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# The Way the Cookie Crumbles?

A Study of the Relationship Between Gender and  
Corruption in Ghana

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# Abstract

In the field of development economics corruption is considered a major obstacle to economic development. When opportunities to abuse power for self-interest are widespread, inequalities may become reinforced and democratic and economic development will be undermined. Empirical studies have found a negative relationship between gender and corruption implying that increased female participation lowers the level of corruption and that it could be used as an anti-corruption strategy. By accepting this relationship as a fact without further investigating the underlying mechanisms, simply increasing female participation as an anti-corruption strategy could fail.

Our intention in this thesis is to critically assess the relationship between a higher number of women in public office and lower levels of corruption in the public sector. We intend to investigate whether it is gender equality per se that has this effect or whether there are other underlying mechanisms such as the presence of networks, level of social trust and gender related differences in opportunities, expectations, level of power and risk aversion.

A sample survey was carried out within a number of governmental ministries to measure the attitudes, perceptions and behaviour of public officials. We also conducted several interviews and a natural field experiment to validate our results from the survey.

The result from our study is ambiguous, and our hypothesis about a gender effect and its underlying mechanisms cannot explain corruption. This could be due to imperfections in our survey questionnaire, experiment and interviews. Our conclusion that the relation between increased female participation and lower level of corruption cannot be verified, is however based on a large and diverse material. This gives our study support and further questions the idea that women have a positive effect on corruption.

# Abbreviations

ADF	African Development Fund
AG	Attorney General
CDD	Center for Democratic Development
CHRAJ	Commission for Human Rights and Administrative Justice
GACC	Ghana Anti-Corruption Coalition
GII	Ghana Integrity Initiative
GPRS	Ghana Poverty Reduction Strategy
HR	Human Resources
MOE	Ministry of Education
MOEN	Ministry of Energy
MOFA	Ministry of Food and Agriculture
MOFEP	Ministry of Finance and Economic Planning
MOH	Ministry of Health
MOI	Ministry of Interior
MOJ	Ministry of Justice
MOLNR	Ministry of Lands and Natural Resources
MOTI	Ministry of Trade and Industry
MOWAC	Ministry of Women and Children Affairs
NGO	Non Governmental Organisation
TI	Transparency International

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# 1 Introduction

According to a World Business Environment Survey (World Bank 2000), which studied private firms' perceptions, corruption is the main obstacle to operation and growth in developing countries. "*Corruption is the abuse of entrusted power for private gain*" as defined by Transparency International (TI), the most acknowledged NGO working on anti-corruption issues. This is a wide definition of corruption in a sense that it includes all kinds of possible actions that could benefit the person in a position of entrusted power, for example accepting and demanding bribes as well as nepotism. Corruption raises transaction costs, and obstructs establishment of firms as well as the obtainment of necessary permissions and licenses. This has negative effects on the investment climate and overall business performance. Corruption is also perceived to particularly constrain the performance of small and medium-size firms as well as favour the performance of state-owned firms (WBES, World Bank 2000). In addition to inefficient resource allocation in the private sector, corruption may also divert government expenditures and investments from welfare-enhancing programmes towards non-optimal projects. These are major obstacles to a country's economic development and by eliminating corruption and rent-seeking behaviour in the public sector, a country can optimize the resources available and thereby fully promote development.

When it comes to the research field focusing on the link between gender and corruption a number of studies have been influential. Dollar et. al. (1999) draw on findings in the social sciences which suggest that "*women may have higher standards of ethical behaviour and be more concerned with the common good*" (Dollar et. al. 1999:6). By using a corruption index which tries to capture the likelihood that high officials will demand bribes and the extent to which bribery is expected in different levels of government, their study shows that higher female representation in government is associated with lower corruption. Swamy et. al. (2001) also find that when comparing women and men's attitudes towards corruption by using the World Value Survey, which puts questions about hypothetical situations to women and men in both developed and developing countries, women are less likely to justify bribery. The relationship is consistent even when controlling for several other factors such as marriage, religion and education. (Swamy et al. 2001). On the contrary, Alolo-Alhassan (2007) finds that when men and women are exposed to the same opportunities to corruption; have access to the same kind of networks; and face the same expectations there will be no

significant difference between the sexes. Further studies argue that contextual explanations rather than gender explanations cause the relationship (Sung, 2003).

These puzzling but diverging empirical findings as well as the fact that several countries and NGOs have implemented policies based on these conclusions, makes it necessary to further investigate the relationship. Explanations based on possible socio-biological differences are too simplistic but due to the substantial evidence the relationship between gender and corruption should not be dismissed.

## 1.1 Objective

In the proposed study we intend to investigate the relationship between higher numbers of women in public office and lower levels of corruption in the public sector. We want to critically assess whether it is gender equality per se that has this effect or whether there are other underlying mechanisms such as the presence of networks, level of social trust and gender related differences in opportunities, expectations, level of power and risk aversion.

The hypotheses that we intend to study are:

- *Women have a greater level of generalized trust whereas men have a greater level of particularized trust, which causes gender differences in corruption.*
- *The longer time in public office employment the more corrupt behavior.*
- *Women and men have different levels of power and therefore different opportunities to abuse their position.*
- *If a network is pro-corruption both men and women will be corrupt.*
- *Women are less corrupt since they are excluded from corrupt networks.*
- *Women are less corrupt than men because women's networks differ in character from men's networks.*
- *Women are less corrupt than men because they are more risk averse since they feel a stronger responsibility for the family.*
- *Women are less corrupt since they are expected to be less corrupt.*

## 1.2 Method

In our research design we chose to collect the data through a sample survey. This method allows us to pose questions which directly or indirectly relate to our hypotheses which thereafter can be constructed into variables in our data analysis. To complement the



questionnaire we interviewed a number of the respondents and carried out a smaller natural field experiment.

### *Sample survey*

In our selection of institutions we chose to collect the data from officials within governmental ministries with a total of 216 observations. A study of officials in more service-oriented institutions, such as the Ghana Police Service, would perhaps have given a different result as these have direct contact with citizens and are perceived to be the most corrupt institutions. However, the focus of our study was rather to capture the level of corruption on a higher level in the bureaucracy in which policies are directly implemented and government budget is distributed.

The selection was thereafter partially based on which ministries we regarded to be most important for growth and economic development and since we also aimed at having a variation in the level of corruption among the ministries chosen, we chose ministries that we, based on our prejudices, expected to be more or less corrupt. Within the first category we chose the Ministry of Finance and Economic Planning (MOFEP), Ministry of Trade and Industry (MOTI), Ministry of Food and Agriculture (MOFA), Ministry of Education (MOE), and within the second category we chose the Ministry of Lands and Natural Resources (MLNR), Ministry of Energy (MOEN), Ministry of Interior (MOI), and Ministry of Health (MOH). Out of a total number of 21 ministries in Ghana we studied 9.

A sample which includes a number of different ministries is optimal since these are similar in structure but differ in the distribution of women and men. In this case the effects caused by differences in gender equality would be easier to disentangle from other structural effects on the level of corruption. Thus, in the choice of objects of study we excluded stereotypical male or female ministries, such as for example the Ministry of Women's and Children's Affairs and the Ministry of Defense, since these presumably would have had a biased gender distribution which could affect the results.

The questionnaire we used was constructed from our hypotheses and we tried to figure out how these could be formulated into questions. The document was thereafter thoroughly examined not only by our supervisors at LU but also by Dr. Alolo-Alhassan University of Birmingham two researchers at University of Cape Coast, Dr. Vijay Bhasin and Prof. Mansah Prah, as well as the executive secretary at TI's local chapter, Ghana Integrity Initiative (GII) Vitus Azeem. Before the questionnaires were distributed, we made a smaller pilot study where seven copies were distributed at the Ministry of Women and Children's Affairs

(MOWAC). The pilot study helped us improve and modify our questions so that they were not misunderstood and gave varying responses.

When it comes to the sample selection itself we aimed to achieve an as equal distribution between men and women as possible and also distribute the questionnaires evenly in the different levels in the hierarchy. The practical distribution of the questionnaires was carried out with the help of mainly the human resources director in each ministry, who also granted us the permission to undertake our study, and their assistants. This of course can be argued to have compromised our sample selection since we ourselves did not control which respondents were selected. On the other hand the help we got from these assistants and directors enabled us to distribute a larger number of questionnaires than expected since they had the advantage of knowing whom to target and their authority probably made sure that we got the questionnaires filled in properly. In one ministry where we personally approached our subjects and handed out the questionnaires, with written permission from high authority, we were often met with suspicion and unfriendly attitudes and the work collecting the filled-in questionnaires was time consuming. That sample was not randomly selected either since those who filled in the questionnaires were most friendly and willing to answer the questions, which probably affected the result to some extent as well.

Due to the sensitivity of the subject there is a high probability that people may feel uncomfortable responding to a survey about corruption and therefore under-report their actions. Respondents tend to give a more socially desirable response. A sample survey like ours could consequently contain inaccurate data, when the respondent either believes in the inaccurate statement about his/her behaviour or perception, or deliberately embellishes the answers (Alolo-Alhassan, 2006:181). To reduce social desirability bias to the extent possible we did not mention the word corruption in our encounter with officials or in the introductory letter of the questionnaire. To further eliminate this dilemma the respondents were guaranteed anonymity and the questionnaires were self-administered (Alolo-Alhassan, 2006:182). Even though the questionnaires were filled in without our presence as interviewers or observers we cannot know for certain what role and influence the HR director and assistants might have had.

In the analysis of our survey data we must also mention the potential of inaccurate data due to the central tendency bias which is the result of respondents avoiding extreme categories. When we consider both these tendencies, central tendency bias and social desirability bias, we can conclude that when it comes to the most direct questions about corrupt behaviour, for example “How often would you accept a payment, gift or a favor to

perform a certain task of your duties?”, a majority of the respondents answered never. This raises the suspicion that the social desirability bias is stronger than the central tendency bias which makes it even more interesting to study those who actually answered something different.

### *Interviews*

In order to obtain a deeper knowledge of the respondents’ attitudes and behaviour we interviewed a handful of them. We made seven interviews with both men and women in different positions. The interviews were carried out by both of us where one was responsible for taking notes while the other focused on posing the questions and could register details such as the interviewees’ body-language. With the questionnaire as the basis we had the same starting-point for all the interviews while at the same time we could freely elaborate the questions from the interviewee’s response. In addition we also interviewed experts from organisations working with anti-corruption which gave us good background knowledge of the corruption situation in Ghana. The organisations were; Ghana Anti-corruption Coalition (GACC); Commission for Human Rights, and Administrative Justice (CHRAJ); Centre for Democratic Development (CDD); and Ghana Integrity Initiative, (GII). We also complemented our research with reports and surveys made by these organisations as well as from the Ghana Statistical Service.

### *Cookie Experiment*

The design of our experiment was inspired by Pruckner and Sausgruber (2008) who made an experiment on newspaper purchasing in order to examine the honesty on the streets. This experiment was used to give validity to our survey by indicating how honest people are in the workplace.

A small table was put up inside the ministries on which we placed a cash-box and snacks such as fried plantain chips and cookies. On the table and cashbox were also clear signs attached asking passers-by to “Pick and Pay, each item 50 pesewas”. The table and cash-box, were put in place by our Ghanaian assistant and left unwatched during the time of the experiment. The experiment was placed somewhere in the ministry where many employees would pass by, such as a corridor or at a landing step or elevator. A staffroom or cafeteria would have been ideal but did not really exist within the building. By the end of the workday we collected the experiment in order to count the items and the money in the box and see how many cookies had been taken and how much money had been paid. If the money in the cash-

box represented the value of the items taken, it would indicate that people had been honest and paid for the cookies. If there were more cookies missing than there was money in the cash-box, it would indicate that there was a culture in the workplace of people expecting to get things for free, or that taking snacks from the jar without paying was acceptable as long as no one detected it. Our experiment was thus an attempt to examine how honest the payments were and to use that as an indicator of how honest the behaviour was in general at the workplace under investigation.

We very soon encountered problems with conducting the experiment as we were forced to ask for permission to put our table in the ministries. This did not only lead to delay of our time plan but most importantly meant that one person, at least, would know the intention behind the experiment, and considering the lack of discretion, the crowded office spaces, and many interrupted conversations we had with officials, our guess is that word might have spread. The delayed time plan meant that we could only carry out experiments in six (out of nine) ministries and during two days in each ministry. A longer time frame would have allowed us to carry out the experiment during a longer period and also in all of our ministries studied. The short time of the experiment was definitely a shortcoming since people were not used to either having snacks sold in the buildings or this kind of payment system. In many places the turnover of the snack sales was very low but that would probably have increased if the table was in place for a longer period of time.

The experiment had other drawbacks since we could not control for if the “buyer” or “thief” was employed within the ministry or is a visitor. We tried to avoid this by not placing the table directly by the entrance or reception. Neither can we know if the person was a man or woman, so our explanatory variable gender equality must be estimated by using the gender distribution within the ministries tested.

Due to its flaws the experiment and its results are to be seen as an indication of honesty and only as a complement of the other measures of attitudes towards corruption and dishonest behaviour from the survey and our interviews. Even though the scientificity of the experiment can be questioned; we however found people’s reactions and thoughts about the experiment to be the most interesting part. The reaction of more or less everyone we spoke to about the experiment was. “If no one is watching, then people will just take the cookies without paying”. Interesting was then that it was only very few who did not pay.

### *Data Analysis*

When analysing the data we both looked at the percentages of the different answers as well as mean values and standard deviation. We also used regression analysis to determine relationships that would support our hypotheses.

In the regression analysis we used corruption as the dependent variable and gender or gender equality as explanatory variable.

$$\text{Corruption} = \alpha + \beta(\text{Gender})$$

We first made a scatter plot of an aggregated measure of corruption perception and corrupt behaviour by using the mean values from the different ministries, as well as the results from the experiment, as three different dependent variables and the gender distribution as explanatory variable. Since the number of observations in this case was very small, 6-8 ministries, we continued with using the whole data set and every individual as an observation in the regression analysis. That gave us a sample size of 216 observations. In that case we used one measure of corruption perception and one measure of corrupt behaviour as the dependent variable and a gender dummy as the explanatory variable. We then extended the equations with the other explanatory variables such as networks, trust, power and risk aversion etc.

The measures for corruption, both perception and behaviour, networks and trust were calculated by using the mean value of the individual's answer in two or three questions. If the number of answering alternatives differed between the questions these were recoded to calculate a mean value

We used the Ordinary Least Squares, OLS-method to do the regressions and we expected the assumptions of the classic linear regression analysis and the Gauss-Markov theorem to be fulfilled which means that the estimated parameters are linear, unbiased and have the lowest variance of all the linear, unbiased estimators (BLUE, Best Linear Unbiased Estimator). (Gujarati, 2006: 113, 212-214).

To control that the assumptions were fulfilled we performed some different tests. First we looked at the residuals in a histogram to see if they were normally distributed. In some cases, when using the corrupt behaviour as the dependent variable, the residuals were not normally distributed, the Jarque-Bera value was around 300 instead of 0 as preferred. We tried to correct that by using the logarithm of the variable instead but that did not make any difference for either the results or the distribution of the residuals. The fact that the residuals were not

normally distributed affects the validity of the results and should therefore be taken into account.

We also plotted the residuals to make sure that they looked as if they had an expected value of 0 and a constant variance. We also performed tests to see if we could detect problems with heteroskedasticity. In some cases there were problems with heteroskedasticity and to correct for that we used Whites' robust variance-covariance matrix to see if the inference was affected of the heteroskedasticity (Westerlund, 2005:168). To make sure that there was no problem with multicollinearity we made a correlation table for all the variables to see how correlated they were. The few which were correlated were expected to be so and thus we did not have any problems with multicollinearity. Also the  $R^2$  values were not very high which they would have been if there was multicollinearity.

We used Dummy-variables for gender in two ways, both as an intercept-dummy and as an interaction-dummy where we expected that the gender could have that effect. We also tested to use a dummy for the different ministries to see if the workplace made any difference for the results.

## 2 Previous studies

In this section we present previous studies within the field. First we present studies that find evidence that women are less corrupt than men and in the second section we present studies that criticize the mentioned relationship.

### 2.1 Women as an Anti-corruption Strategy

The World Bank has presented the report *Engendering Development* (2001) that emphasizes the importance of increasing gender equality as an objective per se, since that will improve the living standards and political and human rights for women the world over. In addition to that, the report also discusses the positive spin off effects that increased gender equality will have on development. For example one chapter discusses the positive effect that increased female representation has on the governmental quality. Women are assumed to bring different politics to the agenda and also the report alleges that increased women's participation will reduce corruption and improve governmental quality (World Bank, 2001:92).

In the article *Gender and Corruption* Swamy et. al. (2001) present empirical evidence that women and men have different attitudes towards corruption, that women managers are less involved in bribery and that countries with higher gender equality have lower levels of corruption. First they present the results from the World Value Survey which collects information about the attitudes and values of people in both developing and developed countries, both in 1981 and in 1990-1991. For a majority of the countries and throughout the survey women tend to have a less accepting attitude towards corruption. The article continues with an enterprise survey in Georgia where managers were asked if they had contact with or made illegal payments to different agencies. Firms owned and managed by women paid bribes on 4.6% of the occasions of contact compared to 12.5% for firms owned and managed by men. Further the article presents the results from a cross country study on the macro level where a graft index, similar to the CPI index from Transparency International, constructed by Kaufman et al. (1999) is used as the dependent variable. As explanatory variables Swamy et al. (2001) have used the proportion of women in the parliament, the share of women as ministers and top-ranked bureaucrats and the share of women in the labor force. All the variables as well as an index over the three variables are statistically significant and positive; higher proportion of women gives a higher ranking in the graft index. (Swamy et al. 2001)

Whether the relationships found by Swamy et al. (2001) and Dollar et al. (1999:6) are real or spurious have been questioned by for example Sung (2003), but there are several reasons why it might be real. The explanation could lie in the context, where more liberal and egalitarian societies are more likely to promote gender equality and are more likely to have institutions and social norms that control for corrupt behaviour. Gender equality and corruption will then seem to have a negative relationship. There could also be a difference in behaviour between men and women for which the reasons could be several. That women and men react differently in different social and economic situations could stem from gender differences in schooling, experiences, access to information and expectations among other things. The question is whether after controlling for these factors the difference in behaviour still remains (World Bank 2001:93).

## 2.2 Is it Really the Women?

In the article "Fairer Sex or Fairer System? Gender and Corruption Revisited", Sung (2003) criticizes both the results found by Swamy et al. (2001) and Dollar et al. (1999) and argues that the relationship between gender and corruption is spurious and would be insignificant if the political system was controlled for. According to Sung, both the two other studies make inference across different levels of analysis. They use micro-level data to construct hypotheses on an aggregate level which implies a risk for aggregative errors. Then they also use macro-level data to make inference about individual behaviour. This kind of cross-level thinking has often proved to be misleading and despite that, Swamy et al. and Dollar et al. state probabilistic hypotheses and make policy implications from their findings. (Sung 2003)

Instead Sung argues that it is liberal democratic institutions and social norms that increase female participation in government and restrain corruption, which are not causally related to each other. The author concludes that encouraging female participation is an objective in itself but it will not be effective as an anti-corruption policy. Instead, "*the best antidote to systematic corruption is the strengthening of political, economic, and civic mechanisms that promote competition, transparency and accountability in both the economy and government decision making.*" (Sung, 2003:718)

Also Alolo-Alhassan (2007) criticizes the results of Swamy et al., among others, that increased participation of women should reduce the level of corruption. She questions whether the integration of women works as an anti-corruption strategy in environments with corrupt opportunities, networks and a societal context where corruption is tolerated.



According to Alolo-Alhassan (2007) individuals with greater access to or opportunities for corrupt behaviour will be more likely to engage in corruption than those without the same opportunities, regardless the sex of the actor. She also argues that societal expectations of and from public servants influence the individuals' corrupt behaviour. If members of the social community expect and accept certain roles of the public servants such as nepotism, the public servants may feel obligated to fulfill the roles expected of them. The author does a sample survey that studies the attitudes of public servants in Ghana at the Ghana Education Service and the Ghana Police Service to obtain empirical evidence that if corrupt opportunities and networks are present, the argument that women are less corrupt will not hold (Alolo-Alhassan, 2007).

The results from the study show that there are no significant differences in the attitudes of men and women when they are exposed to the same kind of opportunities for corruption, networks and social obligations that are permitting and/or expecting corrupt behaviour. (Alolo-Alhassan, 2007)

In the article "Political Cleaners: Women as the New Anti-Corruption Force?", Goetz (2007) also criticizes "the myth of women's lesser propensity to engage in corrupt activity". (Goetz, 2007:88) "The myth" about women that now qualifies them for public office is the same myth that previously kept women excluded from the public life, namely that women are more honest, caring and have more sexual integrity and that they lack the principles of impartiality and universality which makes them ill-equipped for rational debates. The author argues that gender does not determine individuals' reactions but instead that gender shapes opportunities for corruption. The article examines how the women were recruited into and treated within institutions of public life in order to investigate not just their access to but also their means of access and the nature of the institutions in which they function. The author argues that the explanation that more liberal systems both promote gender equality and discourage corrupt behaviour is contradicted by the low level of women in office in liberal, transparent and open democracies such as the US and Canada. The fact that women are relative newcomers to public office and that their recruitment to and treatment within the institutions differ from men's experience, could be the reason why they have less opportunities for corruption and thus are engaged in illegal activities to a lesser extent than men. There are findings suggesting that when there were a larger number of women in a sector or office the women did bend rules for their own advantage and when dealing with female clients women were not averse to accepting bribes. Women are less corrupt than men because; 1) the ways in which they are recruited to public office and powerful positions limit

their opportunities for corruption because they lack access to male patronage networks and because of the sexual danger that it implies, and 2) in the cases when women do act less corruptly in social and economic situations this depends on their short time in office, lack of knowledge of how the system works and how to take advantage of their position or their eagerness to prove themselves worthy. These effects will however disappear with time and with increased number of women in office. (Goetz, 2007).

# 3 Theoretical Framework

Below we present a theoretical framework to be used in this study and eight different hypotheses that we intend to investigate.

## 3.1 Social Trust

The fact that many developing countries experience lasting and often increasing levels of poverty is explained by the lack of functioning institutions in economic theory and other social sciences. According to the discourse on social trust, ineffective institutions are not able to function in such a way that social trust can be established in the society (Rothstein, 2003:34). Effective institutions are defined by Williamson as institutions that manage to bring transaction costs down to a minimum (Rothstein, 2003:5). Transactions costs arise as part of economic interaction to establish and maintain contracts (Rothstein, 2003:35). The supply of goods in exchange for future payment and the decision to invest, which relies on the assurance that government would not expropriate the savings, are both examples of transactions that need be cemented in contracts (Knack & Keefer, 1997:1252). Where institutions are corrupt, officials realise the gains from transactions and will thereby induce higher costs for individuals who will abstain from entering contractual arrangements and doing business (Rothstein, 2003:35).

The theoretical discussion of trust is based on the wider concept of social capital. Putnam, whose work on the subject has been one of the most influential in the literature, defines the concept of incorporating a behaviour of participation in voluntary organisations, a function that enables individuals to trust others as well as a norm of reciprocity (Rothstein, 2003:97). Putnam, who studied the effects of a decentralisation reform in Italy in the 1970s, found that the level of voluntary association could affect how well democracy functioned at the local level (Rothstein, 2003:80). Joining an association would create social capital in the sense that people gain trust in other people in society. This also had positive effects on economic growth. However, Knack and Keefer's analysis found a connection between trust and "civic cooperation" and economic performance but the positive effect on economic growth due to associational activity showed no proof of correlation (Knack & Keefer, 1997:1252). The notion that social trust and social capital stem from the level of voluntary association is rejected by other authors as well; Rothstein and Uslaner argue that the explanation lacks

empirical evidence (Rothstein & Uslaner, 2005:47), Rothstein argues that the causal relationship can be considered as circular. As pointed out by Rothstein, trust in others could also explain why people join voluntary associations in the first place (Rothstein, 2003:95). Rothstein further claims that Putnam's definition is too wide and also problematic due to relations between the different explanatory parts (Rothstein, 2003:97).

Instead Rothstein and Uslaner make a distinction between different types of trust; *Particularized trust* – people have faith only in their in-group, connected to social strains as each group looks only to their own interest.

*Generalized trust* – bond that people share across society, economic and ethnic groups religions and races (Rothstein & Uslaner, 2005:45).

Rothstein and Uslaner further write that corruption is based on loyalty to the in-group (Rothstein & Uslaner, 2005:53). This implies that those individuals who possess particularized trust will thus be more corrupt. In our discussion of social trust within the subject area gender and corruption the concepts of *particularized* and *generalized trust* are of relevance. When considering the different nature of these types of trust, where particularized trust refers to faith and loyalty towards members within the in-group which see only to the group's interest, and generalized trust that stretches across different groups in society, the ways in which they function could be applied to the different kinds of networks that men and women belong to. Depending on the types of relations in the different networks, where men tend to belong to old-boys networks and women to a larger extent join voluntary associations of a more formal character, they grow different types of trust. Therefore we hypothesize the following;

- *Women have a greater level of generalized trust whereas men have a greater level of particularized trust, which causes gender differences in corruption.*

## 3.2 Power

Power corrupts. As Levine and Moreland write, power gives the holder control over resources and a possibility to influence others (Levine & Moreland, 2006:185). "Exchange-oriented" individuals in positions of power act in self-interest, according to Chen, Lee-Chai and Barghs findings, whereas "communally oriented" holders of power act altruistically (Chen, Lee-Chai & Bargh, 2001)

Keltner, Gruenfeld and Anderson define power as "the capacity to alter others' states by providing resources and administering punishments", which in formal situations can involve

giving “*financial opportunities, contacts and referrals or access to decision making*” to others, or by punishment “*demoting them or terminating their employment*” (Keltner, et al. 2003:267). In positions where the opportunities for rewards are many and the probability of being evaluated by others is low, a person with power is aware that one can act in self-interest without serious consequences and will detect potential rewards quicker than a low-power individual (Keltner, Gruenfeld & Anderson, 2003: 269). Without power an individual lacks access to resources and is more sensitive to social threats and punishment (ibid).

As well as the fact that low-power individuals lack access to resources they might also lack experience due to shorter time of employment and knowledge about the organisational culture. Swamy et al point out that it could be that women have less “*individual and collective experience in the labour force*” and have therefore “*not learned how to engage in corruption*” (Swamy et al., 2001:36) The longer time employment the greater the personal connections and network at the working place. So the longer the time of employment the greater the opportunities for corrupt behaviour. With time the employee learns how others act and when the probationary employment period is over the employee is more prone to be corrupt.

- *The longer time in public office employment the more corrupt behaviour.*

Women further have less access to higher level positions. The informal old-boy’s networks tend to promote men for higher executive posts. As Goetz writes the “*personalized or dynastic leadership*” and the “*patronage system*” in many political systems, enable only women to get to leadership positions via personal relations to powerful men. For women without the right connections, these systems undermine their participation (Goetz, 2007:97). This type of power abuse is called nepotism and is one kind of corrupt behaviour. If the same mechanisms work in public office, women will not have access to the same positions and will therefore not get the same opportunities. Goetz emphasizes that there are obstacles to female employment in public bureaucracies as well. This is not only apparent in developing countries and is particularly a problem at senior level (Goetz, 2007:99). Through interviews in Bangladesh, Goetz found out that women in senior positions felt they had been placed in “*unattractive*”, “*gender stereotyped*” positions with limited prospects for promotion since they were unwilling to “*curry favour with*” men in senior positions or bribe senior bureaucrats.

- *Women and men have different levels of power and therefore different opportunities to abuse their position.*

### 3.3 Networks

Another reason why women are less corrupt than men that has been touched upon might be that women are not engaged to the same extent and in the same kinds of networks as men are.

Networks could be defined as a set of actors and a set of ties that represent some relationship between the actors. In organisations networks usually involve contacts with work colleagues with the purpose of mutual work benefits. It can also be more informal and involve personal favors, persuasion and connection with people that have influence in order to gain personal or professional advancement. (Wang, 2009).

The various forms of networks can be divided into three types: formal, informal and community based. Formal networks are usually professional organisations that require memberships, have affirmed rules and require members to engage in networking activities. Informal networks consist of personal relationships between likeminded individuals that meet to discuss common interests and concerns. Community based networks are more broadly based organisations with a common interest such as religion or sports (Wang 2009).

Lin (2001) argues that individuals engage in networks to earn a profit, not only for the pure joy of it. She explains that social networking is beneficial in four different ways: information, influence, social credential and reinforcement. i) networks are an information broker which facilitates the flows of information from those with access to those that need to know; ii) social bonds may influence individuals with power to act in a way that favors those without power and who rely on them in order to improve their position; iii) those in powerful positions act as social credentials for those who seeks employment or entry in other organisations or institutions; and iv) social relations reinforce the identity and status of the members within a social community or group (Lin, 2001, Alfred 2009).

Much literature about corruption points out the effects that different kinds of networks have on institutional quality and level of corruption. The effects can be positive in that social networks are said to enhance the social capital and the trust between people, but it can also be negative since rules and behaviour within networks can be permitting and also promoting corrupt behaviour. As Hellsten and Larbi (2006) point out, the difference between the public and the private good will become more diffuse for people that belong to some kind of social network, since the common good of that network will be more important than for example the nation's good for the members (Hellsten & Larbi, 2006). Manzetti and Wilson (2007) also argue that if the institutional quality is low, corrupt governments may survive because they are able to buy off voters through clientelistic networks. Networks can thus promote corrupt

behaviour since the individual will want to give favors to other members in the same network, either of social responsibilities for that group or to make personal gains. Our hypothesis is thus:

- *If a network is pro-corruption both men and women will be corrupt.*

There should not be any difference between men and women if they belong to the same kind of network. However women are often excluded from male networks, especially if women constitute a minority group at the workplace. It is often through these kinds of old boys' networks that corruption functions, and if women are excluded from them they will not get the same opportunities for that kind of illegal behaviour. This is also the case in politics where women who have gained political power laterally, for example by an inheritance from a male family member. If the institutional quality is low the political power is determined by personal networks which the woman in the political position lacks access to since she has not gained power by rising from the bottom (Goetz, 2007). According to Goetz (2007) this would change if the gender inequality is reduced and more all-women networks are established, and when women take the top leadership positions that enable them to illegally use the networks for their gain instead. That would mean that when women have caught up in building networks there will be no gender difference in corruption. This leads us the next hypothesis:

- *Women are less corrupt since they are excluded from corrupt networks.*

There might also be a difference in the type of networks that men and women build which can be another reason why women tend to have a less corrupt attitude. According to Putnam (1995) networks can be both bonding and bridging. The bonding function reinforces the common values, cultures and group homogeneity whereas the bridging function offers linkages to external actors and other networks. Women's networks do usually have a good bonding internally within the network but often lack the bridging function. (Alfred, 2009) Also women's networks are characterized by having greater homogeneity, stronger ties, smaller size and less power than men's networks (Wang, 2009). Because of the lack of access to men's networks women more consciously build their own networks that are more formal and publicly visible compared to the informal old boys' networks. Because women often occupy lower level positions the members in their networks will be individuals with less powerful positions which makes their networks less powerful than men's (Alfred, 2009).

The difference in the type of networks might explain the difference in corruption between men and women. Networks that are more formal and publicly visible ought to have more internal rules and to be more transparent than informal networks, which would make it more difficult to conduct corrupt actions. Smaller networks also increase the risk that the illegal

action gets detected. There is a relation between power and corruption since the more power a person has the more possibilities he or she has to use that power for personal gain, and the less likely it is to get caught. Both Hellsten and Larbi (2006) and Goetz (2007) point out that clientelistic or patronage relations in networks will give rise to corruption since that will sustain and reinforce the power of the leaders. Our next hypothesis is:

- *Women are less corrupt than men because women's networks differ in character from men's networks.*

### 3.4 Risk Aversion

Another reason why women are less corrupt than men could be that women are more risk averse than men. Since they are more averse to the risk of getting caught and maybe lose their job or get punished in some way for the illegal action, they will avoid corruption to a higher extent than men. There are several findings that women should be more risk averse than men, for example Borghans et. al. (2009) who use an experiment with high school students who were given different urns containing balls of different colors to estimate risk aversion. The students were asked to bet on which color they would get and would receive \$2 for guessing right. The article concludes that women are more risk averse than men (Borghans et al. 2009: 650-651). Swamy et al. (2001) also presents women's higher risk aversion as a possible reason for their less corrupt attitudes.

Some authors mean that women have a stronger feeling of responsibility for the family which could explain their relatively higher risk aversion. When having a strong responsibility for the family, losing the employment or in any other way losing the income would be a much worse outcome than for an individual without the same feelings of responsibility for the family. According to Alogo-Alhassan (2007) the "help-thy-neighbor" concept is a responsibility for both men and women, but since the negative impact on women who do not follow this norm is greater than for men, the women will be more willing to take on that responsibility.

- *Women are less corrupt than men because they are more risk averse since they feel a stronger responsibility for the family.*

### 3.5 Expectations

Sunder (2005) points out the importance of social norms and expectations as explanatory factors for corruption. "*Corruption is not simply a problem of greedy men and women using*



*public office for private gain. It is a degenerated state of expectations the citizens hold about the behaviour of one another.*” (Sunder, 2005:420) He argues that if people expect others to behave ethically, they tend to do so and vice versa. For example the strong societal pressure on women to help family members and friends could thus imply that women are more corrupt since they would be more willing to use their position to help family and friends even if that would mean that they would act corrupt (Alolo-Alhassan, 2007).

On the contrary, many authors have claimed that women are more honest and fair, and thus less corrupt, than men of sociological and/or biological reasons. Whether true or not, this will create expectations that women are more honest and less corrupt. Also the increasing amount of literature on the gender difference in corruption and rent seeking behaviour as well as the wave of implementing gender equality as anti-corruption strategies also enhances the expectations that women are less corrupt. If people do not expect others to be corrupt, it will affect the actual behaviour of women and they will become less corrupt. It will also affect the way that women are treated. A female official who is not expected to be corrupt will not be offered bribes or asked to do illegal or unethical favors to the same extent as a person who is expected to be corrupt. Despite the personal character of that woman, she will not face the same opportunities to be corrupt because of peoples’ expectations.

- *Women are less corrupt since they are expected to be less corrupt.*

## 4 Country Background

Corruption is a major problem and an obstacle to development in Sub-Saharan Africa but the fact that Ghana is not the worst case in the region makes the country appropriate for our study. Disentangling the corrupt behaviour from the not-corrupt is difficult in a country where corruption is widespread and rather accepted throughout the whole society. The fact that Ghana has gone through a democratization process enables us to investigate underlying reasons which are not caused by a non-transparent and totalitarian political system.

Ghana is one of the more developed countries in Sub-Saharan Africa with a GDP per capita of \$1,500 and GDP growth of 5-7% since 2005 (CIA World Fact Book, World Bank Country Brief). The country has made significant progress in reducing the poverty level as the incidence of poverty fell from 51.7% in 1991/1992 to 28.5% in 2005/2006. These figures point to the fact that Ghana might halve the poverty rate by 2015, thereby reaching the Millenium Development Goals (African Development Fund 2008:4).

Progress has also been made in terms of democratic development. The country has a multiparty system and the 4 latest elections have been considered fair by foreign observers. Regarding corruption Ghana has had a pretty stable level during the last years according to TI, which in 2009 ranked Ghana 69 of 180 in the corruption perception index. In the regional comparison over sub-saharan Africa, Ghana was ranked 7 out of 47, doing far better than the majority of Sub-Saharan countries in the CPI (Transparency International, 2009:1). However according to the World Bank the low institutional quality and corruption are still a problem but a surmountable one. (Worldbank Country Brief).

### 4.1 Corruption in Ghana

The latest comprehensive report over the corruption situation in Ghana was published by the CDD in August 2000. The survey consisted of three different questionnaires distributed to households, public officials and business enterprises. In summary the survey found that about 75% of the households saw corruption as a serious problem and about 80% of both the households and the public officials believed that corruption had become worse between 1997 and 2000. Among the households with a yearly income within a certain range, 66% paid 10% of their incomes in bribes to public officials. (CDD, 2000:ii). In the private sector 56% of the firms reported having made unofficial payments before services were delivered by the

public sector. Out of these payments 46% were initiated by the firms and 31% by the public officials themselves. (CDD, 2000:ii). This indicates a strong culture of corruption within the system where the public officials are corrupt and are also expected to be corrupt since in many of the cases the firms pay bribes without being asked to do so. That, however, does not mean that corruption was not perceived as a problem among the firms and households. 86% of the households saw corruption as a major problem in the public sector and 27% were willing to contribute 10% of their income to reduce corruption. Among firms 44% of the firms were willing to pay on average 4% of their revenue to fight corruption. (CDD, 2000:iv).

In Ghana the culture of gift giving is widespread which means that there are social norms influencing you to give someone a gift in exchange of a favour or service. This behaviour is also transmitted to the public and private sector and 56% of the public officials reported that gift giving is one of the causes of corruption (CDD, 2000:17).

The survey from 2000 also reported that public officials abstained from reporting corruption because they either did not know where to report it or because the procedure was too complex and long. On the household level, 81% were unaware of any reporting system and about 25% of the households who had witnessed a corrupt action did not know where to report it and 22% feared reprisal if they reported corruption. (CDD, 2000:sida). Either a reporting system did not exist at the time or the knowledge about or trust in such a system was very low among both households and public officials.

However, in 2006 the Whistle Blower's Act (Act 720) was passed by the Parliament which gives a legal right to protection to citizens who reveal information in the public interest. *"The aim of the Whistle Blower's Act, (Act 720) 2006 is to ensure that people particularly workers who have information about a wrong doing and disclose such wrong doing in the public interest are protected."* (GACC, 2010a:23).

In 2006 the Commission for Human Rights, Justice and Advocacy, CHRAJ, published *Guidelines on Conflict of Interest - To assist public officials identify, manage and resolve conflicts of interest*. Copies of the guidelines were distributed to 5000 civil servants and aimed to assist public officers in order to revive trust and fairness in the public sector in Ghana. (CHRAJ, 2006). The guidelines are not legally binding. The general principles of the guidelines state the following:

In the performance of their official duties public officials should not:

- Seek or accept personal or private benefit by granting preferential treatment to any persons
- Solicit or accept gifts and favours of economic value

- Use or permit the use of government property for activities not associated with their official duties
- Seek or obtain personal or private benefit from the use of information acquired during the course of their official duties which is not generally or immediately available to the public.

Despite the efforts to implement laws and policies to reduce corruption it seems like the information about the Whistle Blower's Act and the guidelines to public officials have not reached the majority of the people concerned. In 2010 the GACC, released a pocket sized booklet to further spread the information about the act.

In January 2010 the Right of Information Bill was submitted to parliament, which if approved will strengthen transparency and human rights in Ghana. ([www.parliament.gh](http://www.parliament.gh), 22/8 2010). Once freedom of information is guaranteed the investigation process will be enhanced and the time period for each investigation will be shortened.

According to the experts in different organisations that we spoke to, the size of corruption is largest by frequency in the sectors where services are provided but if the amount of money is considered, corruption is biggest in procurement and construction (GII). A further problem of corruption in Ghana is the so called "Quiet Corruption" where public officials fail to deliver goods and services. This type of corruption particularly affects the poor since public resources are misused when for example a teacher on the payroll does not show up to teach (GACC).

CHRAJ, which was established as an independent department to investigate complaints of corruption and abuse of power, receives complaints from "Whistle blowers" and can in certain cases initiate investigations on its own. After investigation a case is submitted to the Attorney General (AG) who decides whether it is brought to court or not. (CHRAJ). According to the CDD this is a major obstacle in the fight against corruption because no matter how thoroughly the investigation is made by CHRAJ, the AG who is appointed by the President and whose department is affiliated to the Ministry of Justice, "will cover up" (CDD). CHRAJ, which sometimes disagrees with AG's decision, believes that a separation between the AG and MOJ, which has been suggested, would allow a more objective interrogation (CHRAJ).

CHRAJ further emphasized the challenges of the fact that Ghana does not have freedom of information which prolongs the investigation (CHRAJ); underpayment, country needs to be in a better state in order to increase salaries (CDD), unemployment and large family sizes and the pressure to provide for them (GACC).

## 4.2 Public Sector in Ghana

The public sector in Ghana employed 516,157 persons in 2000, which constitutes 6.2% of the economically active population (15 years and above). Of those 64% were men and 35% women. (Ghana Statistical Service, 2002:62). The hourly average wage was 0.78 cedi, 1.03 cedi for women and 0.70 cedi for men in 2005/2006. Men's wage in the public sector is lower than in private white collar professions. For example the hourly wage for men in financial services is 1.67 cedi per hour in average and 1.26 cedi per hour in real estate. Women's wage in the public sector is higher than in all other sectors and it is only in the public sector and in the fishing industry that women have higher average wage than men.

The public officials we interviewed stated that public sector wages were very low, one third of private sector wages, and were not sufficient to get you through the end of the month, especially not if you have a family to support. In 2000 for example, 62% of public officials had a monthly salary corresponding to approximately \$35-96 (\$1= 5200 cedi) (CDD, 2000:17). This opinion is also apparent in our survey where most respondents saw underpayment as the major cause of corruption. In the Ghana Government and Corruption Survey 80% of public officials cited the low salary to be causing the corruption in the public sector. Public officials also found the shortages in incentive mechanisms and reporting systems as causes (CDD, 2000:17). From our interviews 4 of 7 reported that there were no reporting systems within the ministries and described it as almost impossible to lose your job after a wrong doing. They described it as a secure employment where the consequences are either sanctions or replacement.

The survey (CDD 2000) further reported that guidelines were often missing, 41% of public officials stating that they had not been provided any job descriptions, and that there was a discontent with the reward and disciplinary systems (CDD, 2000:23). These effects could have a negative impact on corruption since the accountability of public officials is undermined.

The survey also classified institutions as "good" or "bad" based on how honest they were perceived to be. "Good" institutions were positively related to good internal management. Further these "good" institutions showed lower bribery frequency, lower percentage of unofficial income, lower percentage of "bought" jobs and they had more budget diversion, compared to the "bad" institutions. However, the average bribe per contract was actually higher in the "good" institutions. (CDD, 2000:25-26).

### 4.3 Gender Equality

Gender equality is often emphasized as an important factor in a country's development strategy. Increasing female participation in public life can be seen as a matter of democratic and human rights. Ghana implemented gender mainstreaming in the Ghana Poverty Reduction Strategy II (GPRS II) which entailed gender equality improvements for instance in human resource development and governance (African Development Fund, 2008:10). In 2001 the Ministry of Women and Children's affairs (WOMAC) was established and there are also committees in parliament handling gender issues (African Development Fund, 2008:6). Gender equality as an anti-corruption strategy is not pinned down in policies or strategies but seems to be in people's mind-sets.

According to the African Development Fund (ADF) the historically important role that women had in decision making has faded in today's system. In the pre-colonial era women held a stronger position in the Ghanaian society since the matrilineal system, where the descent and inheritance are through the female, was one of the two most important systems (ADF, 2008:26). The patrilineal system was prevalent in the north which also today has a male dominated culture, whereas the matrilineal system coincided with the south where the patriarchal organisations of the colonial systems remained dominant also after independence (ADF, 2008:2).

The legal framework for gender equality is expressed in the constitution which prohibits gender discrimination (ADF, 2008:7). Article 35 of the constitution further requires the state to implement measures to reach gender balance in recruitment and appointment to public office. Policies have thereafter been formulated to increase female participation in order to achieve 40% representation at all levels of government. At the District Assembly level the 2002 government increased the quota to 50 %, but only 35.5% percent of the appointed members were women. (ADF, 2008:27). The current President, John Atta Mills, also "manifested 40% of government positions to women but did not meet it" (Interview CDD).

**Table 4.1 Parliamentary Seats 1992-2008**

<b>Sex</b>	<b>1992</b>	<b>1996</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>
<i>Women</i>	16	19	19	25	20
<i>Men</i>	184	181	181	205	210
<b>Total</b>	200	200	200	230	230

In the latest election the number of women in parliament has been reduced from 25 to 20, a negative development from the election before, since now only 8.7 % of the seats are held by women. Considering also the development over time, one can see a positive increase of the total number of women from 1992-2004, but as the total number of seats have also increased the share of women has in reality decreased. The low participation can be explained by discrimination and negative attitudes towards women (AfDB, 2008:ix). Some however seem optimistic about their effect on governance;

*“Bringing more women into parliament would improve governance as women are less likely to be self-serving”* Felix Owusu-Adjapong.

*“There will be no good politics without women. Women are generally good administrators and co-ordinators. They can significantly help reduce corruption. They are very careful in all their dealings as they take into consideration their family, children and their family , children and husbands before they take any decision.”* Nana Ama Bonsu.

(The Female Parliamentarian, Women, Media and Change Newsletter, 2008:15)

Mrs. Florence F. Dennis at GACC explained the underrepresentation of women in political positions and leadership positions due to women's concern for their public image. The male dominated northern region was also included as an explanatory factor as the districts there would never vote for a woman. Another expert from CDD described Ghana as “fairly gender conscious” but claimed that women were “too smart to get into politics”. He further rejected the focus on equality in parliament since “parliament has no power” and said that focus should rather be on empowering women in government and “appoint them to positions with power”.

# 5 Empirical Results

The following chapter will show the results from our survey, interviews and experiment. The structure of the chapter will follow the order of how the hypotheses were presented in chapter three, starting with the relation between gender and corruption.

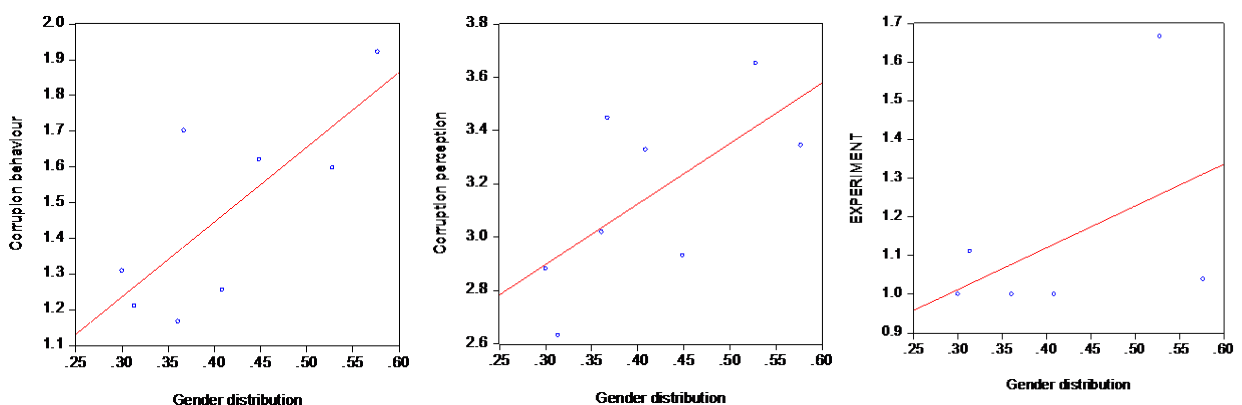
## 5.1 Gender and Corruption

In order to investigate the relationship between gender and corruption we started by making scatter plots where we scattered each ministry and its estimations for our three variables that estimate corruption, and the ministry's share of women in the work force. All ministries could not be included in the three scatter plots since data was missing for the gender distribution within MOFEP and since the experiment was only carried out in six ministries.

The first step was to recode the values for all the questions concerning perception and behaviour in order to get a mounting scale where a higher number reflects higher corruption. Thereafter we created a mean value for each individual since both perception and behaviour consist of three questions. These values were then added together to get one mean value for each ministry and each corruption estimator. From that we got two dependent variables, corruption perception and corruption behaviour. We tested them separately since the perception of how corrupt the public sector is does not necessarily have anything to do with how corrupt the public officials in a certain ministry are.

The estimator from the experiment was calculated by dividing the money that should have been paid for the snacks with the money that was actually paid so that the higher value represents a larger number of snacks stolen.

**Picture 5.1. Corruption and gender distribution among ministries**



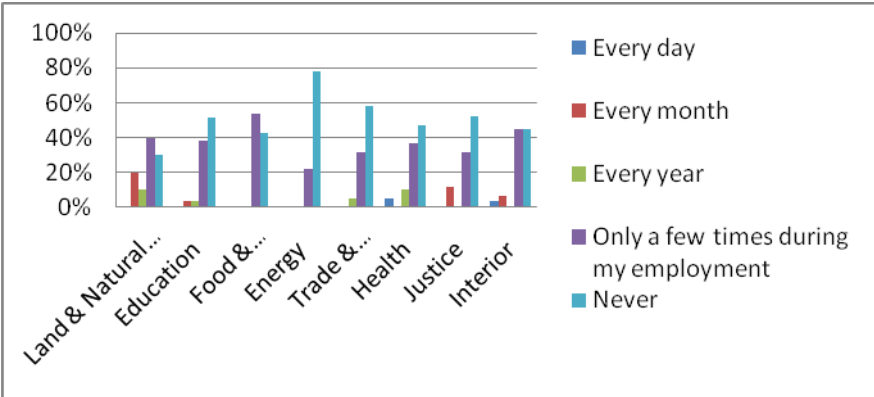


The scatter plots indicate the opposite relationship from what we had expected; all of them imply that the higher number of female employees, the higher is the level of corruption or dishonest behaviour.

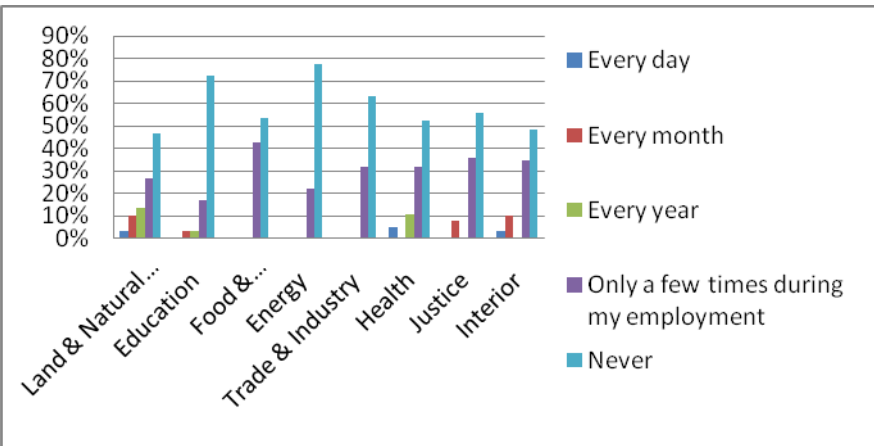
For the eight ministries from which we received data over the gender distribution, there seems to be a positive relationship between number of women in the ministry and the level of corruption perception and corrupt behaviour.

The results from the experiment that was carried out in six ministries has the same kind of relationship. However this seems to be driven by the high value of one observation, Ministry of Justice. One employee at the MOJ, commented before the experiment was put up that people would not care, *“I guess they would just take it. Somebody would say I pay later”* (Mrs G MOJ). If we excluded that from the plot the relationship would vanish or even become slightly negative. However, because of the drawbacks of the design of the experiment and the small number of observations, it is difficult to draw any conclusions from that graph.

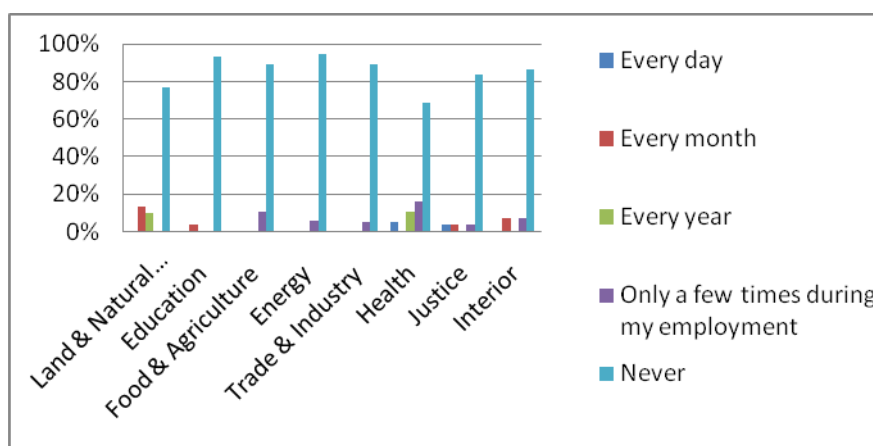
**Picture 5.2. How often are you offered a payment, gift or favor to perform a certain task within your duties?**



**Picture 5.3. How often would you accept it?**



**Picture 5.4. How often would you demand it?**



After having investigated the relationship on an aggregated level between the ministries, the study continued with investigating whether a relationship between corruption and gender could be found on an individual level. The corruption variables now used were; the mean value of each individual's answer to questions 21, 22 and 26 as corruption perception, and the mean value of question 25A-C as corrupt behaviour. Gender was used as a dummy-variable taking the value 1=man and 0=woman and an intercept was used.

First we used only the gender dummy, which was significant for both behaviour and perception. The figures highlighted in light grey are significant at 5% level and those in dark grey are significant on a 10% level. The sign of the coefficient was positive for perception, which means that if you are a man you will be 0.2 percentage points more corrupt. This supports our hypothesis that men should be more corrupt than women. However, for behaviour, the sign of the coefficient was negative, meaning that if you are a man you would be 0.2 percentage points less corrupt than women. This is the complete opposite of our hypothesis but is consistent with the results at the aggregate level. Since the residual for corrupt behaviour was not normally distributed the logarithm of corrupt behaviour was also tested since there seemed to be a non-linear relationship. This however did not have much impact, the coefficient was still significant and negative, the residuals were still not normally distributed and instead we got a problem with heteroskedasticity. So we decided not to use the logarithm of the corrupt behaviour variable.

Age, monthly income and how many you provide for were also controlled for (see table 5.1 below) since those were all likely explanatory variables for the corruption level. None of the variables were significant and the gender dummy was still significant for perception.

**Table 5.1 Gender**

Basic variables						
Variable	Behaviour			Perception		
Gender dummy	-0.228*	-0.2387*	-0.1462	0.215*	0.205*	0.209*
Gender dummy (Log(behaviour))	-0.1257*					
Age <sup>2</sup>	-0.0091			-0.016		
Age				-0.100		
Monthly income				0.006		
Provide for				-0.009		

(\* Significant on 5% significance level)

For behaviour, the gender dummy became insignificant which is quite interesting. However that could be a sign of multicollinearity since age and how many you provide for are positively correlated with 0.48. The correlation however is not very high and  $R^2$  values were still low which indicates that multicollinearity should not be a problem. The squared age was tested but was not significant either.

Despite the insignificance of the variables it is interesting to take a look at the sign of the coefficient. In the case of perception the coefficients for age and how many you provide for were negative which would imply that if significant, the older you get and the bigger family you have to support the lower corruption perception. Monthly income has a positive sign which implies that the higher income the higher corruption perception.

From the interviewees we got the impression that employees in general were not satisfied with their salaries. Even though the salaries as well as the professional allowances increase with the grade of position, the higher ranks are paid “*relatively the same*” (Mrs C MLNR). The attitude was that “*The more you get the more you want*” (Mrs G MOJ) and “*Everyone needs more*” (Mrs C MLNR). However when focusing on corruption perception, our three older civil servants who also provide for a larger family did not quite see the severity of corruption to the same extent as our younger interviewees. Either the person had not seen or experienced it within the ministry (Mr M MOJ, Mr P MLNR), or the person believed that there was “*transparency and good governance*” both within the ministry and in Ghana, or the person justified it saying that if you are not paid well it is not corruption (Mrs C MLNR). This then is in line with the age and family size coefficients but is contradictory to the results for income.

Considering instead corrupt behavior, age and income were negative and how many you provide for is positive. This means that the younger you are and the lower income you have the more corrupt is the behaviour, and the larger family the less corrupt.

Putting this in relation to our interview results two of our interviewees pointed out that corruption was more frequent in the lower ranks where salaries are so low that the employees would take any opportunity they get (Mr A MOE & Mrs G MOJ). Intuitively one could guess that employees in the lower ranks of the hierarchy are younger. In the higher levels, where people then presumably could be expected to be older and income is higher, *“people are more held to account...They are more cautious”* (Mrs G MOJ).

Since none of the variables age, squared age, monthly income and how many you provide for were significant, they were excluded thereafter from the equations tested.

## 5.2 Social Trust

The hypothesis that there is a gender effect from the different kinds of trust was tested with questions concerning whether the respondent could agree that people in general could be trusted (generalized trust), and to what extent he/she would lend money to his/her friends and how they in turn would lend money to him/her (particularized trust).

In the tables below you can see how men and women responded differently. It is interesting that about 45% of the respondents either disagreed or partly disagreed with the statement and only 9% fully agreed that people could be trusted. More men would lend money to a friend and also believe that they would lend them money in return. Women have to a greater extent responded none in both cases. As the results from our diagrams point out (see Appendix), more men than women responded that they agree or partly agree with the statement that people in general can be trusted. This means that men have more general trust. Regarding particularized trust the diagrams say that more men responded that they would lend money to all or a few of their friends. For the question about how many would lend money to the respondent, men to a larger extent responded that a few of their friends would lend money to them whereas women to a slightly larger extent than men responded all of their friends, but also to a larger extend than men that none of their friends would lend money to them. According to these results we can conclude that men have both more particularized and generalized trust.

**Table 5.2 Do you agree that people in general can be trusted?**

	Total	Women	Men
I agree	9%	7%	11%
I partly agree	45%	41%	50%
I partly disagree	13%	12%	13%
I disagree	32%	38%	26%

**Table 5.3 How many of your friends would you lend money to?**

	Total	Women	Men
All of them	8%	6%	10%
A few of them	80%	76%	83%
None	11%	16%	6%

**Table 5.4 How many of your friends would lend money to you?**

	Total	Women	Men
All of them	17%	17%	17%
A few of them	69%	64%	73%
None	13%	16%	9%

Testing the relation between the different kinds of trust and our two corruption indicators gave us the following results.

**Table 5.5**

Trust						
Variable	Behaviour			Perception		
Gender dummy	-0.2278*	-0.2063*	-0.2081*	0.2054*	0.1884*	0.1865*
Particular trust	0.0564		-0.0399	-0.1346		-0.0444
General trust		0.1080*	0.1151**		-0.0971*	-0.0892**

(\* Significant on 5% significance level, \*\* significant on 10% significance level)

Testing behaviour (the mean value of all three corruption behaviour questions) against particular trust was positive. Since the higher value of that variable means you trust your friends less, low particularized trust leads to more corrupt behaviour. The result however is not significant.

When testing general trust instead, the sign of the coefficient is positive, meaning that the higher the value of the variable (the lower general trust), the more corrupt you are. Our intuitive explanation for this is that if a person feels that others cannot be trusted, he/she

might believe that others abuse their position for private gain which would justify his/her own corrupt behaviour.

This is significant on the 5% level when tested separately from particular trust and at the 10% level when the two variables are tested jointly. The particular trust is negative but insignificant when tested jointly with the general trust. Since the two variables are a bit correlated there might be a problem with multicollinearity when tested jointly.

Looking instead at the corruption perception the particular trust is negative, implying that the more trust you have in your friends, the higher corruption perception you have. The results are not significant.

The generalized trust is in this case negative, meaning that the more you trust people in general the higher the corruption perception. So if the respondent has less trust in others in general his/her perception of corruption will also be lower. Whereas our intuitive notion would be that if you do not trust in others you would also overestimate the level of others' corrupt behaviour.

The gender dummy is negative and significant for all the regressions with corruption behaviour. For corruption perception it was significant and positive and the value of the coefficient is a bit lower when the general trust is included, indicating that the general trust might explain a little bit of the gender differences.

Through our interviews we found out that there were differences in trust between the sexes which could influence differences in corrupt behaviour.

*“You can trust a person but not give the person the full trust. Sometimes you can trust men more than women. When a man gives a promise, although his mind changes, he will fulfill the promise. But a woman you cannot trust fully. Man to man trust is also stable...Women are their own enemies...they are afraid something will happen so won't go out and help... Men trust women but women don't trust each other.”* (Mrs G MOJ).

Regarding general trust a clear majority explicitly stated that people in general cannot be fully trusted, *“you shouldn't put your full trust”* in a person *“you must have alternatives and be cautious”* (Mrs M MOLNR). Two of the female respondents said that they could trust women more whereas the other two said that “gender does not matter” or that women could not be trusted which is an ambiguous result for the in-group “women”. If the nearest in-group could be interpreted as your close family, then the responses of two men who stated, *“I give my wife...maybe 50-70% of trust”* (Mr P MOLNR) and *“I cannot even trust my mother”* (Mr M MOJ), are quite interesting.

### 5.3 Power

The hypothesis concerning a gender difference in power states that men and women have different levels of power due to different amounts of time in public office. In the questionnaire we have therefore asked the respondent how long they have worked in the ministry as well as what level of position they have and their title.

In our questionnaire we hoped to capture a clear division in the different levels of position by categorizing the respondents in upper level management, middle level management, technical and other which we hoped could correspond to high/middle/and low level of power. Since we also had asked the respondent to fill in his/her title, which most people did, we could see in which categories different posts fell. Soon we realized that both an executive officer and a secretary had ticked in the alternative middle level management, thus not exactly reflecting the kind of division we had hoped for. Therefore we had to create a new variable from the one we had and a new one where the title was placed in tripartite scale where 3 is the highest level of power. This method would thereby consider the respondents who had placed themselves in the other category and also those who had written title but not chosen level of position. A director or deputy director was for example categorized as 3, highest in power, whereas positions secretary or driver received the number one. Thereafter a mean value was calculated for each individual.

**Table 5.6**

Power						
Variable	Perception			Behaviour		
Gender dummy	0.1262*	0.2174*	0.5145*	-0.1922*	-0.1769**	-0.2601*
Length of time in service	-0.0120*			0.0010		
Position of power	-0.0750			-0.0482		
Gender dummy *Power	0.0479*		-0.1617	-0.0664		0.0394

(\* Significant on 5% significance level, \*\* significant on 10% significance level)

Corruption perception and length of time in office had a negative significant relation, meaning that the longer the respondent has worked the lower is this person’s perception of corruption. Our interviews confirm this since most of our younger interviewees who had only been working for a shorter amount of time, said that corruption was a big problem in Ghana and present everywhere in society. Those who had been working for a longer time meant that either corruption was not a problem(Mr M MOJ), “*wouldn’t say there is corruption*” (Mr P MOLNR) within the ministry, or justified the corrupt action with the low payment meaning

that if salary is low the act of using your position is not a corrupt one (Mrs C MOLNR). However when salaries increase and the person still abuses his power then the person is corrupt.

Testing the relationship between level of position and corruption perception the coefficient is negative but insignificant. The gender dummy is still positive and significant.

There might be a gender difference in how much the corruption increases with the level of position. There are more men in the top positions and if men are more corrupt when interacting with other men, they might be more corrupt than women the more power they get. The opposite for women, when in the higher positions there are less women and thus women in those positions might be less corrupt.

Therefore we used a so called interaction dummy for gender and multiplied with the level of position. Using only the interaction dummy it was insignificant and positive. However, when adding the gender intercept dummy to the equation, the intercept dummy was positive and significant and was bigger than in the previous equations, around 0.5. The interaction dummy on level of position was also significant but negative. That means that women tend to become more corrupt the higher up in the hierarchy they get, compared to men.

When testing the corrupt behaviour and the level of position and length of time in service, both the coefficients were insignificant. Length of time in service was positive and the level position was negative. However when multiplying a gender dummy with the level of position the coefficient is negative and insignificant when tested alone but when adding a intercept dummy for gender, the intercept gender dummy is significant and the level of position multiplied with a gender dummy is positive and insignificant. This means that the level of position does not seem to have anything to do with corrupt behaviour and that there is a gender difference.

## 5.4 Networks

The hypothesis that women and men belong to different types of networks which could influence the level of corruption is divided into different network effects. First we have the distinction between formal and informal networks, which was estimated by asking questions concerning voluntary associations where the respondent filled in the number of associations for formal networks, and questions concerning the individuals' social life within and outside the workplace for informal networks. The second distinction is made between internal and



external networks, reflected in questions about where your friends work, which themselves constitute the informal network variable.

**Table 5.7 Networks**

Networks										
Variable	Behaviour					Perception				
Gender dummy	-0.2258*	-0.2292*	-0.2447*	-0.2447*	-0.2450*	0.1920*	0.2165*	0.2373*	0.2372*	0.2054*
Formal networks	0.0119				-0.0041	0.1312				0.1440*
Informal external networks	0.0515		0.0111		-0.0076	-0.0807		-0.0123		-0.0328
Informal internal networks	0.1226		0.1212		0.1144	-0.0813		-0.0798		-0.0790

(\* Significant on 5% significance level, \*\* significant on 10% significance level)

For corrupt behaviour all network-variables were insignificant after having corrected for heteroskedasticity. When testing only the formal networks against the corrupt behaviour the sign of the coefficient was positive, which means that the more associations you are a member of the more corrupt behaviour. When testing the informal networks both separately and jointly, both of them were positive. However, when testing all network-variables in the same regression the formal and informal external networks changed sign and became negative. Both of the coefficients for formal and informal external networks were very small however and insignificant, and the value of the informal internal networks remained positive and about the same size of the coefficient, but insignificant still. This could mean that the effect of the informal internal network variable is captured to some extent by the other variables and that the formal network variable is the most important. The positive effect on corruption behaviour implies that the larger the informal networks within the ministry the higher the level of corrupt behaviour. However, since it is not significantly separated from zero the interpretation should not be given too much importance. The gender dummy is still significant meaning that internal networks do not explain the gender difference.

When testing the corruption perception against formal networks the coefficient was not significant on a 10% level but close to 13%. The positive sign of the coefficient means that the more involved in voluntary associations you are the more you perceive the public sector to be corrupt. The value and the significance of the gender dummy decreased slightly which implies that the formal networks probably explain a small part of the gender difference.

When it comes to the informal networks none of the coefficients are significant, neither when tested separately nor jointly. The signs are negative for all of them as well, meaning that the more involved in informal networks the less corrupt you are.

When testing all the network variables the coefficient for formal networks becomes significant at a 10% significance level and is still positive. The other two remain insignificant and negative. The gender dummy is still significant and negative and has a value around 0.2.

From our survey and interviews it is clear that socializing within the workplace is not that common. A majority of our interviewees felt included in the groups and networks within the workplace, and one person commented that people in the lower ranks, who are mostly women, perhaps did not feel “so included” (Mr A MOE). The perception was further that, “people are corrupt together, people watch each other’s back” (Mrs H MOE). However some expressed that women in particular could not be trusted (Mrs G MOJ, & Mr P MOLNR), and specifically women cannot trust each other and will not look out for each other, which could be a problem for networks (Mrs G MOJ). Further, women do not have the same networks since they lack education, which is from where men get their networks (Mrs G MOJ). Since men trust each other, they watch out for each other. “In corrupt networks men will be more corrupt and also have more of those networks” (Mrs G MOJ).

Regarding the formal networks almost all of our interviewees and a majority of the survey respondents attended church. But as Ghana is a very religious country this can perhaps not be taken as a perfect estimator of people’s engagement in voluntary associations. In our interviews the women seemed to be more “active” in the voluntary activities they participated in; three out of four were either lecture assistants (Mrs 7 MLNR) or were trustees within church groups (Mrs H MOE) or NGOs (Mrs M MOLNR). Whereas the men in their leisure time attended church (Mr P MLNR), lectured for government secretariat (Mr M MOJ), or were members of sports clubs (Mr A MOE).

**Table 5.8 Are you a member of any voluntary association?**

Nr of ass.	Men	Women
1	64%	72%
2	6%	3%
3	1%	0%

# 5.5 Risk Aversion

When testing for our hypothesis about a gender difference in risk aversion which would affect corruption we use the questions concerning an investment opportunity and the respondents fear of losing their job. The variables how many people the respondent provides for, and whether the only provider or not, had no correlation with his/her fear of losing the job, contrary to what one could expect.

The variable for investment opportunities had two values, 1 for the high risk opportunity and 2 for the low risk option meaning that if you are risk averse you choose the higher value.

The variable of how afraid the respondent is to lose his/her employment takes a higher value the more prone you are to risk the employment. That is, if you have a high value on that variable, losing the job is not a problem.

On the percentage result from women’s and men’s responses, women were more prone to take risks in the investment opportunity.

**Table 5.9**

Riskaversion						
Variable	Behaviour			Perception		
Gender dummy	-0.2679*	-0.1922*	-0.2675*	0.1852**	0.1938*	0.1809*
Investment opportunity	0.1684		0.0333	0.1310		0.1290
Loss of employment		0.0010	0.1714		-0.0593	-0.0528

(\* Significant on 5% significance level, \*\* significant on 10% significance level)

Testing corruption behaviour against investment opportunity the coefficient is positive, meaning that the more risk averse you are the more corrupt you would be. This is the opposite of our hypothesis about risk aversion but the coefficient is not significantly different from zero.

The “loss of employment” is positively related to corruption, which means that the more you are willing to risk your employment, the more corrupt you are. This supports our theory that the more afraid you are to lose your job, the less corrupt you are. However, the results are not significant.

Testing the two variables jointly changes the result slightly. There is still no significance on the 10% level but the loss of employment is close to being significant, the p-value is around 0.12. The gender dummy is negative and significant in all equations.

When testing the corruption perception against risk aversion there are no significant variables either. The investment opportunity is positive and the loss of employment is negative, throughout the analysis. This is contradictory to our hypothesis about risk aversion. The gender dummy is significant and positive throughout but only on the 10% level when testing against investment opportunity only.

When analyzing the relation between corruption and risk aversion one must first take into consideration how large the risk of getting caught is and what the consequences are. Our interviewees stated that it was hard getting caught due to a lack of a discreet reporting system. To file a complaint, a written report has to be made to the chief director and then it will also be sent to the accused but “*you keep it to yourself, people are scared*” (Mr P MOE). A wrong doing however is “*easy to hide*” since you can “*manipulate the system*” (Mrs H MOE) and since “*everyone would do it, so who would expose you?*” (Mrs C MLNR). If caught you can however be suspended or transferred (Mrs C MLNR), and “*depending on severity get fired*” (Mr P MOE) but even when caught stealing it is “*hard to prove*” (Mrs C MLNR) and in that sense it is a “*secure employment*”.

Secondly the individual’s risk aversion according to our hypothesis is based on which investment alternative the individual has chosen and how the person would feel about losing the job, which in itself could be related to how many people you provide for. Also the social security system in Ghana is underdeveloped and does not take care of unemployed citizens. So those who do have a fairly well paid job provide for people in their family and extended family. The two young interviewees, who did not provide for anyone and lived with parents in the one case, did not feel that losing the job would be that big of problem (Mr A MOE, Mrs H MOE). The older interviewees provided for five or more. One of them commented on the risk of losing the job and responded that a position as accountant implied a bigger risk since loss of employment due to a wrong doing would lead to withdrawal of certificate and that all governmental bodies would be informed (Mrs C MLNR), which indicates that risk aversion is also related to position.

Regarding the respondents attitudes 6 out of 7 commented that women were more “risk averse”, “careful” and “afraid of getting caught”. One however stated that women are calculating and know what risks to take (Mrs H MOE). Men on the other hand were perceived to be more corrupt since they are “bold”, “daring”, and “more aggressive”. Men were also expected to be more corrupt as they have the responsibilities to pay for children.

# 5.6 Expectations

Our hypothesis that men and women are expected to behave differently when it comes to corruption will give them different opportunities to be corrupt. In our questionnaire we tested this by asking how often the respondent was offered payments, gifts or other favours which then reflects others expectations on them. Since the same question is part of our behaviour variable we had to exclude offered from that variable.

**Table 5.10**

Expectations			Expectations	
Variable	Behaviour	Perception	Gender	Gender
Gender dummy	0.10477*	0.20741*	Offered a bribe	-0.4911*
Offered a bribe	0.01686	-0.0158		

(\* Significant on 5% significance level)

The regression analysis of corruption perception and how often the respondent has been offered a bribe or gift showed a negative but insignificant relation. The negative relation indicates that when an individual is offered bribes to a larger extent the perception of corruption decreases, which is quite contradicting but the results are not significant.

The result from testing our new behaviour variable, that is, how often the respondent has accepted or demanded a bribe or gift, against how often they have been offered one is more interesting. The coefficient of being offered a bribe is positive, implying that the more often an individual is offered bribes the higher the level of corrupt behaviour will be. What is more interesting is that when we exclude offered from the mean value of corrupt behaviour the gender dummy becomes positive and significant. This must mean that the offered a bribe variable captures the negative relationship between gender and corruption. To investigate that we tested the offered a bribe variable as the dependent variable against the gender dummy and the result was negative, meaning that if you are a man you will be offered gifts or bribes to a lesser extent than if you are a woman. This contradicts our hypothesis that women are offered bribes to a lesser extent than men because they are expected to be less corrupt. The result is significant on a 5% significance level.

## 5.7 All Variables

Finally we tested all the variables in the same equation to get a picture of how that affected the results (see table 5.11 on page 43). The variable for gender behaviour in this case was the mean value of question 25.B and C and how many times the respondent had been offered a gift was used as an explanatory variable. Interestingly, this gives the gender dummy a positive coefficient that is significant. We also excluded age from the equation since it was strongly correlated with length of time in service and how many you provide for. In the equation with corrupt behaviour as the dependent variable the only coefficients that were significantly separated from zero were the gender dummy, which was positive, and the investment opportunity which was negative. This means that men are more corrupt than women and that the more risk averse you are (the higher value of that variable indicates more risk aversion) the less corrupt you are. These results are not consistent with the results when we used the mean value of question 25A, B and C where the gender dummy was negative and the investment opportunity was insignificant. That indicates that the difference in how often you are offered a bribe etc. between the sexes affects the result of the other variables.

**Table 5.11**

Behaviour, R2=0,115067	Coefficient	P-value	Perception R2=0,135473	Coefficient	P-value
Intercept	0.906888	0.0001	Intercept	3.451695	0.0000
Gender dummy	0.103709*	0.0084*	Gender dummy	0.048912	0.6614
Voluntary association	0.043387	0.1977	Voluntary association	-0.010869	0.9102
External networks	-0.018970	0.7413	External networks	0.091876	0.5773
Internal networks	0.013275	0.6642	Internal networks	-0.134057	0.1276
Investment opportunity	-0.124645*	0.0051*	Investment opportunity	0.138329	0.2727
Loss of employment	-0.012248	0.5870	Loss of employment	-0.061948	0.3385
Particular trust	-0.028796	0.5581	Particular trust	-0.113203	0.4223
General trust	-0.020271	0.3295	General trust	-0.119999*	0.0452*
Length of time in service	-0.000890	0.6847	Length of time in service	-0.012166*	0.0542*
Position of power	-0.005692	0.8552	Position of power	-0.005609	0.9500
Monthly income	-0.008370	0.4567	Monthly income	-0.028137	0.3831
Provide for	0.007364	0.2931	Provide for	0.001127	0.9552
Offered	0.026038	0.1715	Offered	-0.007538	0.8899

(\* Significant on 5% significance level)

Using instead the corruption perception as the dependent variable the gender dummy becomes insignificant and the only two variables that are significant are the length of time in service which is negative and the general trust which is also negative. That implies that the longer you have been working in the ministry the less corrupt do you perceive the ministry and the public sector to be. It also implies that the less you trust people (the higher value of the variable) the lower the corruption perception. That means that the more you trust people in general, the more corrupt you perceive them to be, which is the opposite to our hypothesis that the more general trust you have the less corrupt you are. It is also the opposite of the intuitive explanation that if you do not trust others then you would presumably expect and perceive them as corrupt. A negative relation between perception and length of time in service could as we previously stated be explained by the responses from our interviews which also pointed to this.

From the interviews it is apparent that the expectations are that women are less corrupt. “Men think women to be less corrupt, women expect men to be more corrupt. Men then would not give money to women but rather become friends and then ask for favours. So the level of corruption is the same but the means are different.” (Mrs H MOE). As you sit down with respondents they look beyond the boxes of the questionnaire, which they at the time had already filled in, and could elaborate on the answers. For example one interviewee said that there is no difference but people “expect men to be more corrupt but when they see how women are...” (Mrs C MLNR), and another quote “It’s in people’s mindset that men should be much more corrupt” (Mrs M MOLNR), pointing to that the respondents were talking about others attitudes. If however one got caught, “the public reaction is stronger for women” (Mr A MOE). Regarding whether the interviewee had been offered bribes one person said that in the procurement department the receivers were mostly men who are bosses and directors (Mrs H MOE). Gift giving seemed to be common. One of the responded said that only the day before someone had tried to persuade her to carry out a corrupt act (Mrs C MLNR).

## 5.8 Dummy for the Ministries

To test whether it matters which ministry the respondent belongs to, we constructed a dummy for each ministry and tested these separately with each of the corruption variables.

**Table 5.12**

Ministries	Perception	Behaviour	Gender distribution
Education	-0.358605*	-0.147662	41%
Energy	0.352494*	-0.327698*	36%
Finance	-0.022157	-0.237998	
Food & Agriculture	-0.025977	-0.191971	30%
Health	0.140555	0.200918	37%
Interior	-0.025281	0.155542	45%
Justice	0.224474	0.030998	53%
Lands & Natural resources	-0.253633**	0.503675*	58%
Trade	0.225023	-0.205741	31%

(\* Significant on 5% significance level, \*\* significant on 10% significance level)

Considering first corruption perception, the Ministry of Education and Ministry of Lands and Natural Resource showed a significant and negative relation; if the respondent belonged to these two, the corruption perception is lower. This is interesting since the MOLNR has the highest number of women working in the ministry and MOE has a rather high gender equality as well. Energy on the other hand shows a significant positive relation.

Performing the same test for behaviour, the Ministry of Lands and Natural Resources has a significant but in this case negative relation, meaning that the corruption behaviour is lower in MOLNR. The Ministry of Energy also shows a significant relation but instead a positive one.

Looking at our interviews we can find support for corruption being higher in the lower ranks. Frequency is said to be higher in the lower ranks since salaries are so low that people must take every opportunity they can. *“The higher rank already have money and respect for themselves.”*(Mrs M MOLNR). This is particularly true if employees in the lower levels deal with money (Mrs G MOJ). However if money first flows in to the ministry at the higher level then corruption will be larger there, which is the case for instance in the procurement departments (Mrs H MOE). *“Corruption moves in the higher ranks since they handle contracts, so from middle level to higher”* (Mr P MLNR). People in the higher ranks are more



held accountable and therefore *“more cautious and will not be caught. If money is high, they will accept it”* (Mrs G MOJ).

Regarding the gender difference between men and women when it comes to power, it seems that women are not represented in the higher ranks; few of them tend to climb higher. In the Ministry of Education an interviewee explained that there has been an explicit policy of increasing women, which had had an effect (Mr A MOE). Explanations are found in the statements that women are not appointed to the higher ranks since *“Men choose male friends. Women can be hard and for example not accept bribes. Men choose fellow friend because they can watch each others’ back. Women betray and don’t watch each other.”* (Mrs H MOE). The foundation for the networks are laid during school years and since women lack education, they will not have access to the networks (Mrs G MOJ).

## 6 Analysis

In this section we use the theoretical framework to analyse the empirical findings presented in the previous section. The aim is to investigate the hypotheses we intended to study.

### 6.1 Gender and Corruption

On the aggregated level our results show that the larger the female representation within the ministry the more corrupt is the ministry in terms of perception and behaviour. On the one hand this contradicts our hypothesis that an increased level of female participation in public office would lower corruption.

On the other hand, our hypotheses also state that when men and women get the same opportunities to be corrupt there will be no difference in corrupt behaviour. Since women historically have been excluded from the workforce and public office employment they can be considered to be a minority group in public office. That implies that if women are a minority in the organisation they will not have access to the corrupt networks, they will not have as much power as the men and they might be more afraid of losing their job. That should imply that when women are the minority group, they are less corrupt as individuals but when the number of women increases they will so to say learn to “talk the talk and walk the walk” and thus become as corrupt as their male colleagues. If that is the case, the positive effects on women’s behaviour due to them being the minority would affect the corruption level for the whole ministry. When this positive effect declines at the same pace as the number of women increases this will then cause the positive relationship described above, that the level of corruption in the ministry increases when the number of women increases. Theoretically the same arguments could be used if men were the minority group, but since the highest percentage of women in the ministries was 58%, it could not be investigated. If the above argument holds, the increase in corruption will decline the more equal the organisation becomes and when it is 50/50 the corruption would be constant. However on the aggregate level we only have 6-8 observations which makes it difficult to draw any strong conclusions at all.

On the individual level the relationship is more ambiguous since women have lower corruption perception but higher corrupt behaviour, when “offered” is included in the variable behaviour. However when “offered” is excluded and the behaviour variable only includes

“accept” and “demand” women tend to be less corrupt than men. This implies that women do not accept and demand bribes/gifts/favors but are to a higher extent offered bribes etc., compared to men. Looking at our diagram, men seem to act less corruptly than women in most cases but more men have responded “every day” to demand which could drive the relation that women are less corrupt than men.

This leads us to discuss the other hypotheses that we are investigating.

- *Women have a greater level of generalized trust whereas men have a greater level of particularized trust, which causes gender differences in corruption.*

Our results show that men indeed seem to have a higher level of particularized trust than women, even if the difference is quite low. However the particularized trust is not significantly related to either corruption perception or corrupt behaviour. Men also seem to have higher generalized trust than women. The more general trust you have has a significant relationship with both perception and behaviour. The more general trust you have the less corrupt you are but the more general trust you have the higher corruption perception you have. The first relationship, the more general trust the less corrupt, corresponds to our assumption, even though we assumed that it was the women who had more general trust. The second relationship, however, is harder to explain. The problem here could lie in the subjectivity of how people interpret the question and the answering alternatives. When the respondents have answered that they partly agree that people in general can be trusted, we have graded this as a 2 in a 1-5 “trust-scale” where 1 is the highest level of general trust. The answer “I partly agree” could also be interpreted as a sign of particularized trust instead, since the respondent could mean that by partly agreeing it depends on who the person is, and the graded scale is then not appropriate. If “I partly agree” is considered as a sign of particularized trust and “I agree” as generalized trust, men still have a higher level of both types of trust. The fact that women seem not to trust others, neither people in general nor the “in-group”, should then indicate that they for that reason are less corrupt. However, women still behave more corruptly when controlling for trust.

The result that general trust and high corruption perception are positively related could imply that if you trust people you are more involved in the system and indoctrinated in it, despite the fact that the system is corrupt.

- *The longer time in public office employment the more corrupt behaviour.*

If we look at the answer for how long time the respondents have been employed, women on average have been employed longer. This could then explain the gender effect on corruption behaviour, which indicates that women are more corrupt. If women in general have

worked longer time in the ministry they have learned how the system works, learned how they can manipulate it without getting caught, and been included in the informal networks in the workplace. The fact that the most gender equal ministries also seem to be the most corrupt could thus be explained by, despite the insignificance of the length of time in service on the individual level, women having collectively gained more experience and knowledge of how to use the system to their own benefit.

The length of time in service is however negatively related with corruption perception. From the interviews it seemed like the older people had a looser definition of what corruption is. They did not see gift giving as corruption but rather as a cultural expression. They also defended bribe taking with the low salaries paid in the public sector. The younger people instead were quite certain of the different aspects of corruption. This might be a result of the anti-corruption campaigns the last ten years and younger people being more educated and aware of corruption. It could also be that the longer you have been working in a corrupt system the more you accept it and believe it is the way things should be; it is the way the cookie crumbles.

- *Women and men have different levels of power and therefore different opportunities to abuse their position.*

There are fewer women in the upper level management but there are more women in the middle level management. The position of power variable however is only significant when multiplied with a gender dummy, meaning that a man becomes less corrupt the higher up in the hierarchy he is, compared to a woman. That means the increase in how corrupt you become the more power you get is higher for women than for men. This is contradictory to our hypothesis, because there are fewer women in the upper ranks, and the women who actually get there would have smaller networks and less trust in the colleagues than men in those positions.

- *If a network is pro-corruption both men and women will be corrupt.*

The only type of network that had any relationship with the level of corruption was the formal networks. The more formal networks you belong to the higher corruption perception you got. The more associations you belong to could give you more connections to either be corrupt or get more insight into how corrupt others are. Women have lower corruption perception and to a larger extent belong to only one association, which in most cases is a church. Men are to larger extent members of more associations besides a church which then could imply that men belong to more pro-corrupt formal networks which increases their perception of corruption.

The result that an informal network does not seem to have any relationship with corruption could imply that informal networks do not matter, but it is rather more likely that we were not able to capture which types of networks are pro-corruption and which are not.

- *Women are less corrupt since they are excluded from corrupt networks.*

Men seem to spend more time with colleagues which could lead to them having more informal and perhaps more corrupt networks within the workplace. In that case the fact that informal networks are not significant could be explained by the above arguments that we could not distinguish between corrupt and uncorrupt networks. Therefore we cannot find support for the above hypothesis.

- *Women are less corrupt than men because women's networks differ in character from men's networks*

A slightly larger share of women belong to one or more associations and women also spend less time with colleagues outside the workplace than men. These two results point to differences in the type of networks. However we cannot draw conclusions on any effects that this difference might have on corruption.

- *Women are less corrupt than men because they are more risk averse since they feel a stronger responsibility for the family.*

The investment variable is significant for corruption behaviour when offered is excluded. The relationship is negative meaning that the more risk averse a person is the less corrupt he/she is, which is consistent with our assumption. However, women tend to be more risk-loving than men in the choice of investment opportunity. Are the female public officials any different because of their position? Have they been more daring in order to get where they are?

The second indicator of risk aversion which regards how the respondent, when considering family situation would feel about losing their employment, points to a positive and close to significant relation with corruption behaviour (with offered). This implies that the less afraid you are of losing your employment, the more corrupt is your behaviour. This is also in line with our assumptions. However there is no gender difference in the answers. Also the fact that the relation is not significant can be explained by the low risk of getting caught when acting corruptly and the minimal risk of losing the employment as a result of being caught.

Income, age and family size are insignificant, which contradicts people's explanations of corrupt behaviour due to low wages and having large families to support. Further the result that less women are single providers and that men provide for larger families implies that men

have a larger responsibility to provide for the family. The interviews also confirm that men have an economic responsibility as the head of the family, which could lead to them being more corrupt in order to increase the household income. This contradicts our hypothesis that stronger responsibility for the family makes you more risk averse. This again can be explained by the non-existent risk of losing your employment due to corrupt behaviour.

- *Women are less corrupt since they are expected to be less corrupt.*

Our survey results show that women are offered bribes and gifts more often than men. At the same time both men and women expect women to be less corrupt. Especially men responded that women are less corrupt in all questions concerning expectations of women. However if our respondents make a distinction between women in general and women in public office, the fact that the respondents have answered that they expect women to be less corrupt does not have to contradict the fact that women have been offered bribes more often. It could be that people expect women in the public sector to be at least as corrupt as men since they believe that the level of corruption is so high in the public sector that it affects the officials irrespective of sex. We can conclude that women in general are expected to be less corrupt but since women in the public sector are offered bribes/gifts/favours more often than men this is not true for women in the public sector.

When we exclude offered from the behaviour, men are more corrupt. Both men and women have also responded that men have more possibilities to be corrupt than women. This could indicate that men are not offered bribes/gifts/favours to the same extent as women simply because they ask for it themselves. However this is a strong conclusion to draw from the results we got.

## 7 Conclusions

Our results regarding the relationship between gender and corruption are rather ambiguous. There seems to be a significant gender effect on the individual level that women have a lower corruption perception and behaviour, if the number of times they have been offered a bribe is not taken into account. However, when offered is included in the variable men seem to be less corrupt. On the aggregate level a higher representation of women correlates with a higher level of corruption.

Women seem to have less trust in people, over all, but the more general trust the more corruption perception. Women seem to become more corrupt when reaching higher ranks than men, which also contradicts our hypothesis.

Men and women do seem to belong to different kinds of networks where a larger share of women are members of associations and men belong to more informal networks. The formal networks seem to have a positive relation with corruption perception but no relation to behaviour. However we cannot disentangle the corrupt networks from the non-corrupt and therefore we cannot say whether this distinction makes a difference when it comes to corruption.

Women also seem to be less risk averse than men and they have smaller families to take care of. However because of the minimal risk of losing the employment as a consequence of corrupt actions this hypothesis cannot be supported.

There seems to be a difference between the expectations of women in general and women in the public sector, since the respondent's attitudes say that women in general are less corrupt but among the respondents women had actually been offered bribes/gifts or favours to a larger extent.

In conclusion the result from our study about the relation between corruption and gender is ambiguous, and our hypothesis about a gender effect and its underlying mechanisms cannot explain corruption. This could be due to imperfections in our survey questionnaire, experiment and interviews. However our large and diverse material makes our result, that the relationship between more women and a lower level of corruption cannot be verified, more solid and the idea that women have a positive effect on corruption more questioned. Hence, we remain critical to using increased female participation as an anti-corruption strategy since the effect from such a strategy is still not clarified.

From our study we find other suggestions of anticorruption policies which could be successful in Ghana's public sector. Since the culture of gift-giving is widespread and by many not even perceived as a problem, this must be dealt with. Well-functioning internal reporting systems must be established where the accuser can remain anonymous. The reprisal system must be more effective so the consequences of being caught are factual. Further a separation of the attorney general from the ministry of justice and the government, could lead to more objective investigations and might lead to more cases being taken to court. The presence of quiet corruption needs also to be considered and a first step could be to provide civil servants with clear job descriptions and guarantee that those who are on the pay roll actually perform their tasks. If it is possible to monitor people's input and fire those who do not meet the standards, the salaries could be raised for the rest.

We suggest that more research should be undertaken within the field of corruption where different kinds of corrupt actions are investigated and perhaps a different conclusion can be drawn.



## 8 References

- African Development Fund, 2008. "Ghana Country Gender Profile", <http://www.afdb.org/en/countries/west-africa/ghana/>, 20/5/2010.
- Alfred, Mary V., 2009. "Social Capital Theory: Implications of Women's Networking and Learning". *New Directions for Adult and Continuing Education*, nr 122, pgs. 3-12.
- Alolo-Alhassan, Namawu, 2006. "The gender-Corruption Nexus: An Examination of the Gender Dynamics of Corruption in Ghana's Public Sector", School of Public Policy, University of Birmingham, pgs 178-223.
- Alolo-Alhassan, Namawu, 2007. "Gender and Corruption: Testing the New Consensus". *Public Administration and Development*, nr 27, pgs 227-237.
- CHRAJ, 2006. "Guidelines on Conflict of Interest to Assist Public Officials Identify, Manage and Resolve Conflicts of Interest".
- Dollar, David – Fisman, Raymond – Gatti, Roberta, 2001. "Are Women Really the Fairer Sex? Corruption and Women in Government". North-Holland, nr 46, pgs. 423-429.
- Dollar, David – Fisman, Raymond – Gatti, Roberta, 1999. "Are Women Really the Fairer Sex? Corruption and Women in Government". Washington DC: The World Bank.
- GACC, 2010a. "The Whistle Blowing in Ghana Training Manual for Civil Society".
- GACC, 2010b. "A Guide to Whistle Blowing in Ghana"
- Ghana Statistical Service, 2002. "Population and Housing Census, Summary Report of Final Results".
- Goetz, Anne Marie, 2007. "Political Cleaners: Women As the New Anti-Corruption Force?". *Development and Change*, nr 38, pgs. 87-105.
- Gujarati, Damodar N., 2006. *Essentials of Econometrics*. Tredje upplagan. New York: McGraw-Hill Companies, Inc.
- Hellsten, Sirkku – Larbi, George A 2006. "Public good or private good? The paradox of public and private ethics in the context of developing countries". *Public Administration and Development*, nr 26, pgs. 135-145.
- Keltner, Dacher – Gruenfeld, Deborah H – Anderson, Cameron, 2003. "Power, Approach and Inhibition". *Psychological Review*, nr 2, pgs. 265-284.

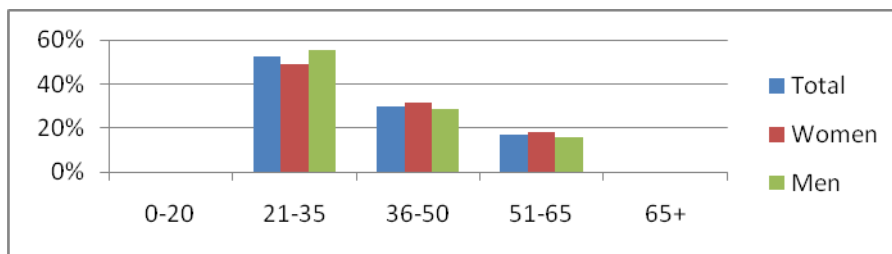
- Levine, John M – Moreland, Richard L, 2006. *Small Groups*. New York: Psychology press.
- Manzetti, Luigi – Wilson, Carole J, 2007. “Why do Corrupt Governments Maintain Public Support?”. *Comparative Political Studies*, nr 40, pgs. 949-970.
- Pruckner, Gerald J – Sausgruber, Rupert, 2009. “Honesty on the Streets – A Natural Field Experiment on Newspaper Purchasing”. *University of Innsbruck*.
- Rothstein, Bo, 2003. *Sociala fällor och tillitens problem*. Stockholm: SNS förlag
- Rothstein, Bo – Uslaner, Eric M, 2005. “All for all. Equality, Corruption and Social Trust“, *World Politics*, nr 58, pgs. 41-72.
- Sunder, Shyam, 2005. “Changing expectations as a source of and Remedy for Corruption”. *Journal of Public Budgeting, Accounting & Financial Management*, nr 3, pgs. 420-424.
- Sung, Hung-En, 2003. ”Fairer Sex and Fairer System? Gender and Corruption Revisited”. *Social Forces*, nr 2, pgs. 703-723.
- Swamy, Anand – Knack, Stephen – Lee, Young – Azfar, Omar, 2001. ”Gender and Corruption”. *Journal of Development Economics*, nr 64, pgs. 25-55.
- The Female Parliamentarian, Women, Media and Change Newsletter, 2008 (?). “How Others See Women’s Participation in Politics”, *Women Media and Change*, Volume 1/No.1.
- Transparency International, 2009. “Corruption Perceptions Index 2009, Regional Highlights: Sub-Saharan Africa”,  
[http://www.transparency.org/policy\\_research/surveys\\_indices/cpi/2009/regional\\_highlights](http://www.transparency.org/policy_research/surveys_indices/cpi/2009/regional_highlights)  
 , 20/5/2010.
- CIA World Fact Book, <https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html>, 10/4/2010.
- Wang, Jia, 2009. “Networking in the workplace: Implications for women's career development”. *New Directions for Adult and Continuing Education*, nr 122, pgs. 33-42.
- World Bank Country Brief,  
<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/GHANAEXTN/0,,print:Y~isCURL:Y~menuPK:351962~pagePK:141132~piPK:141107~theSitePK:351952,00.html>, 10/4/2010.
- World Bank, 2001. *Report on Engendering Development*.  
<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTGENDER/0,,contentMDK:20186672~menuPK:489201~pagePK:148956~piPK:216618~theSitePK:336868,00.html>.  
 8/3/2010.

# 9 Appendix

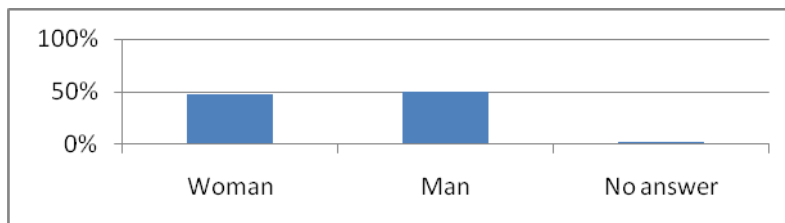
## Questionnaire

Below follow the questions which were asked in the questionnaire. Some of the questions have been grouped together under a headline in order to facilitate the reading of the document. The headlines were not included in the version that was filled in by our respondents but have been added to show which questions relate to our hypotheses.

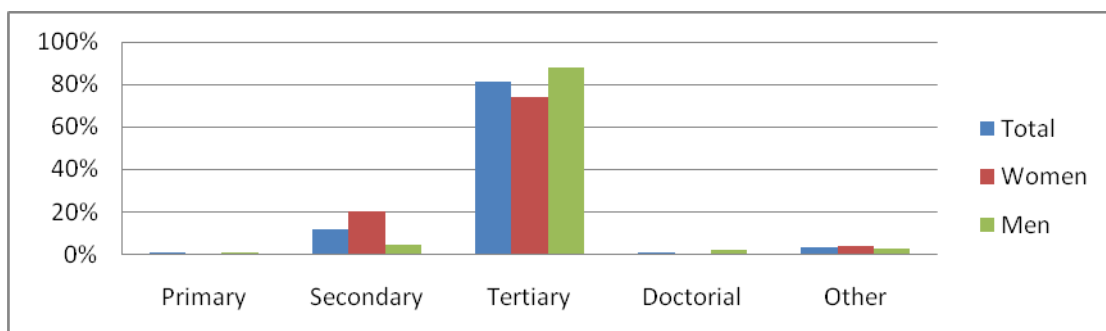
### 1. How old are you?



### 2. Are you:



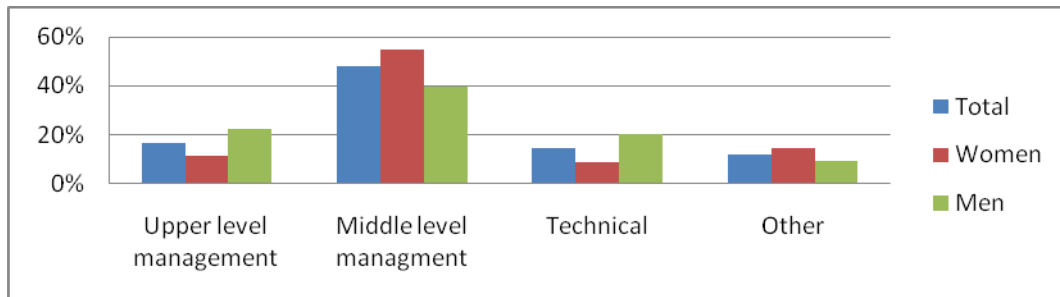
### 3. Level of education?



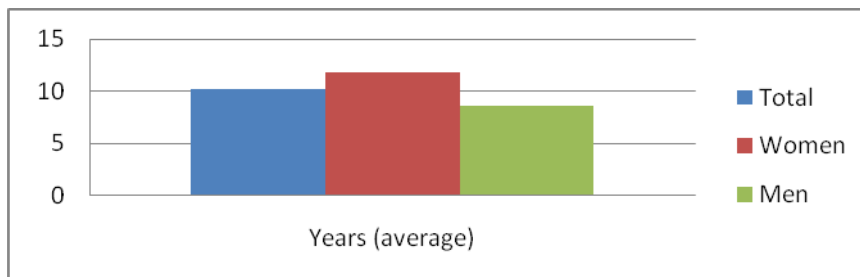
4. In what ministry do you work and what is your title? \_\_\_\_\_

\_\_\_\_\_

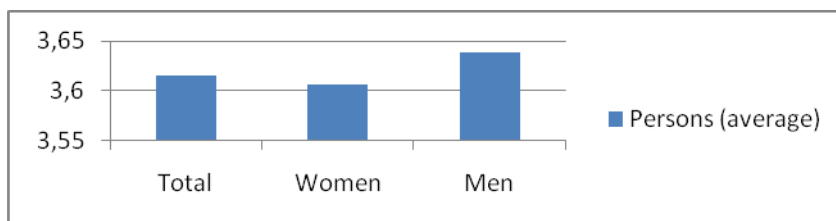
5. Level of position?



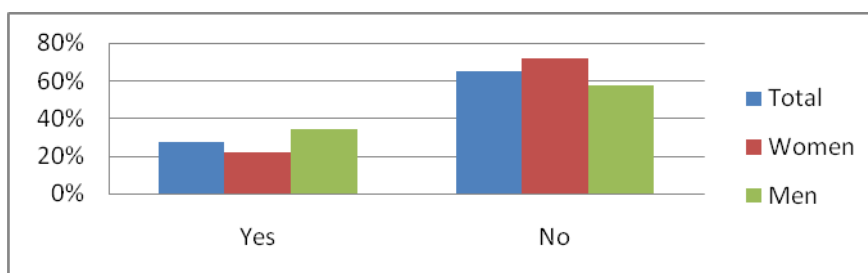
6. Length of time in service? \_\_\_\_\_



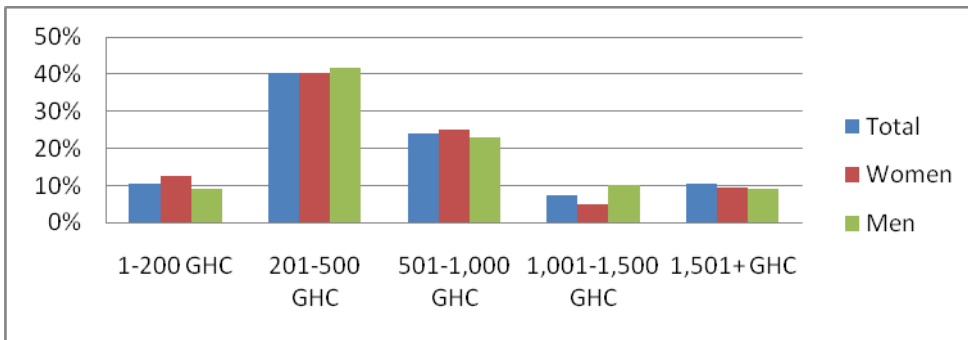
7. A) How many people in your household do you provide for?



B) Are you the only provider?



8. What is the monthly income in your household?



**Networks**

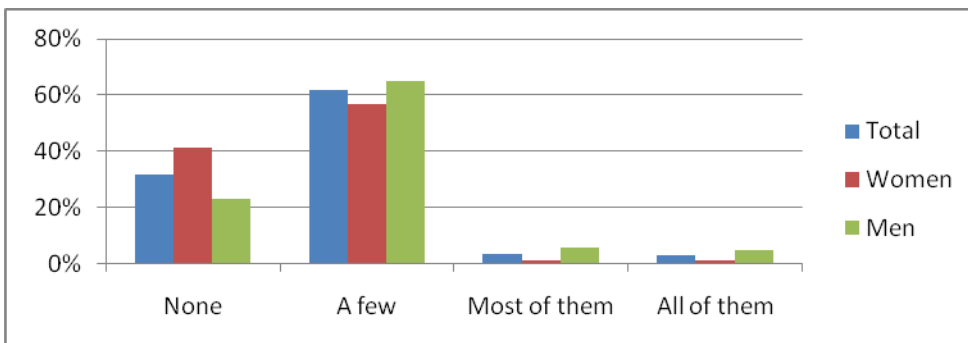
9. Are you a member of any voluntary associations? If yes, what type of association?

Church      Sports      Political      Other      None

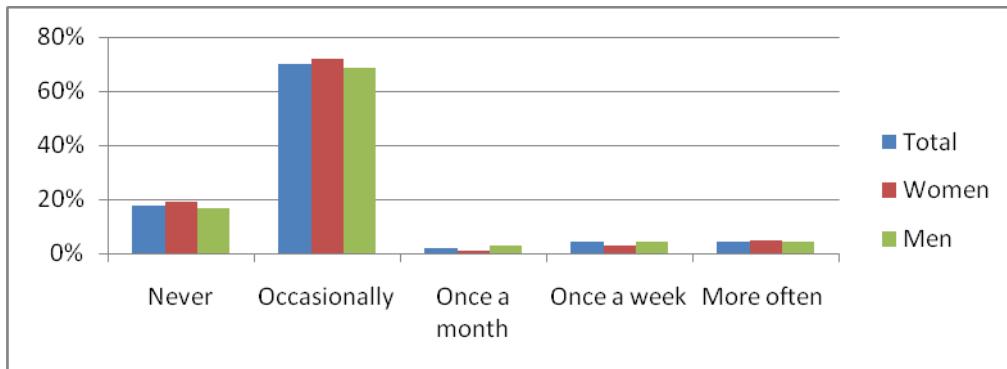
                      

If other, please specify: \_\_\_\_\_

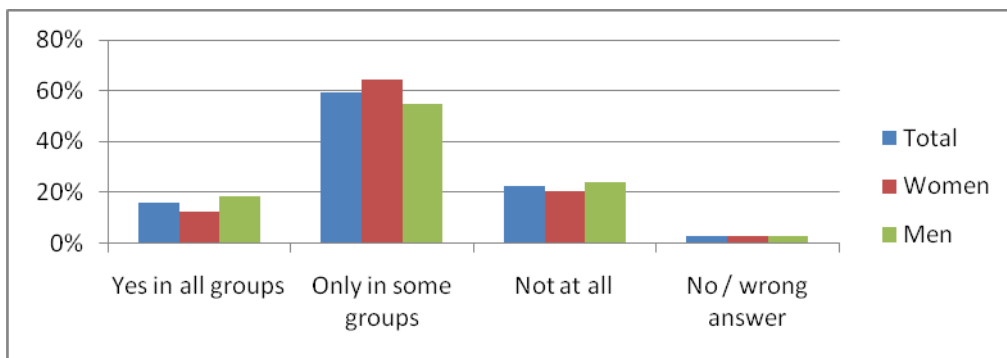
10. How many of your colleagues do you spend time with outside of the office?



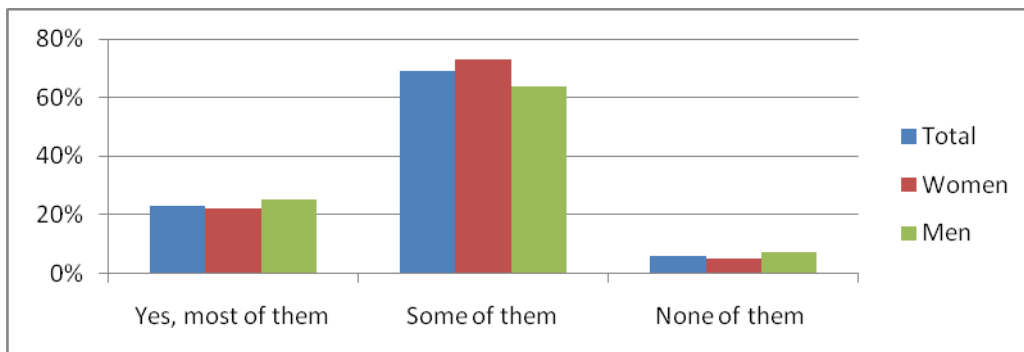
11. How often do you go out for a meal or a drink with your colleagues?



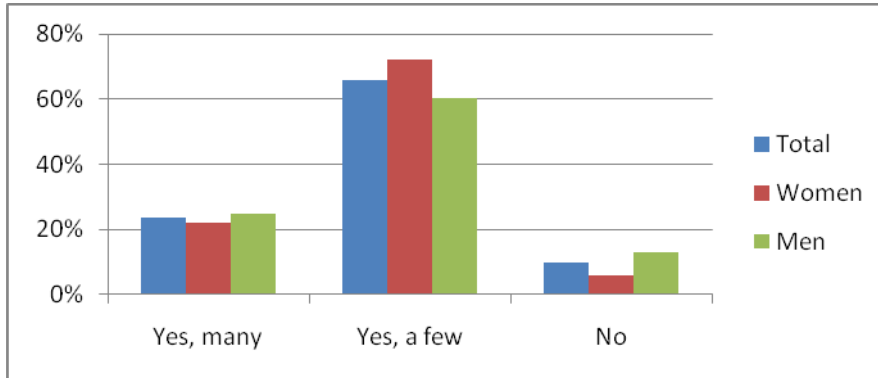
12. Do you feel included in the social groups and networks in your workplace?



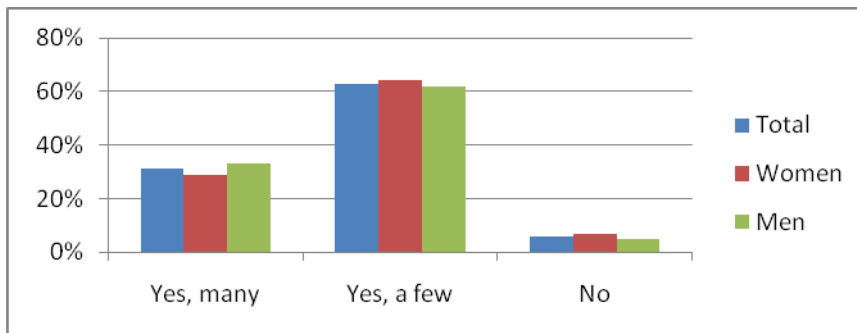
13. Are most of your friends in the same type of positions as you are?



14. Do you have friends in other ministries?



15.A. Do you have friends in other sectors?



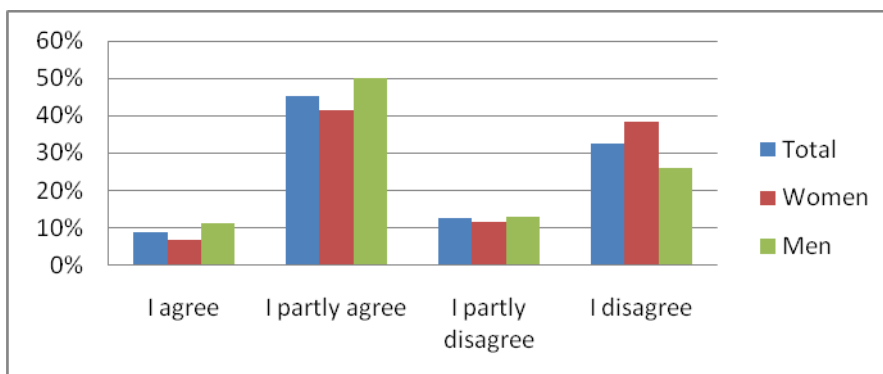
B. In which type of sector?

Business  Media  Juridical  Financial  Other

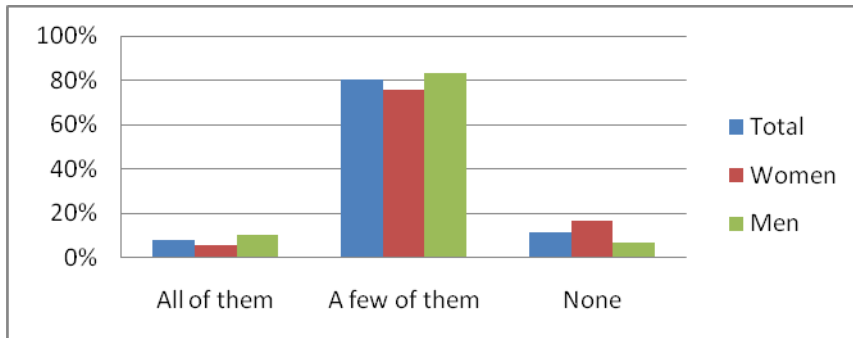
If other, please specify: \_\_\_\_\_

**Social trust**

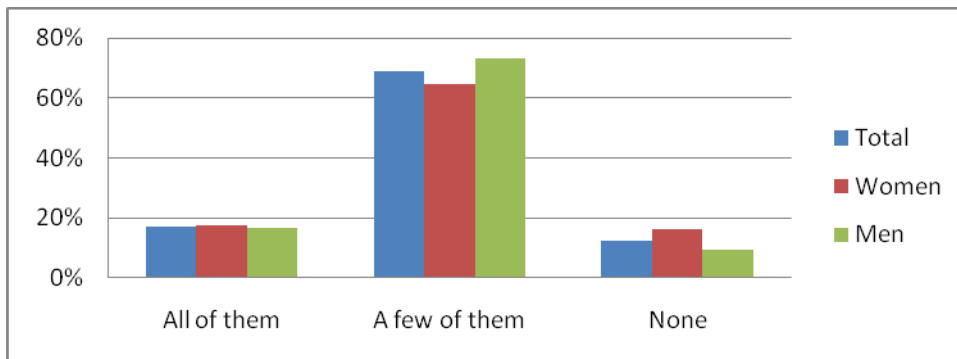
16. Do you agree that people in general can be trusted?



17. How many of your friends would you lend money to?



18. How many of your friends would lend money to you?

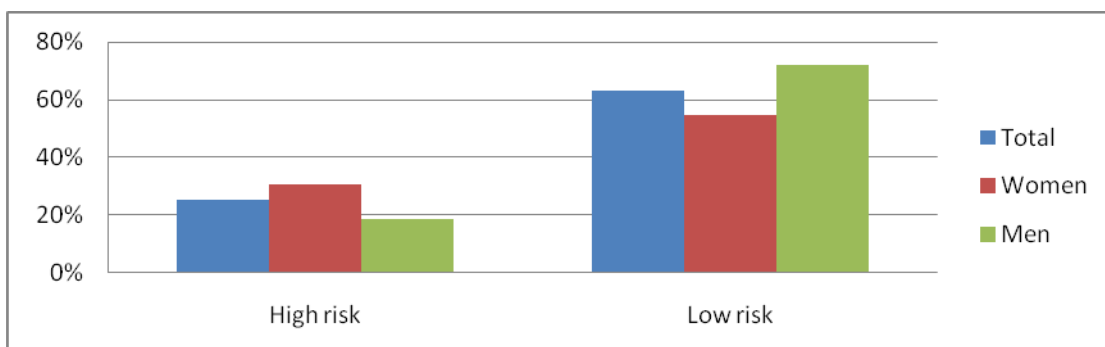


***Risk aversion***

19. You are faced with two alternative investment opportunities:

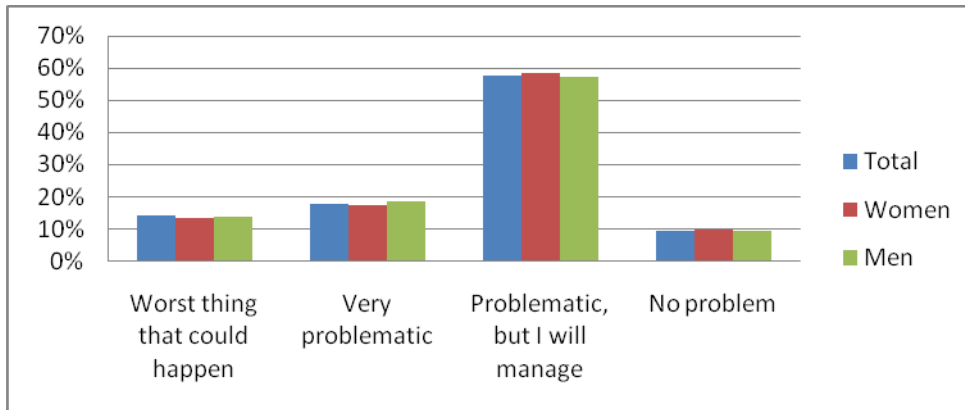
1. Return: 175% of invested capital with 50% certainty, otherwise 0
2. Return: 110% of invested capital with 80% certainty, otherwise 0

Which one would you choose?



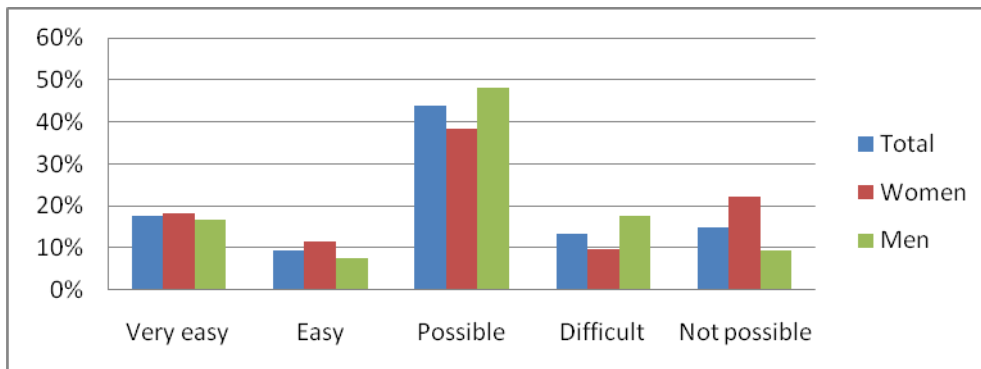


20. When considering your family situation, how would you feel if you lost your employment?

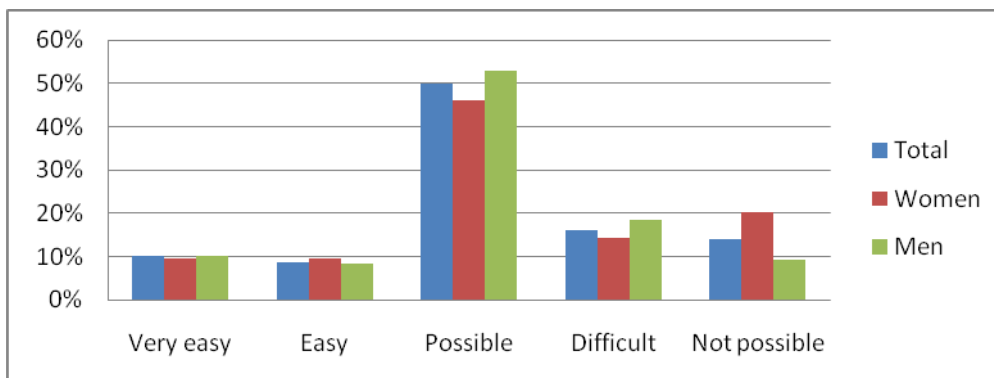


**Corruption**

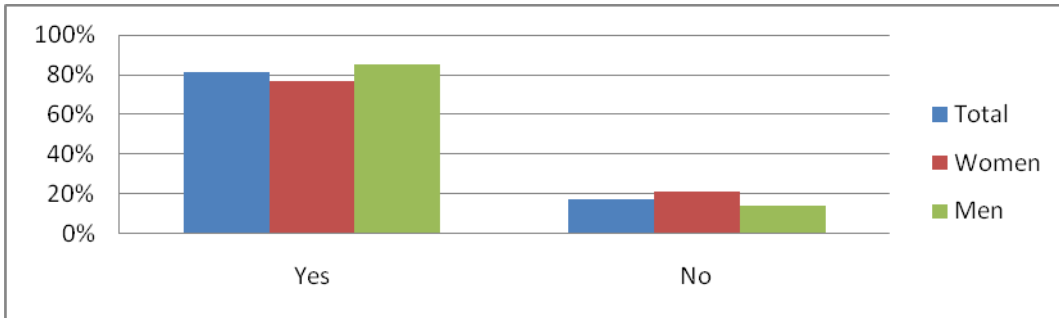
21. Would it be possible for a state official to use his/her position of power for private gain without anyone noticing it?



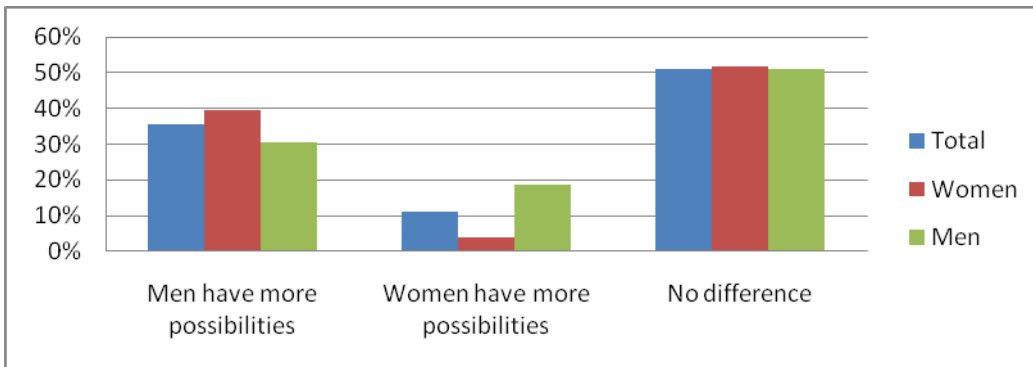
22. Would it be possible for a colleague of yours to use his/her position for private gain in your workplace?



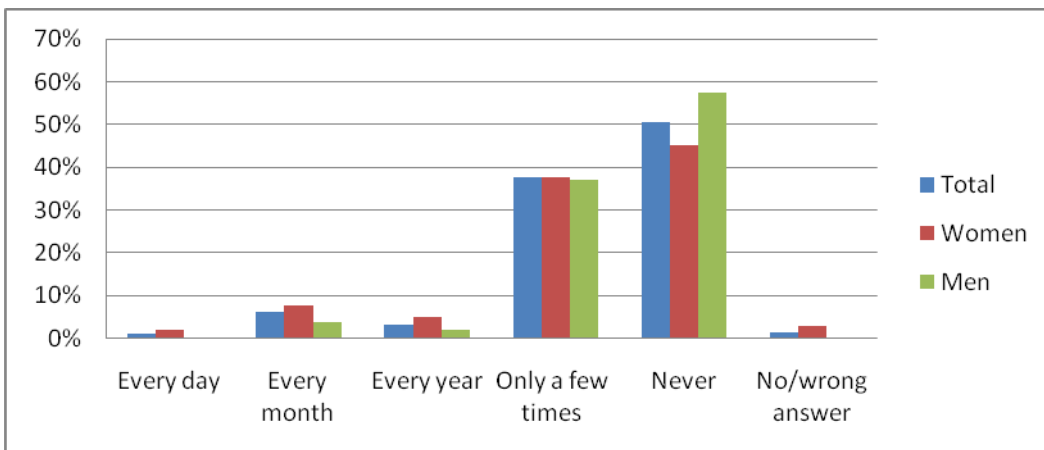
23. Are there greater possibilities for a state official at a higher level of employment to use his/her position for private gain?



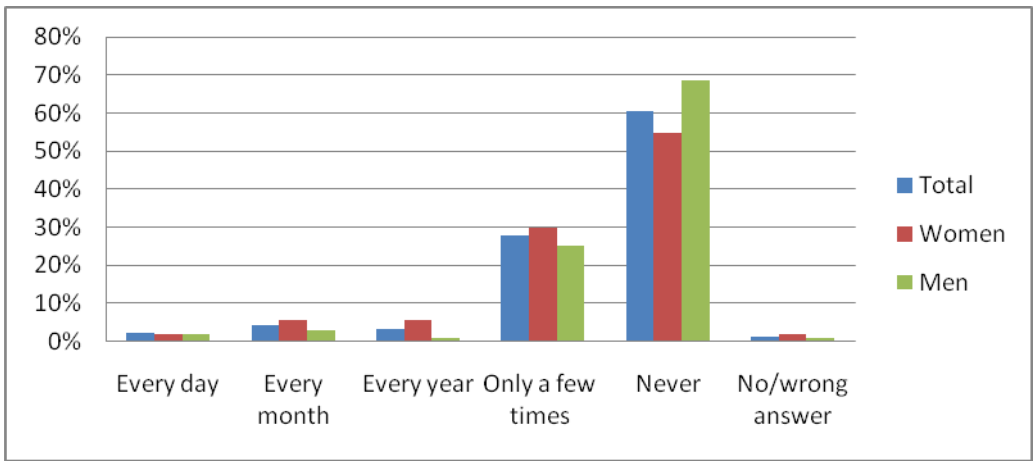
24. Do women and men have the same possibilities to use their position for private gain?



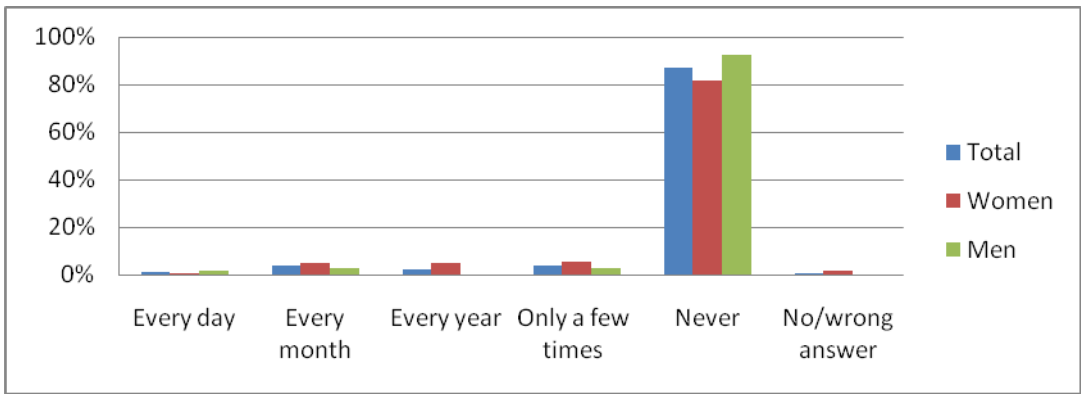
25.A. How often are you offered payment, gifts or favours to perform a certain task within your work duties?



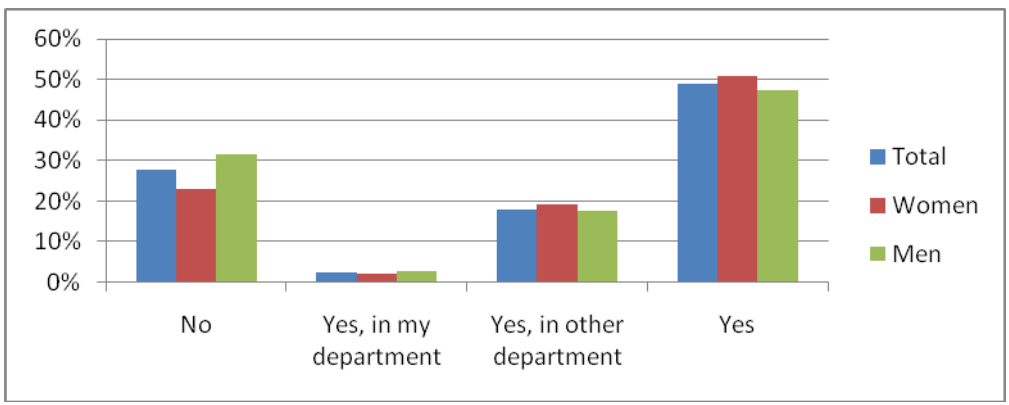
**B. How often would you accept it?**



**C. How often would you demand it?**

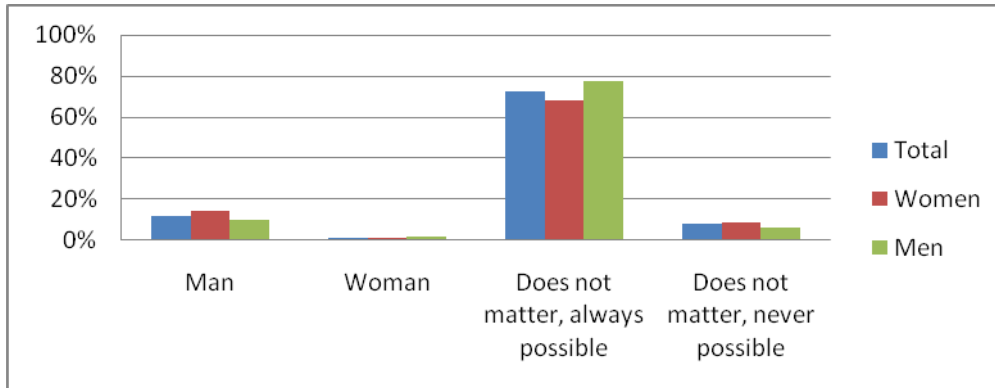


**26. Do you find state officials in general to be corrupt or self-serving?**

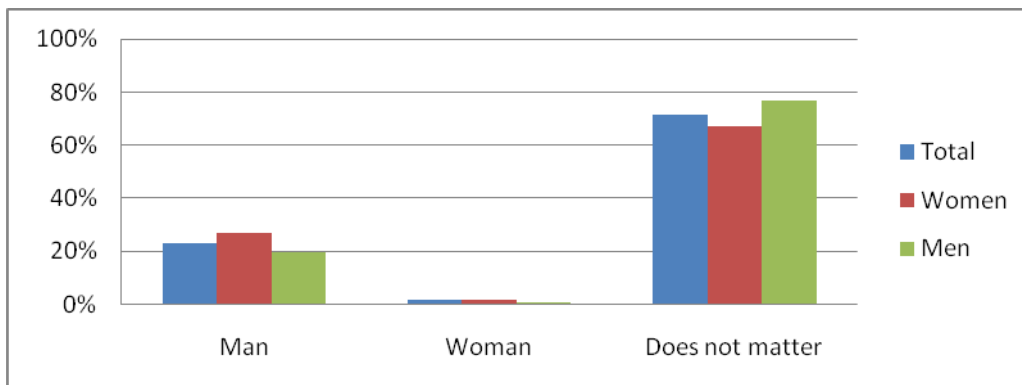


## Expectations

27. When is it most likely that one manages to get out of an inconvenient situation and avoid being fined or sentenced *by offering* a bribe, for example in a traffic violation? When the police officer is;



28. A police officer *demand*s a bribe as an opportunity for you to get out of a situation. Would that be more likely if the police officer is a:



29. Do you find women in general to be less corrupt or self-serving than men?

