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THE PERCEPTION OF CORRUPTION

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Abstract

Corruption and corruption perception are cultural phenomena because they depend on how a society understands the rules and what constitutes a deviation. Indeed, it does not depend only on societies but also on personal values and moral vies. High levels of corruption perception could have more devastating effects than corruption itself; it generates a “culture of distrust” towards some institutions and may create a cultural tradition of gift giving. This study aims to assess the foundations of corruption perception while focusing on its commonalities and differences across societies by employing the 2004 survey carried out by the International Social Survey Program (ISSP).

Moreover, since the definition of corruption depends on social and cultural factors, the same is true for corruption perception. Therefore, the present research aims to find an answer to: (1) what are the individual characteristics that shape corruption perception?; (2) how important is the incidence of the country of residence in determining corruption perception?; and (3) is there a relationship between macroeconomic performance of a country and corruption perception?

Key words: corruption, microeconomic behavior, comparative research, public opinion, ISSP

JEL Classification: D73, K42, O57

Resumen

La corrupción y la percepción de corrupción son fenómenos culturales dado que dependen tanto de cómo una sociedad entiende las reglas, como de lo que constituye una desviación. De hecho, también depende de los valores personales y aspectos morales. Los altos niveles de percepción de corrupción puede tener efectos más devastadores que la corrupción dado que genera una “cultura de desconfianza” hacia algunas instituciones, que puede crear una tradición de pago de coimas. Este estudio tiene como objetivo evaluar los fundamentos de la percepción de la corrupción considerando tanto los aspectos comunes como las diferencias entre las sociedades mediante el empleo de la encuesta de 2004 llevada a cabo por el *International Social Survey Program* (ISSP).

Además, como la definición de la corrupción depende de factores sociales y culturales, lo mismo es cierto para la percepción de corrupción. Por lo tanto, la presente investigación tiene como objetivo responder las siguientes preguntas: (1) ¿cuáles son las características individuales que dan forma a la percepción de la corrupción?, (2) ¿qué tan importante es la incidencia del país de residencia para determinar la percepción de corrupción? y (3) ¿existe una relación entre el desempeño macroeconómico de un país y la percepción de corrupción?

Palabras claves: corrupción, comportamiento microeconómico, análisis comparativo, opinión pública, ISSP

Clasificación JEL: D73, K42, O57

1. THEORY AND PREVIOUS FINDINGS

The concept of corruption varies widely depending on societies and people. Behind it lie several contrasting strands of thought and language. In effect, social rules may vary dramatically from one culture to another and among people; while an action could be normal practice in a society; in a different one, it could be considered corrupt and the disposition to pay a bribe is influenced by moral views and values. Therefore, corruption perception is not the reflection of an absolute situation; it is a social phenomenon.

According to Nelken and Levi (1996), comparative research should not only be confined to seeking out what there is in common but also in understanding the many relevant differences in political and legal cultures. The first problem of any comparative research on corruption is arriving at a definition that lends itself to cross-cultural and cross-national research. In economic terms, there are several ways to define corruption. For example, Werlin (1973) characterizes corruption as the use of public office for private needs and Blackburn, Bose and Haque (2004, p. 5) consider public sector corruption as the “illegal, or unauthorized, profiteering by officials who exploit their positions for personal gain”. To emphasize governmental corruption, Shleifer and Vishny (1993, p. 2), define it as “the sale by government officials of government property for personal gain”. Pope (2000) asserts that corruption can take place where there is a combination of opportunity and inclination. Corruption can be initiated from either side of the transaction. Those offering bribes may do so either because they want something, they are not entitled to, and bribe the official to bend the rules, or because they believe that the official will not give them their entitlements without some inducements being offered. On the other hand, officials may refuse to serve clients unless a bribe is paid.

Given the previous definitions, we focus on a wide concept of corruption: the misuse of public office with the purpose of making private gains. This definition incorporates the notion of wrongly getting an advantage, pecuniary or otherwise, in violation of official duty and the rights of others.

Corruption perception differs from the level of corruption but the latter may influence the former. According to Rose-Ackerman (2001) low salaries and poor monitoring at the

public sector are not only incentives for corruption but also these facts hike corruption perception even when a corrupt action does not occur. The same is true when the bureaucracy is charged with allocating a scarce benefit to many individuals or when the costs imposed on the private sector by governments are high.

Furthermore, the fulfillment of rules implies several costs, the cost of a rule is a function of the time-loss and the information needed to fulfill it. One possible explanation for corruption is based on the fact that people may pay illegal and informal taxes (bribes) which allow them to avoid a rule, a penalty, etc. Consequently, rules and laws modify the decision-making process (Gherzi, 2006). These costs decrease the probability of behaving in accordance with the law. Corruption could also be interpreted as insurance. People buy this insurance when they bribe a government employee to protect themselves against costly rules. Therefore, people's attitudes toward bribes vary depending on their risk preferences; risk averters would be more likely to pay an insurance premium (a bribe) than risk-lovers (Svetozar, 1985).

Moreover, You and Khagram (2005) show that income inequality is a significant determinant of corruption. With the increased inequality, the rich, as a class or as interest group, can use lobbying, political contributions or bribery to influence law-implementing processes and to buy favorable interpretations of the law. Additionally, the authors argue that income inequality also influences corruption perception in the following way: if inequality is high, "the rich are likely to believe that corruption is an acceptable way of preserving their societal position as this behavior goes unpunished and social networks of corruption expand and people will more easily justify their corrupt activities as inequality increases". We expect that a greater level of inequality determines a higher level of corruption perception. Thus, we should find a direct empirical relationship between inequality and corruption perception, other factors being equal.

Regarding democracy, Montinola and Jackman (2002) find that political competition matters. It is posited to reduce corruption in two ways. First, monitoring public officials is easier with freedom of information, thereby limiting their opportunities for corrupt behavior. Secondly, the possible turnover of power implies that politicians cannot always credibly promise that particular laws and regulations will continue. This minimizes the size

of bribes that rent-seekers are willing to pay. In line with this, Rose-Ackerman (2001) asserts that a competitive electoral process can give politicians an incentive to reveal the untrustworthy behavior of their opponents and to be trustworthy themselves. She focuses on honesty and trust as they affect the functioning of the democracies and markets. As these are proofs of this relationship, we will focus on the satisfaction with the democratic system rather than the democracy itself.

Cábelková (2001) studies the incentives to take corrupt actions and she holds that this problem is affected by individual perception about corruption level and the authority's level of tolerance. This perception may affect both the demand and supply of corrupt actions. Consequently, corruption perception might facilitate or diminish the current corruption level.

In general terms, corruption perception has favored the growth of institutional instability and the deterioration of the relationships among individuals, institutions, and states. Moreover, the perception of economic corruption would have more devastating effects than corruption itself; it generates a ‘‘culture of distrust’’ towards some institutions.

Given the previous findings, we expect that several personal characteristics shape the perception of corruption at the micro-level due to the incidence of life-course adjustments, personal experiences, and the capability of assessing the information and dealing with rules (such as age, gender, education, marital status, etc.). Secondly, we hypothesized that the place of residence should be another determinant of corruption perception because it implies a different culture and traditions, judicial system types, geographic regions, institutional development, economic development levels, etc. The next section describes the data source and the methodology employed to shed light on this issue.

2. DATA AND METHODOLOGY

Our dataset is the module on Citizenship of the 2004 *International Social Survey Program* (ISSP).¹ The survey asks respondents for their opinions on a great variety of issues,

¹ More information is available on ISSP website: www.issp.org

including trade, migration, politics, taxes and corruption, as well as demographic and socio-economic information, such as age, gender, education, religiosity and others. Data was weighted by country size.

An ordered probit model aims at determining how individual characteristics affect the formation of opinions towards corruption. The dependent variable seeks to grasp citizen's corruption perception and uses the following question: *Taking into account your experience, how widespread do you think corruption is in the public service in [respondent's country]?* Table 1 shows the weighted frequency distribution of the answers to this question in the whole sample. This table shows that answers are concentrated in the category "a moderate number" (31 percent), however, more than 10% of respondents indicated that "almost everyone" had been involved in a corrupt action. The description of the variables is included in Table 2.

Insert TABLE 1 – Perception of corruption: distribution of answers to the question: *Taking into account your experience, how widespread do you think corruption is in the public service in [respondent's country]?*

Insert TABLE 2 - Description of independent variables: individual characteristics included in our ordered probit model

3. RESULTS

As could be seen in Table 3, the probability of perceiving the highest level of corruption, for the whole sample, is 4.25 percent. We compute the marginal effects and their standard errors after ordered probit model estimation. Rather than reporting coefficients, Tables 3 and 4 report the discrete change in the probability for each significant independent variable.

Insert TABLE 3 – Marginal effects after ordered probit model estimation (only significant characteristics)

We find a significant gender difference. In particular, women are more likely to perceive a higher level of corruption than men (the probability is up 0.40 percentage points). This result shows that although traditional gender roles and perspectives have been changing in recent decades, some influences remains.

Secondly, age plays no significant role; there are no significant differences among younger people, middle-aged people and the oldest group. Hence, regarding corruption perception there are no life course adjustments. It is often argued that more recent generations have been socialized in more 10 troubled situations and more impersonal environments. However, this may not affect corruption perception.

Thirdly, marital status matters; those people who are married (or live as married) tend to perceive a lower level of corruption than other people, the opposite is true for those who are divorced (the changes in probability are -0.3 and 0.9 percentage points, respectively). While it is possible to see a divorce as just another miscellaneous negative life event, Smith (1997) holds that divorce will have a distinct and especially strong negative impact on shaping judgments about life since it concerns broken commitments involving very close, interpersonal relationships.

We also find that the level of education has a relevant role in determining corruption perception. People who have completed, at least, secondary education are more likely to perceive a lower level of corruption. The fall in the probability is -1.0 and -2.6 percentage points, respectively. This result could imply that access to information and the capability to process it matters; more educated people have more information about the current level of corruption and better capabilities to process the information. Moreover, corruption perception decreases with socioeconomic status, the better-off people are materially and the higher their social standing, the more likely they are to view the world and other people in a favorable light.

Regarding religion and religiosity, findings indicate that there are no significant differences among religious groups and the same happens if we compare people who identify with some religious group and atheists. However, as there is no information available, we could not identify if there are a significant difference among those with fundamentalist beliefs,

which may emphasize the sinful nature of humans and a stern and authoritarian God, and others. On the other hand, the degree of religiosity does influence corruption perception, we found that attending religious services more often reduces corruption perception (the probability is down by 0.50 percentage points).

Concerning the labor market, the model shows that self-employed people tend to perceive a higher level of corruption (the probability increases 1.30 percentage points). It might be possible that this group of people is exposed to more incidents of corruption. The opposite is true for full-time workers who tend to perceive lower corruption (the probability reduces 0.20 percentage points). On the other hand, there is a significant difference among people who are unemployed and those who are employed; the former group of people is more likely to perceive a higher level of corruption (the increase in the probability is 0.6 percentage points). There are no significant differences among: (a) those who are retired and other people and (b) those people who belong to a union and other people.

Additionally, the sector of employment is a determinant of corruption perception. Those who are working in a private enterprise are more likely to perceive a higher level of corruption than those who are employed in the public sector. The probability increases by 0.90 percentage points. Connected with democracy, we find that those who have a favorable opinion of it are more likely to perceive a lower level of corruption. This variable has the most significant impact on corruption perception; when we change from someone who believes that the state of democracy in his/her country is not satisfactory to someone who has a favorable opinion, the probability reduces 6.9 percentage points.

Taking into account the place of residence, the model shows that there are no significant differences among people living in urban and rural areas. However, even this characteristic is not relevant; it is worth noting that all country dummies are significant. This result might mean that there are significant cultural and political differences that influence the perception of corruption. While most of them show a positive sign, a small group of countries registers a negative sign. We will explain this result later. Table 4 summarizes the information about the change in the probability of perceiving the highest level of corruption for each country variable.

Insert TABLE 4 – Marginal effects by country of residence

The average change in the probability is 7.78 percentage points, Chile registers a similar value (7.74 percentage points). The median change is 5.08 percentage points, Hungary and United States show impacts close to this value (5.82 and 4.34 percentage points, respectively).

The biggest impacts are found in Latin American (LA) countries: Brazil, Mexico and Venezuela. In these cases, the probability is up by 37.96, 25.74 and 25.05 percentage points, respectively. Moreover, the table shows that all LA countries are situated in the first half of the table; the change is higher than the average. In this group of countries, Chile and Uruguay register the lowest and almost identical impacts (7.74 and 7.71 percentage points, respectively). In the case of Asia, the same is true: all countries are found in the first half of the table.

On the contrary, in the case of the European Union (EU) the majority of countries are situated in the second half of the table; Portugal is the exemption. Similarly, Canada and United States, which belongs to America but with very different economic performance and cultural characteristics than LA countries, reach lower values (1.68 and 4.34 percentage points, respectively). Additionally, Anglo-settlement colonies (Canada, New Zealand and United States) fall in the bottom half as do the majority of rich countries.

Only in eight cases (out of 34) does the probability of perceiving the highest level of corruption decline: Switzerland (-0.23 percentage points), Norway (-0.36 percentage points), Cyprus (-0.42 percentage points), Netherlands (-0.45 percentage points), Great Britain (-0.61 percentage points), New Zealand (-0.65 percentage points), Finland (-0.88 percentage points), and Denmark (-0.93 percentage points). It is worth noting that all of these countries are developed and five of them belong to the EU.

Analyzing political characteristics, we find another clear pattern of behavior. The former Socialist states of Eastern Europe are located in the first half of the table in the following order: Poland (22.20 percentage points), Bulgaria (21.46 percentage points), Slovakia (17.08 percentage points), Slovenia (9.42 percentage points), Czech Republic (9.07

percentage points), Latvia (7.63 percentage points), and Hungary (5.82 percentage points). This result could be related to the past experiences of corruption at the governmental level than to present events.

Taking into account country size (measured by the population), we find that, in general, smaller countries are at the bottom of the table (Cyprus, Finland, Denmark, New Zealand, and Norway). Regarding others characteristics such as whether the country was a colony or the official language, we do not find a clear pattern of behavior.

Given our previous results, we assess whether there is a relationship among our ranking of countries and Transparency International's Corruption Perception Index, CPI (2004). We employ the Spearman's rank correlation test, which displays the correlation coefficients for selected variables. The null hypothesis established that the variables are independent.

We find that these country rankings are correlated (the null hypothesis is rejected at 1 percent) and that the correlation coefficient is high: -88.46. Even when it is high, the correlation is not perfect because these variables are not determined by the same set of independent variables. Figure 1 shows the dispersion between our ranking of marginal effects per country of residence and CPI.

Insert FIGURE 1 - Relationship between the corruption perception rankings

Insert FIGURE 2 – Interaction effect between GDP per capita and highest education (level 4)

Finally, we estimate two additional models in order to analyze the impact of macroeconomic environment and as expected, it is relevant. In particular, the probability of perceiving corruption falls if *GDPpc* is up and the interaction between it and education is also significant (and negative), but only for the highest level of education. Figure 2 shows that even when the interaction effect decreases as *GDPpc* increases, it is always positive. Moreover, macroeconomics stability also reduces corruption perception (higher inflation rate raises corruption perception). However, the interaction between this variable and the opinion on democratic system is not significant. On the other hand, inequality hikes

corruption perception: the higher the GINI index, the higher corruption perception. The biggest impact is found in the case of the GINI index (0.36 percent), followed by the inflation rate and *GDPpc* (0.16 percent and -0.06 percent, respectively).

4. CONCLUSIONS

This study's main contributions are three-fold and may be a factor of influence in identifying groups of people that are more likely to pay a bribe because they tend to believe that corruption is high and in designing focalized campaigns to influence on people's perceptions.

First, by employing a large and widely heterogeneous dataset, we present econometric evidence that verify our expected results. Findings indicate that personal characteristics play a relevant role in shaping corruption perception at the micro-level. While being a woman, being divorced, being unemployed, working at the private sector or being self-employed are positively correlated with the perception of corruption, being married, working full-time, attending religious services frequently, having completed higher secondary or above this level and having a favorable opinion on the way that democracy works in his/ her country have the opposite effect.

Secondly, new evidence is provided about the significant impacts of country-effects. While a better economic performance reduces corruption perception, macroeconomic instability and income-inequality have the opposite effect. Considering our ranking of countries, it could be shown that all LA and Asian countries are in the top half of the table and the same is true for ex-Socialist states and the majority of East Asian countries. People who live in these countries tend to perceive higher corruption than others do. On the contrary, the majority of European countries and Anglo-settlement colonies show lower changes than average (Portugal is the exemption) and ranked in the bottom half as do the majority of rich countries. Moreover, a eight countries registered a negative sign; all of them are relatively small countries, well to do and European countries (five of them belong to the EU).

Thirdly, we demonstrate that our ranking of countries is highly correlated with a well-known corruption index (CPI).

These results indicate that individual characteristics and social conditions are specific factors that influence on the perception of corruption. Findings shed light on the need for further research about the roles of culture, political context and other countries' characteristics as potential determinants.

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Annex - tables

TABLE 1 Perception of corruption: distribution of answers to the question: *Taking into account your experience, how widespread do you think corruption is in the public service in [respondent's country]?*

<i>Categories</i>	<i>Frequency</i>
Hardly anyone	4.45%
A small number	27.21%
A moderate number	31.04%
A lot of people	25.92%
Almost everyone	11.39%
Total	100%

TABLE 2 Description of independent variables: individual characteristics included in our ordered probit model

<i>Area</i>	<i>Variable</i>	<i>Values</i>	<i>Mean</i>
	Atheist	1 if respondent does not identify with some religious group	0.21
Religion and religiosity	Attendance at religious services	1 if the person attends religious services once a week or more	0.2
	Roman Catholic	1 if respondents religion is Roman Catholic	0.42
	Protestant	1 if respondents religion is Protestant	0.23
	Unemployed	1 if unemployed	0.06
	Retired	1 if retired	0.2
Labor market	Employed full time	1 if respondent is employed full time	0.44
	Private sector	1 if working in a private enterprise	0.54
	Self employed	1 if being self-employed and	0.17
	Union	1 if belonging to an union	0.22
	Education level2	1 if respondent is above lowest qualification	0.21
Human Capital	Education level3	1 if respondent has completed higher secondary or above this level	0.37
	Education level4	1 if respondent has a university degree	0.15
	Gender	1 being a woman	0.53
Other socio-demographic variables	Age18-39	1 if respondent's age is between 18 and 39 years old	0.39
	Age40-60	1 if respondent's age is between 40 and 60 years old	0.38
	Married	1 if married or living as married	0.58
	Divorced	1 if divorced	0.09
Others variables	Urban	1 if respondent lives in a big city, suburb or outskirts of a big city	-----
	State of democracy	1 if respondent places the state of democracy in his country among 5 to 10	0.77

TABLE 3 Marginal effects after ordered probit model estimation (only significant characteristics)

<i>Probability of corruption perception equals the highest level (corruption = 4) = 4.25%</i>	
<i>Variable</i>	<i>Marginal change (dy/dx)</i>
Self employed	0.013*** [0.003]
Private sector	0.009*** [0.002]
Positive effect	
Divorced	0.009*** [0.003]
Unemployed	0.006** [0.003]
Gender	0.004** [0.002]
Employed full time	-0.002* [0.002]
Married	-0.003** [0.001]
Negative effect	
Attendance at religious services	-0.005*** [0.002]
Education level3	-0.010*** [0.002]
Education level4	-0.026*** [0.003]
State of democracy	-0.069*** [0.008]
Pseudo R-squared	0.143

Notes: Sample size is 27,047

*p<0.01, **p<0.05, ***p<0.001

Robust standard errors in brackets

TABLE 4 Marginal effects by country of residence

<i>Country of residence</i>	<i>Marginal change (dy/dx), percentage points</i>	<i>Robust standard errors</i>
Brazil	37.96	0.010
Mexico	25.74	0.010
Venezuela	25.05	0.011
Poland	22.20	0.009
Bulgaria	21.46	0.013
Israel	18.21	0.012
Slovakia	17.08	0.009
Philippines	16.61	0.010
South Korea	9.69	0.007
Slovenia	9.42	0.007
Czech Republic	9.07	0.007
Portugal	7.89	0.007
Chile	7.74	0.007
Uruguay	7.71	0.006
Latvia	7.63	0.005
Japan	6.92	0.006
Hungary	5.82	0.005
United States	4.34	0.004
Canada	1.68	0.002
France	1.63	0.002
Ireland	1.54	0.002
Germany	1.53	0.002
Spain	1.29	0.002
Sweden	0.43	0.001
Austria	0.32	0.001
Switzerland	-0.23	0.001
Norway	-0.36	0.001
Cyprus	-0.42	0.001
Netherlands	-0.45	0.001
Great Britain	-0.61	0.001
New Zealand	-0.65	0.001
Finland	-0.88	0.001
Denmark	-0.93	0.001

FIGURE 1 Relationship between the corruption perception rankings

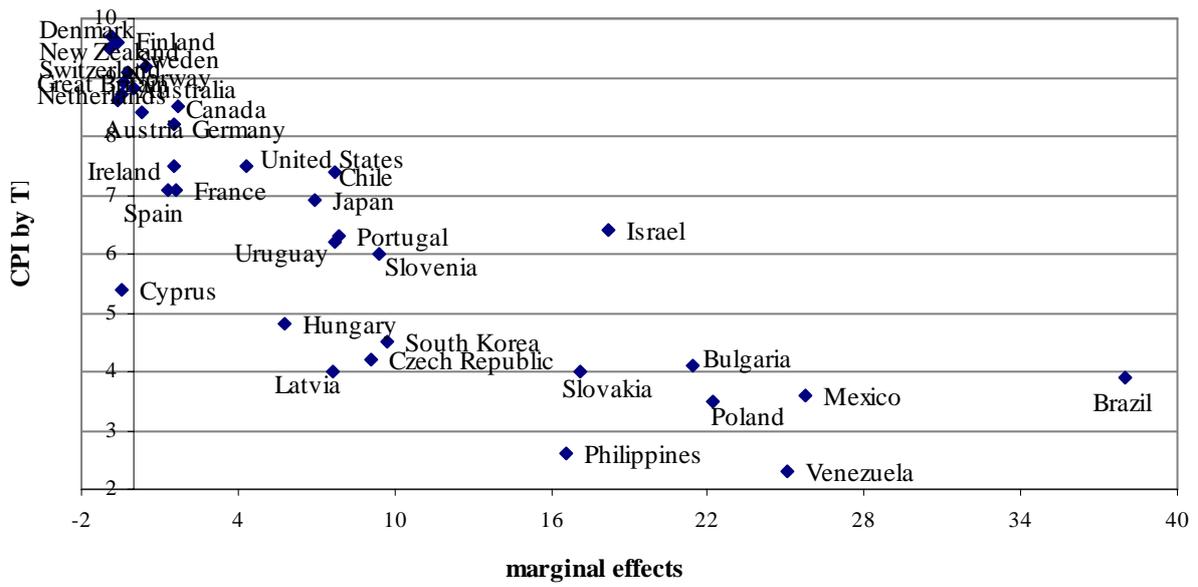


FIGURE 2 Interaction effect between GDP per capita and highest education (level 4)

