
Do corrupt practices affect the development of SMEs ?

An exploratory study

D. Ray Bagby, E. Umble and L.E. Palich

Introduction

The extent and detrimental effects of corruption are well documented and discussed in the literature. For example, the U.S. Agency for International Development indicates that studies conducted during the previous ten years showed clearly both the short- and long-term costs associated with corruption. For example, a survey of 49 countries revealed that the cost of capital tended to be higher where corruption was more prevalent. Also, according to the International Monetary Fund (IMF), countries with high corruption achieved aggregate investment levels that were almost five percent lower than the others. Their studies contend that corruption “results in a general waste of resources, ineffective government, and a loss of tax revenue (International treaty to criminalize bribery, 1998, p.1).” The same article also reports studies by the U.S. Commerce Department, which conclude 80 per cent of international deals are won by foreign firms that offer bribes. Because some countries offer tax deductions for the bribes paid by their businesses, U.S.-based firms that must adhere to the Foreign Corrupt Policies Act suffer a competitive disadvantage in the global marketplace.

Wilhelm (2002) reports that the U.S. Department of Commerce estimates that \$80 billion was paid to officials in other countries by foreign firms between 1995 and 1998 and that corruption acts as a barrier to development and economic growth. Furthermore, he references a KMPG Peat Marwick survey that found that most of the respondents believed that global fraud would increase in the future. This survey covered almost 4000 firms in 18 different countries. Reasons cited for this prediction included: deteriorating economic conditions, declining societal values, and increased opportunity related to technologies such as the Internet and international wire transfers. Recent events involving Enron, WorldCom and other large firms in the United States would tend to confirm this prediction.

Habib and Zurawicki (2002) looking at 89 countries in an IMF database found that corruption was a serious obstacle to foreign direct investment. They cite a study by Gupta, Davoodi and Alonso-Terme (1998) that demonstrated the ways in which corruption adversely impacted economic development and led to greater poverty for the inhabitants of the corrupt nation. They also note “corruption is widespread in countries where the administrative apparatus enjoys excessive discretionary power, and where laws and processes are barely transparent. Corruption, once present, tends to persist because some firms can use it for competitive advantage.

Boswell (1996) observed that scandals involving corruption had toppled governments in four countries: Brazil, Japan, Italy and Venezuela during the period 1991–1996. And she also noted that in six other countries, government officials had been forced to resign in disgrace, while stories of other incidents continued to appear in the

to resign in disgrace, while stories of other incidents continued to appear in the news almost daily. This corruption is seen as draining economic resources and in destroying confidence in governments. Furthermore, it causes greater uncertainty for investors. She also notes that even the United States is not immune from corruption, despite its laws and culture.

Included in Boswell's (1996) article is a reference to Dieter Frisch, the former Director General of Development at the European Commission. He posits that the cost to the community is greater than the cost of the bribe paid, because the corruption leads to "uneconomic decisions that divert scarce resources, raise the costs, lower the standard of goods and services, and ultimately increase the debt of the country. He concludes that corruption creates a vicious cycle, causing poverty, which, in turn, feeds corruption among those too poor to subsist by honest means (Boswell 1996, p.4)."

The definition of corruption

The World Bank (2000) considers corruption to be an abuse of public office for private gain. This conceptualization is similar to that employed by Transparency International, a non-government organization, that is leading the charge against global corruption. In their words, corruption involves "the misuse of entrusted power for private gain (Transparency International, 2002, April)." In practical terms, this would include bribery, extortion, fraud, trafficking, and embezzlement, as well as nepotism and cronyism. Acts of corruption need not involve money. For example gifts or advantages (e.g. memberships to an exclusive club) are often used to influence people or to close a deal, and these would clearly fall under the definitions above.

Coase (1979) argued that corruption exists between private parties as well, but this argument is beyond the scope of this paper.

The development and growth of SMEs

The effects of national corruption on entrepreneurial activity have not been well documented, but it is our contention that an empirical linkage may very well exist. The negative effects of corruption on economic development, noted above, may also affect the formation of new businesses and the performance/success of these startups over time. Specifically, where government corruption is high (e.g., bribes are common and cronyism abounds), we aver that startup efforts will be hindered. That is, these conditions favor large, established firms with deep pockets and well-developed social networks. New ventures, apart from those initiated by larger companies, will lack the critical resources and thus find the hurdles to startup more insurmountable. Corruption may have a similar effect on nascent enterprises. Those SMEs that lack the capacity to play by the rules of a corrupt government may find their competitive potential to be very limited. At the very least, the growth potential of these smaller competitors will be hindered since they cannot offer the substantial "contributions" that various government officials may seek.

Wilhelm (2002) alludes to this in his article. He notes that in Sub-Saharan Africa and some countries in South America getting a business license is not as simple as in the United States. It can take endless trips to a government building, countless bribes and as much as a year of waiting in order to obtain a similar license. He observes that these conditions are often caused by excessive regulations. The fact that regulation can lead to corruption was noted by Aleksei Kudrin, the Deputy Prime Minister of Russia, in an interview published in the *Academy of Management Executive* (Shekshnia 2001). He states, “direct government intervention only creates additional opportunities for embezzlement and corruption (p.13).” He further remarks that entrepreneurship and SMEs are the cornerstones of a market economy and that he sees the role of government to be that of creating business conditions which allow individual entrepreneurs and small firm owners to prosper. Thus, we would expect entrepreneurial activity to be low where regulation and its concomitant corruption are high.

Measuring corruption

The measurement of corruption can be challenging because most of it occurs in secret. Recent research has used *The United Nations Survey of Crime Trends and Operations of Criminal Justice Systems* to index the level of corruption in different countries. However, this measure is based on data reflecting the number of felonies, convictions and penalties as published by various national organizations. So these numbers may say more about the efficiency and competency of the judicial system than about the level of corruption. Furthermore, the precise legal definition of terms such as bribery, extortion and fraud differs across countries. Thus, the use of such data may also create distortions.

Transparency International (TI) was founded in 1993 and is headquartered in Berlin. It has become the leading advocate for action to counter corruption in the international business scene. It has since developed 80 national chapters around the world (Boswell, 1996; Transparency International, 2002, February). In 1995 TI launched its first Corruption Perceptions Index (CPI) that utilizes a composite measure based on other polls. In 2001, it drew information from 14 different surveys from seven independent institutions. These surveys reflect the perceptions of business people, academics and country analysts. Surveys used have been undertaken during the previous three years, and no country is included in the index unless it has been included in a minimum of three separate surveys. It should be noted that these are measures of perception rather than actual corruption, but as noted above, objective measures are not available.

Wilhelm (2002) validated the CPI and found that it had the highest correlation of all measures with real gross domestic product per capita using the available international data. CPI data will therefore be used for this study as a measure of corruption for the country. Although each country receives a score from 1 to 10, the rank of the country was used for this study. A rank of one indicates the least corrupt country, while 91 is the worst.

| <i>Country</i> | <i>Necessity-based entrepreneurship</i> | <i>Corruption</i> | <i>GDP Growth</i> |
|-----------------|---|-------------------|-------------------|
| Argentina | 7 | 57 | 13 |
| Australia | 8 | 11 | 14 |
| Belgium | 23 | 24 | 26 |
| Brazil | 3 | 46 | 7 |
| Canada | 9 | 7 | 25 |
| Denmark | 27 | 2 | 28 |
| Finland | 25 | 1 | 10 |
| France | 19 | 23 | 21 |
| Germany | 16 | 20 | 22 |
| Hungary | 6 | 31 | 6 |
| India | 1 | 71 | 2 |
| Ireland | 13 | 18 | 1 |
| Israel | 26 | 16 | 9 |
| Italy | 12 | 29 | 22 |
| Japan | 15 | 21 | 29 |
| Korea | 4 | 42 | 4 |
| Mexico | 2 | 51 | 5 |
| New Zealand | 10 | 3 | 19 |
| Norway | 29 | 10 | 27 |
| Poland | 5 | 44 | 8 |
| Portugal | 17 | 25 | 17 |
| Russia | 22 | 79 | 10 |
| S. Africa | 11 | 38 | 12 |
| Singapore | 21 | 4 | 3 |
| Spain | 14 | 22 | 15 |
| Sweden | 24 | 6 | 16 |
| The Netherlands | 28 | 8 | 20 |
| U.K. | 18 | 13 | 17 |
| U.S. | 20 | 16 | 24 |

Table 1: Necessity-based entrepreneurship, corruption, GDP growth

Measuring entrepreneurial activity

In 1999, the Global Entrepreneurship Monitor (GEM) began an assessment of entrepreneurial activity with 10 countries participating. Twenty-nine countries participated in the 2001 assessment. The *2001 Executive Report* included not only a measure of total entrepreneurial activity within the countries, but also separated the activity into two categories: necessity-based entrepreneurship and opportunity-based entrepreneurship. About 54 percent of the people engaged in entrepreneurial activity reported that they were pursuing a business opportunity for personal interest. These were classified as

opportunity-based entrepreneurs. Another 43 percent said they were involved because they had “no better choices for work” and were classified as necessity-based entrepreneurs. The measures of these two variables were found not to correlate with each other, indicating that they were different activities.

The data from the Global Entrepreneurship Monitor was considered to be the best measure of entrepreneurial activity available. However, rather than try to decipher the exact “scores” from the graphs showing the results of these assessments, the countries were assigned a rank, with one being the highest scoring country and 29 the lowest. Although this relegates us to the use of ordinal data, it is considered better than using inaccurate interval level data.

In addition to the measures of entrepreneurial activity noted above, the report offered data for ranking Gross Domestic Product (GDP) growth for each country, the number of SMEs receiving venture capital, venture capital as a percentage of GDP, and the amount of informal investment by country. The data regarding venture capital was not available for a few countries.

Method and results

A Spearman rank order correlation was performed using the ranks obtained from the above databases for each of the 29 countries included in GEM.

No significant correlation resulted from the comparison of the total entrepreneurial activity of the country and the level of corruption ($r=0.21998$). The correlation of the CPI and GEM data for opportunity-based entrepreneurship was also not significant, although slightly negative ($r=-0.1122$). There was a strong positive correlation between the level of corruption in the country and the necessity-based entrepreneurship however ($r=0.55383$) with Russia included and with Russia excluded ($r=0.74022$). Both were significant at the $p < .01$ level. The attached scatter diagram (figure 1) shows why it was computed the second way. Russia was clearly an outlier in the data.

Hypothesis testing indicated that the only economic variable that was significantly correlated with corruption was GDP growth. The scatter diagram attached (Figure 2) shows the relationship. More corrupt countries appear to be experiencing higher levels of GDP growth as well as NBE growth, which was noted in the GEM report.

Implications

Given the level of the data and the small size of the sample, a significant finding is encouraging. However, we must be careful not to read too much into the findings. Clearly, more extensive work is needed, and called for, based on the findings of this rather simple, exploratory work.

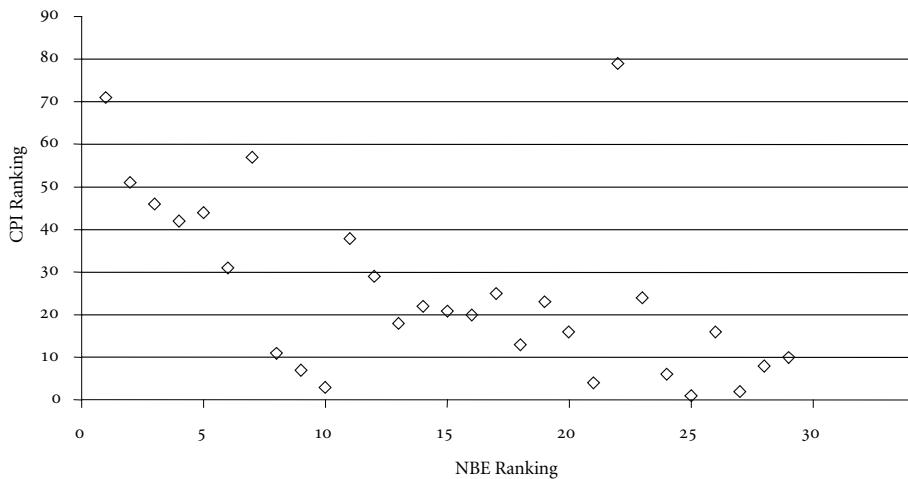


Figure 1: Corruption vs. Necessity-based entrepreneurship

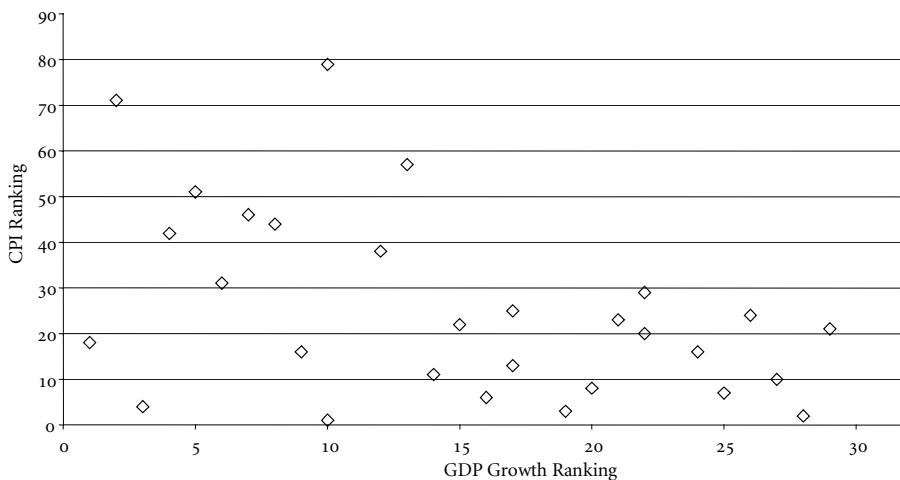


Figure 2: Corruption vs. GDP growth

Although we expected levels of entrepreneurship to be low in countries where corruption is high *a priori*, the results do tend to make more sense with hindsight. Necessity-based entrepreneurship should be higher in those countries because it would be more difficult to find gainful employment, especially since most of the corrupt countries are those with emerging or transitional economies (see for example, Goldsmith 1995). Much of this activity may be low-growth ventures such as vegetable stands (retail) or service areas. This contention is supported by the GEM (2001) data, which notes that most of the countries with high NBE are developing countries and that a greater per-

centage of NBE occurs in the consumer-oriented sectors. Further, 9 of 10 necessity-based entrepreneurs expected little employment growth in the next five years.

How much of the necessity-based entrepreneurship ends up in the shadow economy is an interesting question that deserves further research attention. Ayres (1996) reports that as much as 20 percent of the U.S. economic activity may be in a shadow economy. He observes further that 24 percent of the GDP in Hungary, 40 percent in Russia, and 60 percent in Zimbabwe exist in the shadow. It would be very interesting to examine this question because of the tax implications for such countries.

Although not statistically significant, the result with regard to opportunity-based entrepreneurship is worth noting. The r-value is so small that it is essentially zero. This may indicate that these type entrepreneurs are able to thrive in any situation, regardless of level of corruption. Clearly, additional research using better measures and larger samples appears to be justified.

All of the literature indicates a strong relationship between perceived corruption and the underdeveloped status of nations. Because of this strong correlation it is not clear whether corruption or the economic status of the nation is the primary link with entrepreneurial activity. Additional analyses with higher-level data will be necessary in order to examine this question.

The authors are attempting to obtain the specific interval level data from GEM and other databases to continue this line of research. Hopefully additional answers will be found regarding corruption and its effect on SMEs in the future.

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