

Original Research

Roots of Administrative Corruption in Public Sector of Developing Countries

Mina Alavi¹ 

Assistant Professor, Department of Public Administration, Faculty of Management and Accounting, Islamic Azad University, Qazvin Branch, Qazvin, Iran

Seyedeh Laya Mortazavi 

PhD in Human Resource Management, Young Researchers and Elite Club, Islamic Azad University, Bandar Anzali Branch, Bandar Anzali, Iran

Abstract

What lessons does prior research on causes of corruption offer public administrators operating in, and researchers studying the dynamics of, public sectors of most governments developing societies? In this paper we summarize a voluminous body of prior economic, social and political science research that tells us about the roots of corruption in public sector of developing countries. Informing the analysis is a "review of reviews" of a sprawling research that examines six indicators: government size, oil revenue, democracy, quality of bureaucracy, rule of law, and human development; that are assumed to be major factors in increasing or decreasing the level of corruption in developing societies. We discern from this formidable body of research what is known about causes of corruption, what is left to know, and how useful the prior research could become panacea for encountering administrative corruption of developing countries. Finally, based on research findings, suggestions for future research are presented

Keywords: Administrative Corruption, government size, oil revenues, democracy, bureaucracy quality, rule of law, human development.

¹ Corresponding author's Email: mina.alavi65@gmail.com

Introduction

According to the Corruption Perception Index (CPI), over two-thirds of the 176 countries in the globe, fall below the midpoint of the scale of 0 (highly corrupt) to 100 (very clean). The global average score is a paltry 43, indicating endemic corruption in a country's public sector (Transparency Organization, 2016). Administrative corruption could be the outcome of mismanagement of a society's potential talents and resources that could result in socio-political failure and economic crisis in that society. Therefore, the fight against administrative corruption is an undeniable imperative for all governments. (Zadegan & Mohammad, 2004). In other words, administrative corruption is an obstacle for organizations to function effectively, and a main factor that ends up to removal of institutions from achieving their goals (Frisch, 1994; Igiebor, 2019). In fact, administrative corruption is like an infection that pollutes the body of the organization, its members one after another, and infects the spread of the corpuscular community (Kasasbeh, Mdanat, & Khasawneh, 2018). The corruption, particularly the political and administrative corruption has been discussed from different point of views. But, corruption literature, have dealt, more frequently, with the question of how to cure this social ills. Compared with the literature on the solution of this bureaucratic illness, there are less debates on the roots of administrative corruption and the context within which it will exist. Therefore, the main question of this study is "What are the roots of administrative corruption in public sector of developing countries?" If any of scholarly efforts on the subject is part of a puzzle, this study attempts to draw a general picture in order to combine different pieces of this puzzle. Therefore, this study aims at systematically reviewing recently published ISI articles on AC, to find out in what conditions administrative corruption increases and where it may be decreased?

Method

In this meta-analysis research we reviewed one hundred ISI articles that were published over a period of 1995 to 2022 in international journals. The databases searched included Scopus, Oxford, Cambridge, JSTOR, Springer, Science Direct, ProQuest, Elsevier, and Google Scholar. In addition to these known databases, the authors had access to a tool called Dialog Classic, which is a collection of many data-bases. The search included terms related to the administrative corruption (roots, causes, reasons, and effect factors). Theoretical sampling in sequential order was used to comparatively analyze the convergences and divergences, of the causes of corruption in the articles that provided an opportunity to select the articles in the next stage. In next stage we had access to articles containing roots and causes of corruption in public sector of developing countries. Then, by reviewing the selected articles we were able to extract the roots and causes of corruption from the texts, and identify the spectrum of opinions of scholars, their discussions and agreements and disagreements. It was at this point that we found the causes for corruption in developing countries, being measured by their frequency. These can be categorized into five factors: economic, political, bureaucratic, legal and social. In order to operationalize the five factors and set variables to be discussed in each concept, the authors received the views of the research committee's professors, and a number of experts from political science and economics departments of Science and Research Branch of Islamic Azad University. Summing up the comments in the second round of

panels of experts led to selection of six representative variables in the five categories. In the economic dimension, the size of government and oil revenues, in the political dimension, the democracy, in the bureaucratic dimension, the quality of bureaucracy, in the legal dimension, the rule of law, and ultimately in the social dimension, human development were identified as representing variables for each class.

Government Size & Corruption

Government size can be viewed as an important subject for study of the corruption, but, the causality and direction of these two construct may be two-sided. What are the logic and impacts of government size on corruption? There is no consensus among authors on the issue from theoretical aspect. The literature that has examined the relationship between these variables vary and represent different point of views.

Proposition 1: *The effect of government size on reducing corruption is dependent on the level of democracy.*

Kotera et al. study results of 82 countries (2012) found that an increase in government size can lead to a decrease in corruption if the democracy level is sufficiently high. Furthermore, their findings show that the greater the level of democracy, the more decrease in level of corruption. These results provide some important implications for policymakers seeking to perform government interventions without aggravating corruption. The focus of a study by Montinola & Jackman (2002) is about causal relationship between the size of government and corruption. According to their findings, public-sector size, by itself, does not foster corruption. They argue, the level of growth and political stability mediate this relationship.

In summary, the reviews findings, reveal that if democracy runs low, an increase in the size of government will increase the level of corruption. Conversely, there are studies that argue, increasing the size of government causes higher corruption in developing countries. In other words, the hypothesis is that, the larger the size of government and bureaucracy, the larger will be the number of bureaucrats, and the greater opportunities for them to be corrupt and demand bribes. The findings of several studies show that the overall size of the government budget relative to GDP is positively correlated with higher level of corruption (Rose-Ackerman & Palifka, Corruption and government: Causes, consequences, and reform, 2016; Mauro, The effects of corruption on growth and public expenditure, 2017; Gillanders, 2014; Goel & Nelson, 2021; dela Rama, Lester, & Staples, 2022; Jetter, Agudelo, & Hassan, 2015; Philp, 2017; Gründler & Potrafke, 2019; Husted, 1999; Mauro, Corruption and growth, 1995) (LaPalombara, 1994; Scully, 1991). Given the fact that an increase in the size of government, causes corruption, it is possible to conclude that a smaller government is desirable if the objective is to control corruption. It follows that an increase in the size of government will temporarily raises administrative corruption. As, (O'Donnell, 2001) state that the lesser government involvement in the economy, will lead to lower level of the corruption.

Proposition 2: *An increase in government size reduces corruption if economic development level is high.*

When governments are in periods of economic downturns, providing adequate government services to citizen is unlikely. So, those citizens or customers who demand public services might be tempted to bribe public officials in order to seize more public services. This may happens in another way. The government may be forced to lessen employee salaries to reduce its payroll costs. Indeed, in conditions that economy is booming, evidence show that the larger the public sector in terms of government expenditures, the lower the extent of corruption. The discussion is that public-sector size itself does not foster corruption. It has to be emphasized that corruption declines with increasing economic development, as reflected in GDP per capita. GDP reflects a number of factors, of course, but we have emphasized its substantial correlation with average wages, both private and public. Along with their intrinsic interest, the results for per capita GDP thus speak at least indirectly to part of the claim made for an effect of government size on corruption. The higher wages in both the private and public sectors associated with increasing GDP will reduce the incentives for corruption. In other words, wages would seem to be the critical quantity, not the sheer size of the public sector itself.

It appears from our analysis that corruption increases in periods of economy downturns. According to the study of (Li'an & Jing, 2009) corruption increases at economy downturn. They have used a panel data at the provincial level during the period 1989—2004. Applying a fixed-effect model and IV estimation, they found that government size positively affects the occurrence of corruption, and the effect becomes larger for the increase in the size of the "core" government sector. They also identified the significant impacts of the size and structure of government expenditures on corruption. Also, (Arvate, Curi, Rocha, & Miessi Sanches, 2010) found that increasing the size of government causes higher corruption in developing countries. Given the fact, there is a consensus on promoting good governance, the policy recommendations are all related to strengthening governments capacity to formulate appropriate policies regarding expenditures, revenues and reducing the "room" for corruption.

Oil Revenues & Corruption

Over the past decades, "huge oil revenues" have been considered as a major source of corruption in oil-rich countries. In countries where the main part of government income is earned from oil revenues and GDP growth depends on oil production, oil revenue and corruption, as well as the society's political structure, transformation and social condition are fundamental variables for analyzing the corruption phenomenon. Let us see what literature tells us about the connection of resource rents and corruption in rentier countries?

Proposition 3: *mechanisms through which resource rents affect corruption cannot be separated from political systems.*

In a study, (Arezki & Brückner, 2011) examined the effect of the interaction between resource rents and democracy on corruption for a panel of 29 Sub-Saharan countries during the period from 1985 to 2007. They found that higher resource rents lead to more corruption and the effect is significantly stronger in less democratic countries. They support their argument by documenting that higher resource rents lead to more (less) government spending in less (more) democratic countries. Also, Shaxson's study

(Shaxson, 2007) that was based on nearly 15 years' research into oil and politics in sub-Saharan Africa, and included interviews with numerous key players, explores the dynamics of the resource curse theory. Shaxson's conclusion support the argument of development theorists who are in favor of political rather than economic development, in developing societies. Further, the study of (Ross, 2008) represents that oil wealth often wreaks havoc a country's political system. He blames political leaders of developing countries for being indifferent to the advice offered by development specialists and adds that they are too busy profiting from corruption and crushing their opponents.

Understanding the interplay between political systems and resource rents is a matter of key importance for the design of risk management strategies to tackle corruption. As the authors commented so far, it is not advisable to separate the issue of resource rents from political systems when studying the evolution of corruption following a resource bonanza. This is because less democratic countries are able to dispense pork-barrel spending to disguise redistribution and quell the masses (Arezki & Brückner, 2011)

Proposition 4: *If the quality of democratic institutions is relatively low, resource rents will increase corruption.*

In a cross national study of 39 countries in a period of 1997 to 2013, (Mahdavi, 2014) asserts that the political institutions employed by states to govern their petroleum wealth, are responsible for much of the variation that are seen in corrupt outcomes. He argues not only political institutions do not matter for corruption — a long-held view in political economy, but those accountable to watch corrupt behavior, are themselves involved in the matter. The separate literature on political corruption has similarly shown that rent-seeking is exacerbated by or borne out of so-called “bad” institutions (Krueger, 1974; Rose-Ackerman, The economics of corruption, 1975; Buchanan, Tollison, & Tullock, 1980; Rose & Peiffer, 2019). In general, regulatory NOCs may facilitate corruption because these firms are staffed with political appointments (as opposed to meritocratic appointments), who not only have the opportunity to solicit bribes from contract bidders but also have little incentive or even knowledge to pick the “best” bidder on the basis of technical skill. In other words, these types of managers are more prone to bribery and extortion given not only their political connectedness but also their capacity as gatekeepers of oil licenses and lucrative contracts. Research's results of (Bhattacharyya & Hodler, 2010) confirm that the relationship between resource rents and corruption depends on the quality of the democratic institutions. They use panel data for 124 countries covering the period 1980 to 2004. In their study, various alternative measures of natural resources, corruption and the quality of the democratic institutions, are examined. The findings imply that democratization might be a powerful tool to reduce corruption in resource-rich countries. Brunnschweiler's study re-examines the effects of natural resource abundance on corruption, considering the role of institutional quality. The empirically significant relationship between institutional quality and resource dependence reflects that countries with poor institutions are unlikely to develop non-primary production sectors to reduce their dependence on resource exports (Brunnschweiler, 2008).

The results of several studies show that the relationship between resource rents and corruption will depend on the quality of democratic institutions. Rentier states, politically

tend to become authoritarian (Hammond, 2011), prevent democratization and political participation. Obviously, in such this system, the quality of democratic institutions is relatively low, and separation of powers and independence of the judicial system is nonexistent.

Proposition 5: *Government control over all aspects of the economy in resource-rich countries increases corruption opportunities.*

(Arezki & Brückner, 2011) by using panel fixed effects regressions and a new measure of country specific oil rents that is driven by cross-country differences in geology, examine the effects of oil rents on corruption for a panel of 30 oil-exporting countries during the period 1992–2005. They found that an increase in oil rents significantly increases corruption. They support their argument by documenting there is a significant effect of oil rents on corruption in countries with a high share of state participation in oil production. Also (Bardhan, 2017) indicate that the role of OPEC on corruption is noteworthy, because the state control of all aspects of the dominant sector of an economy does in fact increase the opportunities for rent seeking and corruption. Freed of the political constraints associated with direct taxation, political leaders have every incentive to engage in the politics of patronage, an environment in which corruption flourishes.

As economists argue the rentier states by restricting economic freedom, create opportunity to maximize their involvement in the economy.

Proposition 6: *In resource-rich and less democratic countries, political leaders, through mechanisms such as populist cost policy, convert natural resources to corruption in order to survive their political status.*

(Andersen & Aslaksen, 2013), in a sample of more than 600 political leaders in up to 152 countries, found that allocation and distribution of government income through populist cost policy is a means for the maintenance of undemocratic regimes. The authoritarian governments, which gains their revenues through resource rents, do not set up an effective tax system or alternatively, do not have much incentives to let other economic sectors to grow. Hence, political leader's legitimacy rest on widespread occupation. There are studies that suggest, leaders in developing economies, in the absence of property rights (individual or communal), eliminate "open access" conditions to natural resources and incentives for investment and long-term management of the resources (Badeeb, Lean, & Clark, 2017; Barbier, 2010). Also, in a study (Torvik, 2002) argues that people in this conditions try to obtain quotas or entitlements for access to natural resources rather than focusing on direct production. Intense competition to capture economic rents creates ample opportunities for corruption and can motivate people to offer bribes or government officials to solicit bribes.

Democracy & Corruption

Generally speaking, institutionalist literature especially in empirical terms – has focused on political factors as the main state- related factors for explaining corruption. To start with, there are numerous cross country studies dealing with the impact of the type of political regime on corruption: are democratic states less corrupt than authoritarian

ones? Contrary to , (Harriss-White & White, 1996) there seems to be a significant relationship between democracy and corruption, though it is a non-linear one. This non-linearity has been defined as either a U-shaped (e.g (Bardhan, 2017)), a J-shaped (e.g., (Bäck & Hadenius, 2008)), or an S-shaped (e.g., (Sung, 2004)) relationship.

Proposition 7: Corruption is reduced by establishing democracy

(Paldam, 1999) finds that there is a negative relationship between corruption and the level of democracy. He adds that since there is a strong interaction (vice-versa) between democracy and pattern of transition, therefore the independent effect of democracy on corruption is uncertain. But, (Akçay, 2002) has mentioned that more democratic nations are less corrupt because of two reasons. First, democratic regimes possess effective governance system, rule of law, accountability and transparency, whereas undemocratic regimes do not. Second, democratic regimes embraces those leaders who have political will to address corruption, create the environment in which civil organization can deal with corruption, and support anticorruption activities. Similar argument is put forward by (Shleifer & Vishny, 1993) who say that countries with more political competition have stronger public pressure against corruption – through laws, democratic elections, and even independent press – and so, are more likely establish organizations that reduce rather than maximize corruption. Therefore, they conclude that democracy is negatively related with corruption.

Comparative politics, tell us about the impact of classical distinction between majoritarian and proportional representation (PR) systems over corruption. In the PR systems, with the existence of large voting districts, democracy has a positive effect in controlling corruption. In the majoritarian systems that characterized by the number of MPs elected in a single district, democracy has the same positive effect on reducing corruption. Despite the fact that, in the both systems the relationship between variables do not change much, the individual accountability of MPs in majoritarian is lower than PR system. Thus, it is likely that in the latter, the candidates be more prone to engage in corrupt activities (De Vries & Solaz, 2017; Klačnja, 2015; Esarey & Schwindt-Bayer, 2018)

The relationship between democracy and Corruption could be moderated by variables such as “independent media”. (Bardhan, 2017) but (Jetter, Agudelo, & Hassan, 2015) state that the relationship between independent media and democracy is not statistically significant. As (Klačnja, 2015) state, the main reason that political freedom reduces corruption is that it imposes transparency and creates a balance in the political system.

In addition, as democratization process goes on, political stability is more pervasive for governments to fight corruption, so it's not surprising that writers like (Jetter, Agudelo, & Hassan, 2015), (Rose-Ackerman, Corruption in international business, 2018) and (Leite & Weidmann, 1999) found that corruption increases in unstable politics. Thus, while some argue that with the increase of democracy, corruption decreases, other scholars believe that corruption will increase in the early stages of democracy, and will be decreased as the political stabilization goes on (Jetter, Agudelo, & Hassan, 2015)

Bureaucracy Quality & Corruption

A growing literature, mainly in economics and political science, has highlighted the relationship between the quality of bureaucracy and corruption in developing societies. The lack of "bureaucracy quality" plays an important role in creation and spread of corruption. On other hand, the higher the quality of bureaucracy, the more possibility for corruption to diminish (Bardhan, 2017; Van Rijckeghem & Beatrice S. , 1997). Scholars and policy-makers agree that factors like "good governance", "state capacity", and "quality of government" foster social and economic development. Also researchers have argued that in highly inefficient government institutions where the level of meritocracy is low, the likelihood of corrupt activities to increase is high. (e.g., (Hall & Jones, 1999; Acemoglu, Johnson, & Robinson, The colonial origins of comparative development: An empirical investigation, 2001; Acemoglu, Johnson, & Robinson, Reversal of fortune: Geography and institutions in the making of the modern world income distribution, 2002; Easterly & Levine, 2003; Rodrik, Subramanian, & Trebbi, 2004))

Proposition 8: *The higher level of meritocratic recruitment the lesser level of corruption*

(Rauch & Evans, 2000) and (Dahlström, Lapuente, & Teorell, 2012) show that some bureaucratic factors, i.e. professionalism and meritocratic recruitment which are statistically significant deterrent of corruption, reduce corrupt activities. Their argument goes on to state that even other political and administrative factors such as the years of democracy or the type of electoral system, as well as employees' competitive salaries, carrier stability or internal promotion, compared to meritocratic recruitment, do not have much significant impact on reduction of corruption.

They argue that one way to reduce corruption is separating interests of bureaucratic agents from those of their political principals. This policy prevents opportunistic actions such as accepting bribes or organizing kickbacks to take place. The elected officials and professional bureaucrats may engage in corrupt behavior, but this requires coordination of actors with different interests. The premise is that, weakening the ties between politicians and bureaucrats diminishes the possibility of their collusion and increases the chances for both groups to reveal corrupt actions taken by the other group. (Frankel, 2014) argue the possibility of separation of interests between these groups can be occurred as a result of different source of their accountability. Politicians are accountable to their constituencies and higher civil servants are accountable to their professional peers or to the public at large. (Alesina & Tabellini, 2008) conclude, the separation of interest might be limited to parliamentary systems where the carrier of professional civil servant become independent from the carrier of political incumbents.

Proposition 9: *The low level wages of civil servant is a cause for corruption.*

There is a classical premise in the literature on bureaucracy and corruption which assumes that public servants low incomes is a main cause for corruption. Traditionally, the authors who study public servants' wages and penalties for corrupt behavior, tend to use cost-benefit analysis. Within this framework they apply cost-benefit analysis in which economic incentives – carrots and sticks – might be set so that public servants are not

tempted to engage in corrupt behavior (Becker & Stigler, 1974). Although, it needs much efforts to conduct empirical investigation over the incentives of public servants, it is assumed that their incentives can be affected by the amount of their wage and the probability of detection and the penalty they may receive for corruption (Ninepence, 2020). The study of (Ninepence, 2020) presents the first empirical estimation of the effect of civil service payments on corruption. First, they showed that theory is ambiguous on the relationship between civil-service payment and corruption. Then, they examined the issue using a new data set on wages for low-income countries. Their findings based on a cross-country averages presented evidence of a significant relationship st between relative civil-service payments. Also, the study of (Herzfeld & Weiss, 2003) that measured employees' wage-to-GDP ratios, suggest that wage increases, significantly reduce corruption. The effect of wages on corruption has been also highlighted by Evans and Rauch (Evans & Rauch, 1999) . However, other studies show that this relationship is not always statistically significant (Kuntz, et al., 2015; Dimant & Tosato, 2018)

Rule of Law & Corruption

Despite the disagreement over the definition of the rule of law and indicators to measure this concept, most of the studies have raised the question of whether civil servants are law abiding and stand the norms governing their formal responsibilities. This again raises the question of whether a country could enjoy a higher level of rule of law and yet facing a widespread corruption?. (Mendonça & Fonseca, 2012) show that corruption is inherently related with rule of law. It seems that most of developing societies sustaining serious corruption problems, have a very weak rule of law and law enforcement system (Igiebor, 2019)

Proposition 10: *A higher level of rule of law is associated with a lower level of corruption.*

The idea that a weak rule of law implies a high level of corruption is supported by (Leff, 1964) and (Huntington, 1968). Also, the World Bank considers rule of law as an important dimension of good governance and the essential means for controlling corruption. In brief, in countries where a higher rule of law exist, it is ensured that no one is above the law and thus the corruption may decrease much. As Herzfeld & Weiss's study (Herzfeld & Weiss, 2003), indicate, an effective legal system has been viewed as a key component in reducing corruption (see also (Rose-Ackerman, Corruption in international business, 2018; Van Rijckeghem & Beatrice S. , 1997))

(Mendonça & Fonseca, 2012) poses the question as whether there is a causal link between corruption and rule of law. They argue that the low level of rule of law in developing societies is associated with high level of corruption. The discussion focuses on politician's behavior whose success in elections depends on large sums of money that is acquired through illegal granting of state contracts to their friendly business partners. More than a few layers of society are involved and are affected by this trail of money. In the first place, politicians misappropriate public funds; and in order to protect themselves they intervene in the judicial process. Because of perpetual lack of rule of law, citizens' liberties and rights are not protected. Corrupt politicians require political appointees in government organizations to grant procurement contracts facilitate cheap sales of state

land and assets to their personal businesses or their family or friends' companies. The recipients of the contract reward the influential politicians with a generous commission. This side payment serves as party/campaign finance or enrichment (sometimes as large as half the contract—up to millions of dollars). They deliberately avoid targeted reforms such as, independent, powerful anti-corruption agencies; supervisory bodies to enforce public wealth declarations; civil service reform; electoral law reform; public procurement supervision and transparency. While the media and civil society may uncover these activities, and investigations and prosecutions may follow, most of the people involved in the exposed illicit transactions never receive punishment. The cases of corruption get dropped, or resolve without punishment and due justification. Politicians and their business partners intervene in the judiciary process in order to avoid punishment. This endangers principles of rule of law, separation of powers and independence of judiciary.

Human Development & Corruption

Human development is defined as “expanding the choices people have to lead lives that they value” (Programme, 2001) . Extending human capabilities through human resource development; such as good health and nutrition, education and skill training are choices that can be expanded. According to the Human Development Index (HDI) released by the United Nations Development Program, human development includes three vital aspects of socioeconomic development: health, education and living standards. HDI is based on three indicators, all of which are equal in weight (United Nations Development Program, 2001):

- Longevity, as measured by the life expectancy (at birth) index;
- Educational attainment, as measured by an index evaluating a combination of adult literacy (two-thirds weight) and the combined gross primary, secondary, and tertiary enrolment ratio (one-third weight);
- Standard of living and access to resources, as measured by an index calculating real GDP per capita in terms of purchasing power parity (PPP).

Although literature links human development and corruption, the causal relationship between these variables remains unclear. While many researchers support the decisive role of corruption in preventing human development indexes to improve (Akhter, 2004; Gatti, 2004; Leys, 2017; Mauro, Corruption and growth, 1995), some recent studies support a Vis versa relationship between them. (Zhang, Cao, & Vaughn, 2009). It seems corruption and human development has a dialectic effect on each other, which means they influence and are influenced by each other thus form a vicious cycle. (Anand & Sen, Human development and economic sustainability, 2000; Prados de la Escosura, 2015) . It is argued that targeted efforts to strengthen human development are necessary to break this vicious cycle and facilitate the process of combating corruption. First of all the human development constructs encourage the importance of economic power to improve the quality of life (Anand & Sen, Human development index: Methodology and measurement, 1993; Anand & Sen, Human development and economic sustainability, 2000). Human development increases the willingness and ability of individuals to monitor the corrupt practices to happen and the motivation for corrupt behavior.

Proposition 11: *Increasing the level of human development reduces the level of corruption.*

According to the study of (Husted, 1999), in countries with higher GNP per capita, the level of corruption is lower. This argument is based on the fact that governments are restricted by private party opposition and the fact that the more resources are more likely to reduce the incentive to get involved in corrupt practices (Cheung & Chan, 2008; Husted, 1999). Second, in countries with higher levels of human development, people are more educated and capable of monitoring and evaluating public behavior. The analysis of data collected from Uganda showed that better education was associated with better knowledge of the corruption reporting process. This, in turn, led to a reduction in administrative corruption and improved public service quality (Hsiao, Vogt, & Quentin, 2019). Similarly, (Cheung & Chan, 2008) by examining the Gross Enrollment data in education and Corruption Perceptions Index data, found that, increasing in the number of literate people will lead to a decline in corruption. Ultimately, by definition, a higher level of human development creates an environment that provides equal access to opportunities for people to exercise their freedom and maximize their potential (Ul Haq, 1995). As a result, increase in human development encourages more people to collectively seek social justice and enhance moral standards (Zhang, Cao, & Vaughn, 2009; Sen, 1999). Within such an environment, corruption is likely to be restricted. To conclude the above literature, which shows the link between corruption and income, education and free will, researchers have proposed the following statements: It seems countries with longer life expectancies, higher education and literacy, adequate salary, and the ability of citizens to participate in communities, the level of corruption is less likely to increase.

Conclusion

This study was conducted to examine a broad range of prior economic, social and political researches that were published in accredited international journal during a period of 1995 to 2022 on the roots of corruption in the public sector of developing countries. It examined the six concepts that linking to and influencing the administrative corruption: government size, oil revenues, democracy, bureaucracy quality, rule of law and human development. The results showed that though each of these concepts as independent variables, have measured the level of corruption, the corruption has been influenced by mediating and moderating variables as well. Given that combating corruption is essential for investigating the quality of governance in developing societies, this paper attempted to present what the previous studies have told us about the roots and causes of corruption, and the context (political, economic and social) in which it may exist. It aimed at presenting the gaps in the literature and where researchers need to focus in their future researches on the topic. The paper may present some idea or possible plan (policy advice) for policy makers to strengthen the government's capacity, and promote the institutional quality and democracy to fight back corruptive practices in developing areas. This goal might be achieved through a strong political will and by such a means like restructuring the state bureaucracy, rule of law and human development.

As to the limitations of this research, we have to note that in order to extract the causes of corruption in developing countries, the literature could not place the importance and priority of the five concepts that have affected the level of corruption in developing

societies. Also, the reviewers had to deal with the international and local statistics and data available to them at the time of enquiry, so, in order to determine the appropriateness of the above-mentioned indicators they had to consult with several social science academicians and professionals. Obviously, the generalizability of the findings requires more comprehensive research. Therefore, we suggest that this study be carried out using a longitudinal method and other research strategies.

References

- Acemoglu, D., Johnson, S., & Robinson, J. (2001). The colonial origins of comparative development: An empirical investigation. *American economic review* 91.
- Acemoglu, D., Johnson, S., & Robinson, J. (2001). The colonial origins of comparative development: An empirical investigation. *American economic review*, 91(5), 1369-1401.
- Acemoglu, D., Johnson, S., & Robinson, J. (2002). Reversal of fortune: Geography and institutions in the making of the modern world income distribution. *The Quarterly journal of economics*, 117(4), 1231-1294.
- Akçay, S. (2002). Corruption, democracy and bureaucracy: Empirical evidence from developing countries. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 4(1), 205-218.
- Akhter, S. H. (2004). Is globalization what it's cracked up to be? *Economic freedom, corruption, and human development. Journal of World Business*, 39(3), 283-295.
- Alesina, A., & Tabellini, G. (2008). Bureaucrats or politicians? Part II: Multiple policy tasks. *Journal of Public Economics*, 92(3-4), 426-447.
- Anand, S., & Sen, A. (1993). Human development index: Methodology and measurement. *Human Development Report Office Occasional Paper 12, United Nations Development Programme, New York*.
- Anand, S., & Sen, A. (2000). Human development and economic sustainability. *World development*, 28(12), 2029-2049.
- Andersen, J., & Aslaksen, S. (2013). Oil and Political Survival. *Journal of Development Economics*, Vol.100, No.1, 89-106.
- Arezki, R., & Brückner, M. (2011). Oil rents, corruption, and state stability: Evidence from panel data regressions. *European Economic Review* 55(7), 955-963.
- Arvate, P. R., Curi, A., Rocha, F., & Miessi Sanches, F. (2010). Corruption and the size of government: causality tests for OECD and Latin American countries. *Applied Economics Letters*, 17(10), 1013-1017.
- Bäck, H., & Hadenius, A. (2008). Democracy and state capacity: exploring a J- shaped relationship. *Governance*, 21(1), 1-24.

- Badeeb, R. A., Lean, H., & Clark, J. (2017). The evolution of the natural resource curse thesis: A critical literature survey. *Resources Policy*, 51, 123-134.
- Barbier, E. (2010). Corruption and the Political Economy of Resource-Based Development: a Comparison of Asia and Sub-Sahara Africa. *Environmental and Resource Economics*, Vol.46, No.4, 511-537.
- Bardhan, P. (2017). Corruption and development: a review of issues. *Political Corruption*, 321-338.
- Becker, G. S., & Stigler, G. (1974). Law enforcement, malfeasance, and compensation of enforcers. *The Journal of Legal Studies*, 3(1), 1-18.
- Bhattacharyya, S., & Hodler, R. (2010). Natural Resources, Democracy and Corruption. *European Economic Review*, Vol. 54, No.4, 608-621.
- Brunnschweiler, C. N. (2008). Cursing the blessings? Natural resource abundance, institutions, and economic growth. *World development*, 36(3), 399-419.
- Buchanan, J. M., Tollison, R., & Tullock, G. (1980). Toward a theory of the rent-seeking society. *Texas A & M Univ Pr*(No. 4).
- Cheung, H. Y., & Chan, A. (2008). Corruption across countries: Impacts from education and cultural dimensions. *The Social Science Journal*, 45(2), 223-239.
- Dahlström, C., Lapuente, V., & Teorell, J. (2012). The merit of meritocratization: Politics, bureaucracy, and the institutional deterrents of corruption. *Political Research Quarterly*, 65(3), 656-668.
- De Vries, C. E., & Solaz, H. (2017). The electoral consequences of corruption. *Annual Review of Political Science*, 20, 391-408.
- dela Rama, M. J., Lester, M., & Staples, W. (2022). The Challenges of Political Corruption in Australia. *the Proposed Commonwealth Integrity Commission Bill (2020) and the Application of the APUNCAC. Laws*, 11(1), 7.
- Dimant, E., & Tosato, G. (2018). Causes and effects of corruption: what has past decade's empirical research taught us? A survey. *Journal of economic surveys*, 32(2), 335-356.
- Easterly, W., & Levine, R. (2003). Tropics, germs, and crops: how endowments influence economic development. *Journal of monetary economics*, 50(1), 3-39.
- Esarey, J., & Schwindt-Bayer, L. (2018). Women's representation, accountability and corruption in democracies. *British Journal of Political Science*, 48(3), 659-690.
- Evans, P., & Rauch, J. (1999). Bureaucracy and growth: A cross-national analysis of the effects of "Weberian" state structures on economic growth. *American sociological review*, 748-765.

- Frankel, A. (2014). Aligned delegation. *American Economic Review* 104(1), 66-83.
- Frisch, D. (1994). The Effects of Corruption on Development, paper presented to the Africa Leadership Forum on Corruption, Democracy and Human Rights in Africa. *Cotonou, Benin*, 19-21.
- Gatti, R. (2004). Explaining corruption: are open countries less corrupt? *Journal of International Development*, 16(6), 851-861.
- Gillanders, R. (2014). Corruption and infrastructure at the country and regional level. *Journal of Development Studies*, 803-819.
- Goel, R. K., & Nelson, M. (2021). Direct and indirect influences of political regimes on corruption. *Social Science Quarterly*, 102(4), 1569-1589.
- Gründler, K., & Potrafke, N. (2019). Corruption and economic growth: New empirical evidence. *European Journal of Political Economy*.
- Hall, R. E., & Jones, C. (1999). Why do some countries produce so much more output per worker than others? *The quarterly journal of economics*, 114(1), 83-116.
- Hammond, J. L. (2011). The resource curse and oil revenues in Angola and Venezuela. *Science & society*, 75(3), 348-378.
- Harriss-White, B., & White, G. (1996). *Corruption, liberalization and democracy*. editorial introduction.
- Herzfeld, T., & Weiss, C. (2003). Corruption and legal (in) effectiveness: an empirical investigation. *European Journal of Political Economy*, 19(3), 621-632.
- Hsiao, A., Vogt, V., & Quentin, W. (2019). Effect of corruption on perceived difficulties in healthcare access in sub-Saharan Africa. *PloS one*, 14(8), e0220583.
- Huntington, S. P. (1968). *Political Order in Changing Societies* New Haven. *Yale Univ.*
- Husted, B. W. (1999). Wealth, culture, and corruption. *Journal of International Business Studies*, 339-359.
- Igiebor, G. S. (2019). Political corruption in Nigeria: Implications for economic development in the fourth republic. *Journal of Developing Societies*, 493-513.
- Jetter, M., Agudelo, A., & Hassan, A. (2015). The effect of democracy on corruption: Income is key. *World Development*, 74, 286-304.
- Kasasbeh, H. A., Mdanat, M., & Khasawneh, R. (2018). Corruption and FDI inflows: Evidence from a small developing economy. *Asian Economic and Financial Review*, 1075-1085.
- Klašnja, M. (2015). Corruption and the incumbency disadvantage: Theory and evidence. *The Journal of Politics*, 77(4), 928-942.

- Kramer, J., & Chen, J. (2010). Title of the Article. *Journal Name*, 3(2), 110-313.
- Krueger, A. O. (1974). The political economy of the rent-seeking society. *The American economic review*, 64(3), 291-303.
- Kuntz, K. D., Collado-Vega, Y., Collier, M., Connor, H., Cravens, T., Koutroumpa, D., & Walsh, B. (2015). The solar wind charge-exchange production factor for hydrogen. *The Astrophysical Journal*, 808(2), 143.
- LaPalombara, J. (1994). Structural and institutional aspects of corruption. *Social research*, 325-350.
- Leff, N. H. (1964). Economic development through bureaucratic corruption. *American behavioral scientist*, 8(3), 8-14.
- Leite, M. C., & Weidmann, J. (1999). Does Mother Nature corrupt: Natural resources, corruption, and economic growth? *International Monetary Fund*.
- Leys, C. (2017). What is the Problem about Corruption? In *Political corruption*, 59-74.
- Li'an, Z. H., & Jing, T. (2009). Government size, market-orientation and regional corruption: Evidence from the provincial level panel data. *Frontiers of Economics in China*, 4(3), 425-448.
- Mahdavi, P. (2014). Extortion in the oil states: Nationalization, regulatory structure, and corruption. *UCLA manuscript*.
- Mauro, P. (1995). Corruption and growth. *The quarterly journal of economics*, 681-712.
- Mauro, P. (2017). The effects of corruption on growth and public expenditure. In *Political corruption*, 339-352.
- Mendonça, H. F., & Fonseca, A. (2012). Corruption, income, and rule of law: empirical evidence from developing and developed economies. *Brazilian Journal of Political Economy*, 32(2), 305-314.
- Ninepence, A. M. (2020). The Risks that Should be Taken Into Account and Conditions that Needs to be Met before the Government Launches a Programme to Attack Corruption in the Civil Service. . *Acta Universitatis Danubius. Administratio*, 12(2).
- O'Donnell, G. A. (2001). Democracy, law, and comparative politics. *Studies in Comparative International Development*, 36(1), 7-36.
- Paldam, M. (1999). The Bigg Pattern of Corruption: Economics, Culture and the Seesaw dynamics. *University of Aarhus. Center for Dynamic Modelling in Economics. Working Paper, Working Paper*, 11.
- Philp, M. (2017). Conceptualizing political corruption. In *Political corruption*, 41-58.

- Prados de la Escosura, L. (2015). World human development: 1870–2007. *Review of Income and Wealth*, 61(2), 220-247.
- Programme, U. N. (2001). *Human Development Report*. United Nations Development Programme.
- Rauch, J. E., & Evans, P. (2000). Bureaucratic structure and bureaucratic performance in less developed countries. *Journal of public economics*, 75(1), 49-71.
- Rodrik, D., Subramanian, A., & Trebbi, F. (2004). Institutions rule: the primacy of institutions over geography and integration in economic development. *Journal of economic growth*, 9(2), 131-165.
- Rose, R., & Peiffer, C. (2019). The Impact of Corruption on Citizens. In *Bad Governance and Corruption*. Palgrave Macmillan, Cham., 127-144.
- Rose-Ackerman, S. (1975). The economics of corruption. *Journal of public economics*, 4(2), 187-203.
- Rose-Ackerman, S. (2018). Corruption in international business. *Zeitschrift für Wirtschafts-und Unternehmensethik*, 19(1), 6-24.
- Rose-Ackerman, S., & Palifka, B. (2016). Corruption and government: Causes, consequences, and reform. *Cambridge university press*.
- Ross, M. (2008). Blood Barrels-Why Oil Wealth Fuels Conflict. *Foreign Affairs*, Vol.87, No. 3, 2.
- Scully, G. W. (1991). Rent-seeking in US government budgets. 1900–88. *Public Choice*, 70(1), 99-106.
- Sen, A. K. (1999). *Development as Freedom*. New York: Oxford University Press.
- Shaxson, N. (2007). Oil, corruption and the resource curse. *International Affairs*, 83(6), 1123-1140.
- Shleifer, A., & Vishny, R. (1993). Corruption. *The quarterly journal of economics*, 108(3), 599-617.
- Sung, H. E. (2004). Democracy and political corruption: A cross-national comparison. *Crime, Law and Social Change* 41(2), 179-193.
- Torvik, R. (2002). Natural resources, rent seeking and welfare. *Journal of development economics*, 67(2), 455-470.
- Transparency Organization, I. (2016). *Annual Survey: Corruption Perception Index*. Retrieved from.
- Ul-Haq, M. (1995). *Reflections on human development*. Oxford University Press.

Van Rijckeghem, C., & Beatrice S. , W. (1997). Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption? *IMF Working Paper WP/97/73*.

Watson, J., Taylor, A., Haffman, T., Jorge, A., Sullivan, B., Chung, D., & Mahmood, A. (2009). *Title of the Book*. New York: Publisher.

Zadegan, A., & Mohammad, S. (2004). Administrative Corruption. *Publications Office of Cultural Research, First Edition. (In Persian)*.

Zhang, Y., Cao, L., & Vaughn, M. (2009). Social support and corruption: Structural determinants of corruption in the world. *Australian & New Zealand Journal of Criminology*, 42(2), 204-217.

<p>COPYRIGHTS</p> <p>©2022 The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.</p>	
<p>HOW TO CITE THIS ARTICLE</p> <p>Alavi, M., & Mortazavi, S. L. (2022). Roots of Administrative Corruption in Public Sector of Developing Countries. <i>International Journal of Management, Accounting and Economics</i>, 9(10), 669-685.</p> <p>DOI: 10.5281/zenodo.7331079</p> <p>URL: https://www.ijmae.com/article_160768.html</p>	