase levels of social interaction, we feel that because our measure of entrepreneurship focuses on very new businesses, it requires a degree of social capital beforehand. We are thus reasonably confident that our model reflects the true direction of effects, with increased social capital prompting entrepreneurship. In terms of the data itself, we also acknowledge that these results are limited by the quality and methodology of data collection. Further, we acknowledge that our results may be affected by omitted variable bias. Despite these limitations, we feel justified that our selection of data accurately tests our hypothesis.

The results of our statistical analysis confirm the hypotheses put forth above: Social capital has a statistically significant, albeit modest, effect on entrepreneurial activity. This finding has important, real-world applications: Because formal insurance is not available to a large portion of the world’s population, and because insurance, as a method of risk-management, is requisite for economic growth, any replacement for insurance in a developing world setting will be helpful in increasing economic activ-
ity. We have shown that informal methods of risk-management via social capital have a positive impact on entrepreneurship, the atomic unit of economic growth. Thus, fostering an increase in social capital may be an alternative way to promote poverty-reducing growth, from an individual level up to the aggregate. Because of the potential implications of this study, more research is needed both in establishing better measurements of social capital and in the analysis of data relating to social capital.

REFERENCES


**APPENDIX**

Table 1: Summary of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
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<tr>
<td>Entrepreneurial Activity</td>
<td>77</td>
<td>11.04065</td>
<td>6.899262</td>
<td>3.1</td>
<td>32.47</td>
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<td>Social Capital</td>
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<td>118.4074</td>
<td>61.01492</td>
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<td>Social Capital (without Ireland)</td>
<td>79</td>
<td>114.8276</td>
<td>52.27041</td>
<td>31.16338</td>
<td>253.831</td>
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<td>Number of Start up Procedures</td>
<td>185</td>
<td>8.532046</td>
<td>3.251969</td>
<td>1.714286</td>
<td>19</td>
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<tr>
<td>Fear of Failure</td>
<td>77</td>
<td>33.61962</td>
<td>8.914809</td>
<td>18</td>
<td>65</td>
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<tr>
<td>Human Development Index</td>
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<td>0.6204358</td>
<td>0.1876696</td>
<td>0.17675</td>
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<tr>
<td>Informal Investment</td>
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<td>4.352788</td>
<td>2.966205</td>
<td>0.5</td>
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<td>Average Time to Start a Business</td>
<td>190</td>
<td>33.81368</td>
<td>57.52744</td>
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<td>694</td>
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Table 2: Variable Correlation

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<th>Number of Start up Procedures</th>
<th>Fear of Failure</th>
<th>Human Development Index</th>
<th>Informal Investment</th>
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<td>Number of Start up Procedures</td>
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<td>Human Development Index</td>
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<td>Informal Investment</td>
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<td>Average Time to Start a Business</td>
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<td>0.6730</td>
<td>0.1084</td>
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Table 3: Robust Least Squares Regressions

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<td>Social Capital</td>
<td>0.00653 (0.0112)</td>
<td>0.0165* (0.00981)</td>
<td>0.0198** (0.00746)</td>
<td>0.0186** (0.00866)</td>
<td>0.0180*** (0.00657)</td>
</tr>
<tr>
<td>Social Capital (outlier omitted)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-0.973** (0.447)</td>
</tr>
<tr>
<td>Number of Start up Procedures</td>
<td>-</td>
<td>0.922*** (0.205)</td>
<td>1.339** (0.566)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Number of Start up Procedures²</td>
<td>-</td>
<td>-</td>
<td>0.0995*** (0.0331)</td>
<td>-</td>
<td>0.0946*** (0.0265)</td>
</tr>
<tr>
<td>Average Time to Start a Business</td>
<td>-</td>
<td>-</td>
<td>0.0585 (0.0651)</td>
<td>0.133 (0.0837)</td>
<td>-</td>
</tr>
<tr>
<td>Average Time to Start a Business²</td>
<td>-</td>
<td>-</td>
<td>0.000328 (0.000497)</td>
<td>0.000254 (0.000608)</td>
<td>-</td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>-</td>
<td>-</td>
<td>-0.161 (0.0975)</td>
<td>-0.118 (0.0865)</td>
<td>-0.148 (0.0970)</td>
</tr>
<tr>
<td>Informal Investment</td>
<td>-</td>
<td>-</td>
<td>1.094** (0.451)</td>
<td>1.418*** (0.455)</td>
<td>1.316*** (0.397)</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>-</td>
<td>-</td>
<td>-11.89 (9.067)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Constant</td>
<td>9.584*** (1.486)</td>
<td>0.545 (2.083)</td>
<td>19.66** (8.128)</td>
<td>3.364 (3.749)</td>
<td>7.711* (4.044)</td>
</tr>
<tr>
<td>Observations</td>
<td>57</td>
<td>56</td>
<td>55</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.004</td>
<td>0.287</td>
<td>0.679</td>
<td>0.589</td>
<td>0.660</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
### Table 4: Parsed Sample Based on the Human Development Index

<table>
<thead>
<tr>
<th>Entrepreneurial Activity</th>
<th>High Human Development and above</th>
<th>Medium Human Development and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital</td>
<td>0.015*** (0.004)</td>
<td>0.038 (0.034)</td>
</tr>
<tr>
<td>Number of Start up \ Procedures</td>
<td>-1.060** (0.462)</td>
<td>-1.270 (5.038)</td>
</tr>
<tr>
<td>Number of Start up \ Procedures$^2$</td>
<td>0.091*** (0.030)</td>
<td>0.095 (0.214)</td>
</tr>
<tr>
<td>Fear of Failure</td>
<td>-0.106** (0.044)</td>
<td>-0.058 (0.333)</td>
</tr>
<tr>
<td>Informal Investment</td>
<td>2.017*** (0.349)</td>
<td>0.794 (0.560)</td>
</tr>
<tr>
<td>Constant</td>
<td>4.766* (2.624)</td>
<td>9.733 (25.02)</td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.818</td>
<td>0.414</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$