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Self-Selection into Corrupt Judiciaries

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ABSTRACT

Drawing on experimental games and a survey conducted with university students at an elite legal academy in Ukraine, this study compares the attitudinal, behavioral, and demographic traits of students aspiring to public sector legal careers as judges, prosecutors, and investigators with their counterparts aiming to pursue private sector legal careers as defense attorneys and commercial lawyers. The author finds evidence that students pursuing public sector legal careers display more willingness to cheat or bribe in experimental games as well as lower levels of altruism. These findings indicate that corruption in some societies may persist in part from the self-selection into government institutions of citizens with a higher propensity to seek profit from illicit activities. Moreover, the findings suggest that such corrupt self-selection can infect a country's judicial and law enforcement apparatus, with potentially dire implications for the rule of law.

Do individuals with a propensity for corruption self-select into highly corrupt organizations? This question is of significant importance for understanding why corruption, with all of its negative political, social, and economic consequences, so frequently proves resilient even in the face of substantial institutional reforms.[1] Moreover, if corrupt judicial systems attract individuals with a propensity for corruption, then corrupt self-selection may undermine the institutions that form the cornerstone of the rule of law and compromise the agencies responsible for combatting corruption in society more broadly.

Whereas existing research on the persistence of public sector corruption predominantly emphasizes the incentives faced by state officials *once in office*, including factors such as low wages, ineffective monitoring, and low levels of transparency (for a review, see Olken and Pande 2012, 496-503), this article contributes to a newly emerging research agenda emphasizing the incentives that influence *who chooses* to become a state official. For example, theoretical models on corrupt self-selection developed by Barfort et al. (2015) and Klašnja et al. (2016) predict that where public sector corruption is widespread, public officials are more likely to believe that practices such as bribery will go unpunished. Expecting to frequently encounter corrupt officials, citizens in turn become habituated to engaging in bribe transactions, perpetuating corruption and contributing to a harmful yet durable cycle. Meanwhile, individuals motivated by self-enrichment rather than a desire to serve society come to perceive public office as a lucrative opportunity and seek to become bureaucrats and politicians, cementing the cycle of corruption.

Building on these theoretical frameworks, this study draws on experimental games and a survey with university students at a top legal academy in Ukraine to offer empirical evidence of corrupt self-selection into judicial systems in a setting in which corruption is widespread. I find that Ukrainian law students who are more likely to cheat and bribe and less likely to display altruism in laboratory games are also more likely to aspire to careers as judges, investigators, prosecutors, bailiffs, and government lawyers. By contrast, I find no correlation

[1]For reviews of the evidence regarding corruption's consequences, see Olken and Pande (2012, 491-495) and Svensson (2005, 36-39).

between tendencies to cheat, bribe, or donate and aspirations to become a private sector defense attorney, commercial lawyer, or notary. The findings are robust controlling for a number of potentially confounding factors including students' academic specialization, levels of risk aversion, gender, ability, family income, and relatives' occupations. Moreover, the findings do not reflect heterogenous effects across subgroups (e.g., it is not the case that corrupt self-selection occurs primarily among lower-ability individuals).

Investigating sensitive topics such as corruption presents challenges, many of which are related to the unreliability of respondents' self-reported preferences and attitudes. This study mitigates these challenges by employing experimental games which utilize incentive payments to reveal participants' preferences and elicit observable behavior. The first game employed measures propensity for dishonesty using an online dice task developed by Barfort et al. (2019). Respondents were asked to guess a number between 1 and 6 and then self-report whether their guess matched a randomly generated outcome of a dice roll, an exercise that was repeated 40 times. Participants received higher payoffs for correct guesses, creating an incentive to cheat. The multiple rounds of guesses then facilitated estimation of individuals' cheat rates based on a comparison of reported distributions to the expected distribution of successful guesses. The second game consists of a modified version of Barr and Serra's (2010) bribery experiment, in which participants are randomly assigned to the role of a citizen or a bureaucrat. The citizen is presented with a scenario in which she can increase her payoff by offering the bureaucrat a bribe to obtain a permit. Whether participants offer (in the role of citizen) or accept (in the role of bureaucrat) a bribe serves as an indicator for willingness to engage in corrupt behavior. Finally, to measure pro-social behavior, the study used a modified dictator game in which participants received a sum of money which could be retained or donated to a Ukrainian charity of their choice.[2]

The findings based on experimental indicators are partially confirmed when relying on non-experimental, survey-based measures. On the one hand, participants in the study who

[2]The pre-analysis plan documenting my research design and intended use of these three experimental games was pre-registered with the Open Science Framework and is included in Section E of the Online Appendix.

are more likely to agree that corruption can sometimes be justified are more likely to aspire to public sector legal careers. On the other, there is a positive correlation between higher levels of "public service motivation" – a distinct set of attitudinal traits such as commitment to public values, compassion, and self-sacrifice that public administration scholars have found to distinguish public employees from their private sector counterparts in many Western countries (Perry, 1996; Kim et al., 2013) – and preferences for a public sector legal career, in direct contrast to the negative correlation between public sector career preferences and willingness to make a personal financial sacrifice in the experimental games in order to support charities. This discrepancy in findings points to the importance of utilizing indicators based on behavioral rather than self-reported measures, and suggests that some aspiring judges, investigators, prosecutors, bailiffs, and government lawyers in the Ukrainian context perceive themselves to be public-service minded, even as their incentivized behavioral choices contradict this self-perception.

In addition to these primary findings, the article examines some of the key attitudinal and demographic traits commonly associated with the choice of public sector employment, such as risk aversion (i.e., placing high value on job security) and parental occupation (Lewis and Frank 2002; see also Buurman et al. 2012). However, in the context of Ukrainian legal careers, I find no evidence of a correlation between risk aversion and preference for public sector employment. I also find no correlation between parents' employment in the legal system and preferences for, or expectations of, a public sector legal career, contrary to Ukrainians' widespread beliefs about nepotism in their judicial system.[3] Having a parent in a private sector legal profession, however, is a predictor of student preferences for a career as a defense or commercial lawyer. Meanwhile, males are more likely to prefer a public sector legal career, while students with higher ability, as measured by self-reported grades and university entrance exam scores, on average express a higher preference for a private sector career, even controlling for gender.

[3]See, e.g., Natalia Mamchenko, "Semeinyi sud. Sudi Ukraini privetstvuyut 'sudebnye dinastii' " [Family Court: Ukrainian Judges Welcome "Judicial Dynasties"], *Ukraina Kriminalnaya* (October 1, 2013).

This article is most closely related to the studies by Banerjee et al. (2015) and by Hanna and Wang (2017), who have found that aspiring civil servants in the high-corruption context of India are more likely to cheat or engage in corrupt acts, and less likely to display pro-social behavior, in laboratory experiments than their peers aspiring to careers in the private sector.[4] However, in extending the study of corrupt self-selection to the post-communist region, this article makes two key contributions with both theoretical and policy implications. First, whereas these previous studies of corrupt self-selection focus broadly on civil servants in general, this study is the first to experimentally examine the next generation of judicial and law enforcement cadres in a high-corruption context. As noted above, understanding the roots of corruption in judicial systems is particularly critical given their central role in building the rule of law and fighting corruption in other institutional spheres. Second, this study was conducted in the wake of a series of high-profile anti-corruption reforms carried out in the aftermath of Ukraine's 2014 Euromaidan Revolution. As such, the findings offer unique insights into the extent to which anti-corruption campaigns can – or cannot – break the self-perpetuating cycles that sustain corruption by reshaping younger generations' motivations for joining state institutions.

In short, this article provides novel evidence of corrupt self-selection into the judiciary, law enforcement agencies, and prosecutorial apparatus, the institutions responsible for mitigating corruption in society more broadly. The findings suggest that understanding corruption's persistence requires attention to the types of citizens that self-select into state agencies, not just the incentives of public employees once in office. The results also demonstrate anti-corruption campaigns' limited capacity to alter deeply entrenched citizen attitudes – including the attitudes of younger generations – underlying the institutional traps that perpetuate corruption. It follows that scholars seeking to understand corruption may need to

[4]See also Barfort et al. (2019), who find that in the low-corruption context of Denmark, the opposite occurs: Students seeking to become civil servants are less likely to cheat and more likely to give to charities in laboratory experiments than their counterparts with private sector career ambitions.

focus on how these attitudes develop at an early age, while policymakers seeking to combat corruption may need to formulate anti-corruption policies specifically targeted at youth.

The following section provides context for the setting of the study. Section 2 then discusses issues of measurement, research design, and data collection. In Section 3 I present the primary analyses, while Section 4 discusses implications of the results and agendas for future research.

1 Research Setting and Implications for Corrupt Self-Selection

This section provides context about the research setting and examines implications of this setting for the type of individual likely to be attracted to employment in Ukraine's judicial system. The discussion below first establishes that the public sector in Ukraine overall, and the judiciary and related institutions in particular, are marked by high levels of corruption and lower (official) wages relative to the private sector. In these circumstances, theories of corrupt self-selection would predict that Ukrainian students with a propensity to engage in corruption should be more likely to pursue public sector careers – and that if these students display low levels of altruism and high degrees of willingness to employ dishonesty for the sake of pecuniary gain, then their public sector aspirations most likely are motivated by expectations of illicit self-enrichment. However, the fact that Ukraine has recently engaged in extensive anti-corruption campaigns also deserves consideration, as these campaigns potentially could inspire students motivated by altruism and desire to improve society during a period of significant transformation to pursue public sector careers.[5] Finally, this section offers background on legal sector career paths in Ukraine and the nature of the choice between public and private sector career paths faced by Ukrainian law students.

1.1 High Corruption Levels

Ukraine is a highly corrupt country, ranking 130th out of 180 countries on Transparency International's Corruption Perception Index (CPI) in 2017, the year the study presented

[5]Students, of course, may also aspire to public sector careers for pragmatic reasons, such as job security, rather than for the pursuit of personal gain or idealistic public service goals. Section 3.6 addresses this issue.

below was conducted. For the sake of comparison, Russia was ranked 135th; India, 81st; and the United States, 16th. New Zealand held the top spot for the lowest levels of corruption, followed by Denmark, Finland, and Norway. Transparency International's Global Corruption Barometer (GCB), which polls average citizens about their encounters with corruption, points to similar conclusions, finding that 38 percent of Ukrainians reported paying a bribe when accessing basic government services in 2016, the most recent year for which data are available. The comparable figure for Russia was 34 percent; for India, 69 percent. The United States and New Zealand showed much lower levels of bribery, with 7 and 3 percent of citizens paying a bribe, respectively.[6]

While corruption in Ukraine affects nearly all institutions, Ukrainians perceive the judiciary and related rule of law institutions to be among the worst. For example, 66 percent of Ukrainians in a 2015 national poll conducted by the Kiev International Institute of Sociology considered courts to be "very corrupt," tied with the State Auto Inspectorate for the most corrupt institution in the country, and followed by the police (*militsiya*)[7] and prosecutors office, which 63.1 and 62.4 percent of respondents rated as "very corrupt," respectively. By comparison, 47.2 percent of respondents considered the tax authorities to be "very corrupt," while 47.0 percent of respondents gave this designation to universities, 42.2 percent to the process of acquiring government permits, 37.5 percent to agencies charged with business regulations and inspections, 26.8 percent to school administrators and teachers, and 20.2 percent to public utilities.[8]

The high level of corruption in Ukraine's public sector in general, and judicial system in particular, may dissuade high integrity candidates from seeking public sector work and attract candidates with a willingness to engage in corruption. Moreover, while the fact that

[6]See www.transparency.org/cpi and www.transparency.org/research/gcb/overview. Data for India are from 2017; data for the United States and New Zealand are from 2013.

[7]In July 2015 a newly reformed National Police Service replaced the *militsiya*, in large part with the aim of reducing corruption.

[8]Kiev International Institute of Sociology, "Corruption in Ukraine: Comparative Analysis of National Surveys," 2015, p. 33. Available online at http://kiis.com.ua/.

public sector employees in Ukraine on average earn lower official wages than their private sector counterparts might serve as a disincentive for individuals motivated by pecuniary gain, Gorodnichenko and Peter (2007) show that despite their lower earnings state officials' expenditures and asset holdings are remarkably similar to private sector workers, indicating that Ukrainian civil servants receive substantial sources of unofficial income. This phenomenon has long been observable in the Ukrainian judiciary. While recent reforms have raised judges' and prosecutors' incomes, top private sector lawyers earn far more than even the highest paid judicial officials – for some, as much as several million US dollars annually.[9] Yet journalists regularly report on judges who drive luxury cars costing several times their annual official salaries and whose wealth rivals that of their private sector peers.[10] In summary, the high levels of corruption and visible examples of judicial and law enforcement officials' illicit self-enrichment make the Ukrainian judicial system and related institutions likely targets for corrupt self-selection.

1.2 Anti-Corruption Efforts

In the wake of the 2014 Euromaidan Revolution, Ukraine undertook a series of ambitious anti-corruption reforms, including the creation of a national anti-corruption agency, mandatory electronic income declarations for public officials, an electronic procurement system for government purchases, and new rules governing civil service hiring. With respect to law enforcement and judicial institutions, reforms also included a major restructuring of the traffic police; the creation of new administrative bodies for selecting and disciplining judges; and an effort to select justices to a newly reformed Supreme Court through an open, competitive, and transparent process (De Waal, 2016).

The results of these anti-corruption efforts have been mixed (Lough and Dubrovskiy, 2018). Even some of the most high-profile reforms, such as the selection of justices to the new Supreme Court, have underperformed: Civil society activists estimate that approximately

[9]"Ukraine's 'Top Lawyers' Can Be Worth Knowing," *Kyiv Post* (July 1, 2011).

[10]See, e.g., Natalia Zinets, "Fighting corruption, Ukraine starts to judge its judges," *Reuters* (May 25, 2017).

one-third of justices ultimately approved by the presidential administration should have been disqualified for ethical violations ranging from corruption to lack of political independence.[11] Nevertheless, the massive publicity surrounding anti-corruption efforts may have sent a signal to younger generations that use of public office for illicit enrichment could soon become decidedly more difficult than in the past. Moreover, during the peak of the reform effort a number of prominent businesspeople left the private sector and took significant pay cuts to serve in government positions, possibly providing inspiration for youth to consider the pursuit of public sector careers for idealistic, rather than self-interested, motivations.[12] In short, it is possible that recent anti-corruption campaigns in Ukraine weakened the cycle of corrupt self-selection into the judicial system and began to attract individuals motivated by a desire to further reform efforts; to the extent that reforms did not have such an effect, this finding would attest to challenge of breaking cycles of corrupt self-selection.

1.3 Legal Profession Career Paths

Of relevance for the analysis below, students pursuing a legal degree – which in Ukraine is an undergraduate degree, usually supplemented by the equivalent of an MA – face a starker choice between working within or outside of state institutions than their counterparts in the United States.

Ukraine, like many civil law systems, has what some legal scholars refer to as a "career judiciary": Aspiring judges often spend much of their early career working in courthouses as clerks to sitting judges, and then join the bench on the merits of this experience. Tenure is not linked to a specific position or court, and judges work their way up within courts or to higher courts via promotions within the judicial system. By contrast, Anglo-American common law systems usually exhibit a "recognition judiciary" model: Judges are appointed

[11] Oleg Sukhov, "Political Ties, Ethical Violations Sully Supreme Court Nominees," *Kyiv Post* (October 2, 2017).

[12] Rowland Manthorpe, "From the fires of revolution, Ukraine is reinventing government," *Wired* (August 20, 2018); author interviews with Oleg Starodubtsev, head of the Department of Public Procurement Regulation of Ukraine (November 11, 2016) and Denis Brodsky, former head of the National Agency for the Civil Service of Ukraine (February 22, 2017).

or elected at later career stages based on broader experience in the legal profession, tenure is frequently tied to a specific court, and while judges from lower-courts may be reappointed to a higher court, promotions overall are rare (Georgakopoulos, 2000). Consequently, a Ukrainian law student aspiring to be a judge is likely to pursue a distinctly different career path than a student aspiring to a private sector legal career.

The Ukrainian procuracy, meanwhile, is descended from institutions created by Peter the Great to facilitate control over the Russian Empire. As such, it is a much more authoritative institution than its counterparts throughout Europe or America, combining investigatory and prosecutorial powers, as well as – until recently – responsibility for oversight of all other state institutions (Foglesong and Solomon, 2001, 58-62, 70-71). The Procuracy and the Ministry of Internal Affairs (MVS), which oversees the police, recruit both from legal departments within academies run by the MVS and from universities without immediate ties to law enforcement structures; some of these universities, including the research site discussed below, have sub-departments dedicated to producing such recruits. Public sector legal careers also include work in the Ministry of Justice, which oversees the penitentiary system and significant regulatory functions such as registering businesses, as well as work in the legal departments of other ministries or government agencies.

While private sector legal professions in Ukraine offer a distinctly different career path than those in the public sector, the private legal sector itself is highly fragmented. Lawyers are divided among *advokaty* and *yuriskonsulty*, a distinction that originated during Soviet times, with the former serving as the rough equivalent of defense attorney and that latter as the rough equivalent of in-house counsel. Only *advokaty* are required to take the bar exam and only they can represent clients on criminal matters, while they compete with *yuriskonsulty* in the market for commercial litigation and legal advice.[13] A final private

[13]For background on the structure of the Soviet legal profession, see Hendley (2010, 8-9). For a discussion of similarities and differences between law students with public and private sector aspirations, albeit in the Russian rather than Ukrainian context and without a specific focus on corruption, see Hendley (2018).

sector legal path concerns notaries, a profession that in Ukraine requires a law degree and is regulated by the Ministry of Justice.

To be sure, career paths for some may involve crossing over from the public to private sector or vice versa. Prosecutors, for instance, may leave the Procuracy to become commercial or defense lawyers. And judicial reforms enacted after the Euromaidan Revolution include provisions to further open the judiciary and Procuracy to lawyers with private sector experience as well as legal scholars from universities, though so far such efforts have had limited success.[14] For the time being, the conceptual and real-world distinction between a public or private sector legal career remains salient for Ukrainian law students.

2 Data Collection and Research Design

2.1 Implementation

The study was conducted with undergraduate and masters students at one of Ukraine's top legal academies from October 25 to November 3, 2017.[15] Students were recruited with the assistance of the university administration. Working with a team of local research assistants, I created a sample frame based on the university's enrollment data and then conducted stratified random sampling by class year and department. Research assistants then visited classrooms and requested the participation of students from the sample. When students were not present, their names were replaced with the next person on the list until quotas for each department and class year were filled. Students were notified of the potential to earn money, but were given the option to refuse to participate.[16] Those that agreed to participate were then led by research assistants to the university's computer labs and directed to the

[14]See, e.g., Balazs Jarabik and Thomas de Waal, "Ukraine Reform Monitor: March 2018," Carnegie Endowment for International Peace (March 27, 2018); Cono Giardullo, "Four Years After: The 'Long March' of Justice-Sector Reforms in Ukraine," *IAI Papers 18/01* (January 2018).

[15]Prior to launching, a two-day pilot was conducted. Additionally, the research instrument had been previously employed at other universities in the post-Soviet region.

[16]Response rates varied by department from 14 percent to 41 percent, with an average response rate for the sample of 27 percent. Students rarely refused to participate, but on any given day for any given auditorium or classroom in which recruiting was conducted a number of students were either absent or in a different location than indicated by the university administration.

instructions on the computer screens.[17] At any given time, we had access to between two and five labs, each of which had between eight and sixteen computers.

We recruited students from six departments with a focus on the legal profession, resulting in a sample of 577 participants.[18] Within the legal academy where the study was conducted, distinct departments are devoted to specialized legal training. Twenty-three percent of students were from the Institute of Criminal Justice; 17 percent, the Faculty of Social Law; 17 percent, the Faculty of Advocacy; 16 percent, the Judicial and Administrative Faculty; 16 percent, the Faculty of Civil and Commercial Justice; and 11 percent, the Investigator Training Faculty. Additional details about the distinct curricular orientation of each department are provided below. Of the participants, 61 percent were women. Twenty percent were first-years, 18 percent were second-years, 17 percent were third-years, 20 percent were fourth-years, and 25 percent were MA students.

The survey and experimental games were conducted using Qualtrics. Average participation time was 49 minutes.[19] To mitigate concerns about participants' attentiveness, we employed screener questions (Berinsky et al., 2014). The language of the survey was Russian.[20] All participants received a minimum of 50 Ukrainian hryvnia and had the opportunity to earn up to 200 hryvnia, depending on their responses during the experimental games. On average, participants received 106 hryvnia, or approximately 4 USD.[21] It was made clear to participants that the payoffs for each of the experimental games were independent and that their total payoff would be the sum of their earnings from across the games. All experimental games were conducted at the outset of the study to ensure that responses to survey ques-

[17]One department was located in a different part of the city from the main campus. To ensure that all participants engaged the survey and experimental games in the same setting, we rented a bus and transported these students to the main campus.

[18]Data were also collected for use in another study from 117 students studying in recently created journalism and social science departments. These students were not asked questions related to legal sector professions and accordingly are excluded from the analyses presented here. Additionally, six observations were removed due to quality control concerns in accordance with criteria defined in my pre-analysis plan.

[19]The study described here was combined with an unrelated information experiment.

[20]The university at which the study was conducted is located in a region of Ukraine where Russian is the predominant language and one of the official regional languages.

[21]Conversion is based on the monthly average exchange rate for October 2017.

tions would not influence participants' choices. All participants first engaged in a modified dictator game, then in 20 rounds of the dice task game, then in the bribery game, then in a lottery game measuring risk aversion, and then in another 20 rounds of the dice task game. Survey questions then followed.

2.2 Measuring Dishonesty and Corruption

Given that respondents may be unlikely to respond sincerely to interview or survey questions pertaining to dishonesty or corruption, the study employed tools developed by behavioral economists to address these challenges.[22] In particular, experimental games in the study offered incentive payments to elicit observable behavior, facilitating inferences about participants' preferences from the choices they make when confronted with decisions that lead to real-world financial loss or gain. To measure dishonesty and willingness to engage in corruption, the study utilized two games:[23]

Dice Task Game To measure dishonesty, the study utilized the dice task game developed by Barfort et al. (2019).[24] Respondents were asked to imagine a dice roll, guess a number between 1 and 6, and then click to the next screen. On this screen a picture of a dice was shown with a randomly generated outcome. Participants were then asked to record the number they had imagined and then click to the next screen. For correct guesses, participants earned 1 hryvnia and 50 kopecks. For incorrect guesses, participants received 50 kopecks. Since there was no way for our research team to observe participants' guesses, an incentive existed to dishonestly report guesses that matched the randomly generated outcome in order

[22]These descriptions of the experimental games draw on the descriptions introduced in Gans-Morse et al. (2018).

[23]Dishonesty clearly is a related but not equivalent concept to corruption, which is usually defined as abuse of public resources or authority for private gain. While Barfort et al. (2019) and Hanna and Wang (2017) use dishonesty as a proxy for propensity to engage in corrupt behavior, Banerjee et al. (2015) and Alatas et al. (2009) study self-selection into public service using corruption games in India and Indonesia, respectively. To the best of my knowledge, this study and its companion study in Russia are the first to simultaneously use dishonesty and corruption games, facilitating investigation of the extent to which findings based on such games reflect similar or distinct phenomena.

[24]Barfort et al.'s (2019) approach builds on Hanna and Wang (2017), which in turn is a modification of Fischbacher and Föllmi-Heusi (2013).

to increase one's payoff. Participants engaged in 20 rounds of this exercise at two points in the study, for a total of 40 rounds. A participant who cheated in every round received 60 hryvnia. An honest participant on average would guess between 6 and 7 rolls correctly, resulting in a payoff of around 27 hryvnia. Comparison of a participant's number of successful guesses reported to the expected distribution of successful guesses under the assumption of honest reporting allows for estimation of the participant's cheat rate, as discussed in greater detail below. The full scripts for this and all other games can be found in Section A of the Online Appendix.

Corruption Game The bribery game used in the study builds off of Barr and Serra (2010) (for similar games, see Abbink et al. 2002 and Cameron et al. 2009).[25] All participants were initially given 35 hryvnia at the outset of the game. They were then randomly assigned to the role of citizen or bureaucrat and the citizen was presented with a scenario in which she could receive an additional 45 hryvnia by obtaining a permit. When she seeks to obtain the permit, however, she is denied and informed that to avoid a long and burdensome reapplication process, she may offer a bribe to the bureaucrat of a value ranging from 5 to 35 hryvnia (only increments of 5 were allowed). Bribing entails a risk of punishment, so for offering a bribe the citizen loses 10 hryvnia, regardless of whether the bureaucrat accepts or rejects the offer.[26] The bureaucrat then decides whether or not to accept the bribe, incurring a fine of 15 hryvnia for engagement in corruption, a cost larger than that imposed on the citizen to reflect the greater harm done to society when officials act corruptly. If the bureaucrat accepts the bribe, the citizens receives the permit and the correspondingly higher payoff.[27] If the citizen offers and the bureaucrat accepts a bribe, then two additional

[25]The study uses explicit corruption framing rather than neutral language (e.g., we use the term "bribes" rather than "transfers" and label the players "citizen" and "bureaucrat" rather than Player A and Player B). As Alatas et al. (2009) note, explicit framing may offer more direct insights into participants' motivations for engaging or not engaging in corruption, and like Alatas et al. (2009) we asked subjects to elaborate on the motivations underlying their decisions at the end of the game. For further consideration of framing effects, see Abbink and Hennig-Schmidt (2006) and Barr and Serra (2009).

[26]To avoid the conflation of risk aversion and aversion to corruption, we chose, following Barr and Serra (2010), not to make punishment probablistic.

[27]We use strategy elicitation for the bureaucrat role, in which the participant indicates whether she would

participants (chosen at random) each incur a loss of 5 hryvnia, representing the harm that corruption inflicts on society at large.

These payoffs were set up so that the bureaucrat is strictly better off accepting a bribe of 20 hryvnia or higher and indifferent between accepting and rejecting a bribe of 15 hryvnia. Conditional on the bureaucrat's acceptance of the bribe, the citizen is strictly better off offering a bribe of 30 hryvnia or less and indifferent between offering or not offering a bribe of 35 hryvnia. From a purely strategic perspective, citizens maximize their earnings by offering 20 hryvnia, an offer that a self-interested bureaucrat should accept. However, if the bureaucrat incorporates considerations other than financial payoffs into her decision and rejects the citizen's offer, the citizen is strictly worse off, receiving a payoff of 25 hryvnia rather than the 35 hryvnia with which she began the game. The primary indicator of interest for the study was whether an individual offers (in the role of citizen) or accepts (in the role of bureaucrat) a bribe.

Non-experimental Measures In addition to the two games described above, the research instrument employed attitudinal questions culled from recent public opinion surveys in Ukraine. Participants were asked the extent to which they agreed with the statement that, "In certain situations, corruption can be justified," on a 1 to 5 scale where 1 indicates "strongly disagree" and 5 indicates "strongly agree."

2.3 Measuring Public Service Motivation

Pro-Social Preferences Game Following Banuri and Keefer (2013), Hanna and Wang (2017), and Barfort et al. (2019), the study measured pro-social preferences using a variant of the dictator game in which participants were allotted 40 hryvnia and then could choose to donate any amount from 0 to 40 hryvnia (in increments of 5) to one of three Ukrainian charities. Actual donations were made in accordance with the participants' preferences. The

accept or reject each possible bribe amount. After the study concluded, payoffs were determined by randomly sorting participants into pairs of citizens and bureaucrats. This process was made explicit to participants.

game therefore places participants in a scenario that encompasses a direct tradeoff between personal financial gain and efforts to promote broader societal goals.

Non-experimental Measures The study also employed a 16-item version of the Public Service Motivation (PSM) index developed by Kim et al. (2013). This version of the index builds on the original index created by Perry (1996) but was designed by an international team of scholars to account for cross-cultural distinctions. The index consists of a series of attitudinal questions measuring four dimensions of PSM: (1) attraction to public service, (2) commitment to public values, (3) compassion, and (4) self-sacrifice. For each item, participants were asked to indicate the extent to which they agreed with the statement on a 1 to 5 scale, where 1 represents "strongly disagree" and 5 represents "strongly agree." The PSM indicator used below is an unweighted average of the 16 items. The questions on which the index is based can be found in Section A of the Online Appendix.

2.4 Measuring Career Preferences

The study measured career preferences by asking respondents to imagine they are free to choose any job, and then requesting them to rate their likeliness of choosing specific career paths on a scale of 1 to 7, where 1 represents "very unlikely" and 7 represents "very likely." Eight career paths tied to the legal profession were evaluated: prosecutor, investigator, judge, government lawyer, bailiff, defense attorney, commercial lawyer, and notary. As a robustness check, the survey also asked respondents to consider the distinction between the job they would like to have and the job they are most likely to have upon graduating. They were then asked to rate the likeliness of near-term employment in each of the previously stated career paths, again on a 1 to 7 scale.

2.5 Other Measures

To measure risk aversion, the study used a series of seven paired lottery choices in which participants chose between a series of fixed payoffs and lotteries with a 50 percent chance of receiving no payment and a 50 percent chance of receiving a higher payment (see Holt and

Laury 2002). The indicator of interest is the number of certain payoffs an individual chooses before switching to a riskier – though potentially higher paying – lottery.[28] The survey additionally collected data on demographic and attitudinal indicators that have been shown or hypothesized to influence career preferences, including gender, class year (i.e., first-year, second-year, MA student), department of study, relatives' occupations, family income, and ability (measured with self-reported GPA and Unified State Exam (ZNO) scores).

3 Analysis

3.1 Descriptive Statistics from Experimental Games

Before presenting the primary analyses, this section offers an overview of the results from the experimental games. As can be seen in Figure 1, students displayed a wide range of propensities for dishonesty in the dice-task game. Only two percent of the sample purely maximized their payoffs by reporting 40 correct guesses. At least 10 percent of the sample was fully honest, reporting 7 or fewer correct guesses, the amount of or lower than the number of correct guesses an honest individual would be expected to make by chance. Eighty-two percent of respondents reported 10 or more correct guesses, despite the fact that the probability of honestly guessing right 10 or more times is around 12 percent. Following Barfort et al. (2019), I calculate cheat rates for each individual participant.[29] For the sample, the mean number of correct guesses – 19.3 – corresponds with a cheat rate of 0.38. In other words, on average participants cheated on more than one of every three rolls.

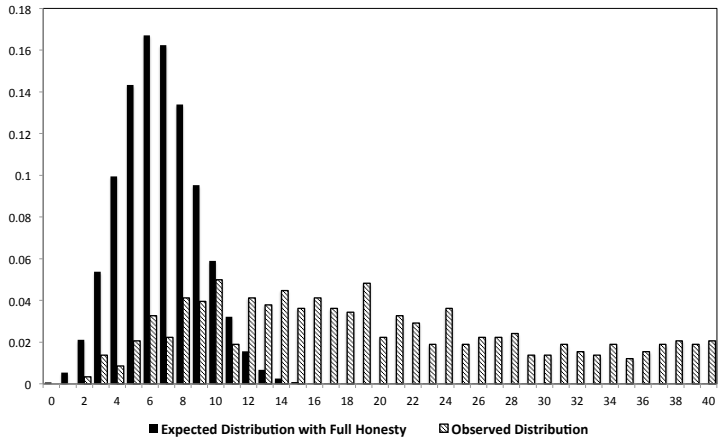
Whereas the dice task game focuses narrowly on willingness to employ dishonesty in order to increase one's payoff, the bribery game encompasses multiple dimensions of a real-world

[28]Participants' earnings for the game were then calculated as the sum of payoffs for all seven choices.

[29]To pull apart the extent to which an individual's reported number of correct guesses reflects dishonesty or random luck, Barfort et al. (2019, 12) derive a estimator for an individual's cheat rate, based on the fact that each participant's reported number of correct guesses Y_i is a function of the number of dice rolls K, the probability of a correct guess p, and individual i's true (unobserved) cheat rate θ_i, such that $Y_i = K(p+(1-p)\theta_i)$. Rearranging produces an estimated cheat rate $\hat{\theta}_i = \frac{1}{1-p}\frac{1}{K}Y_i - \frac{p}{1-p}$. Although unbiased, the downside of this estimator $\hat{\theta}$ is that for a sufficiently small Y_i (i.e., for individuals who are both honest and unlucky), the estimated cheat rate will be negative.

Figure 1: Number of Correct Guesses for 40 Dice Rolls

Observed Distribution vs. Expected Distribution with Honesty (N=577)



bribery experience: the question of ethical norms, the strategic uncertainty about whether a bribe will be accepted or rejected, and the potential harm to other members of society. And whereas at least moderate levels of cheating were relatively common in the the dice-task game, the majority of participants were unwilling to engage in an act explicitly labeled as corrupt. Thirty percent of participants randomly assigned to the role of citizen offered a bribe, while 24 percent of participants assigned to the role of bureaucrat were willing to accept a bribe.[30] In total, 27 percent of participants offered or accepted a bribe.

Finally, with respect to the dictator game, only seven percent of participants kept all 40 hryvnia for themselves. A plurality of participants – 31 percent – donated all 40 hryvnia to charity. The average donation was 24.8 hryvnia.

Cheating and bribing are positively correlated ($r = 0.16$), while both bribing and cheating are negatively correlated with donations ($r = -0.26$ and $r = -0.30$, respectively). (All pairwise correlations are statistically significant at $p < 0.001$.)

[30]Given the game's payoffs, the lower levels of willingness to accept than to offer bribes is counterintuitive, at least from a purely self-interested perspective. As long as the bureaucrat refused to accept a bribe of less than 15 hryvnia, she retained at least the earnings with which she started the game. The citizen, by contrast, faced the risk of encountering an honest bureaucrat, in which case the citizen's bribe offer of any amount would be rejected, resulting in lower payoff. One possible interpretation is that participants felt a stronger moral obligation to avoid corruption when in the role of a public official.

Table 1: Descriptive Statistics

	Mean	Std. Dev.	Min.	Max.	N
A. Explanatory Variables – Experimental					
Bribe	0.27	0.44	0.00	1.00	575
Correct Guesses	19.34	9.99	2.00	40.00	576
Donate	24.79	13.25	0.00	40.00	576
B. Explanatory Variables – Non-Experimental					
Corruption Justifiable	2.49	1.24	1.00	5.00	576
PSM Index	3.88	0.60	1.25	5.00	575
C. Control Variables					
Male	0.39	0.49	0.00	1.00	576
Risk Aversion	4.56	1.74	1.00	8.00	574
GPA	5.21	0.87	1.00	6.00	576
Family Income	2.80	1.50	1.00	10.00	560
Family Ties - Prosecutor or Courts	0.27	0.45	0.00	1.00	576
Family Ties - Lawyer	0.19	0.39	0.00	1.00	576
D. Dependent Variables					
Public Law Avg.	4.44	1.20	1.00	7.00	568
Judge	5.15	1.85	1.00	7.00	568
Prosecutor	4.95	1.99	1.00	7.00	568
Investigator	4.31	2.04	1.00	7.00	568
Gov. Lawyer	4.24	1.76	1.00	7.00	568
Bailiff	3.58	1.81	1.00	7.00	568
Private Law Avg.	4.84	1.26	1.00	7.00	568
Defense Attorney	5.17	1.71	1.00	7.00	568
Commercial Lawyer	4.72	1.72	1.00	7.00	568
Notary	4.65	1.84	1.00	7.00	568

3.2 Descriptive Statistics for Non-Experimental Indicators & Control Variables

As discussed in Section 2.2, to measure attitudes toward corruption participants were asked the extent to which they agreed with the statement that, "In certain situations, corruption can be justified," on a 1 to 5 scale where 1 indicates "strongly disagree" and 5 indicates "strongly agree." As can be seen in Panel B of Table 1, the sample mean for this question was 2.49. This variable is positively correlated with the propensity to bribe in the corruption game ($r = 0.23$, $p < 0.001$) but uncorrelated with the experimental indicators for cheating and altruism.

Meanwhile, to supplement the dictator game, the public service motivation index, an unweighted average of 16 items again measured on a 1 to 5 scale of agreement, was employed as a measure of pro-social behavior. The average PSM rating was 3.88. This variable is negatively correlated with the propensity to bribe in the corruption game ($r = -0.23$,

$p < 0.001$), positively correlated with willingness to donate ($r = 0.25$, $p < 0.001$), and uncorrelated with cheating in the dice-task game.

With respect to the risk aversion measurement, on average participants switched from preferring the choice of 2 hryvnia for certain to preferring a lottery somewhere between the fourth lottery choice (50 percent chance of 5 hryvnia, 50 percent chance of 0 hryvnia) and the fifth lottery choice (50 percent chance of 6 hryvnia, 50 percent chance of 0 hryvnia).

Other control variables measure ability, family income, and families ties. GPA at this institution was measured on a scale of 2 to 5, broken down into six categories: 2.0-2.4, 2.5-2.9, 3.0-3.4, 3.5-3.9, 4.0-4.4, and 4.5 or higher. The mean of 5.21 presented in Table 1 indicates an average choice between the fifth (4.0-4.4) and sixth (4.5 or higher) categories. Family income was measured on a 10-point scale representing categories ranging from less than 5,000 hryvnia per month to more than 500,000 hryvnia per month. The mean of 2.80 represents an average response between the second category (5,000-10,000 hryvnia) and the third category (10,000-20,000 hryvnia). Finally, 27 percent of respondents reported having a parent or relative who works or had worked as a prosecutor or in the court system; 19 percent reported having a parent or relative who works or had worked as a private sector lawyer.

3.3 Descriptive Statistics On Career Preferences

Panel D of Table 1 shows average preference ratings for each career, where respondents rated their likeliness of choosing each profession on a scale of 1 to 7, with 1 indicating "highly unlikely" and 7 indicating "highly likely." The most popular professions in the overall sample were defense attorney, with a mean rating of 5.17; judge, with a mean rating of 5.15; and prosecutor, with a mean rating of 4.95. Bailiff was the least appealing profession, with a mean rating of 3.58.

Preferences for different types of public sector legal careers are highly correlated, as are preferences for different types of private sector legal careers. This clustering of preferences across public and private sector legal careers can be seen clearly in the results of factor

Table 2: Factor Analysis of Career Preferences

(with varimax rotation)

	Factor 1	Factor 2
Judge	0.630	–
Prosecutor	0.747	–
Investigator	0.624	–
Bailiff	0.669	–
Gov. Lawyer	0.438	0.472
Defense Attorney	–	0.625
Commercial Lawyer	–	0.766
Notary	–	0.684
Eigenvalue	2.203	1.552
Variance Explained	0.275	0.194

Note: Only loadings of 0.400 or higher are shown.

analysis presented in Table 2, in which the public and private sector careers load cleanly onto distinct factors, with the possible exception of the government lawyer category.

For the dependent variables in the analyses below, I created two indices, a public sector legal career preference index based on the unweighted average of the five career preference variables that load onto Factor 1 in Table 2 and a private sector legal career preference index based on the unweighted average of the three career preference variables that load onto Factor 2.[31] Results are substantively similar when all eight career preference variables are used individually as dependent variables in place of the two index variables, as shown in Section B of the Online Appendix.

3.4 Self-Selection and Career Preferences

Table 3 presents the study's primary results, regressing the public and private sector legal career preference indices on the experimental indicators and a set of control variables. The public sector index serves as the dependent variable for columns (1) through (4); the private sector index, for columns (5) through (8). Each index variable is standardized to mean zero and unit variance such that coefficients represent the change, measured in standard

[31] I treat government lawyer as a public sector variable for the sake of conceptual clarity; all results are robust to excluding this variable from the analysis.

Table 3: Predictors of Career Preferences: Experimental Indicators (OLS)

	Public (1)	Public (2)	Public (3)	Public (4)	Private (5)	Private (6)	Private (7)	Private (8)
Gave/Accepted Bribe	0.247**			0.157	-0.045			-0.037
	(0.093)			(0.099)	(0.083)			(0.084)
Correct Guesses		0.018***		0.014***		-0.001		-0.001
		(0.003)		(0.004)		(0.004)		(0.004)
Donations			-0.052**	-0.029			0.006	0.003
			(0.017)	(0.018)			(0.020)	(0.021)
Male	0.221*	0.269**	0.206*	0.221*	-0.043	-0.049	-0.043	-0.042
	(0.089)	(0.089)	(0.088)	(0.092)	(0.103)	(0.103)	(0.101)	(0.104)
Risk Aversion	0.013	0.004	0.001	-0.000	-0.010	-0.009	-0.009	-0.009
	(0.025)	(0.024)	(0.024)	(0.024)	(0.028)	(0.027)	(0.029)	(0.029)
GPA	0.071	0.079	0.079	0.086	0.139**	0.138**	0.138**	0.138**
	(0.069)	(0.069)	(0.068)	(0.068)	(0.047)	(0.047)	(0.047)	(0.047)
Family Income	-0.067*	-0.072*	-0.060*	-0.070**	-0.046	-0.046	-0.047	-0.046
	(0.027)	(0.027)	(0.028)	(0.026)	(0.033)	(0.034)	(0.034)	(0.033)
Fam. Ties – Pros./Court	-0.029	-0.031	-0.018	-0.040				
	(0.092)	(0.090)	(0.092)	(0.092)				
Fam. Ties – Lawyer					0.176†	0.177†	0.177†	0.177†
					(0.093)	(0.093)	(0.093)	(0.094)
Constant	-0.010	-0.271	0.380	-0.078	-0.468	-0.451	-0.515	-0.470
	(0.383)	(0.376)	(0.422)	(0.432)	(0.320)	(0.334)	(0.359)	(0.409)
Dep. Dummies	yes	yes	yes	yes	yes	yes	yes	yes
Class Yr. Dummies	yes	yes	yes	yes	yes	yes	yes	yes
Comp. Lab Dummies	yes	yes	yes	yes	yes	yes	yes	yes
N	549	550	550	549	549	550	550	549
R^2	0.114	0.132	0.120	0.144	0.107	0.107	0.107	0.107

Note: Standard errors clustered at session level shown in parentheses. † Sig. at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

deviations, in the dependent variable associated with a one-unit change in a given explanatory variable, all else equal.

The results show substantial evidence of corrupt self-selection and little evidence to support the idea that anti-corruption campaigns have inspired students with pro-social motivations to pursue public sector careers. On average, those who offered or accepted a bribe in the corruption game have a public sector index score that is approximately a quarter of a standard deviation higher than those who did not. Similarly, a standard deviation change – 10 correct guesses – in the dice-task game is associated with a 0.18 standard deviation increase in the public sector index score. By contrast, each additional donation of 5 hryvnia is associated with a 0.05 standard deviation decrease in the public sector index score. In other words, a one standard deviation increase in donations – 13 hryvnia – is associated with a decline of approximately 0.13 standard deviations. In all cases these findings are statistically significant at the 0.01 or 0.001 level and robust to the inclusion of control vari-

ables for gender, levels of risk aversion, GPA, family income, family ties to the legal sector, department of study, class year, and computer lab (in which each subject participated).

Together, these results point to self-selection of students with a propensity for dishonesty and corruption into the judiciary and other public sector legal careers, and the self-selection of students with a propensity for pro-social behavior out of the public sector. Results in columns (5) through (8) are also consistent with this interpretation. Bribing and cheating are negatively correlated with private sector index scores; donations are positively correlated. These associations are not, however, statistically significant at conventional levels.

The results of analyses based on non-experimental indicators in part correspond with the results based on the experimental games, as can be seen in Table 4. The more an individual agrees with the statement that corruption is sometimes justifiable, the higher his or her score on the public sector index. Each unit increase on the 5-point scale on which corruption attitudes are measured is associated with a 0.076 standard deviation increase in public sector index scores, all else equal, a finding that is statistically significant at the 0.05 level. By contrast, there is no correlation between beliefs about the justifiability of corruption and the private sector index. These findings are consistent with the association between bribery and cheating and preference for a public sector legal career discussed above.

However, the public service motivation (PSM) index is also positively and statistically significantly correlated with preferences for a public sector index, a finding at odds with the earlier results showing that those who display higher levels of pro-social behavior, as measured by charity donations in the dictator game, express lower levels of preference for public sector careers. The PSM index is also positively associated with preferences for a private sector career, but not at a statistically significant level. One interpretation of this finding is that students' self-perception of their public-service mindedness is correlated with a preference for public sector legal careers – but that this self-perception does not correspond with actual behavior when students are faced with incentivized real-world choices.

Table 4: Predictors of Career Preferences: Non-Experimental Indicators (OLS)

	Public (1)	Public (2)	Public (3)	Private (4)	Private (5)	Private (6)
Corr. Justifiable	0.076*		0.082*	0.014		0.021
	(0.035)		(0.035)	(0.039)		(0.040)
PSM		0.142†	0.164*		0.110	0.116
		(0.076)	(0.076)		(0.095)	(0.096)
Male	0.240**	0.280**	0.271**	-0.050	-0.034	-0.037
	(0.088)	(0.090)	(0.089)	(0.102)	(0.100)	(0.101)
Risk Aversion	0.014	0.018	0.021	-0.010	-0.007	-0.006
	(0.025)	(0.026)	(0.025)	(0.028)	(0.029)	(0.029)
GPA	0.065	0.064	0.061	0.139**	0.136**	0.135**
	(0.069)	(0.068)	(0.068)	(0.047)	(0.048)	(0.048)
Family Income	-0.067*	-0.058*	-0.060*	-0.047	-0.040	-0.041
	(0.028)	(0.027)	(0.027)	(0.034)	(0.034)	(0.034)
Fam. Ties – Pros./Court	-0.015	-0.009	-0.008			
	(0.091)	(0.089)	(0.089)			
Fam. Ties – Lawyer				0.176†	0.180†	0.179†
				(0.093)	(0.093)	(0.093)
Constant	-0.097	-0.506	-0.772	-0.509	-0.927†	-0.995*
	(0.387)	(0.505)	(0.503)	(0.320)	(0.474)	(0.485)
Dep. Dummies	yes	yes	yes	yes	yes	yes
Class Yr. Dummies	yes	yes	yes	yes	yes	yes
Comp. Lab Dummies	yes	yes	yes	yes	yes	yes
N	550	549	549	550	549	549
R^2	0.111	0.108	0.118	0.107	0.110	0.111

Note: Standard errors clustered at session level shown in parentheses.
† Sig. at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$

3.5 Field of Specialization, Legal Career Preferences, and Corrupt Self-Selection

As noted earlier, at the university where research was conducted law students apply to study in specialized departments. Several departments – the Institute for Criminal Justice, the Judicial and Administrative Law Faculty, and the Investigators Training Faculty – are specifically designed to be training grounds for judges, prosecutors, and investigators. Meanwhile, the Faculty of Social Law emphasizes training in labor law and social security questions with the aim of preparing specialists for work in government agencies. By contrast, the Faculty of Advocacy and Faculty of Civil and Commercial Justice are more oriented toward preparation for a career in private sector law, although the latter's focus on economic and civil law also is well-suited to some public sector careers related to spheres such as taxation.

The results discussed so far, however, are not simply reflecting differences among students from public versus private sector oriented specializations, which could result either from sorting by students at the time they apply to specific departments or from the influence of each department's curriculum and instruction. As discussed in Section C of the

Online Appendix, even though field of specialization is correlated with career preferences, within each department there is significant variation. Some students in public sector oriented specializations express a stronger preference for private sector careers and vice versa. But while field of specialization is a reasonably robust predictor of career preferences, there is almost no correlation between the department in which a student studies and the student's level of cheating, bribing, or donating.

As a result, not only is it the case that all results discussed in the preceding section are robust to controlling for field of study, as can be seen in Tables 3 and 4, but also many of the results hold at the individual level *within* each department. Table 5 shows department-by-department regressions of the public and private legal career indices on the three experimental outcomes discussed above – measurements of willingness to engage in bribery, to cheat, and to make an altruistic donation. For every department, those more likely to engage in a corrupt transaction in the bribery game, as well as those who cheat more in the dice game, express higher preferences for public sector legal careers. Despite the small number of observations in many of the department sub-samples, these correlations are statistically significant in half of these analyses. Meanwhile, the correlation between donation levels in the modified dictator game and preference for a public sector legal career is negative for every department.

Analyses at the department level of the association between bribing, cheating, and donating and preference for a private sector legal career is also in line with the earlier analyses of the full sample. The relationship between bribing and cheating and preference for a private sector career is either negative or statistically insignificant within every department; the relationship between donating and private sector career preferences either positive or statistically insignificant.

In summary, self-selection may play a role with respect to students' choice of specialization and career preferences, but sorting of those more likely to bribe or cheat, and less likely to donate, into public sector legal careers occurs at an individual, not departmental, level.

Table 5: Predictors of Career Preferences By Field of Study

	Inst. Criminal Justice (1)	Judicial & Adm. Faculty (2)	Inv. Training Faculty (3)	Faculty of Social Law (4)	Faculty of Advocacy (5)	Faculty of Civil & Comm. Justice (6)	Full Sample (7)
A. Dep. Var. = Public Law Career Preference Index							
Bribe	0.506**	0.252	0.138	0.252	0.098	0.506*	0.294**
	(0.188)	(0.224)	(0.243)	(0.324)	(0.211)	(0.222)	(0.089)
Constant	-0.205†	-0.011	0.242	0.081	-0.124	-0.357**	-0.078
	(0.113)	(0.091)	(0.162)	(0.116)	(0.122)	(0.124)	(0.054)
N	127	92	64	97	98	89	567
R^2	0.050	0.017	0.004	0.008	0.002	0.054	0.017
Correct Guesses	0.012	0.020*	0.013	0.023*	0.024**	0.020†	0.019***
	(0.009)	(0.009)	(0.014)	(0.011)	(0.009)	(0.010)	(0.004)
Constant	-0.263	-0.357†	0.004	-0.333	-0.579**	-0.590*	-0.378***
	(0.173)	(0.198)	(0.309)	(0.265)	(0.203)	(0.244)	(0.084)
N	128	92	64	97	98	89	568
R^2	0.012	0.060	0.018	0.049	0.071	0.036	0.038
Donations	-0.055	-0.035	-0.000	-0.059	-0.148***	-0.064	-0.061**
	(0.038)	(0.038)	(0.054)	(0.039)	(0.035)	(0.039)	(0.018)
Constant	0.245	0.226	0.282	0.406*	0.560**	0.094	0.302**
	(0.232)	(0.234)	(0.298)	(0.188)	(0.175)	(0.188)	(0.095)
N	128	92	64	97	98	89	568
R^2	0.019	0.013	0.000	0.024	0.160	0.027	0.026
B. Dep. Var. = Private Law Career Preference Index							
Bribe	-0.036	-0.150	-0.087	-0.068	0.025	-0.346†	-0.105
	(0.195)	(0.292)	(0.274)	(0.289)	(0.198)	(0.197)	(0.077)
Constant	-0.146	-0.203†	-0.243	0.177	0.181	0.379***	0.028
	(0.111)	(0.119)	(0.150)	(0.110)	(0.115)	(0.105)	(0.061)
N	127	92	64	97	98	89	567
R^2	0.000	0.004	0.002	0.001	0.000	0.035	0.002
Correct Guesses	0.002	-0.006	-0.008	0.003	-0.000	-0.007	-0.002
	(0.009)	(0.012)	(0.014)	(0.010)	(0.010)	(0.009)	(0.004)
Constant	-0.185	-0.124	-0.107	0.105	0.192	0.420*	0.038
	(0.189)	(0.254)	(0.305)	(0.242)	(0.187)	(0.192)	(0.083)
N	128	92	64	97	98	89	568
R^2	0.000	0.003	0.006	0.001	0.000	0.007	0.000
Donations	0.064†	-0.021	-0.037	-0.036	0.037	0.065†	0.006
	(0.036)	(0.044)	(0.052)	(0.037)	(0.034)	(0.033)	(0.016)
Constant	-0.507*	-0.128	-0.075	0.336†	0.023	-0.031	-0.032
	(0.217)	(0.243)	(0.277)	(0.195)	(0.180)	(0.178)	(0.088)
N	128	92	64	97	98	89	568
R^2	0.027	0.003	0.009	0.010	0.011	0.038	0.000

Note: Robust standard errors (for models 1-6) and standard errors clustered at session level (for model 7) in parentheses.
*** p<0.001, ** p<0.01, * p<0.05, † p<0.10

3.6 Other Correlates of Legal Career Preferences

Beyond the question of corrupt self-section, the analyses offer insights into several other factors associated with a preference for a public sector legal career. Male students are significantly more likely to prefer public sector legal career paths. All else equal, the average public sector index score for male students is approximately one-fifth to one-quarter of a standard deviation higher, depending on the specification, than the average score for female students. Students from wealthier families appear less likely to prefer public sector legal

careers. Meanwhile, students with higher GPAs are more likely to prefer private sector career paths. Each additional unit on the 6-point GPA scale is associated with approximately a 0.14 standard deviation increase in the preference rating on the private sector index.[32]

More striking, however, than these correlations is the lack of associations between two variables frequently assumed to predict public sector career preferences – risk aversion and family ties. The null results pertaining to risk aversion arguably can be explained by this study's specific focus on the legal sector. Particularly given ongoing judicial reforms in Ukraine, it would be understandable for students not to perceive judges, prosecutors, and related professions as having high levels of job security. The lack of correlations between family connections in the prosecutors office or in courts and public sector preferences is more difficult to explain. One possibility is that the uncertainty induced by recent judicial reforms has led some parents who work in public sector legal professions to discourage their children from pursuing such careers, but assessing hypotheses such as this will require additional research. More in line with expectations, students with a family member in the private sector legal profession do express higher preferences – by around 0.18 standard deviations on the private sector index – for employment in the private legal sector, but the relationship is not statistically significant across all specifications.

3.7 Robustness Checks and Sub-Group Analyses

The primary findings that students who display a higher propensity to bribe and cheat, and a lower propensity to make charitable donations, in the experimental games have higher preferences for public sector legal careers remains robust when taking into account a variety of factors that could confound results. First, with respect to the dice-task game, I confirmed that results are not driven by outliers – the top decile of cheaters who reported 35 or more correct guesses. Excluding these participants does not affect the results. Similarly, to ensure that results are not affected by fatigue or boredom resulting from the multiple rounds of

[32]Similar results hold when substituting GPA with self-reported scores from the ZNO, a nationwide university entrance exam. The primary analyses use GPA because not all students take the ZNO, resulting in missing observations.

(virtual) dice rolling, I conducted the analyses using only the first 20 rounds of rolls. Results remain robust (and, indeed, the average number of correct guesses in the first 20 rolls and second 20 rolls are nearly identical: 9.6 and 9.8, respectively).

A second consideration is whether some of the participants already possessed knowledge related to the types of experimental games employed, which could influence their choices. At the conclusion of the survey, students were asked whether they were familiar with the games they played (or similar games). Approximately 16 percent expressed some familiarity. There are no statistically significant relationships between familiarity with the games and bribe rates or donation levels, though students with knowledge of experimental games did cheat more often. However, excluding the 94 participants who expressed familiarity with the games does not affect the results.

A third set of issues pertains to attentiveness, given that low levels of attentiveness have been shown to influence respondents' choices in some types of experiments (Berinsky et al., 2014). I accordingly employed two screener questions – trick questions that ask respondents to follow a precise set of instructions – to sort out attentive from non-attentive participants. Eighty-six percent of respondents answered the first screener (which was in the early part of the research instrument) correctly, whereas only 36 percent answered the second screener (which was near the end of the research instrument) correctly. Since all games and the career preference questions were in the first third of the research instrument, the first screener question is of more importance. No statistically significant differences in the play of attentive and non-attentive participants emerged in the experimental games, and the primary results remain robust when conducting analyses that exclude subjects who answered the first screener incorrectly as well as analyses that exclude subjects who answered both screeners incorrectly. As an alternative check on attentiveness, I examined the amount of time each subject required to complete the games and survey. There is no association between study duration and bribe rates and donation levels, but those who finished more

quickly did on average cheat more often. Nevertheless, when removing the bottom decile of subjects with respect to the time taken to complete the study, results again remain robust.

Finally, it is not the case that the results reflect heterogeneous effects across different subgroups. Interacting the primary variables of interest – the indicators for bribing, cheating, and donating – with variables measuring ability, relatives' occupation, risk aversion, or gender does not produce evidence of interaction effects. While it is theoretically plausible that low-ability individuals who perceive fewer lucrative options in the private sector are more likely to pursue public sector careers with the aim of self-enrichment, I find no evidence of this in the data. Similarly, while it would seem reasonable to expect students with familial ties to the judiciary or prosecutors apparatus to be more prone to corrupt self-selection, the data again do not support this hypothesis.

3.8 External Validity

An important consideration is whether students' career preferences are indicative of students' expectations about actual career paths. Some students, for example, might strongly wish to pursue a specific profession yet recognize that this choice is unlikely or infeasible. However, ratings of career preferences and subjects' evaluations regarding how likely they are to be employed in a given profession following graduation (again measured on a 1 to 7 scale, where 1 indicates "highly unlikely" and 7 indicates "highly likely") are highly correlated. Correlation coefficients between the preferences and expectations ratings range from 0.55 for judgeships to 0.76 for investigators. I then conducted all analyses from the preceding sections using the expectation ratings in place of preference ratings (see Section D of the Online Appendix). The results are substantively similar for all analyses using the experimental indicators, with just one exception in that the correlation between bribe rates and preference for a public sector legal career is not robust in specifications including the full set of control variables.

A related issue to consider is the extent to which subjects' choices in experimental games reflect choices they make in real life. However, such concerns should not be overstated, for previous studies have offered striking evidence of these games' external validity. Hanna

and Wang (2017) test their dice game on government employees in India for whom they had administrative data on fraudulent absenteeism, the claiming of a paycheck for time not worked. They found a strong correlation between cheating in the dice game and willingness to defraud the government. Meanwhile, Barr and Serra (2010) demonstrate a remarkable connection between real-world conditions and outcomes in their bribery games conducted at Oxford University: Oxford students from foreign countries that rank poorly on global corruption indicators were significantly more likely to engage in corruption in the laboratory than students from low-corruption countries. Finally, a number of studies show that donations in laboratory games are strong predictors of real-world pro-social behavior such as charitable giving (see, e.g., Benz and Meier, 2008).

Finally, like other studies in the emerging research agenda on corrupt self-selection this study's focus on a single research site leaves open the question of whether results generalize to other universities in other locations throughout Ukraine.[33] The results at this specific university, however, are substantively important in and of themselves, given that this legal academy is a prominent training ground for many of Ukraine's future judges, prosecutors, and investigators. Approximately 10 percent of judges in the district courts of Ukraine's capital city, Kyiv, and the city in which this university is based – two of Ukraine's largest cities – are alumni,[34] and the university has formalized internship programs with the Office of the Prosecutor General of Ukraine and with the recently created National Police.

4 Discussion

Based on experimental games and a survey with Ukrainian university students at an elite legal academy, this article offers the first evidence of corrupt self-selection in the judicial sector, a critical set of institutions for building the rule of law and fighting corruption, and

[33]Barfort et al. (2019) was conducted at a single university in Denmark. Banerjee et al. (2015) drew on students from just two universities in India, one with a student body exclusively focused on business and the other with students exclusively preparing for a civil service career. And while Hanna and Wang (2017) recruited 669 students from seven Indian universities, all seven were located in a single city.

[34]Author's calculations based on court websites and publicly available government archives.

also expands the study of corrupt self-selection to the post-communist region. The findings show that students with stronger preferences for careers as judges, prosecutors, investigators, and government lawyers display higher propensities for dishonesty, more willingness to engage in a corrupt act, and lower levels of pro-social behavior. In short, there appears to be substantial evidence in favor of corrupt self-selection.

Future research will be required to examine the extent to which this study's findings generalize beyond Ukraine. But even Ukraine-specific findings would merit attention due to Ukraine's current geopolitical significance. Because Ukraine is the critical buffer state between Europe and an increasingly aggressive Russia, the question of whether or not the Ukrainian state can overcome corruption has implications for the prospects of ending Ukraine's ongoing civil war with Russian-backed separatists, the future of NATO and EU expansion to the east, and relations between the West and Russia more broadly. Moreover, the existing evidence suggests that this study's finding do indeed have relevance for a number of countries in Eurasia and beyond. Not only are the findings in line with evidence from the handful of existing experimental studies of corrupt self-selection from other high-corruption countries, such as India (Banerjee et al., 2015; Hanna and Wang, 2017), but they also fit with the findings of qualitative case study research showing how in countries ranging from India to China and Kyrgyzstan, aspiring officials begin their careers by buying their way into corrupt state agencies with the expectation of recouping their "investment" through embezzlement and the receipt of bribes (Wade, 1985; Zhu, 2008; Engvall, 2014).

The findings also have implications for both scholars and policymakers. For scholars, evidence of corrupt self-selection potentially offers new insights into corruption's persistence by drawing attention away from the traditional focus on incentives public officials face once in office and placing emphasis on incentives shaping aspiring officials' decision to seek public sector employment in the first place. Recognition of corrupt self-selection additionally speaks to the extent to which corruption may become a self-reinforcing phenomenon, with corrupt bureaucracies attracting applicants with a higher propensity to engage in corruption,

thereby ensuring that corruption continues to expand. Evidence that corrupt self-selection has survived a multi-year anti-corruption campaign in Ukraine offers insights into how deeply entrenched this cycle may become.

For policymakers, the existence of corrupt self-selection suggests the need for public sector institutions to develop strategies for attracting candidates with integrity, and for filtering out candidates with unfavorable traits. Furthermore, evidence of corrupt self-selection in sectors such as the judiciary indicates that in high-corruption environments many of the institutions most critical for combatting corruption are likely to remain unreliable partners in this effort until effective recruiting and screening policies are developed. And, finally, confronted with corruption as a self-reinforcing cycle – an cycle durable enough to withstand anti-corruption campaigns – policymakers must identify novel approaches aimed at changing social norms, particularly among younger generations. Although rigorous evaluation remains limited, policies worthy of consideration include education and informational campaigns, as well as study abroad programs that expose students from high-corruption countries to daily life in low-corruption countries (Gans-Morse et al., 2018, 181-182).

Overall, more research is needed on the scope and scale of corrupt self-selection. It is tempting to assume that the phenomenon exists in all countries where corruption is widespread. However, it may be the case that other factors, such as levels of state capacity and relative public sector wages, mediate the extent to which aspiring civil servants are motivated by the aim of self-enrichment as opposed to public service ideals or pragmatic career considerations even in countries with endemic corruption.[35] The study of corrupt self-selection, therefore, offers a rich agenda for future research with relevance for scholars seeking to understand corruption's persistence and policymakers seeking to develop viable anti-corruption strategies.

[35]See Gans-Morse et al. (2018) for more detailed examination of this possibility.

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