

# Dishonesty and Self-Selection into Public Administration in Denmark

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## Introduction and Research Question

Corruption and other types of dishonest behavior in public administration impose large costs on our society. Policy makers and researchers have therefore long been looking for answers to the question: what drives public sector dishonesty and why do some countries have very high levels of corruption, while others do not?

Traditionally, research on corruption and public sector dishonesty has focused on how institutional rules affect the costs and benefits of engaging in dishonest behavior. Recently, however, a new possible factor has been proposed, which can explain the level of public sector dishonesty: the *types* of people who are recruited and work within public administration. In particular, recent research suggests that in high-corruption countries, inherently dishonest people are more likely to seek employment in public administration. The implication of this is that the high levels of public sector dishonesty observed in some countries may be explained by the self-selection of more dishonest individuals into public sector jobs in these countries.

These findings, however, beg the question of what the selection of individuals into public administration is like in countries with low levels of public sector dishonesty, such as Denmark. Furthermore, they also leave open the question of whether and how this selection is related to the job characteristics offered in the public sector. In this project, we will conduct a state-of-the-art survey-experiment to measure individual propensities for dishonesty among a sample of Danes with master's degrees in fields relevant for public administration. We will then combine this with register data from Statistics Denmark, in particular data on individuals' sector of employment. Using these unique data, our project will answer the following research questions:

- **Are people who choose to work in public administration in Denmark systematically less (or more) prone to engage in dishonest behavior?**
- **How is this self-selection related to the particular wage and job characteristics offered in the public sector?**

## Policy Relevance

Curbing corruption and maintaining a low level of public sector dishonesty is a primary goal for policy makers worldwide. By answering the research questions above, our project contributes directly to this goal in several ways. First of all, our project will determine whether and how the selection of more or less honest individuals is related to the salary and job characteristics offered in the public sector in Denmark. Our results here will have implications for how best to recruit into public administration. For Danish policy makers in particular, the research project will show directly how changes to the current job terms offered within public administration would change the pool of applicants and hires. Given the theoretical insights discussed further below, for example, one possibility is that raising

the wages in public administration could have the counterintuitive effect of worsening the pool of applicants - at least with respect to their honesty. The reason is that higher wages may attract workers who are inherently more motivated by their personal pecuniary gains and are therefore also more likely to bend the rules and behave dishonestly whenever this is profitable for themselves. Our research will directly examine this and other possible effects of changing the job characteristics offered in public administration. This will provide an empirical basis for further improving and/or maintaining the good recruiting practices within public administration in Denmark.

In addition, policy makers in many high-corruption countries look to Denmark as a low-corruption role model they can mimic. For these policy makers it is key to understand which features of the Danish system contribute to our low level of public sector dishonesty. By documenting whether there is a systematic selection of honest individuals into public administration in Denmark, our research project assesses one factor that may explain Denmark's consistent ranking as the world's least corrupt country.

### Theoretical and Empirical Background

To understand corruption and dishonest behavior, economists have traditionally used the "rational model of crime" developed by Becker (1968). According to this model, the decision of being honest or not depends solely on the expected benefits (e.g., more money, a better position) and expected costs (e.g., paying a fine, losing a job). Applied to the analysis and prevention of corruption, this model suggests a focus on how contracts and institutions can be set up to minimize the gains from corruption and maximize the expected costs, for example via increased monitoring or harsher possible penalties.

Over time, however, much empirical evidence has surfaced that fundamentally contradicts the Becker view of dishonest behavior. A particularly important example is the work by Fisman & Miguel (2007). Focusing on a particular group of public sector employees, namely UN officials in Manhattan, Fisman & Miguel (2007) document that public sector employees from high-corruption countries engage in much more dishonest behavior than those from low-corruption countries even when they all face exactly the same institutional settings and thus the same potential costs and benefits. In turn, economists and other corruption researchers have started to look beyond Becker's rational framework and focus also on insights from behavioral economics and psychology.

Here, recent experiments in personality psychology have emphasized the existence of persistent differences in peoples' propensity to engage in dishonest behavior (see for example Zettler et al. (forthcoming)); regardless of the costs and benefits, some people almost never behave dishonestly, while others do it frequently. An immediate corollary is that differences in public sector dishonesty across countries may be explained not by differences in the institutional costs and benefits but by differences in the types of people working within public administration. To test this idea, Hanna and Wang (2013) measure the propensity for dishonest behavior among a sample of students in India using the *dice-under-cup* game that will be explained further below. They then correlate students' dishonesty with their job preferences and indeed find that dishonest students are more likely to want to work in public administration.

These results suggest that self-selection of dishonest individuals may be one of the drivers behind public sector dishonesty in India and other high-corruption countries. They also pose a number of new questions, however. First of all, since existing results focus only on the stated job preferences of students, it is not clear whether in fact systematic differences in dishonesty are present once in the labor market. Second, if self-selection is to explain

differences in the level of corruption across countries, it must be the case that there is a very different selection of types into public administration in low-corruption countries. This has never been examined, however. Finally, the existing results tell us little about what is causing dishonest individuals to self-select into public administration or what could be changed to combat this self-selection. It is against this backdrop that we wish to undertake our study regarding public administration in Denmark. In particular, our research project will contribute to the existing literature in three ways: 1) by examining dishonesty among actual employees instead of students; 2) by focusing on a country with very little corruption and 3) by examining how selection into public administration is driven by the wages and particular job characteristics offered in this sector.

### Our study

We are applying for funding to conduct incentivized online survey-experiments with a sample of 1,000 people from Denmark, contacted via the population register at Statistics Denmark. As we are interested in measuring dishonesty among individuals who face the choice of entering higher level public administration or not, we will sample from people who have studied at the University of Copenhagen within the fields of Economics, Law and Political Science. Graduates from these fields all face career opportunities in both the public and private sector. Moreover, these three fields together make up a substantial fraction of the public administration workforce in Denmark.

Our survey-experiment will work as follows: After first answering a set of questions regarding job preferences, subjects will play a simple game aimed at measuring their propensity to engage in dishonest behavior. The game is a version of the *dice-under-cup* game introduced by Fischbacher & Föllmi-Heusi (2013). In our *dice-under-cup* game subjects are told that their reward for participation will be determined as follows: 1) they have to think of a number between 1 and 6; 2) a virtual dice roll occurs and the outcome is displayed on screen; 3) subjects have to report which number they thought of prior to the dice roll. If the reported number matches the dice roll, the subject wins 5 DKK. Since the rules regarding winning are explained to subjects up front, subjects have the possibility of winning dishonestly by reporting the number rolled on the dice even if they in fact were thinking of a different number. As opposed to the standard practice of letting subjects play only a few dice games, we follow Hanna & Wang (2013) and ask subjects to repeat the dice game 40 times. Because dishonest individuals will report winning more often, this repetition gives us the statistical power to distinguish various levels of dishonest behavior at the level of the individual.<sup>1</sup> Such *dice-under-cup* games represent the state-of-the-art method for measuring dishonest behavior in experiments. In particular, individuals' dishonesty in these games has been shown to correlate strongly with dishonest behavior in real world settings (see Cohn, Maréchal & Noll (2013) and Hanna & Wang (2013)).

After conducting the survey-experiment and obtaining individual measures of dishonesty, these measures will be combined with individual data from the registers at Statistics Denmark, particularly data on whether a person is or has been working within public administration. Together, these data will allow us to examine whether people choosing to work within public administration in Denmark exhibit systematically lower levels of dishonest behavior. Next, from the questions asked in the survey-experiments, we will also obtain information about how people value the different characteristics of their job, as well as whether they would look for a different job if their job characteristics or salary were

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<sup>1</sup>For example, after observing a subject reporting on 40 dice rolls, a test of the hypothesis that an individual never cheats conducted at the 5% level of significance has a power of 89% against the alternative that the individual cheats 25% of the time.

changed. This will allow us to assess how the selection of honest/dishonest individuals into public administration is driven by the wages and job characteristics offered in this sector.

### Budget, Practical Details and Project Output

The applicant, Nikolaj A. Harmon, will be the project's Principal Investigator and will guarantee the successful completion of the project (CV and publication list is enclosed). Nikolaj has extensive experience with microeconomic studies based on the Danish register data and has worked and published on the topic of selection into public office before (see Fisman et. al. (forthcoming)). In addition to Nikolaj, the project will involve contributions from Assistant Professor Asmus Leth Olsen (CV and publication list is enclosed), as well as PhD-students Sebastian Barfort and Frederik Hjorth.

We are applying for a total of 297.150 DKK, which will be used exclusively for conducting the online survey-experiment (see budget). The experiment and corresponding IT-infrastructure has already been developed and tested on a small student sample. We have also been in contact with Statistics Denmark and have already obtained the required permissions from Datatilsynet. As a result, the survey experiment is ready to be conducted in January 2015 once funding has been secured.

The output of the project is expected to be 1-2 academic articles, ready for submission by March 1<sup>st</sup> 2016. In terms of the publication potential of these articles, existing contributions on our topic have all ended up in top-ranked international journals, reflecting the high level of interest in the area. Most recently, a paper by Cohn, Fehr and Maréchal (forthcoming) using *dice-under-cup* games to examine dishonesty in the financial sector has been accepted for publication in *Nature*. Overall, we thus view the academic publication potential as very high.

Finally, given the particular relevance of our results for recruitment practices in the Danish public sector, we also expect there to be significant interest in our results in Danish policy circles. We will put emphasis on disseminating our results here as well.

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