

# Diffusion and Adoption of Corruption in Developing Economies: Evidence from Ghana

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## Abstract:

**T**he present study investigates diffusion and adoption of corruption and factors that influence the rate of adoption of corruption in Ghana. In the current study, the diffusion and adoption of corruption and the factors that influence the speed with which corruption spreads in society is examined within Ghana as a developing economy. Data from public sector workers in Ghana are used to conduct the study. Our findings based on the results from One Sample T-Test suggest that corruption is perceived to be high in Ghana and diffusion and adoption of corruption has witnessed appreciative increases. Social and institutional factors seem to have a larger influence on the rate of corruption adoption than other factors. These findings indicate the need for theoretical underpinning in policy formulation to face corruption by incorporating the relationship between the social values and institutional failure, as represented by the rate of corruption adoption in developing economies.

**Key words:** Adoption, adoption rate, corruption, diffusion, innovation.

## I. INTRODUCTION

Corruption has been described as an uncontrollable epidemic in developing economies (Rose-Ackerman 2004), causing major loss, especially within the public sectors, creating a barrier for economic growth and development (Kaufman, Kraay & Mastruzzi 2005). Many studies have been done to examine corruption and its effects on economic growth of developing nations (Burgess, Hansen Olken, Potapov & Sieber, 2011; Peisakhin, 2011). The studies have focused the degree of corruption (Olken, 2009; Sequeira & Djankov, 2010); causes of corruption (Inglehart & Welzel, 2005; Banerjee, Hanna & Mullainathan, 2009); types of corruption (Olken & Barron, 2009; Sequeira & Djankov, 2010; Niehaus & Sukhtankar, 2010; Besley, Pande & Rao, 2011); and consequences of corruption (Olken, 2009; Ferraz, Finan & Moreira, 2010; Sequeira & Djankov, 2010).

A cursory consideration of previous researches on corruption suggest that extensive works have been undertaken to measure corruption in terms of types, magnitude, causes and effects. However, a key area of corruption that is under researched in the extant literature both theoretically and empirically is how corruption actually spreads in the social systems of economies. Most cross-national studies have indicated that corruption is in both developed and developing economies (Inglehart & Welzel, 2005). The current study concentrates on developing countries, in order not to introduce bias into the findings, since developed and developing countries have vastly different characteristics in terms of efficiencies of their socio-economic systems.

The current study focuses on developing countries alone, with particular reference to Ghana, excluding developed nations from the analyses, to evaluate how, and how fast corruption spreads in these countries, using Roger's (2003) product diffusion and adoption framework. The study is significant for four reasons: (a) The use of marketing concepts to the study of corruption expands the theoretical underpinning of the study of corruption into the marketing discipline. (b) Knowing the types, causes and effects of corruption alone is not enough for developing countries to deal with the challenge. Thus, knowing how and how fast corruption can spread can help to positively address not only the spread but also slow the speed of spread. (c) The five factors that influence rate of adoption of corruption would be appreciated and necessary policies put in place to discourage corruption and its consequential spread. (d) Appreciation of the degree of corruption should help deal with the speculation on corruption and to help government tackle corruption 'head on'.

## II. LITERATURE REVIEW

### *Diffusion and Adoption*

Roger (1983) defined diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 34) Other marketing theorists have defined diffusion as the process by which a new product, service or practice is communicated through a population in a specific market (Forlani & Parthasarathy, 2003; Deffuant, Hut & Amblard, 2005; Hafeez, Keary & Hanneman, 2006).

Empirical studies of the diffusion theory in various industries and countries have suggested that the rate of diffusion is influenced mainly by factors relating to product attributes ((Bulte, 2000). The studies attempted to investigate the time taken for a product, service or idea to be adopted by the population (Hafeez, Keary & Hanneman, 2006; Straub, 2009). Some marketing researchers have indicated that the rate of diffusion is influenced by factors such as innovation

attributes and opinion leadership variables (Goldsmith & Witt, 2005; Hafeez, Keary & Hanneman, 2006; Hassan Mourad & Tolba, 2010). Schiffman and Kanuk (2009) identified diffusion as a process by which innovations spread within a market. The framework of innovation adoption is critical to understanding consumer acceptance of new products, service, idea or process as explained by the theory of diffusion. Thus, adoption refers to the acceptance and/or use of a product, service or idea by the people for whom it was designed. Earlier, Rogers (1995) had concluded that innovation adoption might include the perceived attributes of an innovation, the voluntary nature of the decision to adopt it, and the channels by which an innovation reaches the adopter. This suggests that since corruption emanate from an idea to cheat the system, people will be corrupt depending on how attractive corruption seems to be. Also corruption is more likely to be a voluntary phenomenon rather than an instructional one. Again, the spread of corruption could be more intense if there are many existing loop-holes to facilitate the practice.

Despite emphasis on factors such as opinion leadership (Hassan Mourad & Tolba, 2010) and personal characteristics by some researchers as important determinants of adoption of an innovation, several researchers have supported the perceived attributes of the innovation itself, rather than the characteristics of the innovators as the strongest determinants of the adoption process (Schiffman and Kanuk (2009). In this connection, the five-factor diffusion attributes (Rogers, 1983) constitute a significant factor for product adoption. Therefore using the framework to study diffusion and adoption of corruption is appropriate.

### **Corruption**

One study identifies corruption as an act where power and/or position are misused, to create opportunities for exploiting or expropriating resources (Ahmed, 2004). Lipset and Lenz (2000) earlier described corruption as obtaining wealth or power through illegal practices, providing someone with personal gain at the public's expense. Corruption is found to violate societal standards and norms, and they are said to occur when there is an absence of accountability in society (Ahmed, 2004). As noted by Alemann (2004), corruption is a multi-faceted phenomenon, consisting of social decline, deviant behavior, logical exchange, perceptions, and shadow politics. In this connection, study of corruption can assume a multi-disciplinary approach, including the field of marketing, as in this article. Corruption may be defined as the abuse of public power for private benefit, whether political or administrative, and is one of the main problems faced by developing countries. Studies aver that corruption is more rampant in developing countries than in developed countries (Svensson, 2005).

Treisman (2003) identifies personal connections, the blending of economic and political power, profit opportunities as factors that bleed corruption. Inattention to reconstructing social institutions (Treisman 2003), and inadequate economic reforms (Broadman & Recanatini, 2000) have also been identified as promoting corruption because they can be used to serve the elite class' interests. This implies that while developing economies have resources and achievement motivation, access to these resources is restricted, which promotes corruption. Again, other studies associated corruption to lack of secular values (Inglehart & Welzel, 2005; Schwartz 2005). Previous studies have catalogued varying effect of corruption on the national economy. These studies have found corruption's negative impact on firm's (Samphantharak & Malesky, 2008; Sequeira & Djankov, 2010), government provision of goods and services (Olken, 2009; Ferraz, Finan & Moreira, 2010), and correcting externalities (Olken & Barron, 2009). Corruption is also found to negatively affect individuals of a nation (Hunt, 2007). Thus, examining corruption and its diffusion and adoption within the social system of Ghana is in the right direction because it could aid appreciation of how corruption spreads like epidemic disease, and the attributes that when better addressed could contribute to developing nations' effort to fight corruption.

### **III. THEORETICAL FRAMEWORK**

The Rogers' (1983) innovation diffusion framework identifies a process that an individual has to go through to acknowledge the favourability or otherwise of an innovation, which eventually influences his decision to adopt the innovation. In the process of adoption the individuals' decision to adopt the innovation may be reinforced or their minds about the innovation may change, leading to low or no adoption. Deducing from Rogers diffusion framework, communication channels as well as time and social systems underline the attributes of innovation adoption. In this study, an innovation is conceptualised as an idea, practice, or object that is perceived as new by an individual or any other unit of adoption. Rogers (1983) considered five attributes of innovation adoption: (a) relative advantage (b) complexity (c) compatibility, (d) trialability and (e) observability, as influencing the rate of diffusion of innovation.

The theory of diffusion and adoption has been used over the years in relation to product and service innovation (Roger, 2003) to explain how and why new ideas are adopted by consumers, institutions and cultures. It has become necessary in recent times however to use the concept of diffusion in relation to corruption in this sense. According to Rogers (2003) diffusion also refers to how and why certain practices are adopted by individuals, institutions and cultures over time (p.110). Thus using diffusion to study corruption in this current study is not out of context, as it rather conceptualises corruption into the realm of marketing, which is multi-disciplinary. In this sense diffusion may refer to the channels by which members of the social system become corrupt over time (Hassan Mourad & Tolba, 2010). The attributes or attractiveness of corrupt practices will explain their rate of diffusion (Roger, 2003). As indicated above, Rogers (2003) identified five attributes that influence that rate of adoption. *Relative advantage* here is measured in terms of economic, social prestige, convenience and satisfaction. Thus, the incentives and mandates to practice corruption serve to increase the relative advantage of the 'canker'.

**Compatibility** is the extent to which the corrupt practice is considered to be consistent with the person's values, past experiences and needs (Roger, 2003). Thus, the adopter's unique values and belief, how he has been punished or 'left of the hook' in his past corrupt practices and his present and future need may affect the rate of adoption of corruption. **Trialability** means a practice can be experimented in limited basis. The opportunity to experiment minimal corruption without any sanctions reduces the uncertainty to the potential adopter, and speeds up the rate of adoption. **Observability** explains how the results of a practice are seen by potential adopters (Hafeez, Keary & Hanneman, 2006; Hassan Mourad & Tolba, 2010). If the practitioners can see the results of corruption as attractive and less dangerous, they are motivated to communicate the idea to others and this increase the rate of adoption. **Complexity** is the degree to which adoption of a practice is seen as difficult to understand and engage in. If controls are weak and adopters can easily manipulate the system with ease at any little effort, corruption becomes simple and rate of adoption increases leading to increased corruption.

#### IV. RESEARCH PROBLEM

Studies on adoption abound just as studies on corruption also abound in the academic literature. However, synthesizing the two concepts in a single study is under researched. Many studies on corruption have attempted to investigate effects of economic and social factors on corruption in developing countries. In the same vain studies on adoption and diffusion of innovation have mainly been limited to product and services, leaving out ideas and practices in most cases. The lack of a synthesis study to applying the adoption framework to the study of corruption creates a gap in the marketing literature. Therefore this study intends to bridge this gap by examining the how, and the speed with which corruption spreads through the Ghanaian population, using the Rogers (2003) adoption framework. Considering the degree and level of increase of corruption in developing countries, as well as the respective governments' determination to fight corruption it is just appropriate for this study to be undertaken. This is because how corruption spreads in a social systems is as important as what causes corruption and even the consequences of corruption, if not more important.

#### Research Question/ Research Hypotheses

On the bases of the exiting literature reviewed and the problem of the research the purpose of this study examines the how, and the how fast is corruption diffused and adopted in the Ghanaian social system.

Using Rogers (2003) adoption framework attributes, the article finds answers to the following questions:

1) What is the perceived degree of corruption in Ghana?

Research question 1 is answered by testing one hypothesis

H1: There is relatively high level of perceived corruption in Ghana

2) How does Rogers (2003) diffusion framework attributes affect the rate of adoption of corruption?

In order to address research question 2, five hypotheses are tested.

H2: The nature of relative advantage of corrupt practices does speed up the spread of corruption in Ghana.

H3: The nature of compatibility of corrupt action does increase the spread of corruption in Ghana.

H4: Trialability issues relating to corruption does facilitate the spread of corruption in Ghana

H5: Observability attributes of corrupt deals does hasten the spread of corruption in Ghana

H6: The complexity involving corruption practices does increase the rate of adoption of corruption in Ghana

#### Analytical Investigation Procedure

The study adopted exploratory approach to probe more rigorously into respondents' perception of corruption. It is also causal because it examines cause-effect relationship attributes of adoption (*independent variable*) and the rate of adoption of corruption (*dependent variable*). Primary research forms the basis for data collection, with little emphasis on secondary data. This is because existing data on corruption is skewed and usually inconsistent. Measurement of perception is scientifically more reliable with primary data than secondary data. The study employs quantitative data collection method, where survey is conducted, using 5-likert scale questions. Likert scale questions are used to measure responses in a range rather than in discrete terms. The population of the study was made up of employees of the public sector. The choice of the sample unit is explained by the fact that corruption in public sector is more pronounce than the private sector. Secondly, public sector workers understand the social systems of their institutions, and can perceive corruption in those social and institutional frameworks better.

Using stratified and cluster sampling techniques, a total of two thousand (2000) public sector managers from Accra, Kumasi, Takoradi, Koforidua, Wa, Bolgatanga and Tamale were sampled for the study. The use of stratified sampling is to group respondents into different departments and agencies. Cluster sampling is adopted to divide survey participants into different geographic areas, which may have varying cultural and economic needs. The regional capitals chosen represent the scope of the study since they represent the whole institutional and cultural systems of the southern, middle and northern belts of the country. Respondents' profile of the study is analysed by frequency distribution technique, while perception of corruption and the factors affecting the spread of corruption were tested by One Sample T-Test. The sample t-test is statistical procedure used to examine the mean difference between the sample and the know value of the population mean. This method was used because there is perceived corruption in the public sectors of Ghana. The test would help to determine the significance of the hypotheses set for this study. The test statistic:

$$t = \frac{\bar{x} - \mu}{\sqrt{\frac{S^2}{n}}}$$

Where;

$\mu$  = Proposed constant for the population mean

$\bar{X}$  = Sample Mean

n = Sample size

$S^2$  = Sample Standard Deviation

## V. RESULTS

Out of the 2000 questionnaire sent out, 1296 were found to be useable for the purpose of the study after completion of responses. This represented a response rate of 64.8%. Regarding an acceptable response rate, Babbie (1990) quoted 60% as 'good' and 70% as very good. He further advised that interpretation of the adequacy of the response rate be placed in the context of existing literature for the type of study undertaken. Thus, in a study that relates to corruption, a 64.8% rate achieved is a good fit considering the above statement made by Babbie (1990).

### Demographic Details of Respondents

Tables 1 to 4 present findings on the demographic characteristics of the respondents of the current study, which include: gender, working experience with the public sector, particular sector of the public and the current designation of respondent.

Table 1 gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	830	64.0	64.0	64.0
Valid Female	466	36.0	36.0	100.0
Total	1296	100.0	100.0	

Table 1 show that 64% of the respondents were males while 36% were female. The findings indicates that there more men participated in the study than men, which was to be expected considering the relatively large men employment population in the public sector.

Table 2 work experience with organization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1 yr - 5 yrs	371	28.6	28.6	28.6
Valid 6 yrs - 10 yrs	413	31.9	31.9	60.5
Valid 10 yrs - 15 yrs	281	21.7	21.7	82.2
Valid over 15 yrs	231	17.8	17.8	100.0
Total	1296	100.0	100.0	

The table 2 above show that a total of over 70% of the respondents have worked with the public sector for six years or more. This suggests that respondents have considerable experience about what they say with regards to corruption in the public sector.

Table 3 public department/agency of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Ministries	518	40.0	40.0	40.0
Valid Revenue authorities	115	8.9	8.9	48.8
Valid Security services	171	13.2	13.2	62.0
Valid Education Institutions	294	22.7	22.7	84.7
Valid Financial institutions	83	6.4	6.4	91.1
Valid utility providers	115	8.9	8.9	100.0
Total	1296	100.0	100.0	

As indicated by the table 3, 40% and 22.7% of the responses were from staff of the ministry and education respectively. Since the ministries and the education sector constitute the highest in the public sector this actually represents acceptable data for the study's purpose

Table 4 respondent designation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid senior level officer	303	23.4	23.4	23.4
Valid middle level officer	528	40.7	40.7	64.1
Valid lower level officer	465	35.9	35.9	100.0
Total	1296	100.0	100.0	

From the table 4 above, respondents were 40.7% for middle level managers, 35.9% of lower level managers and 23.4% of senior level managers. Thus, considering the management structure of the Ghanaian public sector, the respondents were well distributed.

**Degree of Perceived Corruption in Ghana**

Table 5 presents One Sample T-Test results of corruption with the public sectors of the Ghanaian economy as perceived by the public.

Table 5 degree of perceived corruption in Ghana

	Test Value = 4.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
magnitude of corruption underestimated	-44.326	1295	.000	-1.647	-1.72	-1.57
more people engage in corruption than its known	9.375	1295	.000	.213	.17	.26
corruption permeates every aspect of public service	2.009	1295	.045	.050	.00	.10
corruption in Ghana is worse than other countries	-37.725	1295	.000	-1.314	-1.38	-1.25

From the above table 5,  $t(1295) = -44.33 - p(0.000)$  shows that majority of the sampled population agreed that there is an exaggeration of magnitude of corruption in Ghana. Again,  $t(1295) = 9.38 = p(0.000)$  indicates that it is significant (Agreed) from the sampled population that more people engage in corruption than its known. Furthermore,  $t(1295) = 2.01 = p(0.045)$  shows that it is significant that corruption permeates every aspect of public service; and finally, from the table  $t(1295) = 3.3 = p(0.000)$  is an indication that corruption in Ghana is worse than other countries. The response above shows that there is relatively high level of perceived corruption in Ghana. Thus hypothesis 1 is accepted.

**Attributes of Corruption Diffusion and Adoption**

Table 6 to 10 present the One Sample T-Test results of attributes of diffusion and adoption of corruption with the public sectors of the Ghanaian economy as perceived by the public.

Table 6 relative advantage

	Test Value = 4.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
too much attention to economic consideration	-13.631	1295	.000	-.430	-.49	-.37
less care about social prestige	-10.602	1295	.000	-.326	-.39	-.27
unchecked mandate of public officers	3.870	1295	.000	.092	.05	.14
too much incentive for corruption in the system	-4.522	1295	.000	-.132	-.19	-.07

From the above table 6,  $t(1295) = -13.63 = p(0.000)$  shows that many of the of the sampled population agreed that public sector workers give too much attention to financial consideration, which facilitate spread and acceptance of corruption in Ghana. Also,  $t(1295) = -10.60 = p(0.000)$  indicates that respondents believe that corruption spreads faster because majority of the public sector workers care less about their social prestige. Furthermore,  $t(1295) = 3.87 = p(0.000)$  suggests that unchecked mandate of public officers contribute significantly to the rate of spread corruption in Ghana. Finally, from the table above,  $t(1295) = -4.52 = p(0.000)$  is an indication that corruption spreads faster because there is too much incentive in the public system that encourage the menace. The response above suggests that relative advantage is perceived as a key contributing factor to diffusion and adoption of corruption in Ghana. Thus hypothesis 2 is accepted.

Table 7 compatibility

	Test Value = 4.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper

weak values and beliefs of officials	-12.436	1295	.000	-.390	-.45	-.33
failure to give tougher sanctions	13.961	1295	.000	.327	.28	.37
expectation to satisfy future needs	3.136	1295	.002	.077	.03	.13

As shown by table 7 above,  $t(1295) = -12.44 = p(0.000)$  shows that many of the sampled population agreed that the rate of spread and acceptance of corruption in Ghana is a results of weak values and beliefs held by public officials. Again,  $t(1295) = -13.96 = p(0.000)$  indicates that respondents are of the view that failure of regulators of public sector to give tougher sanctions to corrupt practices encourages the rate of spread of corruption. Furthermore,  $t(1295) = 3.14 = p(0.002)$  suggests that spread of corruption in Ghana is also influenced by public officers desire to have enough today to satisfy future needs. The findings above indicate that one of the factors that contribute to the rate of diffusion and adoption of corruption in Ghana is compatibility. Thus hypothesis 3 is accepted.

Table 8 trialability

	Test Value = 4.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
duties that involve inappropriate gifts	-8.848	1295	.000	-.252	-.31	-.20
success in minimal corruption become incentive for bigger ones	3.009	1295	.003	.073	.03	.12
communication of corrupt experiences with innocent colleagues	-5.317	1295	.000	-.142	-.19	-.09

From table 8 above,  $t(1295) = -8.85 = p(0.000)$  shows that many of the of the sampled population perceive inappropriate gifts to public officers as a root to spread of corruption in Ghana. Moreover,  $t(1295) = -3.01 = p(0.003)$  suggests that respondents agree that public officers who succeed in minimal corruption graduate to bigger corruptions, hence the rate of spread of this canker. Finally,  $t(1295) = 5.32 = p(0.000)$  suggests that the rate of spread of corruption in Ghana is fast because successful corrupt practicers openly communicate their experiences with innocent colleagues, thereby inculcating the desire in them. The results above suggest that observability, which the possibility of seeing corrupt practices actually contributes to the rate of diffusion and adoption of corruption in Ghana. Thus hypothesis 4 is accepted.

Table 9 observability

	Test Value = 4.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
corrupt subordinates learn from corrupt bosses	-8.637	1295	.000	-.254	-.31	-.20
anticipation of little or no danger for corrupt practices	-.429	1295	.668	-.011	-.06	.04
attractiveness corruption make more people wish to try	-4.078	1295	.000	-.109	-.16	-.06

As shown by table 9 above,  $t(1295) = -8.64 = p(0.000)$  shows that majority of the sampled population agreed that corruption spreads faster because subordinates often learn corruption from their corrupt superiors. However,  $t(1295) = -0.43 = p(0.668)$  shows that the spread of corruption in Ghana is not significant with anticipation of little or no danger for corrupt practices. This means people are not perceived to be corrupt because they fear no sanctions, but probably because other factors weight on the expected sanctions. Moreover,  $t(1295) = 4.08 = p(0.000)$  suggests that corruption spread faster in Ghana because the practice looks more attractive than punitive.. The findings above show that two variables used to measure observability were significant while only one was not significant. In view of this it can be aver from the results that observability is an important contributor to the rate of diffusion and adoption of corruption in Ghana. Thus hypothesis 5 is accepted.

Table 10 complexity

	Test Value = 4.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
the porous nature of the system bleeds corruption	-0.230	1295	.818	-.006	-.06	.05
the ease to manipulate the system give incentive for corruption	-2.302	1295	.021	-.059	-.11	-.01
control systems in the public service is not just working	8.203	1295	.000	.201	.15	.25

From the table 10 above,  $t(1295) = -0.23 = \rho(0.818)$  shows that the spread of corruption in Ghana is not in anyway related to a porous nature of the public system. This means even when there are control systems in place corrupt officials still go round these and cheat the system. On the other hand,  $t(1295) = -2.30 = \rho(0.021)$  indicates that the spread of corruption in Ghana is faster because of the ease to manipulate the system by public official. Furthermore,  $t(1295) = 8.20 = \rho(0.000)$  suggests that the rate of spread of corruption in Ghana is dependent on the failure of the control systems to work. The results above suggest that even though the spread of corruption is not a result of porous system, corruption however spreads because public official manipulate the system no matter how tight it is, and also this manipulation makes even controls fail to work. This means the public sector has less complex systems to curb corruption. Thus the study points to the fact that complexity is a key factor influencing diffusion and adoption of corruption in Ghana. Thus hypothesis 6 is accepted.

## VI. DISCUSSION OF RESULTS

The first research question was to measure the degree of perceived corruption in Ghana. The findings revealed that there is relatively high degree of corruption in Ghana as perceived by the public. The findings suggest that corruption in Ghana is even underestimated, and that more people engage in corruption than is even known by the public. Again, corruption is perceived to permeate all aspect of the public sector, while corruption is also perceived to be relatively worse in Ghana. The results suggest that corruption is a key ‘canker’ that retards the economic growth and national development of Ghana. This is consistent with the works of Burgess, Hansen Olken, Potapov & Sieber, 2011; Peisakhin, 2011) who found corruption as a factor which affect economic growth of developing nations.

The second question was to examine how Rogers (2003) diffusion framework attributes affect the rate of diffusion and adoption of corruption.

The findings of the study show that the five-factor attributes (relative advantage, compatibility, trialability, observability and complexity) were found to contribute to spread and acceptance of corruption in Ghana. Regarding relative advantage, the study identify too much attention to financial consideration, carelessness about social prestige of public officers, unchecked mandate of officials and incentive for corruption as factors that contribute to the rate of diffusion and adoption of corruption. This result is inconsistent with the work of Treisman (2003) who identified personal connections, the blending of economic and political power, profit opportunities as factors that bleed corruption. This means that the more we have people with low social standing or those who careless about their social standing, the faster the spread of corruption

The result also showed that as per the Rogers (2003) framework, the rate of diffusion and adoption of corruption is determined by compatibility. Weak values and beliefs of public officers, failure of regulators of the public sector to apply tougher sanctions and greediness on the part of public officers are the compatible factors that enhance the spread of corruption in Ghana. This result is in consistent with Inglehart & Welzel, 2005 and Narvey, (2005) who identified lack of secular values as a factor of corruption. Thus, as long as corrupt practices is compatible with people’s values and beliefs the practice will continue to spread at a faster rate

In connection with trialability, the study found that the practice of given and accepting inappropriate gives, success in smaller corruption that embolden people to try bigger corruption and regular communication of corrupt practices with innocent staff, encourage trial of corruption, which speeds up the diffusion and adoption of corruption. This result is consistent with Levin and Satarov (2000) identified inadequate economic reforms as promoting corruption. This means that the easier it is to try corruption without any policy reform the more likely it is for corruption to spread. Furthermore, the study indicates that rate of diffusion of corruption is influenced by observability. Innocent subordinates are tempted to learn from corrupt superiors, while succeeding corrupt practitioners communicate their experiences freely with colleagues who get attracted. The result is consistent with that of Levin and Satarov (2000) who aver that with inattention to reconstructing social institutions bleeds corruption. This suggests that as corruption becomes more obvious and tempting; the possibility is that more people turn to be corrupt hence the high rate of diffusion and adoption of corruption. Finally, the current study found rate of diffusion of corruption as being influence by complexity as an attribute of Rogers (2003) diffusion framework. In connection with complexity, the result showed that the ease with which workers can manipulate the system and failure of control systems in the public sector to work effectively are the

main causes of spread of corruption. The result is consistent with Ahmed (2004) who concluded that absence of accountability in society leads to corruption. Thus the less complex it is to manipulate the control systems, the faster the spread of corruption.

## VII. SUMMARY AND CONCLUSION

Using Rogers (2003) diffusion theory to study corruption, this current study has made a significant contribution to knowledge by applying concepts and theories in corruption into marketing to expand the frontiers of marketing theories. The study has also helped to appreciate the degree of corruption in the public sector in Ghana. Moreover, the results of the study have helped unearth the key factors that contribute to corruption in developing countries. Corruption in the public sectors is perceived to be relatively high; and relative advantage, compatibility, trialability, observability and complexity as attributes determining the rate of product diffusion is also applicable as factors that determine the rate of diffusion of corruption.

The current study recommends that, in order to reduce the rate of corruption, 1) Recruitment to the public sector must be based on integrity and honesty. Managers may have to do more background checks on new recruits to establish their integrity levels. 2) Employment policies in the public sector must include signing of bonds by staff to eschew corruption of any form. In this case workers might not even try smaller corruption let alone graduating to bigger ones. 3) People in position of responsibility must be given appropriate financial rewards so as to reduce attention to financial considerations and incentive to corruption. 4) Accountability of stewardship by people in positions must be strengthened with appropriate rewards and sanctions to discourage any desire for corruption. 5) Policies of public sector reforms must not only be a 'blue print'; it must be implemented and evaluated to check corruption.

The study used only Ghana to study corruption in developing countries instead of doing a cross country study. As such, it begs a question of whether the research findings are generalisable to other developing countries. Further research in such diverse contexts might be necessary to improve the understanding of the challenges relating to developing countries. As an exploratory study, the main purpose of this study was to examine the degree of corruption and factors affecting the rate of spread and acceptance of corruption. However, the study did not seek to provide an exhaustive list of effects and barriers of corruption. It is recognised that consideration of these factors might also present interesting issues in corruption studies. These factors might be considered in future research.

Again, the study used One Sample T-Test to analyse the factors affecting the rate of diffusion of corruption. Future studies may consider using Principal Component factor to do the analysis. Finally, data in this study were obtained from top, middle and lower level managers. It would be useful to obtain a broader sample from all adults or working public, perhaps even students who are of age in future studies so that any potential bias in the data resulting from the level of the respondents would be minimised.

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