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The Life and Times of Corrupt Civil Servants

A Survey of Public Officials in Nigeria

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The Life and Times of Corrupt Civil Servants: A Survey of Public Officials in Nigeria

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Abstract

Understanding corruption in developing country governments has typically been an exercise in association. Perceptions or measures of phenomena argued to be related to corruption are used as proxy measures. A different strategy is to directly survey civil servants in corrupt settings. This paper provides an overview of just such a survey, carried out in Nigeria. It describes the tradeoffs involved in undertaking such an exercise and some of the results, with a particular focus on the measurement of corruption. Nigerian officials state that public sector corruption is at the heart of why public projects fail, with officials under significant pressure to undertake corrupt acts.

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1 Introduction

Combating corruption has long been at the forefront of research on public policy (Aidt, 2003). However, few studies have captured the views of the corrupt themselves. Interviewing public officials about corruption has a number of benefits. It provides a direct link to the actors making the choices of interest. These actors can describe a greater range of margins of interest than are usually available. And the researcher can obtain an understanding of the context in which corruption is embedded.

However, there are also a range of costs associated with interviewing public officials. Foremost, accessing public officials on a scale sufficient to gain a representative sample has typically been challenging. The civil service is a relatively secretive entity in many corrupt countries. Even if access is granted, it is not clear that the researcher could gain the cooperation of officials of interest.

Gaining a better understanding of the dynamics of the civil service in the developing world is important. Many bureaucracies underlie the provision of welfare goods in the developing world and play an important role in constraining or stimulating growth. Thus, rather than surrendering to these difficulties, we attempt to mitigate each as far as possible in a survey of Nigerian civil servants. In the last quarter of 2010, over 4000 civil servants from the Federal Government of Nigeria were asked about a range of aspects of their work, including their experience of corruption. This paper outlines a number of the issues the researcher confronts in surveying civil servants, how we attempted to mitigate these in the current data, and what the data tells us about life in the civil service.

Section 2 discusses the options for mitigation and the reasons a particular course of action was taken in the current exercise. Section 3 looks at the sample composition. Whilst there are concerns to be had, such as an increasing number of missing data points towards the end of the survey, it is argued that the data presents an important window into a developing country civil service. The most likely scenario is that the averages given here are lower bounds on the truth. In section 4, we aim to provide some assessments as to the validity of the data. It is argued that there are indicators of internal and external validity of the data.

Section 5 takes the data at face value and describes the sample and the context in which a Nigerian civil servant finds themselves. This is a relatively unique account of the life of officials in the developing world. The most extensive survey of such officials taken previous to this was the World Bank's 'Public Officials' Surveys'. In the late 1990s, sixteen country surveys involving a total of 7,000 public officials were undertaken, with the largest being in Bangladesh (821 respondents). Little has been published from this exercise. Around the same time, Miller et al. (2001) investigated the experience of civil servants in Eastern Europe. Their questionnaire contained a number of questions about their experience as officials but the main focus was the experience of officials as citizens. More recently, researchers have played laboratory games with public officials (Alatas et al., 2009; Barr et al., 2009; Serra et al., 2010; see Abink, 2005 for an introduction). These concentrate on the results of specific games played with small subsets of officials.[1]

[1] There are more extensive surveys of civil servants in the developed world. For example, in

The existing literature leaves broad scope for us to better understand the internal workings of bureaucracies, particularly in the developing world. When interviewing public officials, issues of measurement will often be considered a first-order concern. That is certainly the perspective this paper takes. Interviewing civil servants is a process of engendering a compact between the interviewers and respondents that takes account of political constraints and personal sensitivities. Issues of trust and confidentiality are more binding than in a standard household survey. We have attempted to mitigate measurement concerns as best as possible in ways that suit the institutional context of the Nigerian civil service. Whilst aware of the dangers, we hope that what results is a useful window into an important topic.

2 Interviewing civil servants

When conducting surveys we would like our respondents to be honest, forthright, and forthcoming. When interviewing public officials in the developing world, particularly in corrupt countries such as Nigeria, we might have concerns that each of these is in danger. Officials may have aspects of their work they would prefer to hide, they may have ulterior motives for the answers of survey questions, and they may feel uncertain about the use of the answers, particularly if they can be traced back to the individual respondent.

Rather than seeing these challenges as insurmountable, the ambition of the survey analysed here was to mitigate these issues as far as possible. The range of potential mitigation strategies is very large, and at points disjoint. The strategies undertaken were felt to be those best suited to the institutional context of the Federal Government of Nigeria. This section aims to provide a flavour of the tradeoffs involved in these types of surveys and not a comprehensive catalogue.[2]

2.1 Honest

The more comfortable survey respondents are with the use of their answers, the more likely they are to be honest. This translates into a need to create an atmosphere of anonymity and trust. There are two key considerations: the setting of the interviews and the questions asked.

The researcher must choose whether respondents are interviewed separated from their colleagues or able to observe the actions of their peers. Most interviews are undertaken with a single individual at a time. In this project, surveys were conducted with all civil servants in the same room, independently filling in their own survey questionnaire. Nigeria has a highly consensual culture, a trait that is intensified in the civil service. In pilots, we found that officials were far more open to answering survey questions when they were in groups and could observe their colleagues engaged in the interview process.

the US the 'Federal Employee Viewpoint Survey' (www.fedview.opm.gov) is an annual assessment of whether public officials believe 'conditions characterizing successful organizations are present in their agencies'. However, even here the breadth of perceptions and engagements asked about is limited.

[2]Further discussion of how we ran the survey is provided in a data appendix.

This facilitated a setting of anonymity, rather than obstructed it. Sheer numbers of questionnaires made attribution difficult. The interviewees were asked not to write their names or any individual identifiers such as their civil service number on their questionnaire. The questionnaires were collected together and placed in a random order into a box that was then sealed. In the introduction to the survey, all this was highlighted, commitments to anonymity were made, and it was stressed that as there were so many individuals in the room, there would be no way for the survey group to trace a set of answers to any single official. Assessments by the survey team indicated that officials seemed confident in the anonymity of the process.

Critical to respondent engagement with the survey was that the survey team was made up of civil servants. When designing an official's survey, the researcher may engage an external survey firm (as was done in the World Bank's Public Official's Survey or Miller et al. (2001)) or work with the relevant entity in the survey country civil service. In this project we chose the latter. In pilot studies officials told us that they would be uncomfortable answering questions to external researchers. They felt they could express their opinions honestly to other civil servants who "knew the conditions of the civil service" but not to an external survey firm "who could do anything with the surveys". The survey was therefore undertaken in collaboration with the Office of the Head of the Civil Service and the Office of the Presidency. Civil servants enumerated the questionnaires and ran the interview sessions. The officials chosen to run the survey were chosen by management in the lead organisations for their honesty and capacity to engage with the survey process.[3]

Turning to the nature of the questions we could ask, there is currently little literature on best-practice in surveying civil servants. Miller et al. (2001) state that studies of corruption should not "focus on general perceptions of the incidence of corruption rather than personal experience". At the same time, they caution against focussing solely on corruption as this artificially highlights the subject and may raise suspicions as to the aim of the survey.

Direct questions on corruption may frustrate our efforts to get objective answers to other questions in the survey. There may also be political constraints. Either the lead organisations do not want to be associated with direct questions on corruption or it may make institutions reticent to take part in the survey. Thus, we asked no direct questions on corruption ("How much money have you stolen in the last month?"). As will be discussed in section 4, direct questions may actually be the least useful formulations in settings in which individuals are likely to lie. Rather, just as in the firm-level survey of Reinikka and Svensson (2001), "the questions on corruption were phrased in an indirect manner to avoid implicating the respondent of wrongdoing." We focussed on the experience of corruption by officers and their relationship to other officials ("In which proportion of projects were you put under pressure to divert some of the funds?", "If your boss receives some benefit from a kick-back, would he share such a benefit equally, hierachically, or not at all?", and so on.) We will see how this provides us with greater data validity under a wider range of assumptions on the biases affecting our data.

[3]The researcher, though a British national, was an officer in the Nigerian civil service for the five years preceding the survey.

We then aimed to formulate questions such that the more restrictive political constraint, the first, was binding. We structured our survey to maximise the return of information based on our pilot surveys and the experiences of the survey team.

2.2 Forthright

Having officials trust you sufficiently that they will respond to survey questions is certainly important. However, it is also useful for them to answer in a direct and straightforward way, as this reduces noise in the data. The key considerations here are the ordering of questions, their relationship, and the constraints placed on response options.

Miller et al. (2001) and Reinikka and Svensson (2003) argue that questions on corruption should be placed late on in a survey, having been preceded by more general questions about the experience of working as a civil servant. Such an approach was taken here. Otherwise, being faced abruptly with such sensitive issues can endanger responses to the questionnaire as a whole, as the interviewee becomes defensive in their responses. Beyond that, there is almost no evidence as to what the optimal ordering of questions in surveys of officials should be.

Questionnaires started with fairly general, non-sensitive questions, gradually moving on to perceptions of, and finally, personal experiences with, corruption. This approach encourages the respondent to engage with the questionnaire early on and then uses this capital to elicit more precise answers to corruption questions towards the end.

We also attempted to include questions that were interrelated, assessing different aspects of the same phenomenon. This allows us (as we do below) to look at issues such as corruption from multiple perspectives. For example, we ask how typical scenarios of corruption in the private sector are, the frequency with which civil servants are pressured by private sector actors to undertake corrupt acts, and the importance of private sector corruption in the failure of public projects.

We also look at capture and other aspects of governance that imply corruption but are not directly associated with it. Nane (2007) interviewed ex-managerial staff from the Nigerian civil service and asked them about the nature of corruption. His respondents state that the most common pressures for corruption arise from coerion by colleagues. We therefore look at the pressure on officials to undertake corrupt acts, at both the official and organisational levels.

Engaging civil servants as enumerators facilitates trust in the survey process as their colleagues believe "they know how it is". However, this invites the danger that officials do not provide sufficient detail in their answers. We therefore made most questions closed (categorical, number of years, and so on) rather than open.[4]

[4]We did, however, conduct the pilots using open questions which then informed our choice of categories in the final questionnaire.

2.3 Forthcoming

To gain as much information as possible, we want to encourage officials to report on a range of topics related to our area of interest. Miller et al. (2001) argue that focussing a survey solely on corruption highlights the unusual nature of the exercise, away from the myriad concerns of service life. It also doesn't provide the range of information that policy makers would like from the survey.

We motivated our survey to engender a desire to communicate on the part of the officials. Each survey session was started with an introduction by the most senior enumerator. That introduction included the following statements:

> "We are conducting a survey of civil servants from across the service. The aim of this survey is to gain a view of government from within. We want to understand the constraints and issues civil servants face in their everyday work ... We want to build a world-class public service in Nigeria. The first step in doing this is to gather information, which is what this survey aims to do."

The response to this aim was very positive across the service. An important question that should be asked in any survey of public officials is what motivated officials to answer any of our questions. Since we had come with the authority of the Head of the Civil Service, part of the answer to that question in this context is that it was mandatory. Beyond that though, civil servants across the federation told us that they were happy to answer our questions, as "everyone in the civil service knows what the problems are".

Consistent with this approach, we included questions on a broad nature of the topics (from how officials entered the service to what training they would most like). This not only allowed us to place corruption questions in a wider framework but also assured officials that our intent was to understand the broad range of engagements they faced in their daily life.[5]

3 Sample description

The 4425 officials interviewed are all members of the Nigerian civil service. Why might Nigeria be an interesting case to understand? First, Nigeria is home to 150 million people, the majority of whom live in absolute poverty. Thus, understanding governance in the country is important in its own right.

Second, whilst Nigeria's public service is certainly unique, it can be said to share many important features with other cases of interest. In 2010, when the survey was undertaken, Nigeria was ranked 134 out of 178 countries ranked in Transparency International's Corruption Perceptions Index.[6] This places it roughly

[5] We also gave officials the opportunity to bring up issues we had not focussed on in the questionnaire during a post-enumeration focus group. The report of these discussions (Federal Government of Nigeria, 2011) provides a check on our findings from the survey as well numerous recommendations for public service reform.

[6] The Corruption Perceptions Index (CPI) measures "the degree to which public sector corruption is perceived to exist" within nations where sufficient data exists. More information about the CPI can be found at www.transparency.org/policy_research/surveys_indices/cpi/2010.

in the middle of those countries classed as significantly corrupt. Its civil service structure is based on British colonial origins, aligning it with a large number of poor countries with significant colonial legacies in their public organisations. A large portion of government revenues (roughly 80%) derive from mineral wealth, again a recurring feature of many developing country governments.

All of the organisations studied are organs of the Federal Government, rather than the state or local governments.[7] They were chosen as part of the 'Overview of Public Expenditure in NEEDS' (OPEN) initiative which aimed to understand service delivery failures by passing funds through a sample of organisations representative of the range of organisations providing social welfare services. These included the range of ministries working on social welfare (for example, the ministries of health and education), their agencies (such as the National Teacher's Institute), and regional bodies (such as federal medical centres). Further discussion of the OPEN initiative can be found in Presidency of Nigeria (2007a,b; 2010) and in the Data Appendix.

At each organisation, we aimed to gain a representative sample of officials above grade 7 from each department.[8] These officers are core civil servants potentially from any cadre (accountants, economists, nurses, and so on) who undertake the daily workload of the civil service. We worked with our contacts in each organisation to draw a representative sample of officers from the nominal roll of the organisation. Checks on the robustness of this exercise are presented in the Data Appendix. In general, it seems that the sample is relatively representative of the target population: civil servants of the Federal Government's social welfare service organisations.

The characteristics of the sample are described in table 1. Roughly two-thirds of the sample are men which echoes the distribution in the service as a whole. The average official has an undergraduate degree (16 years of education) but there is a range from primary through to PhD. There is a wide spread of tenure in the service, with a mean of 17 years and standard deviation of 9. The average service grade level (a measure of seniority) is 11, which is a few steps below the directorate level, which starts at 14. However, we have officials from all grades in the data.

4 Data validity

As described in section 2, we may be concerned about the informational content of data from officials in the developing world. Whilst we have tried to mitigate these concerns through our survey design, we can also attempt checks on the validity of the data. The potential biases, and relevant checks are discussed here.

[7] Surveys were undertaken at a sample of state and local governments during the Civil Servants Survey. However, it is not clear that the samples surveyed were representative of the organisations at those levels. This assessment is based on the fact that we have no benchmarks such as nominal roles to compare them to, as well as on feedback from the survey team.

[8] Grade 7 is the entry-level grade for technical officers. Officers below grade 7 undertake non-technical work such as clerical officers, messengers, and so on. They are not the focus of this project.

4.1 Potential biases

Given the sensitive nature of both the formal and informal aspects of public officials work, we may be concerned that officials may bias their survey responses. This bias may take multiple forms which are best understood in the following framework. Imagine a simple world in which there are corrupt and non-corrupt officials. C_i is the corruption of official i. Each officials makes a statement about the level of corruption, $\hat{C}_i$, that may or may not be true. We aggregate the statement using an aggregation function, $A[\cdot]$.[9] We can ask officials about their own corruption, such that $\hat{C}_i = f(C_i)$, about everyone's, $\hat{C}_i = f(C_1, \ldots, C_{i-1}, C_i, C_{i+1}, \ldots, C_n)$, about other officials, $\hat{C}_i = f(C_1, \ldots, C_{i-1}, C_{i+1}, \ldots, C_n)$, or some subset thereof.

It is worth making a number of notes on the discussion in section 2 using this setup. First, asking officials directly about their own corruption, $\hat{C}_i = f(C_i)$, will only work if everyone tells the truth and all officials (or a representative sample) respond. Otherwise, we gain $A\left[\hat{C}_i\right] = \alpha A\left[\hat{C}_i\right] + \beta A\left[\hat{D}_i\right] + (1 - \alpha - \beta)A[.]$, where α corresponds to the proportion of truth-tellers, β corresponds to the proportion of liars, who state $D_i \neq C_i$ and '.' implies a null response. If some statements are false or missing, all aggregation functions will be biased. Since we expect officials to be least willing to implicate themselves, asking directly about corruption is likely to be of limited use given the strong conditions under which it is unbiased.

Now suppose we ask about everyone else and not the respondent, such that $\hat{C}_i = f(C_1, \ldots, C_{i-1}, C_{i+1}, \ldots, C_n)$, $i = 1, \ldots, n$. This is the strategy we've taken in much of the survey reported here. If everyone tells the truth and C_i is small enough, every statement will be approximately the same. If corrupt officials drop out, we are left with $\hat{C}_i = f(C_i, \ldots, C_{i-1}, C_{i+1}, \ldots, C_n)$, $i \in \{noncorrupt\}$. Each of these statements is exactly the same as in the truth-telling case and all provide the same information as the unobserved statements of corrupt officials. Thus, a mean of those statements we observe provides us with a close approximation to the truth. Similarly, if corrupt officials lie about their own corruption but report truthfully otherwise, we return to the full set of truth-telling statements.

If corrupt officials lie about themselves and other members of the group but drop out, we observe $\hat{C}_i = f(C_i, \ldots, C_{i-1}, C_{i+1}, \ldots, C_n)$, $i \in \{noncorrupt\}$ as above. However, they may falsely report rather than drop out. Suppose a set I of officials report a downward biased corruption level for officials $i = 1, \ldots, k$. We now observe everyone in the corrupt group reporting $\hat{C}_i^{corrupt} = f\left(\underline{C}_1, \ldots, \underline{C}_{i-1}, \underline{C}_{i+1}, \ldots, \underline{C}_k, \ldots, C_n\right)$, $i = 1, \ldots, k$ and everyone else reporting

[9] It is feasible that officials could answer 'strategically', in which officials condition their answers on their perceptions of others' strategies. For example, they may perceive the questionnaire as a game between the interviewer and the interviewee in which answers to survey questions implying no-corruption are taken by the researcher as a false statement and imply corruption. The official therefore raises her answer to the point she believes implies a minimum. Whilst this is feasible, it goes against the experience of the survey team. Also, since the aforementioned beliefs are likely to be made on the characteristics of the survey team, we should find strong interviewer effects. We find almost none at all. These and other strategic stories are likely to be strictly dominated by a strategy that consistently under-reports corruption. We therefore continue with a world in which there are no 'strategic' answers.

$\hat{C}_i^{noncorrupt} = f(C_1, \ldots, C_{i-1}, C_{i+1}, \ldots, C_n)$, $i = k+1, \ldots, n$. Any aggregation function that cannot identify the corrupt cannot weight upwards the assessments of the corrupt. Thus, $A\left[\hat{C}_i\right]$ will be a lower-bound on the truth, biased downward by a weight proportional to the fraction of officials who are corrupt. Since $\hat{C}_i^{corrupt} < \hat{C}_i^{noncorrupt}$, one strategy is to take a max function over corruption statements within an organisation.

The aim of the preceding discussion was to show that under plausible assumptions corruption data can be a reflection of the truth or at least a lower bound. In particular, asking about officials other than the respondent across many respondents substantially changes the nature of assumptions we require to hold for our data to have validity. This gives us greater flexibility for interpreting our data as having relevant informational content.

4.2 Investigating biases

To what extent should we be concerned about these different biases in the current setting? It could be imagined that a necessary condition for the survey to be seen as valid is for the survey process itself to be successful. Analysis of survey team evaluations of the survey process summarised in the Data Appendix indicate that most surveys were productive. 98% of surveys were rated as having gone 'somewhat or very well'. We can therefore think about constituent components of the survey in terms of potential biases.

The discussion in section 4.1 implied the importance of understanding the composition of officials attending the surveys and answering the survey questions. We would be concerned if attendance was based on a characteristic correlated with corruption. As discussed in the Data Appendix, that does not seem to be the case. The distributions of basic official characteristics found in administrative data match closely to the distributions observed in our data.

There is little reason why we should have expected otherwise. Officials were asked to attend "a meeting with officials from the Presidency and the Office of the Head of the Civil Service of the Federation". The organisations were not sent the survey in advance, and its contents were not publicised nor shared more generally. It was unlikely that the survey was high profile enough for there to have been significant discussion across organisations. Thus, there was little information for officers to self-select on. We also had very few 'runaways', officials who, when confronted with the survey, made their excuses and left without attempting any questions.

Another way for respondents to opt out is to simply not answer questions that incriminate themselves along any margin. There is certainly missing data in this survey. The average response rate to all questions was over 80%. The response rate to questions on corruption was a little less than 80%. The missing 20% is a concern. This is the margin along which officials 'dropped out' in this survey.

However, it isn't clear that corruption was the driving factor for the missing data. Analysis presented in the Data Appendix indicates that education played a more significant role. A proxy for corruption at the organisational level is in fact positively related to the number of questions answered.

We can also ask whether our corruption data seems to be internally valid. In the framework we have laid out, we can ask whether using different functions, $g(\cdot)$ instead of $f(\cdot)$, corresponding to different types of question, give us similar answers. The rationale behind using a mixture of approaches (perception and personal experience for example) is they target different types of measurement bias. Taking a number of sets of corruption variables that are likely to measure different aspects of the same quantity, we find correlations between variables of 0.6 to 0.8. Thus, many questions on similar topics are being answered in a consistent manner.

4.3 Independent verification

If we can independently verify the levels of corruption in an organisation, this gives us a range of new tools for assessing our corruption data. In 2006/7, the OPEN process described in section 3 gathered information on the output quality of the organisations visited in this survey. Evaluations of a range of each organisation's projects were visited by independent engineers and civil society and their quality rated. These evaluations provide an independent signal of the level of corruption within an organisation.

If we believe the corrupt are more likely to misreport their true corruption, we should see an inverse-U relationship between reported corruption and 'true corruption' as proxied by our evaluation data. If officials are telling the truth, the relationship should be positive and linear. This is graphically demonstrated in the top panel of figure 1. If officials become increasingly averse to truth-telling as the level of corruption increases, as indicated by the dashed line, we gain the a distribution that is the product of these, as displayed.

The second panel of figure 1 provides exactly such a graph for our survey organisations. 'Reported corruption' is the sum of the three most direct questions on corruption in the survey, averaged at the organisational level. The three trend lines provided are a linear fit, a quadratic fit, and a locally weighted scatterplot smoothing. Each of these imply a gentle positive relationship between actual and reported corruption. Whilst the relationship is not strong, it is certainly not a quadratic.

With the OPEN evaluations we can also test our assertions in section 4.1 that direct questions on corruption focussing on the activities of the individual will be more biased than indirect questions relating to the official's experience of the broader service. Figure 2 splits the questions on corruption into these two types. We see a positive relationship in both cases. However, a linear regression of indirectly reported corruption on actual corruption is strongly significant whilst that of the direct questions is insignificant. It does seem that there is some attenuation at the top end of the spectrum of corruption. When we split the direct questions into those asked early on and those asked at the end, we find the latter far more significant than those asked earlier, implying people are becoming more candid towards the end of the survey.

A similar exercise can be performed for the likelihood that officials missed questions. If we believe the corrupt are more likely to drop out of the survey by missing corruption questions, we should see a positive relationship between the

number of missings in the survey and our evaluation data. We in fact see the opposite, as shown by the bottom panel of figure 1. The higher actual corruption, the less likely respondents are to miss questions.

Taken together, the discussions in this section provide a basis for taking the data produced through this survey process to be taken seriously. Whilst the dangers of a corruption survey outlined above should be in our minds during interpretation, they do not seem to have crippled the exercise.

5 Life in the Nigerian civil service

Given the unique nature of the data, this section takes at face value the responses to non-corruption-related questions and paints a picture of life in the Nigerian civil service. Statements relating to the more sensitive questions are likely to be lower bounds on the truth, and we will turn to corruption in the next section.

5.1 Here today, here tomorrow

We begin our investigation by asking why the individuals we observe as civil servants entered the service. Almost three-quarters of officials stated that 'It was mainly a decision I made for myself, independent of the influence of others', rather than it being a decision made by family or community. Table 2 describes the stated reasons for entering the civil service. 37% state that it was for 'the chance to serve Nigeria' and 29% were interested in the type of work the service affords. Thus, two-thirds of officials state that they entered the service based on the nature of the duties rather than the income or prestige.

Whilst 90% of officials believed they did not have influence over where they were initially posted, almost half were posted to the organisation they wanted to work for. New entrants are matched to organisations by a central body. From then on, the mobility of civil servants is decided by the Head of the Civil Service. Officials therefore continue to have limited control over their passage through the service, and this is reflected in the data. Officers at all stages of their career are as likely to claim they had limited control over their posting. On average, only a third of officials believe they have some control over what organisation they work for. Similarly, almost 50% of civil servants do not believe they have control over the department they work for in their organisation. This is matched by the fact that 60% of officials believe their arrival at their current posting was random. The perceived randomness of job postings was a common concern amongst officials we met. Officers believed that civil servants are not effectively matched with those jobs they are most prepared for.

Many officials argued that they should be allowed to have more control over how frequently they move within the service, with only a quarter of civil servants happy with their transition history. In general, officials moved less than once, with a large proportion (60%) never moving at all. Only 5% of civil servants moved 4 times or more. With the average years of service in our sample being 17 years, these are relatively low migration rates.

Consistent with this pattern, most officers (64%) believed that in five years time they would be at the same organisation, albeit at a higher grade. Most of the others believed they would eventually be moved. Of the officers who were unsatisfied with their predicted future in the civil service but felt they couldn't leave the service, half said it was because they couldn't find the same sort of job security anywhere else. Table 3 describes the reasons officers gave for why they felt they couldn't exit. The 'Other' category contained a myriad of different reasons, from a desire to serve Nigeria, through a hope that things would get better, to an aversion to the unknown. Comparing tables 2 and 3, we note that job security is the reason 22% of civil servants entered the job, but the reason 47% won't leave it.

5.2 The In Crowd

The picture of the service above is one of relative stagnation in terms of transitions between organisations and departments. This stagnation can also be said to be true for promotion. The average time for a single promotion in our data is 5 years, with some people waiting much longer to be promoted, as shown in figure 3.

Together these patterns imply that, on average, the managerial structure around a civil servant is relatively constant. We therefore turn to the relationship between officials and their managers. Many officials seem satisfied with their supervisors. Two-thirds of officials believe that they have the right amount of supervision and 60% state that their managers involve their staff in projects s/he works on.

However, it is relatively common for managers to pick and choose who they work with. 40% of officials say that their boss has a set of people s/he trusts to involve in projects and only involves them. This group of confidant's are drawn from within the department and to a lesser extent the wider organisation. Few outsiders, from the wider service or the private sector, are selected for this group.

Does this group capture the spoils of departmental business? Officials were asked to think about a situation in their department in which a project is illicitly awarded to their boss's friend and describe how such an operation would be organised. 47% stated that their 'boss works with a small group of colleagues on such matters'. 38% indicated that the department as a whole would be involved.

They were then asked how the benefits of such arrangements, such as kick-backs, are shared? 9% of respondents state that their department shares such benefits equally. 26% state that sharing is typically hierachical, with more senior members receiving more than less senior. Two-thirds of respondents stated that they would not receive any of the benefit from such dealings.

When officials were given space to discuss bottlenecks in the delivery of public projects, we often heard of the damaging impacts of these 'little empires' or 'cabals' set up by managerial staff. We will explore this possibility further below.

5.3 Engagements with the outside world

How do civil servants engage with the outside world? When asked about engagement with citizens on recent projects or programmes, officials stated that when they did engage with citizens the process was typically constructive. In 50% of projects recently implemented by the officers interviewed, citizens assisted in improving the effectiveness of the project. Discussions with officials suggest engaging with citizens is seen as an important part of a successful project. In other work related to the projects implemented by these officials (Rogger, 2012b), beneficiary interviews were undertaken with communities. There is a clear correlation between project success and the extent to which bureaucrats worked with the community on the projects.

Community groups are roughly twice as likely as a local government chairpersons to intervene (positively or negatively) in the implementation of a project. The community therefore plays an important role in monitoring the bureaucrat's efforts. In a minority of cases citizens argued with officials over a project (21%) or threatened them with violence (8%). Some citizens and community groups made their protests more formally. In 10% of projects officers stated that citizens had reported them to their superiors and in 6% of cases citizens had appealed to politicians over the fate of the project.

Other citizens attempt to influence bureaucratic decisions through gifts. In 9% of projects officials state they are offered presents or money by citizens. However, the experience of such offers is very heterogeneous across officials, with a small number stating that they are being made offers on almost every project they work on. 6% of officials state they are offered presents or money on at least half the projects they work on.

5.4 Self-reported satisfaction

Given these conditions, it is natural to ask how satisfied the officials are in their jobs. Table 4 provides levels of stated satisfaction over various aspects of working in the service. Surprisingly, almost half of civil servants say they are 'very satisfied' with their current job. Only 10% state they are in any way dissatisfied with their current posting.

However, the constituent components of job welfare asked about in the survey do not seem to match this claim. Over 40% of officials are dissatisfied with their current income, their working conditions, or their opportunities for self-improvement, and 25% are dissatisfied with all of them. Almost 60% of officials are dissatisfied with rewards for good performance. There may be something beyond these factors which provides significant job satisfaction for the civil servants in this sample which reconciles these statements.[10]

[10]Another explanation is that the perception of the term satisfaction differs across the categories. For example, civil servants may feel satisfied to have a job, and are thus rating their assessment against unemployment, but conditional on having a job they are dissatisfied with its conditions.

6 Corruption

One of the most intensively researched areas of government in the developing world has been corruption. One rationale for this focus is that corruption is one of the major constraints on the effective delivery of public projects.

One way to validate this supposition is to ask civil servants themselves what the main reasons are for the failure of public projects. Table 6 provides a tabulation of answers to just such a question, with each respondent being invited to specify multiple reasons if they feel they are critical.

Technical issues are unimportant, with only 3% of projects failing due to technical difficulties. The areas of greatest significance are corruption in the civil service (64%), insufficient engagement between the community and officials (32%), and the misappropriation of the project or its funds by local leaders (26%).[11] Thus, civil servants place the highest weight on public sector corruption in agreement with the focus of the literature.

This section aims to better understand the nature of corruption in Nigeria's public sector. As described in section 2, this is an undertaking that we will approach from a range of angles.

6.1 Just typical

A first approach to assessing the extent and nature of corruption in Nigeria is to ask officials how typical different scenario's of corruption are. We presented a scenario in which a politician puts pressure on a department to switch projects to locations of his choosing. 67% of officials stated that this was a typical scenario in government. In general, officials rated politicians as having the most influence outside the implementing organisation on the success of a typical project.

A similar proportion, 65%, said it was typical for their boss to be approached by a friend to which he would award the contract for a project (outside of the procurement rules of government). We saw in table 5 that 18% of officials believe that corruption in the private sector is one of the main reasons that public projects fail. When asked about the nature of the private sector serving government, 55% stated that those contractors/suppliers/consultants most successful in securing contracts are aligned with government in some way and this reduces their effectiveness. Even amongst those who believed the private sector was independent of government, 40% felt that there was little competition between them.

Officers were also presented with a scenario in which a manager organises the transfer of an old employee of his to his department. Asked why might this occur, a quarter of officials stated that it was so the employee could be used in a corrupt scheme.

[11] The percentages sum up to more than 100% because some officials ticked more than one reason.

6.2 Your experience

We can also ask more directly about the experience of official's themselves. We saw in section 5.2 how kick-backs were shared equally across a department in the experience of 9% of officials and hierachically in the experience of 26% of respondents.

We also asked officials how frequently they observed others breaking service rules for their own benefit. Officials responded that this happened on 38% of projects. There was almost no difference in this proportion when differentiating by sex. However, officers below service grade level 11 stated that they observed 5% more corruption than those above grade 11 (the mean grade in the data). Similarly, those with less than mean years of schooling were more likely to state they observed corruption than those above.

At no point did we ask about the individual's corrupt tendencies. We felt that this would endanger the validity of the exercise, as discussed in section 2. However, we asked questions regarding the intensity of pressure officials were placed under to subvert public projects as follows. Officials stated that in 21% of projects they were placed under pressure to change the project location. In the same proportion of projects (but possibly not the same projects), officials were put under pressure to change the project specifications. A slightly higher proportion, 25%, of officials state that they were put under pressure to help select particular contractors or suppliers. Officials state that on just under 20% of projects they are put under pressure to divert some of the funds.

Given these are likely to be lower bounds, they provide a relatively consistent picture of the considerable pressure some officials must be under to undertake one of the above acts. Supposing that the same biases are affecting each of the above questions, it is interesting to note whether it is the same civil servants feeling under pressure along the above margins. Table 6 provides correlations between the variables of personal experience described above. The correlations are all around 70%, indicating that whilst there is significant overlap between the pressures officials face, the intensity is not uniform.

Each of the our stated pressure variables vary considerably across individuals and organisations. We can also look at the distinct nature of the tasks undertaken at different organisations, such as whether the organisation focuses on capital projects. Such differences do not

6.3 Expenditure preferences

As mentioned in the introduction, there has been a recent literature that performs economic games (such as the dictator or reciprocity games) with a subset of interest of civil servants (for example, those about to become nurses). Playing these sorts of games with the officials in our survey would have been infeasible. However, we attempted to understand preferences for corruption through an allocation scenario that is as close to a game as we felt we could achieve.

We agreed with the Presidency that the preferences of the civil servants we surveyed could be taken into account in the allocation of 1 billion Naira (US$6,666,666).

We therefore could ask civil servants how they would like to allocate real money as follows,

> "The following question relates to an actual distributional decision. We have N1,000,000,000 to distribute on social sector projects in the 2011 budget. We would like to collect information from you on what would be your priorities for investment. Below are five methods for expending these funds. Please distribute this N1,000,000,000 in the column below as you suggest we invest it."

We then set up four categories of expenditures to be received by organisations in the official's sector and asked officials to distribute the allocation across the categories. The categories were chosen to be increasingly difficult to extract rents from. In fact, the civil servants who put the categories together agreed that there was a consensus in the civil service on the degree to which corruption would affect each of the categories.

The ambition of the exercise is to make assertions about the preferences for corruption by the degree to which an official skews their distribution towards the corrupt categories. Thus, an official who places all N1,000,000,000 in the most corrupt category has expressed a preference for the highest degree of corruption. There are a range of caveats to this analysis, such as if the official is making a strategic choice based on her perceiving this as a corruption experiment. However, as is stated in section 4, we argue that there is a case to take the data at face value.

Figure 4 describes the allocation of distributions as deviations from the optimal, in which an official invests all the funds in the least corrupt allocation. If one was to take the set up seriously we could interpret the results as a distribution of preferences for corruption. Even if one were to take the set up less seriously, the figure highlights that within the service there is a distribution of preferences for corruption, with some people highly averse to corrupt activities and others less so.

7 Conclusions

This paper presents descriptive results from a survey of public officials in Nigeria. It takes the perspective that in such surveys, issues in measurement are of first-order concern. It thus discusses the tradeoffs involved in implementing such a survey in detail and presents the decisions that were taken in the current setting.

These decisions were based on the Nigerian institutional context and the very limited literature on best-practice in the surveying of public officials. Many avenues exist for research into the optional design of surveys in such settings. Most clearly highlighted in this current project is how to ask officials questions that are informative about topics of interest but take into account political constraints and personal sensitivities.

The analysis implies that a relatively representative sample of officials from Nigeria's social welfare organisations was surveyed, but that they did not answer all the questions asked, with a response rate of only just over 80% on

average, leading to a concern as to the determinants of the missing data. It is unclear, however, that this missing data problem is mainly due to selection on characteristics related to corruption. Rather, officials seemed to skip sections of questions rather than pick out those related to sensitive subjects.

Taking the data as representative of lower bounds on sensitive topics but otherwise informative, we paint a picture of the life of a Nigerian civil servant.

Civil servants state that they entered the civil service based on the nature of the duties rather than for the income or the prestige. They seem to enjoy these duties once they are working, with almost half saying they are 'very satisfied'.

However, many aspects of the job seem less satisfactory. 40% of civil servants are dissatisfied with their income, working conditions, or opportunities for self-improvement. Many would like to move from their jobs, but have limited control over such a decision. The majority never get to move at all.

Whilst two-thirds of officials believe they are appropriately supervised, almost 60% of officials are dissatisfied with their rewards for good performance. Some feel marginalised from the work of their department, and others that external actors play too large a role in their work.

A minority of officers are lucky enough to be made members of the trusted inner circle of their manager. These 'cabals', state many of the officials we talked to, are at the root of corruption in the Nigerian civil service. Whilst 60% of officials state that corruption is at the root of why public projects fail, only a third of them state they ever receive any benefit.

Reports of corruption are highly asymmetric, with a small group claiming they are offered presents or money by citizens on at least half the projects they work on. Others claim they are never put under any pressure at all to undertake corrupt activities. Such asymmetries are reflected across organisations as well as within them, with officials at some organisations reporting broad pressures to undertake corrupt activities, and other organisations reporting none.

The implication of much of the discussion in this paper is that the experience of working in Nigeria's civil service is highly heterogeneous. The lives and times of Nigeria's public officials constitute a mosaic of different paths through the service. Many of their stories are yet to be told.

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World Bank Public Officials Surveys (see http://go.worldbank.org/T4F5GVGSR0 for further information).

Data Appendix

In this appendix we provide further information on the process underlying the Civil Servants Survey. We therefore provide greater detail on the process of the survey itself, how well we think the surveys went, and whether they were representative. We then talk about the main concern of the survey, the existence of missing data.

The setting for our survey: the Nigerian Civil Service

It is not clear what the exact numbers of core federal civil servants are in Nigeria, but it is thought to be around 160,000 persons. The uncertainty arises from the existence of ghost workers, double-dippers, over-aged, and fraudently appointed staff who pick up a wage but do not do any work. Our population of interest is the working population of the social welfare institutions of the Federal Government. By social welfare, we mean those organisations engaged in providing goods and services that directly impact on the social welfare of citizens (health, education, water resources, and so on).

We visited a representative sample of social welfare organisations of the Federal Government. These were chosen prior to the survey exercise for the 'Overview of Public Expenditure in NEEDS' (OPEN) project undertaken by the Presidency of Nigeria. OPEN was a means both to expend debt relief savings received by Nigeria in 2006 and a research exercise to "see where the gaps were in service delivery" (Presidency of Nigeria, 2007a,b, 2010). These are a representative sample of Nigeria's social welfare organisations. Of the organisations we visited (with a total staff strength of 52,750), we interviewed roughly 8% of the population.

The survey process

Pilots were undertaken in May 2010 to gain a sense of the feasibility of a survey of officials. The researcher travelled with members of the Presidency to various institutions to perform focus groups on issues of survey design and question scope.

The survey itself began in September 2010 with the selection of staff from the Presidency and Office of the Head of the Civil Service. These officials were a range of grades and backgrounds, but all said to be suited to research work and commited to the 'scientific principle'.

They were trained in survey practice and a series of workshops were held to ensure each official understood the overarching purpose of the survey and could play a relevant role within that aim.

In parallel, the researcher took the survey team through the questionnaires drafted based on international best-practice. They 'Nigerianised' the surveys by modifying question language and order, and by indicating which questions should be dropped. In the same way that best-practice in surveying refines each questionnaire to take into account cultural anomolies, the culture of the civil service must also be understood and questionnaires refined in response.

In the pilots undertaken, civil servants told us that they would be more comfortable being surveyed inside their own organisation but away from their individual offices. The survey team therefore travelled to each organisation and worked with management to secure rooms away from officials main places of work. Whether officials are more comfortable at their places of work or at an external venue is debatable. However, in the prevailing context it was felt that officials would be more comfortable in familiar surroundings.

Workshop introduction

We motivated the survey as a means to collecting data on life in the service towards improving it. Each workshop began with the following introduction by the senior enumerator,

> Thank you all for your attendance here today. We are a joint team from the Office of the Head of Service and the Office of the Senior Special Assistant to the President on Millennium Development Goals.
>
> We are conducting a survey of civil servants from across the service. The aim of this survey is to gain a view of government from within. We want to understand the constraints and issues civil servants face in their everyday work. We can only achieve the MDGs if we empower the service to achieve its potential. You are our only way to achieving the country's development goals.
>
> It is your opportunity to tell us, and through us the Head of Service and Mr. President, what working in the service is like and how you want it improved. We want to build a world class public service in Nigeria. The first step in doing this is to gather information, which is what this survey aims to do.
>
> The survey will have two parts. First, we'll start with a questionnaire that each of you will fill in individually. It is not an exam! All we want is your opinion, and you can ask us questions at any time. The idea of this questionnaire is to give everyone a chance to air their views individually. Thus, please don't confer with others when you are filling it in. Just fill it on your own. Please answer all questions, even if you are not sure of the answer. Always tick the answer that is closest to your opinion, even if it is not exactly right.
>
> The questionnaire is totally anonymous. Please do not put your name anywhere on the paper. Although we will ask some questions about you, we guarantee that all questionnaires will be kept completely confidential and no one will ever try to match your answers with you. We have all committed to a confidentiality agreement that commit us to keeping the process completely anonymous. So please feel free to answer honestly.

> Since we are on a tight schedule, we only have today to conduct these interviews, we would ask you to help us keep to our timetable. We would ask that you try to get through the questionnaire by [GIVE TIME IN 1 HOUR]. Since you have one hour to complete the questionnaire, don't get caught up thinking about a question for more than a few seconds. Just put what comes naturally. Otherwise, you will run out of time and we will miss important information about your work. We will remind you how much time you have left every 15 minutes.
>
> After you have finished the questionnaire, we will have a roundtable discussion. This again will be totally anonymous. Whilst we will take notes of what is said, no names will be taken and so we will never be able to identify who said what. This is your opportunity to let us know where your challenges are and what might be done to make them easier.
>
> Refreshments will be served soon. So before we start, are there any questions?

Whilst refreshments were served to each participant, no other financial or non-financial reward was given for participating in the exercise.

Evaluation of the surveys

To evaluate how successful the survey process was, we can look at evaluations of the survey process by the survey team. We asked the senior enumerator to evaluate the survey at the end of each workshop. They rated participant knowledge, their willingness to reveal information, their patience, and the session overall. Table 7 states the average success of the surveys along each of these margins.

We can see that the surveys were evaluated relatively positively by the survey teams. 98% are rated as having gone 'somewhat or very well'. Almost 80% of sessions were said to have very patient respondents who were 'totally willing to provide any information'. Comparitive to normal household survey evaluations, these are quite favourable.

Other aspects of the evaluations worth noting are that there are some duration effects on patience, but only for long durations. Only 5% of officials conferred at any point in the survey.

We can assess whether there were interviewer effects in the survey evaluations. We may worry that different interviewers had different effects on the process, particularly when trust and process are such important features of the survey. However, there seem to be few interviewer effects. We may also worry that the interviewers became better at undertaking the surveys, but there are no 'days into the survey' effects. Both of these facts may arise from the fact that initially we undertook multiple practice sessions with all survey staff so to harmonise the survey procedures across enumerators.

Representativeness

The aim of the survey was to gain a representative sample of officials from those organisations of the Nigerian Government that deal with social sector public projects. As describe above, we worked with each organisation to draw a representative sample of officers from their nominal roll (a listing of all the officials registered to be working in an organisation).

It would be useful to check the validity of this process. We can use the information in the nominal roll to determine the extent to which we have a representative sample. By looking at the distribution of a characteristic of officials that are contained in both the nominal roll and the survey, we can see the extent to which the distributions overlap. A perfectly representative sample along the margin of the characteristic chosen would have the two distributions perfectly overlapping. This is, of course, assuming that the selection of officials into participation is correlated with the variables studied.

In the survey, 97% of officers provided their service grade level (sgl; an indicator of seniority in the service). We also have this in the nominal roll and can thus compare the two. Figure 5 provides the distributions of officers above grade level 7 (the population of interest for this survey) in the nominal roll and in our survey. We see that the two are closely matched, apart from at grade level 11. It seems that whilst the nominal roll continues to use this grade, many organisations have phased its use out, using higher grades instead. This is consistent with our having a slightly higher number of officials on grades slightly higher than 11.

We can also look at each organisation in turn. Figure 6 provides the same graph for each organisation for which we have data on sgl in both the survey and the nominal roll. A brief scan of the graphs indicate that there are some organisations in which there is not such a close match. Figure 5.2 breaks the organisations into major sectors. We see that there is a close fit in the case of education and water, but areas of disagreement in the health sector.

In the health sector, where the majority of our disparity in figure 5 seems to arise from, we seem to have a greater proportion of managers than we should and a lower proportion of frontline workers. Whilst the differential is not great, on the order of a few percent in most cases, this fits with a trend reported during the survey that it was more difficult to access frontline medical workers because of pressing patient care they had to attend to.

We can perform a similar exercise with the years of service (ysa) that an officer has been in the civil service. 98% of officials provide this information in the survey. Note years of service is not collinear with service grade level in our data, the two having a correlation under 0.5. Figure 8 provides the distributions of number of years in the civil service for officials in the nominal role and respondents in the survey. We see the two are closely matched throughout the distribution. The mean absolute deviation is under 1%. We can again split the distribution into major sectors, which is done in figure 9. We see that there is a close fit in the distributions for all sectors.

Although only at an aggregate level, we can check the gender balance. National Centre for Women's Development (2009) states that roughly one-third of the civil service is female. In our data, 35% of the respondents are female.

Broadly, the analysis here implies that the sample of officers who attended the survey sessions were representative of their colleagues across the organisations we visited. The concern that officials endogenously chose not to attend the survey session does not seem to be the key issue with this data. A more pressing concern is that officials may have under-reported by missing out questions they were uncomfortable answering, a possibility we turn to now.

Missings

In our setting, where civil servants were filling in their own surveys, the obvious margin of selection is missing data. Where a civil servant was uncomfortable answering a question, they could decide not to. This certainly occurred. So whilst in household surveys a household can refuse to participate, here officials could decide not fill in questions. Across the entire survey, the average proportion of missing questions is 20%.

The pattern of missings was not linear. Figure 10 describes how the proportion of missings changes as the questionnaire progresses. The difference between the lines in the two graphs is that the dotted line does not take account of areas where officials have left related questions blank where they clearly meant the negative answer. This change is what is meant by 'imputed'. The first 60 questions (on their entry into and networks in the civil service) had an average missings rate of 10%. This then jumps for the next 50 questions (relating to your relationship to your boss and external actors) to around 30% and falls for the rest of the survey (on corruption) to closer to 20%, rising towards the end of the survey.

Understanding why this pattern of missings occurs is important to our interpretation of its importance. There are two potential explanations. The first is that some civil servants did not want to answer specific questions. The second is that, faced by a substantial questionnaire, they decided they would skip some questions. This is made credible by noting that the points at which there are jumps in missings map to the start and end of the section on 'Your Engagements'. It may be that officials were simply skipping the section despite it having questions of a similar nature than those asked previously.

To investigate the reasons for these theories we can look at whether cognitive capacity, rather than a corrupt environment, explains the missings. Table 8 shows the results of regressions that have the number of missings as a dependant variable and other features that we have for almost everyone as explanatory variables. We define a variable called 'Corruption' that represents the average pressures for corruption in an organisation. It is constructed by taking the average of all the corruption pressure variables for all bureaucrats in the organisation. Thus, if those who do report are making assertions correlated with the truth, this should be a proxy for the corruption pressure the official bears.

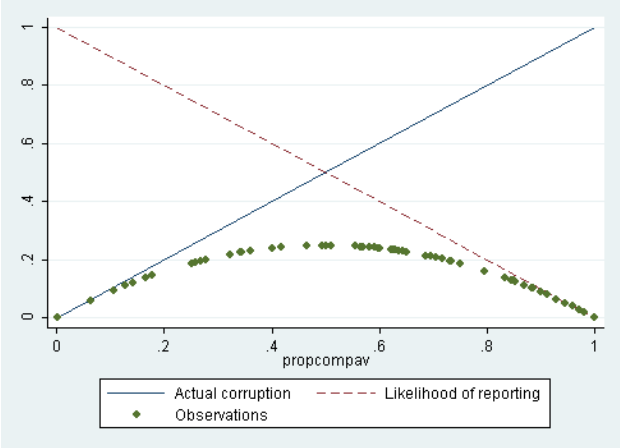
We start with standard characteristics of the individual. Females and officials on lower grades are more likely to miss questions, but given the scale of variation in years of schooling, this is the dominant determinant of missings in the first three columns. The greater years of schooling, the less questions a civil servant will miss on average. This adds weight to the cognitive ability argument. We

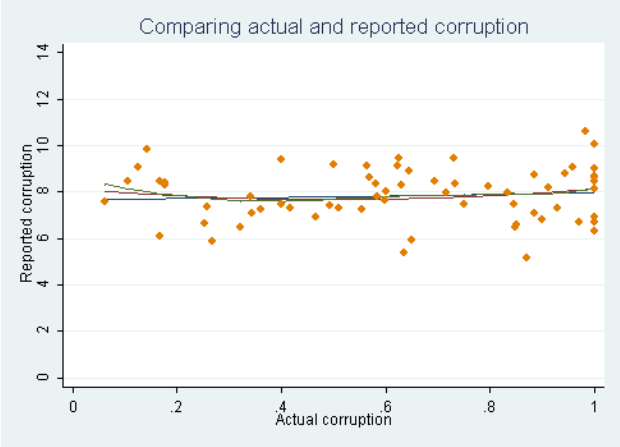
then introduce the corruption variable. This is negative, implying that greater corruption reduces the number of missings. Taking out the dominant sources of variation, we see that this effect strengthens.

Thus whilst we should continue to be concerned that officials have missed a significant proportion of questions out, most likely endogenously, this may be for broader reasons than the hiding of corrupt acts. In such a context, and given the discussion of relative biases in section 2, the perspective we take here is that the data provides us with lower bounds on sensitive topics, and we should be aware of this in our interpretation.

Tables and figures

Figure 1: Independent verification





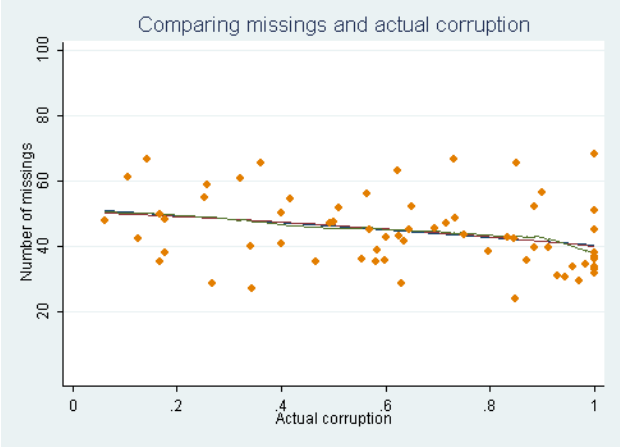


Figure 2: Direct v's indirect questions

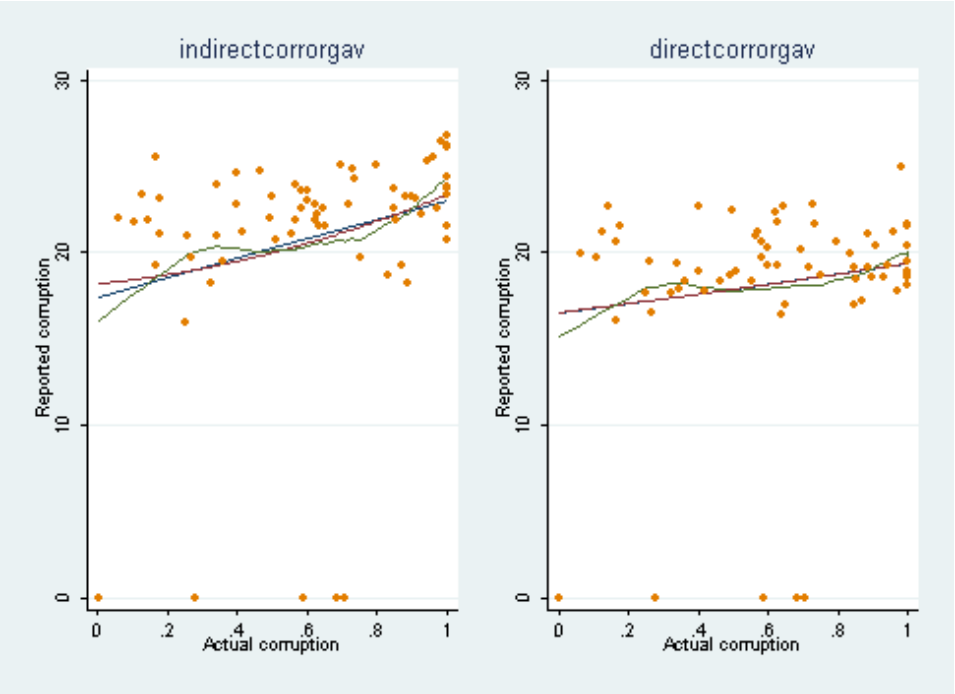
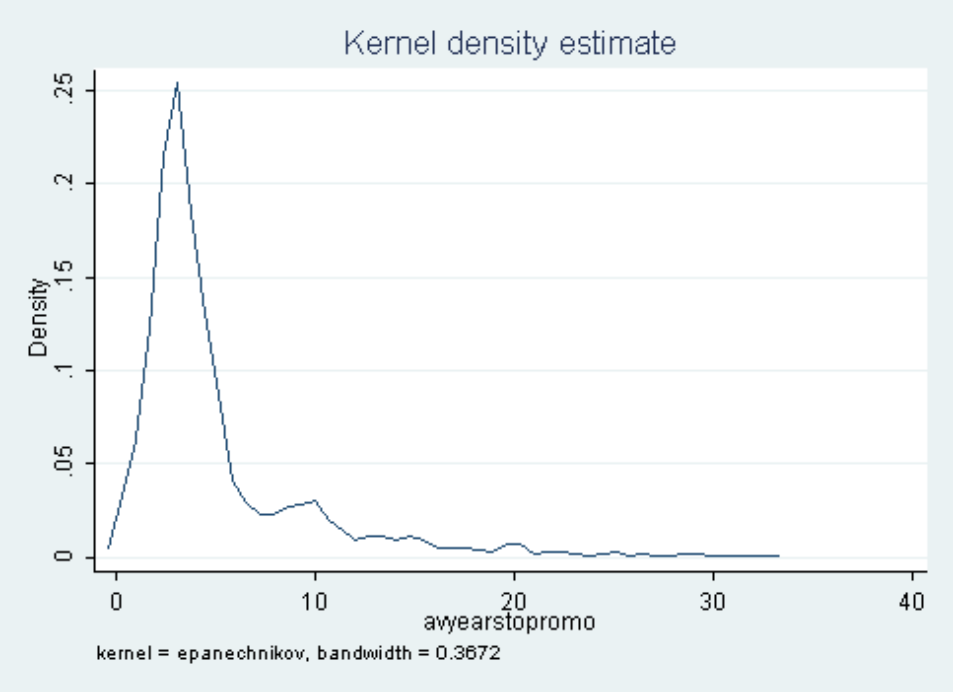


Table 1: Sample composition

Variable			*Std. Dev.*
Sample size		4425	-
		proportion	
Gender	Male	0.65	-
	Female	0.35	-
Religion	Christianity	0.72	-
	Islam	0.28	-
		years	
Years of schooling		16.14	1.52
Years of service		16.55	9.01
		SGL	
Grade level		10.65	3.01

Figure 3: Average years between promotions

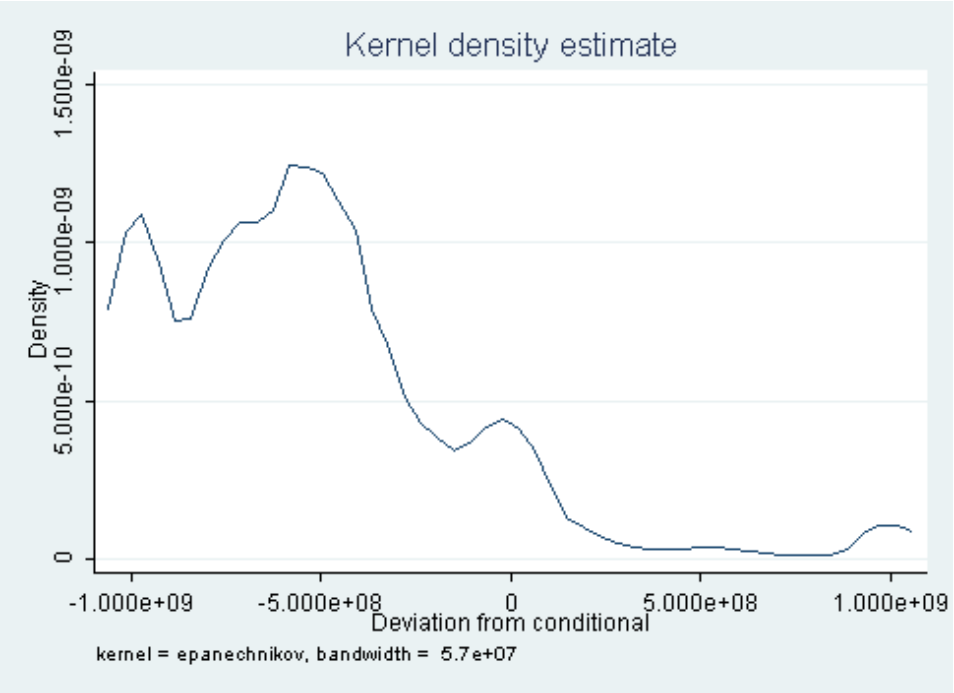


Note: This graph is an approximation of the average time officials wait between promotions. It is calculated by assuming each official enters the service at grade level 7 and being promoted over time from there.

Table 2: 'What most influenced you to take up a career in the service?'

Answer	*proportion*
The chance to serve Nigeria	0.37
I was interested in the type of work	0.29
The stable career path that a job in the service affords	0.22
It was the only employment I could get	0.06
The prestige associated with such a job	0.04
The income prospects	0.02
To accumulate skills	0.01
Other	0.01

Figure 4: A distribution of preferences for corruption?

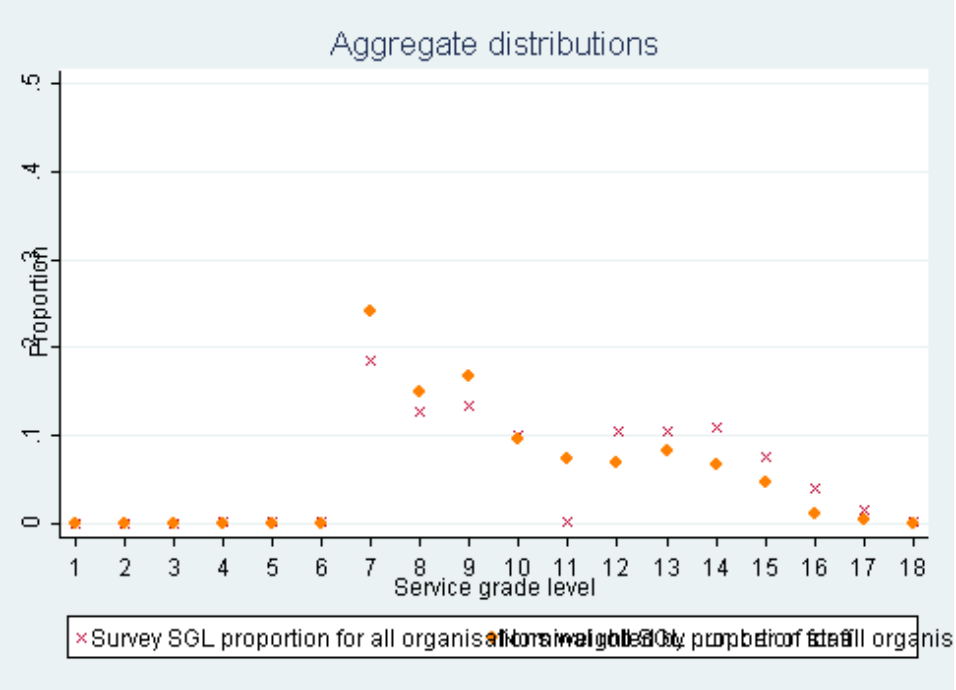


Note: This graph is made as follows. The sum of expenditures allocated to categories that are not that deemed as the least corrupt are subtracted from the least corrupt allocation.

Table 3: Reasons given for not being able to leave the civil service

Reason	*proportion*
Job security is lower in private sector	0.47
Wage in private sector is lower	0.11
The work isn't as interesting	0.09
I don't have sufficient knowledge	0.07
I couldn't get a job	0.06
Other	0.2

Figure 5: Aggregate distribution of service grade level



Note: The distributions in this graph are weighted by the number of officials within an organisation.

Figure 6: Organisational distributions of service grade level

Figure 7: Sectoral distributions of service grade level

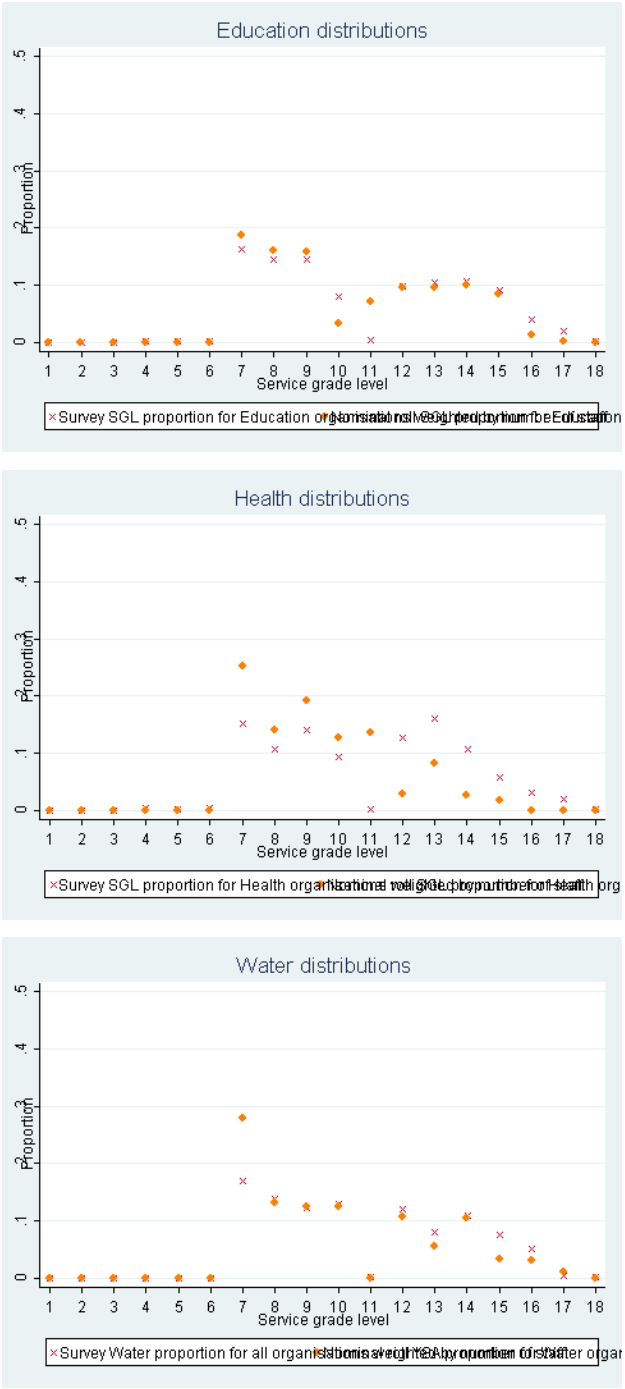
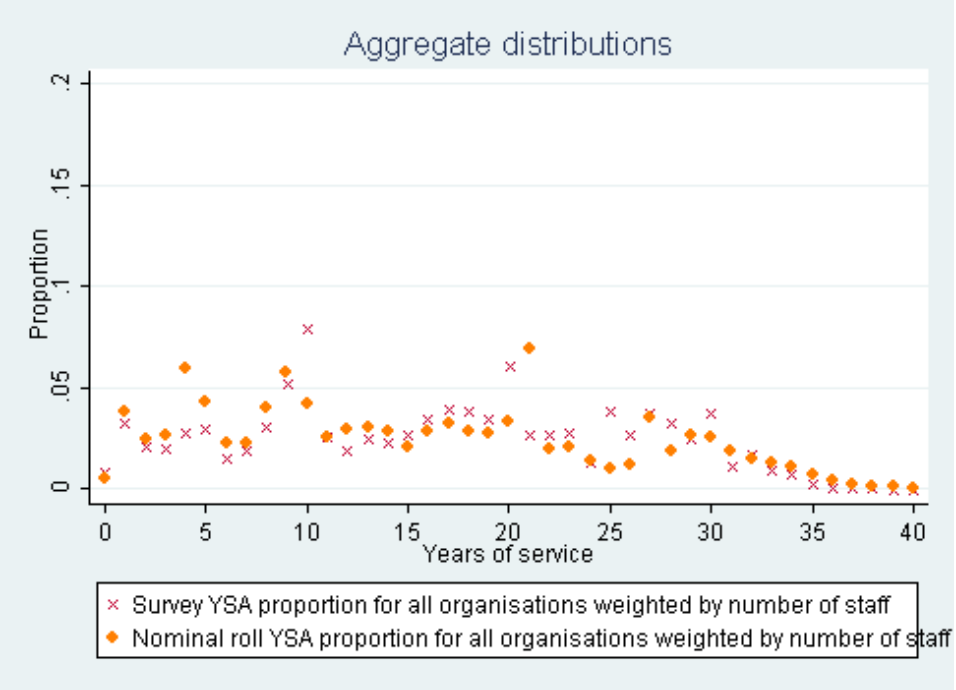


Figure 8: Aggregate distribution of years of service



Note: The distributions in this graph are weighted by the number of officials within an organisation.

Figure 9: Sectoral distributions of years of service

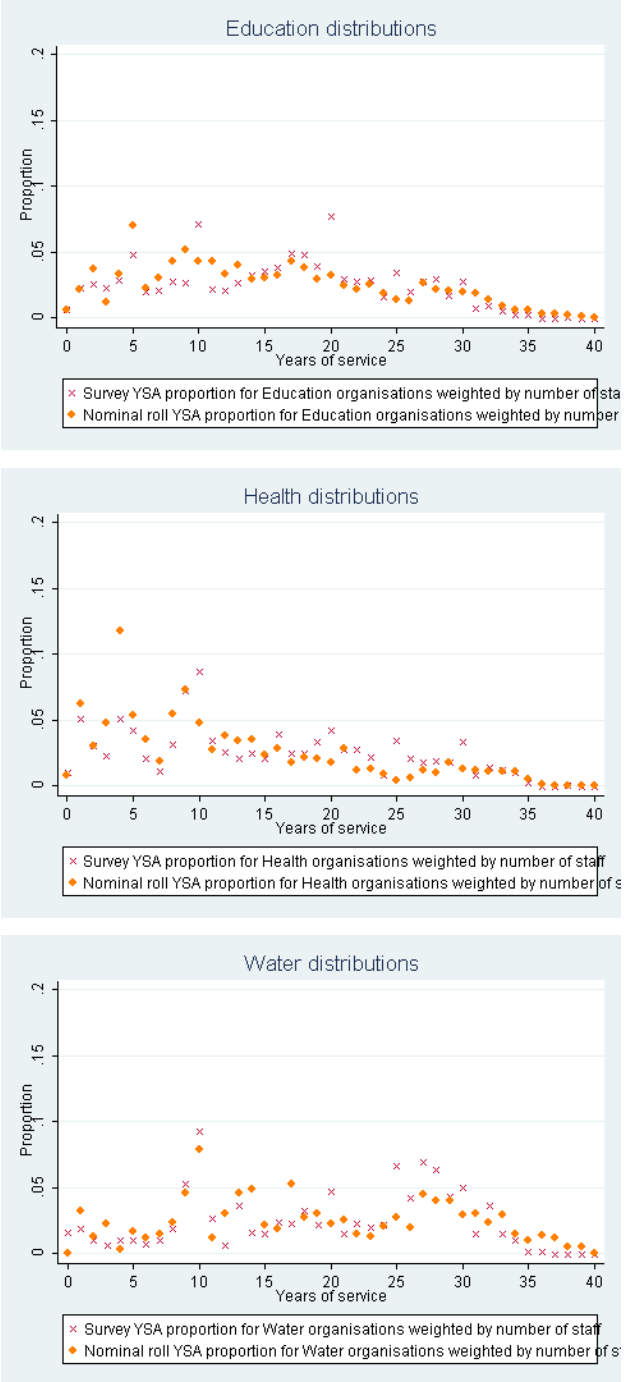


Figure 10: Proportion of missings by question order

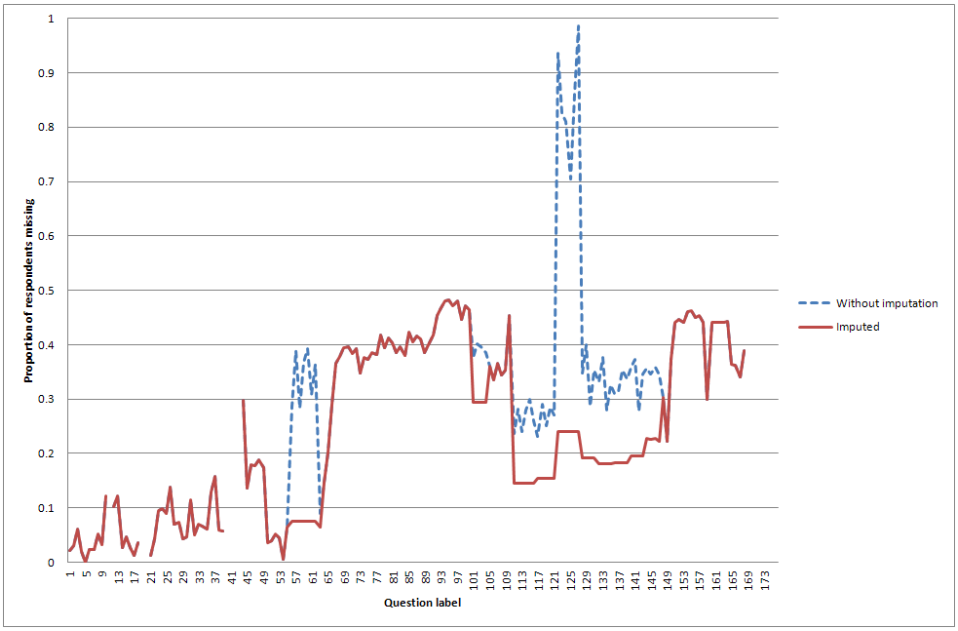


Table 4: Indicators of job satisfaction

	Very satisfied	Relatively satisfied	Relatively dissatisfied	Very dissatisfied
Satisfaction with current job	0.47	0.43	0.06	0.04
Satisfaction with current income	0.14	0.45	0.22	0.19
Satisfaction with working conditions	0.12	0.44	0.27	0.17
Satisfaction with opportunities for self-improvement	0.17	0.4	0.27	0.15
Satisfaction with rewards for good performance	0.12	0.29	0.3	0.28

Table 5: Main reasons public projects fail

Reason	*proportion*
Corruption in the civil service	0.64
Not enough engagement between community and officials	0.32
Local leaders misappropriate project or funds	0.26
Corruption in the private sector	0.18
Community does not accept project	0.05
Projects are technically difficult	0.03

Note: The proportions do not sum to 1. Respondents were asked to tick the 'main reasons for the failure of public projects'. Some respondents ticked more than 1 reason.

Table 6: Correlations between corruption indicators

Pressure on	LOCN.	SPECS.	CONTS.	FUNDS
LOCATION	1			
SPECIFICATIONS	0.7822	1		
CONTRACTORS	0.6956	0.7358	1	
FUNDS	0.6751	0.7122	0.6989	1

Note: Each of these variables corresponds to a question of the form 'In what proportion of recent projects you have worked on have you been put under pressure to [change the location/change the specifications/change the contractors/divert some of the funds]?'.

Table 7: Evaluations of survey process

Variable	Scale	Proportion
Knowledge	Some knowledge of departments	0.06
	Expert knowledge of departments	0.1
	Expert knowledge of organisation	0.84
Willing to reveal	Reluctant beyond basic information	0.03
	Provided some confidential information	0.19
	Totally willing to provide any information	0.78
Patience	Little patience	0.04
	Some patience	0.19
	Very patient	0.78
Overall	Very badly	0
	Somewhat badly	0.03
	Somewhat well	0.2
	Very well	0.78

Table 8: Exploring the determinants of missings

	(1)	(2)	(3)	(4)	(5)
Female	9.89**	9.71**	9.81**	9.73**	
	(0.99)	(0.99)	(0.99)	(0.99)	
Grade level	-2.42**	-2.45**	-1.45**	-2.47**	-3.53**
	(0.2)	(0.2)	(0.17)	(0.2)	(0.18)
Years of school	-2.61**	-2.98**	-3.81**	-2.66**	
	(0.33)	(0.32)	(0.31)	(0.33)	
Years of service	0.39**	0.63**		0.39**	0.8**
	(0.07)	(0.06)		(0.07)	(0.06)
Years at org.	0.36**			0.37**	
	(0.07)			(0.07)	
Corruption				-1.2**	-3.93**
				(0.33)	(1.33)

Note: The dependant variable is the total number of compulsory questions missed. ** implies significance at the 99% level. Female is a dummy taking the value 1 if the respondent is female. Corrupt is a variable that represents the average level of corruption in an organisation. It is constructed as an average of pressure variables most directly related to corruption.

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