

Doing business with corruption: an enterprise empirical analysis

Abstract

This article focuses on survey data and qualitative evidence from a sample of Albanian manufacturing firms to examine the scale and consequences of corruption and tax evasion at enterprise level, discussing costs and benefits from an entrepreneur's perspective. The empirical results of our survey show that manufacturing firms operating in an environment in which tax evasion is more prevalent are more likely to experience demands for bribes from corrupt officials. Regression analysis shows that tax evasion is a matter of degree and that it is not limited to small and medium-sized enterprises: even quite large firms acknowledge concealing part of their sales from the tax authorities. Furthermore, enterprises that evade taxes are less likely to see an external audit while, in addition, the data predict that corruption and tax evasion are more likely to occur when the principal owner is male rather than female. Finally, the findings show that the main effect of the separation of ownership on the likelihood of bribery is insignificant.

Keywords: corruption, tax evasion, ordered probit

Introduction

Corruption can be described as an action in which public power is used for personal gain (Jain, 2001). From this definition, it is clear that there are three conditions necessary for corruption to arise: discretionary power; economic rent; and weak institutions. Additionally, the lack of efficiency associated with government intervention and corruption in many developing countries is well-known: corruption may well affect the extent and advance of competition.

In the context of weak states and under-developed civil societies, firms may exert influence on the state. Such levels of influence may have an impact on the direction of reforms and on the quality of governance in transition countries. Consequently, the way that firms interact with the state has an important implication for understanding the dynamics of corruption. Studies of the phenomenon recognise different forms of it, ranging from grand to petty corruption.

This article analyses corruption with a particular focus on identifying the nature of the phenomenon. Corruption is related to a country's economic, cultural and political institutions (Svensson, 2005). According to the literature, at least two relevant categories of public corruption exist: political and administrative corruption (Bardhan, 1997; Warren, 2004). Administrative corruption refers to petty forms of bribery associated with the implementation of laws and regulations; whereas political corruption refers to the capacity of firms to influence the formation of such laws, regulations and decrees.

Literature review

Using data for about 4 000 firms in 25 transition economies, Campos and Giovannoni (2007) examine the relationship between lobbying and corruption. Their results show that lobbying and corruption are substitutes; that firm size, age, ownership, per capita GDP and political stability are important determinants of lobby membership; and that lobbying appears to be a much more effective instrument of political influence than corruption. However, the study does not completely address how the different kinds of corruption and lobbying interact with each other.

Ramdani and Witteloostuijn (2012) predict that bribery is more likely to occur when the principal owner is male rather than female. Using World Bank Enterprise Surveys from 2002-2005, they additionally found that the equity share of the largest shareholder is negatively related to the likelihood of firm bribery. This finding indicates that corporations without separation of ownership and control are more likely to engage in bribery than their counterparts where there is separation of ownership.

Using World Bank Institute (WBI) surveys of public officials in eight Latin American and African countries, Recanatini *et al.* (2005) found that agencies whose head is popularly elected are systematically more corrupt, while independent agencies whose head is appointed by a political body tend to have better organisational design. According to their study, corruption is lower when internal decisions on budget, procurement and personnel are regularly audited. The data showed that corruption is also influenced by demand-side factors, with agencies that provide services to firms being more prone to corruption.

Bitzenis and Nito (2005) conducted empirical research to investigate the various obstacles that Albanian entrepreneurs encountered in their local business environment. Their study showed that the most important obstacles encountered by entrepreneurs in Albania included unfair competition; changes in taxation procedures; energy crises; and the lack of financial resources. In their paper, bureaucracy and corruption do not appear to represent significant barriers to entrepreneurs.

Corruption and tax evasion matter because they have consequences for resource allocation (Kenyon, 2008). Tax-evading firms draw labour away from those that do pay taxes, while tax evasion and corruption lower the capacity of the state to raise revenues and provide necessary public services. These consequences can undermine the social contract that exists between the state and economic actors. This is of particular interest to a country like Albania.

In this study, I try to understand better the dynamics of tax evasion and corruption at firm level via the use of cross-sectional data.

Data and methodology

The 2013 Albanian Business Environment and Enterprise Performance Survey (BEEPS), which is a joint initiative of the World Bank and the European Bank of Reconstruction and Development, has been used to give an answer to the hypothesis of the article. This survey, through interviews with firms in manufacturing and services, captures business perceptions on obstacles to enterprise growth; the relative importance

of various constraints on increasing employment and productivity; and the effects of business environment indicators that are comparable between countries.

The data were collected in Albania between March and July 2013 as part of the fifth round of BEEPS, with a sample selected with the use of stratified random sampling. Three levels of stratification were used in Albania: industry; establishment size; and region. The sample frame is shown in Table 1.

Industry stratification was designed as follows: manufacturing industry; and two service sector industries (retail and other services). This article focuses on the results relating to manufacturing firms.

Size stratification was defined as small (5 to 19 employees); medium (20 to 99 employees); and large (more than 99 employees). The number of employees was defined on the basis of the reported number of permanent full-time workers.

Finally, regional stratification was defined in four regions: Durrës and Shkodër; Elbasan and Korçë; Fier and Vlorë; and Tirana.

Table 1 – BEEPS sample frame

| Region | Employees | Manufacturing | Retail | Other services | Grand total |
|--------------------|-----------|---------------|--------|----------------|-------------|
| Durrës and Shkodër | 5-19 | 26 | 25 | 59 | 110 |
| | 20-99 | 14 | 7 | 16 | 37 |
| | 100+ | 8 | 0 | 0 | 8 |
| | Total | 48 | 32 | 75 | 155 |
| Elbasan and Korçë | 5-19 | 32 | 11 | 95 | 138 |
| | 20-99 | 8 | 0 | 5 | 13 |
| | 100+ | 1 | 0 | 0 | 1 |
| | Total | 41 | 11 | 100 | 152 |
| Fier and Vlorë | 5-19 | 20 | 9 | 50 | 79 |
| | 20-99 | 14 | 0 | 4 | 18 |
| | 100+ | 2 | 0 | 2 | 4 |
| | Total | 36 | 9 | 56 | 101 |
| Tirana | 5-19 | 197 | 107 | 253 | 557 |
| | 20-99 | 55 | 20 | 45 | 120 |
| | 100+ | 11 | 0 | 5 | 16 |
| | Total | 263 | 127 | 303 | 693 |
| Grand total | | 388 | 179 | 534 | 1,101 |

Source: World Bank (2013) *Albanian 2013 Implementation Report*.

The BEEPS surveys have an excellent set of questions on tax compliance; levels of corruption (as reflected in payments to officials); the fairness of the legal system; the structure of firms; and the expectations of being audited. The data set is used to estimate models on the following themes:

- a) the perceived share of income reported by firms for tax purposes
- b) payments to tax collectors
- c) firms' behaviour as regards tax compliance.

Looking at a measure for bribe payments, a Corruption variable is constructed using firms' responses to the question: 'It is said that establishments are sometimes required to make gifts or informal payments to public officials to "get things done" with regard to customs, taxes, licenses, regulations, services, etc. On average, what percentage of total annual sales do establishments like this pay in informal payments?' The Tax Evasion variable is constructed using firms' responses to the question: 'Recognising the difficulties many enterprises face in fully complying with taxes and regulations, what percentage of total sales would you estimate the typical establishment in your area of activity reports for tax purposes?'¹

To give an answer to the hypothesis, I used OLS estimation where the dependent variables are continuous; probit where the dependent variable is binary; and ordered probit where the dependent variable is categorical.

Empirical results

The regression results rely on information describing 360 of the manufacturing firms. Table 2 shows the OLS regression results which relate to Corruption, being the percentage of sales which are given over to gifts or informal payments; and Tax Evasion, being the percentage of sales reported for tax purposes.

1 Informal firms often misreport taxes, so the economics literature on informality uses this variable as a measure of the extent of unofficial activity.

Table 2 – OLS regression results on corruption and tax evasion

| | Corruption (informal payments as % of sales) | Tax Evasion (as % of sales reported for tax purposes) |
|---------------------|--|---|
| Small (< 20) | .302 (.121) | 2.014 (1.35) |
| Medium (20-99) | .128 (.123) | 1.104 (1.24) |
| Large (>100) | -.005 (.129) | .002 (0.75) |
| Female owner | -.099 (.025)*** | .006 (0.65) |
| External audit | -.478 (1.75)* | -.005 (6.86)*** |
| Sole proprietorship | .026 (3.21)*** | 1.106 (1.22) |
| Partnership | .005 (2.80)*** | .007 (2.34)*** |
| Corporation | -.046 (1.63) | .112 (0.95) |
| Foreign ownership | .003 (0.62) | -.187 (1.07) |
| Borrowed from banks | .039 (2.81)*** | .071 (2.73)*** |
| Exporter | .012 (4.43)** | .001 (0.44) |
| Tax evasion | .044 (1.52) | - |
| Cons | -.439 (.524) | 5.12 (4.43) |
| # Firms | 360 | 360 |
| R ² | 0.38 | 0.42 |

Note: ***, **, and * indicate statistical significance, respectively at the 1, 5 and 10 per cent level or better.

Besides others, the link between tax evasion and corruption, or the making of bribe payments, is interesting as reported in the first column of Table 2. The regression results show that the larger the percentage of sales paid out in bribes, the larger is the level of

tax evasion also. An increase of 1 per cent in tax evasion results in an increase of around 4.4 per cent in corruption or bribe payments.

Larger firms, female ownership and the presence of external audits lower the incidence of corruption in terms of making gifts or informal payments. The marginal effect as regards corporations is higher in magnitude, although the coefficient is not statistically significant.

On the other hand, corruption and tax evasion increase in the case of firms whose working capital is financed from banks. Exporting firms are subject to corruption and tax evasion with coefficients that are statistically significant. This may be related to requests for gifts or informal payments being made when applications for operating licences are lodged.

Table 3 – Regression results on requested payments and policy influence

| | Informal payment requested (1) | Policy influence (2) |
|---------------------|--------------------------------|----------------------|
| Small (< 20) | .221 (.023)*** | .014 (1.35) |
| Medium (20-99) | .587 (.087)*** | .104 (1.24) |
| Large (>100) | .499 (.140)*** | -.034 (0.28) |
| Female owner | -.090 (.019)*** | -.035 (0.013)*** |
| External audit | -.034 (.029)** | -.005 (6.86)*** |
| Sole proprietorship | .008 (.003)** | 1.106 (1.22) |
| Partnership | .068 (.013)*** | .007 (2.34)*** |
| Corporation | -.083 (.031)* | .112 (0.95) |
| Foreign ownership | -.302 (.121) | .187 (1.07) |
| Borrowed from banks | .128 (.123) | .071 (2.73)*** |
| Exporter | .005 (.129) | .005 (0.64) |
| Tax evasion | .814 (.117)*** | - |
| Cons | -.306 (.674) | 4.12 (3.43) |
| # Firms | 343 | 296 |
| R ² | 0.47 | 0.32 |

(1) Probit regression; (2) Ordered Probit

Note: ***, **, and * indicate statistical significance, respectively at the 1, 5 and 10 per cent level or better.

The empirical results shown in Table 3 describe probit regression, when the dependent variable is the request for informal payment; and ordered probit, when the dependent variable is policy influence.

The regression analysis provides us with the finding that firms with higher levels of tax evasion also have less influence over regulations. These results suggest that the relationship between government officials and tax-evading firms is more a type of extortion by the latter than capture by the former.

Conclusions and comments

This article has analysed data for manufacturing firms in Albania. The results show that tax evasion and corruption, in the form of gifts or informal payments, are not limited to small- and medium-sized enterprises. The positive relationship between corruption and tax evasion suggest that government bribery has complex consequences. This relationship may be explained by firms ‘covering’ the costs of bribes by under-reporting their revenues. Corrupt firms may lower the economic costs of their bribes in this way, but they increase the probability of damaging effects where competitors are concerned.

Moreover, the empirical results suggest that, in the case of corporations, corruption and the probability of making gifts or paying informal payments to public officials are lower. In this sense, the separation of ownership lowers the likelihood of firms offering bribes. This result may be related to the benefits of such bribes, in the case of corporations, not being fully internalised by the owners. On the other hand, it may also be explained by arguments surrounding managerial reputation, in the sense that professional managers seek to preserve their good reputations by avoiding engaging in illegal acts (Clarke, 2011). This result implies that stimulating the separation of ownership may provide an effective instrument in the fight against corruption.

In addition, the gender of the owner is important. Empirical results show that a firm with a male owner is more likely to engage in bribery and informal payments to public officials compared to enterprises which have a female owner. This evidence is consistent with earlier studies on the impact of gender on corruption (Swammy *et al.* 2001). Female participation in firm ownership can thus help to reduce firm corruption and tax evasion, implying that government authorities might consider stimulating female entrepreneurship and ownership.

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