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Analysis of corruption at the international level and its relationship with associated costs in business management

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ABSTRACT The following work seeks to test the hypothesis that corruption is the result of the high cost of legality, which hinders the agility required to do business. An econometric model is used with a sample of 43 countries where the dependent variable is the corruption index and the independent or explanatory variables are a cost of legality index (also composed by five indicators) and a variable associated to income. Both were proved to be significant, as the theory suggests. In conclusion, corruption is the result of an excessive cost of legality and low income.

KEYWORDS corruption, cost of legality, regulatory improvement, institutional framework.

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Análisis de la corrupción a nivel internacional y su relación con los costos asociados en la gestión de los negocios

RESUMEN En el siguiente trabajo se busca probar la hipótesis según la cual la corrupción es fruto del alto costo de la legalidad, al obstaculizar la agilidad para hacer negocios. Se realiza un modelo econométrico con una muestra de 43 países, en el que la variable dependiente es el índice de corrupción, y las variables independientes o explicativas son un índice de costo de la legalidad —compuesto a su vez por cinco indicadores—, y una variable asociada al ingreso. Ambas resultan significativas, tal como lo sugiere la teoría. En conclusión, la corrupción es resultado del excesivo costo de la legalidad y del bajo nivel de ingreso.

PALABRAS CLAVE corrupción, costo de la legalidad, mejora regulatoria, marco institucional.

Análise da corrupção a nível internacional e a sua relação com os custos associados na gestão dos negócios

RESUMO Neste trabalho busca-se provar a hipótese segundo a qual a corrupção é fruto do alto custo da legalidade, ao bloquear a agilidade para fazer negócios. É realizado um modelo econométrico com uma mostra de 43 países, no qual a variável dependente é o índice de corrupção, e as variáveis independentes ou explicativas são um índice de custo da legalidade — composto por sua vez de cinco indicadores —, e uma variável associada ao ingresso. Ambas resultam significativas, exatamente como sugere a teoria. Em conclusão, a corrupção é resultado do excessivo custo da legalidade e do baixo nível de ingresso.

PALAVRAS CHAVE corrupção, custo da legalidade, melhora regulatória, marco institucional.

Introduction

“The fight against corruption” is an expression commonly used in the speeches of politicians and leaders, because accountability and performance metrics of public institutions are key to the transparency of institutional activities. Serious problems are attributed to corruption such as the lack of trust in institutions, which reduces investment. Various paths have been proposed in order to combat corruption, since it is a multifaceted concept. Those paths will be clear once the variables that affect a country’s corruption level are determined. This document seeks to show how the difficulty to comply with business laws encourages corrupt acts and it also attempts to demonstrate that measuring corruption allows to improve society by strengthening its institutions and improve State efficiency.

One of the situational elements that has led to the increase in corruption levels is economic globalization, since it facilitates power asymmetries among nations and companies, which is evident in the influence that some global financial groups exercise on the design of public policies. This leads to State deterioration due to the generation of an “economic lobbying” culture in the design of normative frameworks and administrative procedures (Sasia, 2014). This does not mean that globalization implies corruption, but it favors social exposure to more sophisticated and elaborated mechanisms from the conceptual point of view of development.

Together with this, it can be observed that the distribution channels of products and services (imports and exports between countries) have become so complex that they end up favoring the lack of control over the monetary flows of such transactions, such as the specific case of regulations on banking secrecy and tax havens that are increasingly common without a radical and zero tolerance stance from international organizations that could implement laws to eradicate these situations (Sasia, 2014). So far, some progress has been made, such as the Basel I, II and III regulations. The latter, which has been in force since 2010, emerged as a response to banking regulation needs from the initiatives promoted in the Financial Stability Forum and the G20, after the subprime crisis.

At the corporate level, the impact of corrupt practices is not very visible. However, it is widely

used in some areas and developing countries. The most common practice in the private sector is bribing, which is usually executed as a viable strategy with the aim of reducing the processing time of administrative procedures. However, although it is seen as an insignificant act, it contributes to the loss of prestige of public administration and the rule of law. In addition, it generates a negative perception of a country’s legal security and in the long run it affects obtaining resources for the investment of companies (Martín-Baumeister, 2014). Companies and individuals perceive that bribery generates greater profitability than complying with the law and the processes, since the waiting time of processes may be reduced through the payment of bribes. For their part, regulators find in slowness and bureaucracy a way to guarantee some extra income for officials that the institution could not afford otherwise (Zakiuddin, 2001).

The problem of corruption is based on its evolution over time, which has turned it into a systematic problem that can deteriorate a country’s control mechanisms. This makes it difficult to measure and detect the variables that promote corruption and also encourages inefficiency of the measures established to combat it. Although it can be observed that governmental administration styles have changed in order to achieve better management, there are also greater opportunities for corruption, since the tendency is to decentralize control within the institutions and this ends up generating greater fraud risks (Klitgaard, MacLean-Abaroa & Parris, 2000).

In order to address this problem, the first part of this article reviews the theoretical concept of corruption and its relation to the cost of legality. The second section describes the variables and database observations used to develop the hypothesis. Then, a statistical analysis is carried out and the countries studied are classified according to their corruption levels. Finally, an econometric model is validated and presented, together with the interpretation of the results.

Corruption and the cost of legality

Although corruption is generally perceived as negative, some authors point out that it can have benefits (Leff, 1964; Huntington, 1968) by assigning an immediate cost-benefit connotation

to it instead of a long-term vision. This is due to the fact that corrupt acts are generated by the high costs of legality¹ (Gherzi, 2006), which are often pointless and do not generate immediate social benefit. Instead, they halt construction and business projects and prevent large national and foreign investments. Therefore, it is necessary to generate institutional frameworks that reduce high transaction costs (North, 1993), instead of institutional frameworks that encourage and nurture corruption to the extent of turning it into an intrinsic aspect of societies. Although corruption denotes inefficient regulations, it generates very serious problems in society. As Hodgson & Jiang (2008, p.76) point out, “corruption reduces trust levels in transactions with companies and the State”, so only a few benefit from it. In addition, “it generates negative externalities that cross sectoral borders, weaken legal and moral norms and facilitate other corrupt acts” (p.161), in a multiplying effect that has been called a “social cancer” (Morillo, 2009).

Several authors agree that corruption can be defined as “acts where the power of the public office is used for personal gain in a way that contravenes the rules of the game” (Jain, 2001, p.73). However, this definition has been criticized, since corruption is not only generated from public offices and it does not only produce private benefits (Hodgson & Jiang, 2008). This article will address corruption from a social perspective, as the act of corrupting or becoming corrupt by transgressing legal norms and ethical principles through human actions (Del Castillo, 2001). However, this paper does not intend to analyze the definition of corruption, but rather to find how business regulation improvements can reduce costs for businesses to become legal. The authors firmly believe that “what is not measured cannot be improved” so they aim at contributing in the detection of variables to measure corruption.

According to Gherzi (2006), corruption increases simultaneously with the cost of legality and it decreases when income increases, not only because of the income itself, but considering the factors that led to such increase, such as higher employment quality and educational level or better job opportunities. This article seeks to provide evidence in this regard by demonstrating the following equation:

$$CORR_i = \beta_0 + \beta_1 CL_i + \beta_2 Y_i + \varepsilon_i$$

where *CORR* is corruption, *CL* is the cost of legality and *Y* is the income.

Briseño, Mendieta & Decle (2014) used a panel data model for the Mexican case, in which they provide evidence of how the increasing ease of opportunities for starting a business and higher income levels have a negative impact on corruption. This paper seeks to demonstrate these hypotheses at the international level by generating and using a robust cost of legality indicator that involves different perspectives.

Database and its analysis

This section explains how the variables were constructed and how the observations were obtained to create the econometric model.

Variables

Table 1 presents a summary with the theoretical concepts, their proxy variables, the source where they were obtained, the way the values were calculated and the scale used. The corruption concept under study will make use of a corruption index based on the perception of experts. The cost of legality will be measured through an index with a scale from 0 to 100, which will include indicators such as the days required to open a company, the time spent by top executives in bureaucratic matters, the hours spent for the estimation and payment of taxes, the tax percentage on salaries and the tax burden for companies. In order to measure income, the variables used are per capita income, years of schooling and educational quality as measured by the PISA test.

However, in the end only the educational quality variable is used, because it generates the best fit within the model. In addition, it deals with two realities. On the one hand, it is an approximate variable of income, since it is highly correlated with it (0.58). On the other hand, it is an indicator that measures the population’s level of knowledge. Therefore, a society with a higher income (higher educational level) will be less prone to corruption by having a higher level of knowledge and the capacity to afford the cost of legality. As mentioned by Bautista (2005), education is a variable related to the degree of social corruption in the sense that

1 Concept coined by Gherzi (1998) based on Coase (1996).

higher educational levels imply higher income. Also, higher income determines lower corruption levels.

Observations

Although information has been provided since 2001, only the 2013 data analyzing 43 countries is used. This is because, as mentioned by the document, although some data are minimal, they were obtained by extrapolation (IMCO, 2015), which can generate autocorrelation. In addition, as stated by Transparency International (2013), the information on corruption indexes are not comparable year after year, since they do not have a standard base and they depend on the information presented by experts of the different countries, so they can vary according to the dynamics of social evolution. This subjectivity is a limiting

series for the corruption indicator. However, that is the information available and, therefore, the most complete and reliable.

The fact that there are 43 observations is also a limitation if the data does not have normality. However, if this test is passed as well as that of homoscedasticity and correct specification, it is possible to make inferences in a more reliable way. This data is the best that could be found, given the information restrictions.

Statistical analysis

The behavior of the variables is examined in this section. The mean and median are analyzed, as well as the maximum and minimum values of the set of observations, which can be seen in Table 2.

TABLE 1. Theoretical concepts and proxy variables for the model

| THEORETICAL CONCEPT | PROXY VARIABLE | SOURCE | FORMULA | SCALE |
|-------------------------|---|--|---|--|
| Corruption (icorr) | Corruption index (corri) | Transparency International at IMCO (2015) | Based on the perception of experts | 0 to 100 (a higher score means worse)* |
| | Difficulty to start a company (dsc) | Doing Business at IMCO (2015) | Average number of days | Greater than 0 (a higher score means worse) |
| | Time spent by top executives on bureaucracy (teb) | Fraser Institute at IMCO (2015) | Index | From 1 to 10 (a higher score means worse) |
| Cost of legality (cl)** | Time spent estimating and paying taxes (tept) | World Bank at IMCO (2015) | Average number of hours | Greater than 0 (a higher score means worse) |
| | Income tax (it) | Institute of Management Development (IMD) at IMCO (2015) | Salary percentage | Greater than 0 (a higher score means worse) |
| | Tax burden (tb) | World Economic Forum at IMCO (2015) | Profit percentage | Greater than 0 (a higher score means worse) |
| Income (Y) | Per capita income (pci) | World Bank (2017) | Per capita GDP in dollars for 2013 | Greater than 0 (a higher score means worse) |
| | Schooling (sch) | World Bank at IMCO (2015) | Average years | Greater than 0 (a higher score means better) |
| | Educational quality (edqua) | PISA at IMCO (2015) | Average math and reading score in the PISA test | Greater than 0 (a higher score means better) |

* The indicator presented in the IMCO database (2015) ranges from 0 to 100, where 100 means less corruption. Therefore, it was re-scaled inversely from 0 to 100, where 100 means more corruption.

** This indicator was constructed based on averages on a 0 to 100 scale, where 100 means the highest cost of legality.

TABLE 2. Descriptive statistics of variables

| | MEAN | MEDIAN | STANDARD DEVIATION | MINIMUM | MAXIMUM |
|---|--------|--------|--------------------|---------|---------|
| Corruption index (corri) | 51,02 | 54,55 | 30,58 | 0 | 100 |
| Cost of legality (cl) | 29,97 | 28,26 | 11,43 | 9,91 | 65,44 |
| Difficulty to start a company (dsc) - days | 15,31 | 11 | 12,12 | 2,5 | 83,6 |
| Time spent by top executives on bureaucracy (teb) – index | 3,27 | 3,29 | 0 1,55 | 1,10 | 6,01 |
| Time spent estimating and paying taxes (tept) - hours | 287,2 | 218 | 387,2 | 63 | 2600 |
| Income tax (it) - percentage | 18,09 | 17,41 | 8,03 | 1,75 | 31,35 |
| Tax burden (tb) - percentage | 46,11 | 42,6 | 15,92 | 24,5 | 108,3 |
| Per capita income (pci) | 29,787 | 21,619 | 24,206 | 1,452 | 102,900 |
| Schooling (sch) - years | 10,49 | 10,57 | 2,30 | 4,80 | 15,25 |
| Educational quality (edqua) – average score | 467,2 | 485,9 | 58,33 | 335,8 | 595,1 |

Source: own elaboration with support from the GRETL software.

Next, the statistical behavior of each variable is described in a general way, according exclusively to sample observations:

- *Corruption index (corri)*. The mean corruption index is 51.02 and the median is 54.55, which indicates very low values that decrease the mean. The maximum values correspond to Nigeria, Russia and Guatemala and the minimal values to Denmark, Sweden and Finland.
- *Cost of legality (cl)*. The mean score of the cost of legality is 29.97 and the median is 28.26. The countries with the highest values in this category are Brazil, Argentina and Nigeria, while the minimal values were obtained by Switzerland, Canada and South Africa.
- *Difficulty to start a company (dsc)*. The mean number of days to open a company is 15.31 and the median is 11, so there are extreme data that push the mean to a higher value. The countries where the most days are needed are Brazil, Indonesia and China, while those that require fewer days are Australia, Portugal and South Korea.
- *Time spent by top executives on bureaucracy (teb)*. The mean and median of this index are 3.27 and 3.29 respectively. The highest values correspond to Guatemala, Russia and Argentina, while the lowest values correspond to Japan, Sweden and Germany.
- *Time spent estimating and paying taxes (tept)*. On average, the time to estimate and pay taxes is 287.2 hours, while the median is 218. Brazil, Nigeria and Panama have the maximum values, while Switzerland, Ireland and Norway have the minimum values.
- *Income tax (it)*. The mean and median of the tax percentage are 18.09 and 17.41 respectively. The maximum values are for Hungary, Denmark and Austria, while the minimum values are for South Africa, Indonesia and Thailand.
- *Tax burden (tb)*. The average percentage of business taxes is 46.11 and the median is 42.6. The countries with the highest tax burden are Argentina, Colombia and Brazil and the ones with lower levels are Malaysia, Ireland and Canada.
- *Per capita income (pci)*. On average, per capita income is 29,787 dollars, with a mean value of 21,619. The countries with the highest per capita income are Norway, Switzerland and Australia and those with less income are India, Nigeria and Guatemala.
- *Schooling (sch)*. The average years of schooling are 10.49 and the median is 10.59. The countries with the highest schooling levels are Switzerland, the United States and the Czech Republic and those with the lowest levels are Guatemala, India and Turkey.
- *Educational quality (edqua)*. The mean score in the PISA math and reading test is 467.2 and the median is 485.9. The maximum values belong to China, South Korea and Japan, while the minimum values are found in India, Nigeria and Panama.

Table 3 shows the correlations for each pair of variables. As it can be seen, the corruption index has a significant positive correlation with the cost of legality and a negative correlation with

per capita income, schooling and educational quality. It is also observed that the cost of legality is negatively correlated with income and the variables associated to education as income approximations. Therefore, educational quality will be used as approximation of income, which is the variable with the least correlation with the cost of legality. The purpose is to reduce the risk for multicollinearity.

Classification of countries according to their corruption levels

The criteria for defining the levels that are visually explained in Table 4 will be standard deviations around the median (the mean will not be taken into account in order to avoid bias). A deviation after the median will express high corruption; between the median and the first standard deviation it will be average; between the median and one standard deviation below it will be regular; and a negative standard deviation around the median towards negative values will be referred to as low.

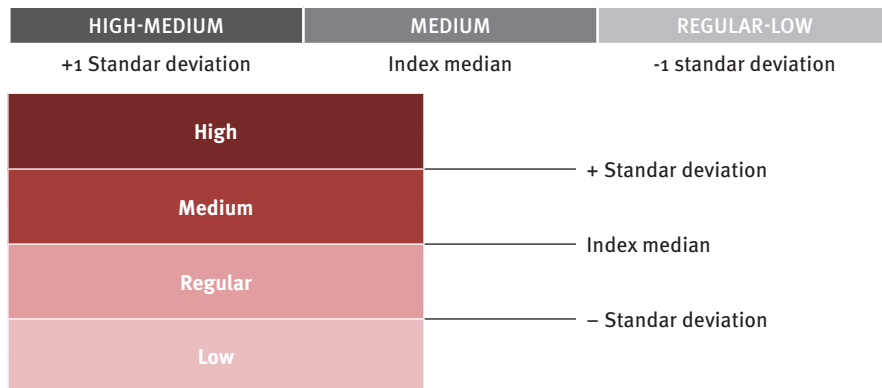
The corruption levels are shown below and their relationship with the cost of legality and its components is analyzed. The data presented are the means of each range, which can be seen in Table 5. It is perceived that higher levels of corruption are associated to higher costs of legality, greater difficulty to start a company, more time spent by top executives on bureaucratic issues, more time to estimate and pay taxes and a higher tax burden. It is curious to see that the same thing does not occur with the level of income tax and the behavior of this variable is opposite to that anticipated. This can be explained by observing how, as the tax burden increases for companies, the tax burden on salaries decreases and vice versa. In addition, in some countries the higher the income from salary, the greater the tax burden through tax tabulation schemes, which can be interpreted as higher tax burdens imply higher income. Higher income levels represent a higher educational level and higher educational and income levels will generate lower corruption levels.

TABLE 3. Correlation matrix

| | CORRI | CL | PCI | SCH | EDQUA |
|-----------------------------|-------|------|-------|-------|-------|
| Corruption index (corri) | 1 | 0,62 | -0,86 | -0,66 | -0,64 |
| Cost of legality (cl) | | 1 | -0,55 | -0,60 | -0,46 |
| Per capita income (pci) | | | 1 | 0,67 | 0,58 |
| Schooling (sch) | | | | 1 | 0,59 |
| Educational quality (edqua) | | | | | 1 |

Source: own elaboration with support from the GRET program.

TABLE 4. Criteria for establishing corruption levels



Source: own elaboration.

TABLE 5. Indicators of the cost of legality by corruption level

| CORRUPTION LEVEL (CORRI) | LOW | REGULAR | MEDIUM | HIGH |
|---|-------|---------|--------|--------|
| Cost of legality (cl) | 21,25 | 25,55 | 34,22 | 41,29 |
| Difficulty to start a company (dsc) - days | 8,25 | 10,61 | 19,68 | 24,05 |
| Time spent by top executives on bureaucracy (teb) – index | 1,51 | 2,52 | 4,08 | 5,56 |
| Time spent estimating and paying taxes (tept) - hours | 117,8 | 209,27 | 403,87 | 401,48 |
| Income tax (it) - percentage | 22,92 | 19,51 | 15,50 | 14,33 |
| Tax burden (tb) - percentage | 38,9 | 43,93 | 49,09 | 54,01 |

Source: own elaboration

Econometric model and interpretation of results

In this section, the model with the best fit is shown. Its validity is revised according to its individual and joint significance, normality, homoscedasticity, correct specification and non-multicollinearity.

Several models were proposed in order to explain the corruption index variable. Each component of the cost of legality was used as an explanatory variable, but there was no satisfactory adjustment. Likewise, regressions were carried out using per capita income or schooling as explanatory variables. However, the results did not satisfy the statistical tests either. The model with the best fit is shown in figure 6. The logarithm of the cost of legality (L_{cl}) and the logarithm of educational quality (L_{edqua}) are used as regressors. Their significance is 1%. The coefficient of

determination is 0.5493, which indicates that 55% of the changes in corruption are explained by changes in the independent variables of the model.

In Table 7 the tests to validate the assumptions can be observed. The null hypothesis of normality and Ramsey and White tests are not rejected. Therefore, normality is assumed in errors, correct specification (there are no missing variables and the functional form is correct), and homoscedasticity (constant error variance). Also, the correlation between explanatory variables is less than 0.5, which supports the non-multicollinearity assumption.

Table 8 shows the functional forms, coefficients and elasticities calculated with the formula proposed by Gujarati & Porter (2010). In this sense, there is evidence that corruption is inelastic with respect to the cost of legality, which means that there will be changes in the former because of

TABLE 6. Econometric model (corri dependent variable)

| | COEFFICIENT | T STATISTIC | P VALUE |
|-------------|-------------|-------------|---------|
| Const | 642,761 | 3,409 | 0,0015 |
| L_{cl} | 29,7401 | 3,200 | 0,0027 |
| L_{edqua} | -112,519 | -4,012 | 0,0003 |

Source: own elaboration with support from the GRETL software.

TABLE 7. Statistical tests of the model

| TEST | NULL HYPOTHESIS (H_0) | P VALUE | INTERPRETATION |
|-------------------------------------|-----------------------------------|---------|---|
| Normality (Doornik-Hansen) | The error is distributed normally | 0,2024 | H_0 is not rejected, so error normality is supposed |
| Correct specification (Ramsey test) | Correct specification | 0,2284 | H_0 is not rejected, so correct specification is supposed |
| Homoscedasticity (White) | Constant error variance | 0,2700 | H_0 is not rejected, so constant error variance is supposed |

Source: own elaboration with support from the GRETL software.

TABLE 8. Result interpretation (explicative *corri* variables)

| X VARIABLES | FUNCTIONAL FORM | B COEFFICIENTS | ELASTICITY* | INTERPRETATION |
|-------------|-----------------|----------------|--------------------------|--|
| L_cl | Log-level | 29,7401 | $\beta_2(1/Y) = 0,5828$ | A 1 % increase in the cost of legality reduces corruption by 0,58% |
| L_edqua | Log-level | -112,519 | $\beta_2(1/Y) = -2,2053$ | A 1 % increase in educational quality reduces corruption by 2,20% |

* The formulas proposed by Gujarati & Porter (2010, p. 173) were used to obtain elasticity in lin-log models.

Source: own elaboration.

changes in the later, but in a smaller proportion if compared to changes in the cost of legality. On the other hand, corruption is elastic with respect to educational quality, which shows that a change in educational quality has an impact that is more than proportional in the reduction of corruption.

In other words, a 1% point increase in the cost of legality decreases the corruption index by 0.58%. Also, a 1% increase in the quality of education decreases corruption by 2.20%. Thus, countries that have decided to invest more on education and educational quality improvement programs could be building the foundations of their own development.

Conclusions

This paper explains how the cost of legality and the income level have an impact on corruption. In order to provide evidence, a variable called “cost of legality” is constructed with the following indicators: difficulty in starting a company; time spent by top executives on bureaucratic issues; time spent estimating and paying taxes and tax burden on salaries and profits. A regression is generated where the variable explained is the corruption index and the explanatory variables are cost of legality and income level (as expressed by per capita income, schooling or educational quality). The best fitting model uses the educational quality variable as an approximation to income.

It can be concluded that the cost of legality has an impact on the increase in corruption, but in an inelastic way. That is, an increase in the cost of legality has a proportionally less increase in corruption. On the other hand, corruption is elastic in terms of educational quality. In other words, an increase in educational quality reduces corruption more than proportionally.

When considering the evidence, it can be pointed out that corruption can be reduced significantly by diminishing unnecessary procedures,

speeding up the procedures required and reducing their costs. In other words, by decreasing the cost of legality. Regarding the income level, not much can be concluded, because it is a variable that cannot be easily modified. It can be said in this regard that the educational level provides cognitive tools and skills to overcome the difficulties that arise in terms of the procedures required to do business. That is, it is difficult to increase the income level, but the cost of legality can be reduced and tools can be provided for people to overcome these obstacles.

Corruption is no longer an issue managed from the internal politics of the states, as it is a priority for international organizations. This can be evidenced in the G-8 and the United Nations, which hold anti-corruption conventions. It is not an exclusive problem of developing nations, but one that extends to all parts of the world. In addition, the numerous scandals that have occurred globally affect different countries, for example, the Odebrecht case in Latin America, the Volkswagen pollutants emission tests in Germany or the Enron case in the United States. These events encourage academic initiatives so that the subject is studied and solutions are proposed to mitigate the impact of these practices. That is why this type of research tries to provide an initial approach to a topic that should be analyzed in greater depth.

REFERENCES

- Banco Mundial. (2017). *PIB per cápita*. Recuperado de: <https://datos.bancomundial.org/indicador/NY.GDP.PCAP.PP.CD>
- Bautista, O. (2005). *La ética y la corrupción en la política y la administración pública* (Tesis de maestría). Maestría en Ciencia Política en Iberoamérica, Universidad Internacional de Andalucía.
- Briseño, H., Mendieta, R., & Declé, J. (2014). *Corrupción y facilidad para hacer negocios. Un estudio*

- econométrico de panel a nivel municipal para México. En *Revista Economía & Política*, 19, 113-142.
- Coase, R. (1996). La naturaleza de la empresa (traducido del inglés, 1937). En O. E. Williamson, & S. G. Winter, *La naturaleza de la empresa. Orígenes, evolución y desarrollo*. México: FCE
- Del Castillo, A. (2001, segundo semestre). Fundamentos de la investigación empírica reciente sobre corrupción. *Gestión y Política Pública*. X(2), 375-402.
- Gherzi, E. (1998). El costo de la legalidad. En *Estudios Públicos*, 30, 83-110.
- Gherzi, E. (2006). Economía de la corrupción. *Cuadernos Cedice*, 73.
- Gujarati, D., & Porter, D. (2010). *Econometría*. México: McGraw-Hill.
- Hodgson, G., & Jiang, S. (2008, primer semestre). La economía de la corrupción y la corrupción de la economía: una perspectiva institucionalista. En *Revista de Economía Institucional*, 10(18).
- Huntington, S. P. (1968). *Political order in changing societies*. New Haven: Yale University Press.
- Instituto Mexicano para la Competitividad-IMCO. (2015). Índice de *Competitividad Internacional 2015. La corrupción en México: Transamos y no avanzamos*. México: IMCO.
- Jain, A. K. (2001). Corruption: The facts. *Journal of Economics Surveys*, 15(1).
- Klitgaard, R., MacLean-Abaroa, R., & Parris, H. (2000). *Corrupt Cities: A Practical Guide to Cure and Prevention*. Oakland, California: ICS Press and World Bank Institute.
- Leff, N. (1964). Economic development through bureaucratic corruption. En *American Behavioral Scientist*, pp. 8-14.
- Martín-Baumeister, B. (2014). La corrupción en el sector privado. *Revista Crítica*, 29-32.
- Morillo, A. (2009). La Corrupción, ¿problema social o político? *Revista Venezolana de Ciencia Política*, 36, 147-160.
- North, D. (1993). *Instituciones, cambio institucional y desempeño económico*. Chile: FCE.
- Sasia, P. (2014). Entender y combatir la corrupción en estos tiempos. *Revista Crítica*, 20-24.
- Transparencia Internacional. (2013). *Corruption perception index*. Recupero de http://cpi.transparency.org/cpi2013/in_detail/#myAnchor1
- Zakiuddin, A. (2001). *Corruption in Bangladesh. An analytical and sociological study*. Documento preparado para Transparencia Internacional, Bangladesh, Bangkok. Recuperado de <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan004881.pdf>