# **Dishonesty and Public Employment\***

Guillermo Cruces University of Nottingham, CEDLAS-FCE-UNLP, and CONICET

> Martín A. Rossi Universidad de San Andrés

Ernesto Schargrodsky Universidad Torcuato Di Tella, CAF, and CONICET

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### Abstract

We exploit a natural experiment to study the causal link between dishonest behavior and public employment. When military conscription was mandatory in Argentina, eligibility was determined by both a lottery and a medical examination. To avoid conscription, individuals at risk of being drafted had strong incentives to cheat in their medical examination. These incentives varied with the lottery number. Exploiting this exogenous variation, we first present evidence of cheating in medical examinations. We then show that individuals with a higher probability of having cheated in health checks exhibit a higher propensity to occupy non-meritocratic public sector jobs later in life.

Keywords: Conscription; public employment; state capacities; dishonesty; impressionable years. JEL classification: D91, J45, K42, O15.

<sup>\*</sup> Guillermo Cruces (guillermo.cruces@nottingham.ac.uk), School of Economics, University of Nottingham, CEDLAS-FCE-UNLP, and CONICET; Martín A. Rossi (mrossi@udesa.edu.ar), Department of Economics, Universidad de San Andrés; Ernesto Schargrodsky (eschargr@utdt.edu), Universidad Torcuato Di Tella, CAF, and CONICET. We are grateful to the editor, Rohini Pande, and three anonymous referees for their constructive suggestions, to Sebastian Galiani for sharing with us the administrative database on the conscription draft lottery in Argentina, to participants at several seminars and conferences for useful comments, and to the specialized physicians who performed the classification of exemption conditions. Carla Srebot and Estefanía Lotitto provided excellent research assistance.

## Introduction

We provide evidence on the causal relationship between dishonest behavior and public employment. Our empirical strategy exploits a natural experiment (the draft lottery in Argentina) that provides exogenous variation in the incentives to engage in dishonest behavior, in a real-world context, and with high-stake consequences. In particular, we study the causal link between draft evasion in early adulthood and later selection into public sector jobs.

Military conscription in Argentina was mandatory for almost all of the 20<sup>th</sup> century. Eligibility for military conscription was determined by a public lottery based on the last 3 digits of citizens' national IDs and by a medical examination. Following the lottery, all males were called to have a medical examination. Later on, the government set a cutoff number. Individuals whose ID number had been assigned a lottery number higher than the cutoff and who had passed the medical exam were mandatorily called to military conscription, and those below or at the cutoff or who had failed the examination were exempt. The high-stake nature of the medical examination outcome (avoiding unpaid military service) created strong incentives to cheat. At the time of this examination, individuals did not know the exact cutoff number that would apply to their cohort, but could have expectations based, mainly, on previous years' cutoffs. Thus, individuals with draft numbers far below the expected cutoff had weaker incentives to cheat than those closer to and above the expected cutoff. In this way, the lottery induced exogenous variation in the incentives to falsify health conditions.

Using individual data for the universe of male Argentines born between 1958 and 1962 (more than one million men), we first report evidence of cheating in the pattern of exemptions for medical reasons. The rate of failure in the medical examination significantly rises as the lottery results increase from the lowest numbers to the proximity of the cutoff. We then exploit this variation to show that individuals who randomly faced stronger incentives to cheat in their

conscription health checks also had a higher propensity to become public employees later in life.

We provide a series of further analyses that reinforce the causal interpretation of our results. First, we asked specialized physicians to distinguish between easy-to-cheat and hard-to-cheat conditions from the list of reasons for failing medical exams. Easy-to-cheat conditions were easier to fake or exaggerate for the exam and/or harder or costlier to verify than hard-to-cheat conditions. Strategic behavior should be mostly observed in easy-to-cheat conditions, and this is exactly what we find. Second, for women in the same 1958-1962 cohorts, we impute the draft lottery results to their ID numbers. Since women were not drafted for conscription, there should be no relationship between ID numbers and public employment, and this is indeed what we find. Third, we find no relationship between the random distance to the cutoff and public employment among eligible men (i.e., those above the cutoff). This is as expected, since all men in this group faced similar incentives to cheat. Fourth, we perform a placebo experiment to challenge the validity of the exclusion restriction exploiting the fact that the cohort of 1976 faced the draft lottery but was not called for the medical examination (nor drafted) because compulsory conscription was abolished. The absence of effects in this placebo exercise suggests that the draft lottery results had no impact on employment outcomes through mechanisms other than cheating in the medical examination.

We explore possible underlying channels for our findings. First, we show that draft evasion has no effect on having a formal job in the private sector. This finding is congruent with a self-reputation channel in which early actions that weaken moral self-restraints can make future temptation opportunities more desirable, as shown in the theoretical models by Bénabou and Tirole (2004, 2011) and Dal Bó and Treviö (2013). These habit models provide a conceptual framework that helps to interpret our findings. Public-sector jobs, with life stability, low effort-provision, absenteeism, and corruption possibilities, could be examples of high-temptation opportunities when compared to private-sector occupations. Engaging in dishonest behavior during the

formative years (i.e., cheating in the draft medical examination) may have weakened these youth moral self-restraints, decreasing the reputational cost of future misbehavior and affecting their future career paths. Our empirical evidence is consistent with these theoretical results.

Second, we report that draft evasion is related to future non-meritocratic public employment, where there is more scope for arbitrary hiring, but not to meritocratic public jobs. This result is compatible with a learning channel in which the successful experience of cheating in a high-stake situation during the formative years familiarized these youths with the potential use of family contacts, influences, and monetary resources for dishonest behavior. These individuals may have then used similar tools to get coveted non-meritocratic public sector jobs, which in Argentina are typically accessed through personal connections.

While suggestive, these additional results are not conclusive on the underlying mechanisms behind our results. The finding that dishonest behavior among young Argentine males positively predicts future public employment could also be due to other, perhaps complementary, mechanisms. For instance, some personal characteristics (such as pacifism, guilt, or stress) could become exacerbated by cheating the draft, and this may in turn affect the probability of working in the public sector.

Our paper relates to several strands of literature. There is growing evidence that individuals differ in their propensity to engage in dishonest behavior (Fischbacher and Föllmi-Heusi 2013; Arbel et al. 2014; Abeler et al. 2019). In addition, recent empirical studies find that dishonesty is not an entirely congenital, time-invariant trait, but rather that individuals respond to incentives, institutions, and cultural norms (see Fisman and Miguel 2007; Dahl et al. 2014; Lowes et al. 2017; and Ajzenman 2021). In line with this literature, our evidence suggests that cheating can be induced and learned, but, in a forward step, we also explore the causal effect of dishonesty on future behavior.

Our paper is also related to lab experiments that study the correlation between individual dishonesty and revealed preferences for working in the public sector (Hanna and Wang 2017; Banerjee et al. 2015; and Barfort et al. 2019). Our contribution is to show a causal link between individual dishonesty and the probability of actually working in the public sector, by exploiting a natural experiment with high-stake consequences.

Given the importance of bureaucracy quality for the proper functioning of modern states, our analysis also ties in with the literature on personnel economics of the state (see Finan et al. 2017), and the use of connections to access public employment (Colonnelli et al. 2020; Brassiolo et al. 2020).

Finally, our paper contributes to the literature that looks at the long-term impact of events that occur during early adulthood (Angrist 1990; Angrist and Chen 2011; Galiani et al. 2011; Cantoni et al. 2017; Roth and Wohlfart 2018) by suggesting that the experience of dishonest behavior during the "impressionable" years can have long lasting consequences.

### I. Background: Military conscription and public employment in Argentina

### Military conscription in Argentina

Masculine military conscription in Argentina was mandatory from 1901 to 1994. Our analysis focuses on five cohorts born between 1958 and 1962, for which we have individual data on conscription status and on medical examination results.

The eligibility of young males for conscription was determined through a lottery and based on the last 3 digits of their national IDs, a unique lifelong number assigned to every citizen at age 16 for the cohorts in our study. Around April of each year, the National Lottery organized a public session supervised by the National General Notary for all the males turning 18 years old in that year. The results were widely disseminated through live radio broadcasting and printed newspapers. In this lottery, balls numbered 1 to 1,000 were blindly extracted from a drum. The first ball released from the drum corresponded to the last 3 ID digits 001, the second to 002, and so forth.

After the lottery, and irrespective of the assigned number, all men in the cohort were summoned to a compulsory medical examination in military premises, which covered both mental and physical status. Individuals were called for the health revision by the order of their national ID, not by the lottery number.

After the medical examinations, a cutoff number was determined. Individuals assigned a lottery number below or at the cutoff were deemed exempt, and those with an assigned lottery number above the cutoff (and who had passed the medical examination) were mandatorily drafted to military conscription.<sup>1</sup> Among eligible individuals, those with the lowest lottery numbers were assigned to the Army, the intermediate numbers to the Air Force, and the highest numbers to the Navy. Under a gradual trend of reduction in the use of conscripts since the middle of the 20<sup>th</sup> century (see Galiani et al. 2011), the determination of the cutoffs for each cohort depended on the overall political, budgetary, and national defense situation. At each force, conscription began with an additional medical examination at the time of incorporation (around February of the year after the lottery), followed by a 3-month military training period, and a final assignment to a specific military unit.<sup>2</sup>

Providing up to two years of unpaid military service and potentially delaying studies and labor market insertion represented a significant load for young males. Galiani et al. (2011) find

<sup>&</sup>lt;sup>1</sup> Exemption to service was granted to clerics, to individuals providing family support or having a younger brother in the same cohort, and to graduates from the Armed Forces' secondary schools (*liceos*). Deferment to finish high school or college was granted for a maximum of 10 years. Deferment was also granted without a particular reason for up to 2 years. In these deferral cases, the lottery numbers and cutoffs used to establish eligibility were those of the individual's birth cohort.

<sup>&</sup>lt;sup>2</sup> For more details on military conscription in Argentina, see Rodriguez Molas (1983) and Galiani et al. (2011).

that conscription in Argentina had detrimental effects on labor and crime outcomes. These high costs of conscription created strong incentives to obtain spurious exemptions by faking physical or mental impediments during the medical examination, by forging medical studies, and by using family and personal connections, exchanges of favors, and bribes (Gayol and Kessler 2018).<sup>3</sup> Premeditated strategies, some of them requiring weeks of preparation, included the faking or exaggeration of psychological, sight or hearing conditions, the gain or loss of weight before the exam for people close to critical body mass limits, the use of products to trigger respiratory or dermatological reactions, and the deliberated delay of medical treatments before the exam, inter alia (Cantilo 2000; Garaño 2010).

# Public employment in Argentina

Argentina is a federal country comprised of 23 provinces and one autonomous capital city. It has a comparatively high level of public employment, stemming from three levels of government (national, provincial and municipal) as well as from three branches of power (executive, legislative and judiciary).

Public employees in Argentina enjoy attractive labor conditions such as weak absenteeism punishment, low effort requirements, and life stability (see Oliveros 2021a; Cabot 2021). Although there are some pockets of relatively high quality workforce (most notably, in decentralized bodies), with recruitment processes and promotions depending on entry examinations, diplomas, training, and evaluations, the norm for public employment throughout the 20<sup>th</sup> century has been clientelism, undue influence, and nepotism (O'Donnell 1988; Oliveros 2021b). This is particularly true for

<sup>&</sup>lt;sup>3</sup> Cheating was potentially risky. The military service law typified the crime of undue exemptions. In 1993, military personnel were brought to court for declaring draftees physically unfit in exchange for bribes (*Clarin*, October 17<sup>th</sup>, 1993).

public employment in the general administration, at subnational levels, and in less specialized positions, which have been traditionally accessed through family, personal and clientelistic connections. Overall, Argentina's bureaucracy is of relatively low quality, especially given the country's level of development and stock of human capital (Bambaci et al. 2007; Spiller et al. 2008). Moreover, the country shows relatively high corruption levels according to international rankings.<sup>4</sup>

### **II. Data and identification strategy**

### Population and draft lottery

We rely on population data provided by the Argentine Army on all male citizens born between 1958 and 1962 who were alive at age 18. The total number of men in these five cohorts is 1,088,114. Appendix Table A1 presents the population size and lottery cutoff numbers for each cohort. Our dataset includes individual data on draft lottery results, conscription status, and a set of pre-treatment characteristics that includes origin (Argentine-born non-indigenous, Argentineborn indigenous, and foreign-born naturalized citizens) and region of residence at age 16 (one year before the draft lottery). Using individual lottery results and cohort cutoff numbers, we define *Distance to Cutoff* as (the absolute value) of the difference between each individual's lottery number and the conscription cutoff for his cohort. We also define the dummy variables *Draft Exempt*, which takes the value of 1 for men whose lottery number was below or at the cutoff and therefore were not eligible to serve, and 0 for those whose lottery number was above the cutoff and were thus eligible; and *Draft Eligible*, which is the complement of *Draft Exempt*. In our

<sup>&</sup>lt;sup>4</sup> In the 2022 Corruption Perceptions Index by Transparency International, Argentina gets 38 points (below the world mean and median levels, with no significant changes during the previous decade) on a 0-100 scale from highly corrupt to very clean.

dataset, 29.9 percent of individuals were draft exempt (70.1 percent eligible), and 13.61 percent overall failed the medical examination (Appendix Table A2 presents summary statistics of our main variables).

# Medical examination

Our dataset indicates whether an individual failed the medical examinations (without distinguishing if this occurred at the main or the pre-incorporation exam). With this information, we define the dummy variable *Failed Medical Examination*. In these failure cases, the database also provides the reason for medical exclusion from a coded list of 506 "conditions."<sup>5</sup>

In the absence of strategic behavior, we would expect the proportion of individuals failing the medical examination to be the same for the draft eligible and the draft exempt. As lottery numbers are random, they should be uncorrelated with true underlying medical conditions. However, failure rates are, on average, 3.3 percentage points (or 29.2 percent) higher for the draft eligible than for the draft exempt (see Appendix Table A3). The differences are significant for every cohort. Moreover, and most importantly for our identification strategy, Figure 1 (which presents failure rates as a function of cohort-normalized distance to the average cutoff of 300) shows that the failure rate increases with the lottery numbers from about 9.7 percent at the origin up to 13.8 percent near the cutoff (from below). Above the cutoff, the failure rate are consistent with the

<sup>&</sup>lt;sup>5</sup> The armed forces' records from this period referred to these exemption conditions as "diseases", "disorders" or "pathologies." We deliberately avoid using this terminology, and we instead refer to "conditions" that were considered motives for exemption from military service in Argentina at that time, some of which were certainly not pathological nor disabling (e.g., sexual orientation).

<sup>&</sup>lt;sup>6</sup> Part of the increase in failure rates at the cutoff reflects the fact that some drafted individuals did not pass the second pre-induction medical examination (the draft exempt never reached that stage).

 $<sup>^{\</sup>tilde{7}}$  The increase in failure rates as a function of lottery numbers in Figure 1 is reflected in a strongly significant regression coefficient of 0.01 below the threshold, whereas it becomes a non-statistically significant coefficient of 0.0001 above the threshold. We can reject the equality of these coefficients at less than 1% significance.

different incentives to cheat in the medical examination by those at risk of becoming draft eligible. Individuals with draft numbers far below the cutoff had fewer incentives to cheat than those closer to and above the cutoff.

At the time of the first examination, individuals did not know the exact cutoff number that would apply to their cohort. However, the previous year's cutoff (as well as political, budgetary and national defense factors that affected each cohort's intake) provided a natural reference to that year's actual cutoff.<sup>8</sup> Appendix Figure A1 presents failure rates by draft lottery number for each cohort separately, including both the actual and the previous year's cutoffs. For 3 out of the 5 cohorts considered, the cutoff differed from the previous year's cutoff only by 30 units or less. One exception is the cohort of 1958, for which the previous year's cutoff is quite low (at 24 over 1000).<sup>9</sup> This suggests that cheating incentives could start from quite low numbers, as the slope of Figure 1 suggests. Moreover, the uncertainty about the exact cutoff also implies a potential positive slope for a range of lottery numbers above it.

The findings that failure rates are higher for the draft eligible than for the draft exempt, and that failure rates increase within the draft-exempt group as the lottery number gets closer to the cutoff, suggest that the medical examinations were manipulated. Indeed, the failure rate was 9.7% for the lowest ten draft numbers (i.e., close to the intercept in Figure 1 if we draw a regression line around the points to the left of the cutoff), who were virtually certain of not being drafted. This level is probably a proxy of the real underlying rate of exempt-worthy conditions. In turn, the average failure rate for those above the cutoff was 14.6%, which suggests that about one third of

<sup>&</sup>lt;sup>8</sup> The five cohorts we consider were conscripted under the 1976-1983 military dictatorship. Although an increase in the intake of conscripts could be expected, the military government aimed to reduce public spending.

<sup>&</sup>lt;sup>9</sup> Although inevitably noisier, the overall pattern of the plots in Appendix Figure A1 is similar to that of Figure 1. For the two cohorts for which the previous year's cutoff is substantially below the actual cutoff (1958 and 1959), the slope gets milder to the right of the previous year's cutoff, but it is clearly positive up to the actual cutoff. For the five cohorts separately, and for both the actual and previous year's cutoff, the below-the-cutoff slope coefficients are always positive and highly significant.

those who failed the medical examination did not have a true underlying condition, but were cheating.<sup>10</sup>

### Identification strategy

Whereas the draft-lottery literature (i.e., Angrist 1990) typically instruments conscription with the lottery and studies the causal effect of conscription itself on a range of outcomes, our identification strategy instead exploits the increasing incentives to cheat in medical examinations induced by lottery numbers for (eventually) draft-exempt individuals (the positive slope to the left of the cutoff in Figure 1). In particular, we use the distance to the cutoff (from below) as an instrument for whether these individuals cheated in the medical examination, which allows us to estimate the causal impact of draft evasion on subsequent outcomes in a regression framework. Appendix Table A4 shows that our instrument is orthogonal to the limited set of available individual characteristics.

We can also provide some additional evidence on the plausibility of this instrument. We asked physicians from the Ministries of Defense and Security of Argentina, as well as occupational physicians in charge of monitoring the medical conditions of employees who request paid medical leave from their employers, to classify the 506 medical exemption conditions into three groups: conditions that were more difficult/costly to verify with the technologies of the time, and/or those for which it was easier to delay treatment or to exaggerate the symptoms for the exam (for example, psychological conditions, visual deficiencies, hearing loss, and breathing problems); conditions that were hard to fake and/or easy to verify (such as amputations, severe oligophrenia, spina bifida,

<sup>&</sup>lt;sup>10</sup> Conscription in the Army and the Air Force lasted one year, whereas draftees spent up to two years in the Navy. We could thus expect an additional cheating incentive to avoid Navy conscription. However, considering both the actual and previous year's inter-force cutoffs, we do not observe a pattern of higher failure rates for those assigned to the Navy, suggesting that the one-year conscription already provided enough incentives for those willing to cheat.

tuberculosis, or poliomyelitis); and a residual intermediate group.<sup>11</sup> In our sample of draft-exempt individuals, easy-to-cheat and hard-to-cheat conditions represent 53.2% and 17.8% of the failed medical exams, respectively.

Figure 1 also depicts medical examination failure rates due to hard-to-cheat, intermediate, and easy-to-cheat conditions. Inspection of the figure indicates that about 4.8 percent of draft-exempt individuals showed these easy-to-cheat conditions for lottery numbers close to zero. This rate rises steeply to 7.6 percent close to the cutoff, and then remains flat around 7.8 percent to the right of the cutoff. Intermediate conditions show a milder slope below the cutoff and, again, remain nearly constant above it. Instead, hard-to-cheat conditions remain almost flat throughout the whole range.<sup>12</sup> This evidence is compatible with our identification strategy: we observe the increase in medical examination failures when approaching the lottery cutoff for conditions that were more pliable to manipulation (and a steeper slope as faking was easier), whereas this pattern is significantly attenuated for conditions that were easily verifiable or difficult to fake. We interpret these slopes as differences in behavior since true medical conditions should be uncorrelated with random lottery results.

### Employment data

For employment information, we rely on administrative data on social security records of wage earners provided by a credit-scoring agency. The source is the employer-employee matched database that covers the universe of registered wage earners in Argentina (for details, see Cruces,

<sup>&</sup>lt;sup>11</sup> Appendix 1 provides the list of the conditions included in these three subsets.

<sup>&</sup>lt;sup>12</sup> We can reject the null hypotheses that the below-the-cutoff slope coefficients are equal between the three types of medical conditions, and that they are equal to their corresponding (always non-significant) above-the-cutoff coefficients. Moreover, in a semi-elasticity model that takes into account the different prevalence of medical conditions, we cannot reject that the below-the-cutoff estimated rates of increase are similar for easy-to-cheat and intermediate conditions, but we strongly reject the equality of any of these two coefficients with that of hard-to-cheat conditions.

Rossi, and Schargrodsky 2023). Being in this dataset indicates that the individual was a formal wage earner at some point in 2010-2016. The dataset also distinguishes between public and private sector of employment, and provides some limited information on the type of employment activity for public employees.

Our main outcome variable is whether an individual is a *Public Sector Employee*, which takes the value of 1 if the individual was a public employee at some point in the period 2010 to 2016 (16.74 percent), and 0 otherwise. The other outcome for wage employment in this database is being a *Private Sector Employee* (36.68 percent).<sup>13</sup>

Moreover, we classify public sector jobs into two categories. We label as *Meritocratic Public Sector Employee* those jobs that require some type of diploma (universities, scientific institutions, health sector, etc.) or entry examination (the judiciary), or those subject to some form of intensive training and evaluation (armed and security forces). These meritocratic positions represent 20.9 percent of overall public sector jobs in our sample, whereas the remaining 79.1 percent are labeled as *Non-Meritocratic Public Sector Employee*.<sup>14</sup>

## Attrition

The reasons for not appearing in this wage-earner dataset include inactivity, unemployment, informal employment, self-employment, business ownership, international migration, or death. As the males in our conscription sample were born between 1958 and 1962, they were 48 to 58 years old when we observe their employment status in our data (from 2010 to 2016).

Since we are considering employment outcomes more than 30 years after the draft lottery, a

<sup>&</sup>lt;sup>13</sup> These percentages are in line with the proportion of formal wage-earners in the male population in this age range in Argentina (see Gasparini and Tornarolli 2009). For example, in the EPH national household survey for the second semester of 2022, formal wage earners represent 46.5% of the total population of men aged 45 to 60.

<sup>&</sup>lt;sup>14</sup> Appendix 2 provides additional details on the employment database, and on the classification of meritocratic and non-meritocratic public sector jobs.

natural concern is potential attrition. To measure attrition in our population, we rely on another database: the 2013 national electoral roll, around the midpoint of the 2010-2016 period for which we have employment data. Voting in Argentina is compulsory, and registration is automatic and based on the same individual national ID number used for the draft lottery. In our context, we define attrition as not being present in this official administrative dataset, which could be the result of either death or international migration.

Of the 1,088,114 individuals in the 1958-1962 cohorts that were alive at age 18 and were thus included in the draft, 101,225 (9.3 percent) are not present in the 2013 electoral roll. Appendix Table A5 shows that the probability of being alive and living in Argentina in 2013 is orthogonal to the distance to the lottery cutoff (our instrument). This result rules out potential concerns of differential attrition by lottery assignment. After removing attriters from the sample, we are left with 986,889 individuals for our analysis of employment outcomes.

### III. Main results, falsification tests, and potential mechanisms

We are interested in estimating the causal effect of cheating the medical examination in early adulthood on employment outcomes later in life. We start by estimating the following equation:

*Employment Outcome*<sub>ic</sub> =  $\alpha + \beta$  *Failed Medical Examination*<sub>ic</sub> +  $\delta_c + \varepsilon_{ic}$  (1)

where *i* indexes individuals, *c* indexes cohorts,  $\beta$  is the coefficient of interest,  $\delta_c$  is a cohort fixed effect, and  $\varepsilon_{ic}$  is an error term.

Our empirical strategy instruments *Failed Medical Examination* with the randomly assigned *Distance to Cutoff* in order to estimate the causal effect of cheating on employment outcomes. The instrument is not valid for the draft-eligible group, as all these individuals faced similar cheating incentives regardless of their distance to the cutoff as pictured in Figure 1. Moreover, a sizeable fraction of the draft-eligible individuals ended up in the conscription, which, as mentioned, had

direct effects on formal employment, earnings, and related outcomes. Thus, we focus the main analysis on the draft-exempt sample of 295,611 individuals.

### Main results

In Table 1, we first present the simple OLS estimates of the model in equation (1) for the outcomes *Public Sector Employee* (column 1) and *Private Sector Employee* (column 2). The results are as expected: since a majority of the individuals who failed their medical examination did it because of real health conditions, we find a robust negative relationship between employment and failure in the medical examination. For *Public Sector Employee*, the coefficient of -1.62 percentage points indicates a reduction of 9.77 percent with respect to the dependent variable mean. The correlation is even stronger for *Private Sector Employee*. Individuals with some pre-existing medical condition, as signaled by failing the conscription medical examination, exhibited lower formal employment levels later in life.<sup>15</sup>

As discussed above, however, a fraction of failures in medical examinations can be attributed to some form of cheating. The evidence in columns (1) and (2) of Table 1 does not allow us to separate the potential effect of cheating from that of real physical or mental conditions on employment outcomes. But even if we could separate the true and cheating components of *Failed Medical Examination*, the cheating component is likely endogenous when we attempt to measure its effect on employment outcomes. For example, belonging to a middle or upper-class family, or having relatives already working in the public sector, can affect the ability both to cheat in the medical examination (for instance, by using connections in the military or the connivance of physicians to be classified as physically unfit) and to find a future job in the public sector.

<sup>&</sup>lt;sup>15</sup> Appendix Table A6 shows similar results for the draft eligible and for the whole sample.

Thus, for the draft-exempt group we estimate equation (1) by 2SLS, using *Distance to Cutoff* as an instrument for the potentially endogenous variable *Failed Medical Examination*. Our main results are presented in columns 3 to 5 of Table 1. Column (3) first shows the relationship between *Failed Medical Examination* and the *Distance to Cutoff* for the draft-exempt group – essentially, a regression version of the pattern in Figure 1 to the left of the cutoff. The high statistical significance of the coefficient of -0.0098 indicates a strong first-stage relationship.

Column (4) in Table 1 and Panel A in Figure 2 present the reduced-form relationship between *Public Sector Employee* and *Distance to Cutoff*. The coefficient is negative and statistically significant. Thus, draft-exempt individuals who were closer to the draft cutoff also exhibited a higher probability of being public sector employees.

Finally, column (5) in Table 1 presents the 2SLS estimates. The coefficient is positive and statistically significant. It indicates that those who successfully cheated the medical examination to avoid being drafted for military service were 17.55 percentage points more likely to become a public employee later in life.<sup>16</sup>

As the true cutoff was unknown at the time of the medical examinations, a potential concern is whether the relevant threshold for cheating decisions was instead the previous year's cutoff. Columns 6 to 8 of Table 1 show that all results are very similar when using the distance to the previous year's cutoff instead of the actual cutoff.<sup>17</sup>

Under reasonable assumptions, the 2SLS estimate recovers the Local Average Treatment Effect (Angrist et al. 1996), which identifies the causal effect of cheating the medical examination at age 18 on future public employment for the subset of compliers: young men who were induced

<sup>&</sup>lt;sup>16</sup> Our main results are robust to the inclusion of geographic and other pre-treatment controls (see Appendix Table A7).

<sup>&</sup>lt;sup>17</sup> As Appendix Figure A1 already suggested (see also footnote 9), the first-stage coefficient is steeper for the previous year's cutoff than for the actual cutoff.

to successfully cheat on the medical examination by being assigned a lottery number in the proximity of the cutoff, but would have not cheated if they were sufficiently further away. Thus, compliers in this setting are probably those who ex-ante had the means, money, and/or contacts to cheat if needed.<sup>18</sup>

## Falsification tests

The cheating interpretation of our first-stage could be challenged if the stringency of the medical examination varied with the distance to the cutoff. However, individuals were called for medical examination by the order of their national ID, not by their lottery number. Even if military physicians knew the examinees' lottery numbers, we should expect them to be more lenient at failing individuals with very low numbers, who would be exempt from military service anyway, making superfluous any in-depth medical examination to prove the veracity of a claimed medical condition. If, instead, military physicians were more thorough in scrutinizing medical conditions of individuals closer to the cutoff, these true health conditions should make future public (and private) employment less likely, as the first two columns of Table 1 showed, in contradiction with our findings.

Panel A of Table 2 reports results from three falsification tests. First, the coefficient in column (1) indicates that there is no relationship between the random distance to the cutoff and public employment among men with lottery numbers above the cutoff. This is as expected, since all men above the cutoff faced similar incentives to cheat.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> Consistently, compliers are over-represented in more developed provinces as proxied by poverty and education levels.

<sup>&</sup>lt;sup>19</sup> Strictly speaking, because the cutoff was uncertain the cheating incentives could still be milder in the near proximity above the cutoff than for higher lottery numbers. The result in column (1) of panel A in Table 2 is robust to setting arbitrarily higher cutoff numbers (for instance, 500) which would leave no uncertainty about being drafted to the individuals above it.

Second, we constructed a mirror database for Argentine women born 1958 to 1962, and assigned them the lottery number corresponding to their last three ID digits. This should capture any correlation between draft numbers and public employment from a spurious pattern at the assignment of Argentine national ID numbers. The estimates are presented in column (2) of Panel A of Table 2, for the women with an ID number that would have placed them in the draft-exempt group. For women, there is no relationship between these imputed lottery numbers and the probability of being a public sector employee.

Third, we use a placebo experiment to challenge the validity of the exclusion restriction in our identification strategy. The lottery number did not have any further use nor consequences later in life, and only played a role at the time of the conscription draft. However, a potential concern is that our instrument could have a direct effect on employment outcomes through channels other than dishonest behavior in the medical examinations. For instance, being closer to the cutoff may have caused stress or have depressed the morale of young men even before the medical exams, with a potential effect on career choices later in life.

For this placebo experiment, we take advantage of the abolishment of compulsory conscription in Argentina in 1994, which led to the cohort of 1976 facing the draft lottery but not being called for the medical examination (and not drafted). Between the lottery and the conscription abolishment, there were three months during which some young men were at risk of being drafted depending on their distance to the (eventual) cut-off. If increased stress (or other mechanisms not operating through cheating in the medical examination) were responsible for our results, we would expect to find a significant relationship between the *Distance to Previous Year's Cutoff* and *Public Employment* for men born in 1976.

Table 2, Panel A, Column (3) reports the results of this placebo exercise. The reduced-form coefficient of *Distance to Previous Year's Cutoff* on *Public Employment* is small and not

statistically significant, suggesting that the instrument has no effect on employment outcomes through mechanisms other than cheating the medical examination. The findings from these three falsification tests reinforce the causal interpretation of our results.

## Potential mechanisms

To explore possible underlying channels for our findings, we provide two further exercises. First, we compare public and private employment. Column (1) of Panel B of Table 2 shows that draft evasion has no effect on having a formal job in the private sector, as inspection of the reduced form plotted in Panel B of Figure 2 also indicates. This finding is congruent with a self-reputation channel in which cheating during the formative years weakened moral self-restraints and decreased the reputational cost of future misbehavior, making future high-temptation opportunities more desirable (Bénabou and Tirole 2004, 2011; Dal Bó and Treviö 2013). Public-sector jobs, with life stability, corruption opportunities, and weak controls for absenteeism and effort-provision, could be examples of high-temptation occupations, compared to private-sector positions.

Second, within the public sector, we compare meritocratic positions that require some type of diploma, entry examination, or intensive training and evaluation, relative to non-meritocratic jobs. Columns (2) and (3) of Panel B of Table 2 show that draft evasion is strongly related to nonmeritocratic employment, where there is more scope for arbitrary hiring, but not to meritocratic employment. This result is compatible with a learning channel in which the successful experience of cheating in a high-stake situation during their formative years acquainted these youths with the potential use of family connections and influences for dishonest behavior. These individuals may have then used similar tools to get coveted non-meritocratic public service jobs, which in Argentina have been traditionally accessed through family, personal and clientelistic connections. Instead, these contacts may not be enough to attain public meritocratic positions nor private sector jobs which have further individual requirements.

These two potential channels coincide in suggesting a process of adverse selection into public service in Argentina, a developing country with relatively high corruption levels. However, our findings could also correspond to other, perhaps complementary, mechanisms. Pacifists, for example, may choose to dodge the draft, and that experience may then prime them to engage in public service. Guilt could also lead cheaters into public service to make up for their early fraud. Please note that the causal link we established requires that these (or other) personal characteristics become exacerbated because of dodging the draft (the mere correlation of fixed personal features with preferences for public service cannot alone explain our results). Although we can speculate that public service motivated by pacifism or guilt could more likely lead to look for meritocratic rather than non-meritocratic public jobs, which is contrary to what we find, we cannot discard the presence of these (or other) channels. The available data do not allow us to be conclusive on the identification of the precise mechanisms behind our results.

### **IV. Final remarks**

Given the size and scope of modern states, the quality of state bureaucracy is a main factor for economic progress. Honesty, in particular, can be a crucial attribute of government officers. We exploit a unique source of variation in the incentives to cheat during the impressionable years, and find that individuals with a higher probability of having evaded military conscription by faking their medical exam exhibit a higher propensity to become public employees later in life. Our lottery identification strategy, the falsification tests, and the complementary evidence by types of medical condition and public employment indicate that there is a causal link. This evidence suggests that cheating can not only be induced, but can also have lasting effects on future behavior.

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Figure 1. Failure rate in medical examination as a function of draft lottery number

Note: The number of observations is 1,088,114 (325,298 draft exempt in the range (-300;0] and 762,816 draft eligible in the range (0;700]) and corresponds to men in the 1958-1962 cohorts. The figure depicts a binned scatterplot of the failure rate in medical examination by 40 quantiles of the normalized difference between the draft lottery number and the year's eligibility cutoff for all conditions, and also distinguishes between easy-to-cheat, intermediate, and hard-to-cheat conditions. The average cutoff for the 5 cohorts was 300, so for each cohort the distance below the cutoff (i.e., the exempt) was normalized as (-300;0], and as (0;700] for the distance above the cutoff (i.e., for those eligible). All plots include cohort fixed effects and a control for Air Force draftees which were subject to a more stringent medical examination at the time of incorporation, as conscripts had to be fit to participate in flights. Appendix Figure A2 presents the results for all conditions without this Air Force control. The plot was made using the binsreg package by Cattaneo et al. (2019).



Figure 2. Reduced form: Public and private employment as a function of distance to the cutoff

Note: The 295,611 observations correspond to the draft-exempt men in the 1958–1962 cohorts present in the 2013 electoral roll. The figure depicts a binned scatterplot of public and private employment levels for 12 quantiles of the normalized difference between the draft lottery number and the year's eligibility cutoff. The average cutoff for the 5 cohorts was 300, so the distance below the cutoff (i.e., the exempt) was normalized for each cohort as (-300;0]. The plot was made using the binsreg package by Cattaneo et al. (2019).

|                         | (1)      | (2)      | (3)              | (4)       | (5)      | (6)              | (7)       | (8)      |
|-------------------------|----------|----------|------------------|-----------|----------|------------------|-----------|----------|
|                         | Public   | Private  | Failed           | Public    | Public   | Failed           | Public    | Public   |
|                         | Sector   | Sector   | Medical          | Sector    | Sector   | Medical          | Sector    | Sector   |
|                         | Employee | Employee | Examination      | Employee  | Employee | Examination      | Employee  | Employee |
|                         |          |          |                  |           |          |                  |           |          |
| Failed Medical          | -1.62*** | -4.74*** |                  |           | 17.55**  |                  |           | 18.72**  |
| Examination             | (0.21)   | (0.27)   |                  |           | (7.84)   |                  |           | (7.90)   |
| Distance to Cutoff      |          |          | -0.0098***       | -0.0017** |          |                  |           |          |
|                         |          |          | (0.0006)         | (0.0008)  |          |                  |           |          |
| Distance to             |          |          |                  |           |          | -0.0107***       | -0.0020** |          |
| Previous Year's Cutoff  |          |          |                  |           |          | (0.0007)         | (0.0008)  |          |
| Estimation method       | OLS      | OLS      | OLS              | OLS       | 2SLS     | OLS              | OLS       | 2SLS     |
|                         |          |          | (First Stage)    | (Reduced  |          | (First Stage)    | (Reduced  | _~_~     |
|                         |          |          | (1 1130 2 00 80) | Form)     |          | (1 1100 2 00 80) | Form)     |          |
| Dependent variable mean | 16.58    | 37.09    | 10.99            | 16.58     | 16.58    | 10.99            | 16.58     | 16.58    |

### Table 1. Medical examination, employment, and distance to cutoff

Notes: Standard errors clustered at the last-3-ID-digits/cohort level are shown in parentheses. The 295,611 observations correspond to the draft-exempt men in the 1958-1962 cohorts present in the 2013 electoral roll. All models include cohort fixed effects. *Distance to Cutoff* is the absolute value of the difference between each individual's lottery number and the conscription cutoff for his previous cohort (and it is set to zero when draft-exempt individuals have lottery numbers above the previous year's cutoff, but below their cohort's cutoff). *Failed Medical Examination* is a dummy variable that equals 1 if the individual failed the conscription medical examinations, and 0 otherwise. *Public Sector Employee* is a dummy variable that takes the value of 1 if the individual was a wage earner in the public sector at some point in the period 2010 to 2016, and 0 otherwise. *Dummy* variables are normalized to 0/100 so that results represent percentage points. In the Two Stage Least Squares (2SLS) model in column (5), *Failed Medical Examination* is instrumented with *Distance to Cutoff* –the first stage of this regression is presented in column (3). In the 2SLS model in column (8), *Failed Medical Examination* is instrumented with *Distance to Previous Year's Cutoff* – the first stage of this regression is presented in column (6). The Montiel-Pflueger effective F statistics for the first-stage regression are 268.25 for *Distance to Cutoff*, and 267.32 for *Distance to Previous Year's Cutoff*, with a critical value of 37.4 for a 5% worst-case bias (Pflueger and Wang 2015; Montiel Olea and Pflueger 2013). \*\*Significant at the 5% level. \*\*\*Significant at the 1% level.

| A. Faisification tests: araji | i-eligible men, | araji-exempi women, a | na ine 1970 conori |
|-------------------------------|-----------------|-----------------------|--------------------|
|                               | (1)             | (2)                   | (3)                |
|                               | Public Sector   | Female Public         | Public Sector      |
|                               | Employee        | Sector Employee       | Employee (1976)    |
|                               |                 |                       |                    |
| Distance to Cutoff            | 0.0002          | -0.0003               |                    |
|                               | (0.0002)        | (0.0008)              |                    |
| Distance to Previous Year's   |                 |                       | 0.00007            |
| Cutoff                        |                 |                       | (0.00034)          |
| Observations                  | 691,278         | 289,339               | 229,305            |
| Commute                       | Draft           | Women with            | Draft              |
| Sample                        | Eligible Men    | Exempt ID             | Exempt Men         |
| Cohorts                       | 1958-1962       | 1958-1962             | 1976               |
| Dependent variable mean       | 16.81           | 19.40                 | 15.21              |
| Estimation method             | OLS             | OLS                   | OLS                |

# Table 2. Falsification tests and further results

1.1. 1076

B. Private employment and public sector meritocratic/non-meritocratic jobs

|                            | (1)        | (2)           | (3)              |
|----------------------------|------------|---------------|------------------|
|                            | Private    | Meritocratic  | Non-Meritocratic |
|                            | Sector     | Public Sector | Public Sector    |
|                            | Employee   | Employee      | Employee         |
|                            |            |               |                  |
| Failed Medical Examination | -7.46      | -0.439        | 17.99**          |
|                            | (9.82)     | (3.676)       | (7.05)           |
| Observations               | 295,611    | 295,611       | 295,611          |
| Commis                     | Draft      | Draft         | Draft            |
| Sample                     | Exempt Men | Exempt Men    | Exempt Men       |
| Cohorts                    | 1958-1962  | 1958-1962     | 1958-1962        |
| Dependent variable mean    | 37.09      | 3.395         | 13.18            |
| Estimation method          | 2SLS       | 2SLS          | 2SLS             |

Notes: Standard errors clustered at the last-3-ID-digits/cohort level are shown in parentheses. All models include cohort fixed effects. Models in Panel A are estimated using OLS. Models in Panel B are estimated using 2SLS, where *Failed Medical Examination* is instrumented with *Distance to Cutoff. Female Public Sector Employee* is a dummy variable that takes the value of 1 if the woman was a wage earner in the public sector at some point in the period 2010-2016, and 0 otherwise. *Public Sector Employee (1976)* is a dummy variable that takes the value of 1 if the individual born in 1976 was a wage earner in the public sector at some point in the period 2015 to 2019, and 0 otherwise. *Distance to Previous Year's Cutoff* is the absolute value of the difference between each individual's lottery number and the conscription cutoff for his previous cohort. *Meritocratic Public Sector Employee* is a dummy variable that takes the value of 1 if the individual's lottery number and the conscription cutoff for his previous cohort. *Meritocratic Public Sector Employee* is a dummy variable that takes the value of 1 if the individual's lottery number and the conscription cutoff for his previous cohort. *Meritocratic Public Sector Employee* is a dummy variable that takes the value of 1 if the individual was a wage earner in the public sector in an activity that requires some type of diploma, entry examination, or intensive training and evaluation at some point in the period 2010-2016, and 0 otherwise. *Non-Meritocratic Public Sector Employee* is the complement of *Meritocratic Public Sector Employee*. For the definitions of *Distance to Cutoff, Failed Medical Examination, Public Sector Employee*, and *Private Sector Employee* see Notes to Table 1. Dummy variables are normalized to 0/100 so that results represent percentage points. \*\*Significant at the 5% level.

# **Online Appendix**

# "Dishonesty and Public Employment"

# by Guillermo Cruces, Martín Rossi and Ernesto Schargrodsky

# Appendix 1. Easy-to-cheat, hard-to-cheat, and intermediate-to-cheat conditions

# Easy-to-cheat (and/or hard-to-verify and/or delayable treatment) conditions:

- **Psychological conditions:** psychosis associated with other brain conditions; schizophrenia; affective psychosis; paranoid states; other psychosis; non-specified psychosis; anxiety neurosis; hysterical neurosis; phobic neurosis; obsessive compulsive disorder; depressive neurosis; neurasthenia; depersonalization disorder; hypochondriac neurosis; other neuroses; paranoid personality; affective personality; schizoid personality; explosive personality; anankastic personality; hysterical personality; asthenic personality; antisocial personality; other personalities; homosexuality; fetishism; pedophilia; transvestism; exhibitionism; other sexual deviations; alcoholism; drug addiction; somatic disorders of psychic origin; babbling and stammering; specific learning disorders; tics; enuresis; other somatic disorders; mental disorders associated with soma.
- **Eye conditions:** conjunctivitis and ophthalmia; blepharitis; keratitis and corneal ulcer; iritis; irido choroiditis; choroiditis; other inflammations of the uveal tract; optic neuritis and retinal inflammatory; inflammation of glands and tear ducts; other inflammatory diseases of the eye; refractive visual defects; myopia; farsightedness; astigmatism; anisometropia; visual acuity; glaucoma; other diseases of the retina and of the optic nerve; other diseases of the eye.
- **Hearing conditions:** other inflammatory diseases of the ear; Meniere's disease; other diseases of the ear and of the mastoid apophysis; bilateral hearing loss; unilateral hearing loss; hearing loss.
- **Endocrine conditions:** thyrotoxicosis with or without goiter; thyroiditis; diabetes mellitus; other disorders of the internal secretion of the pancreas; parathyroid glands diseases; pituitary gland disorders; adrenal gland diseases; testicular dysfunction; polyglandular deficiency syndrome and other endocrine.
- **Metabolic conditions:** avitaminosis and deficient states; other metabolism diseases; obesity not specified as endocrine; other metabolic and non-specified diseases.
- **Neurological conditions:** epilepsy; trigeminal neuralgia; brachial neuritis; sciatica; polyneuritis and polyradiculitis; other neuralgias and neuritis; other diseases of the cranial nerves; other peripheral neuropathy except the autonomic system; peripheral nerve paralysis; disorders of the autonomic nervous system.
- **Cardiovascular conditions:** essential malignant hypertension; essential benign hypertension; renovascular hypertension; heart block; other rhythm disorders; misdefined diseases of the heart; varicocele; other diseases of the circulatory system; global increase of the cardiac area; partial increase of the cardiac area; hernias and diaphragmatic relaxations.
- Respiratory conditions: asthma; chronic sinusitis; other diseases of the upper respiratory tract.
- **Digestive conditions:** dental caries and decreasing masticatory surface; periodontal diseases; malocclusion; tongue diseases and other oral pathological states; stomach ulcer; duodenal ulcer; peptic ulcer; gastritis or duodenitis; other diseases of the stomach and the duodenum; inguinal hernia; femoral hernia; umbilical hernia; ventral hernia; diaphragmatic hernia; hernias from other locations; non-infectious gastroenteritis and colitis; diverticulitis; other intestinal and peritoneal diseases.
- **Conditions of the liver, bile ducts and pancreas:** other diseases of the liver; other gallbladder and bile ducts diseases.

**Renal conditions:** other diseases of the kidney and the ureters.

**Urogenital conditions:** other diseases of the bladder; non-venereal urethritis; other diseases of the urinary system; chronic prostatitis; other diseases of the prostate; hydrocele; epididymitis orchitis; other genital diseases.

- **Skin conditions:** eczema and other dermatitis; psoriasis and related conditions; pruritus and related conditions; corns and calluses; other hypertrophic or atrophic disorders of the skin; other dermatosis; nail diseases; hair and hair follicles diseases; sweat glands disease; sebaceous gland diseases; hives and angioedema; other skin diseases.
- **Rheumatic conditions:** other specified types of arthritis; unspecified arthritis; other bone diseases; intervertebral disk displacement; other diseases of the joints; synovitis; other diseases of the muscles, tendons and aponeurosis; deviation of the column; flat feet.

Trauma: pseudoarthrosis; surgical sequels; kyphosis or scoliosis.

Genetic conditions: scotoma; constitutional weakness; lack of thoracic perimeter; overweight.

# Hard-to-cheat (and/or easy-to-verify) conditions:

- **Trauma:** eye enucleation; amputation of the tongue, nose or auricle; penis or testicle amputation; traumatic amputation of the thumb; traumatic amputation of other parts of the thumb; traumatic amputation of other fingers of the hand; traumatic amputation of the hand phalanges; traumatic amputation of the arm or hand; traumatic amputation of the foot; traumatic amputation of parts of the foot; traumatic amputation of the foot; traumatic amputation of the leg; spinal fracture.
- **Infectious conditions bacterial:** leprosy; pulmonary tuberculosis; other tuberculosis of the respiratory system; bipolar tuberculosis complex; pleural tuberculosis; tuberculosis of the ganglia of the respiratory system; tuberculosis of the meninges and the central nervous system; tuberculosis of the peritoneal intestine and mesenteric ganglia; tuberculosis of the bones and joints; tuberculosis of the genitourinary system; tuberculosis of the skin and subcutaneous cell tissue; tuberculosis of the lymphatic system; tuberculosis of the adrenal glands and other organs; disseminated tuberculosis; late sequels (tuberculosis);

Infectious conditions – viral: acute poliomyelitis; poliomyelitis sequels.

**Tumors:** malignant lip neoplasm; malignant tongue neoplasm; malignant neoplasm of the salivary glands; malignant neoplasm of gum; malignant neoplasm of other parts of the oral cavity; malignant neoplasm of larynx; malignant esophageal cancer; malignant tumor of the stomach; malignant tumor of the small intestine; malignant tumor of the large intestine; malignant rectal cancer; malignant tumor of the liver and intraliver bile ducts; malignant tumor of the vesicle and extraliver bile ducts; malignant pancreatic cancer; peritoneal and retroperitoneal malignant tumor; malignant tumor of non-specified digestive organs; malignant tumor of nose, ear and annex; malignant tumor of larynx; malignant neoplasm of trachea, bronchus, and lung; malignant pleural tumor; malignant tumor of mediastinum; malignant neoplasm of other thoracic organs; malignant tumor of bones; malignant tumor of connective tissue and other soft tissues; malignant melanoma; malignant tumor of breast; malignant tumor of prostate; malignant testicular cancer; malignant tumor of other genital organs; malignant bladder cancer; malignant kidney tumor; malignant tumor of renal pelvis; malignant ureteral tumor; malignant eye tumor; malignant brain tumor; malignant tumor of other parts of the nervous system; malignant tumor of the thyroid; malignant tumor of other endocrine glands; secondary malignant tumor of unspecified lymph nodes; malignant tumor of other non-specified sites; lymphosarcoma and reticulum cell sarcoma; Hodgkin's lymphoma; other types of lymphomas; multiple myeloma; lymphocytic leukemia; myeloid leukemia; monocytic leukemia; other leukemias; tumors of the mediastinum; hemangioma and lymphangioma; tumor of unspecified origin; bone tumor.

**Endocrine conditions:** simple goiter, colloid goiter; nontoxic nodular goiter; congenital hypothyroidism. **Metabolic conditions:** active rachitism; rachitism sequels.

Psychological conditions: severe oligophrenia; serious oligophrenia.

**Neurological conditions:** hereditary ataxias; multiple sclerosis; infant spastic cerebral palsy; other cerebral palsy.

Eye conditions: corneal opacity; pterygium; cataracts; retinal detachment; blindness.

Hearing conditions: deaf, mute; radical mastoidectomy.

Cardiovascular conditions: dextrocardia; varices of the lower limbs.

Respiratory conditions: nasal septum deviation; nasal polyp; pulmonary agenesis.

# Rheumatic conditions: bunion.

**Genetic conditions:** spina bifida; congenital hydrocephalus; cleft lip and cleft palate; undefined sex; retained testicle; hypospadias; epispadias; renal agenesis; congenital clubfoot; pectus carinatum; congenital anomalies of the skin, hair and nails (albinism); situs inversus; low height.

**Trauma:** loss of an organ and/or function; recent bone fracture.

### **Intermediate conditions (residual category):**

- **Infectious conditions bacterial:** typhoid fever; paratyphoid fever; other salmonellosis; bacillary dysentery; amoebiasis; pleural calcifications; other bacterial zoonoses; brucellosis; diphtheria; whooping cough; scarlet fever; erysipelas; meningococcus and septicemia infection; trachoma.
- **Infectious conditions viral:** viral encephalitis and late effects; hemorrhagic fever; viral hepatitis; infectious mononucleosis.
- Infectious conditions protozoasis: malaria, leishmaniasis, Chagas disease; toxoplasmosis.
- **Infectious conditions sexually transmitted:** congenital syphilis; symptomatic early syphilis; early latent syphilis; cardiovascular syphilis; nervous system syphilis; other forms of syphilis; late latent syphilis; other syphilis and non-specified; gonorrhea.
- **Infectious conditions mycotic:** mycosis; actinomycosis; coccidiodomycosis; blastomycosis; other visceral mycoses.
- **Infectious conditions parasitic:** schistosomiasis; hydatidosis; trichinosis; filariasis; ankylostomiasis; sarcoidosis.
- **Tumors:** other malignant tumors of the skin; polycythemia vera; myelofibrosis; benign tumor of the oral cavity and pharynx; benign tumor of other parts of the digestive system; benign tumor of the respiratory system; benign bone and cartilage tumor; lipoma and fibrolipoma; other benign tumors of muscles and conjunctive tissue; benign skin tumor; benign breast tumor; benign tumor of male genital organs; benign tumor of the kidney and other urinary organs; benign tumor of the encephalus and other parts of the nervous system; benign tumor of endocrine glands.
- Endocrine conditions: mixedema; thymus.

Metabolic conditions: thiamine deficiency; pellagra; gout.

- **Hematological conditions:** hipochromic anemia; iron deficiency anemia; inherited hemolytic anemia; acquired hemolytic anemia; other unspecified anemia; alteration in blood coagulation; purple and other hemorrhagic states; agranulocytosis; other blood and hematopoietic organs diseases; spleen diseases.
- **Psychological conditions:** psychosis associated with intracranial infection; mild oligophrenia; modest oligophrenia; moderate oligophrenia.
- **Neurological conditions:** meningitis; encephalitis and myelitis; hereditary neuromuscular disorders; hereditary diseases of the pallidum and striatum; other hereditary diseases of the nervous system; other diseases of the brain; other diseases of the spinal cord; facial paralysis; diffuse sclerosis.

Eye conditions: crossed eye.

- Hearing conditions: external otitis; otitis media without mention of mastoiditis; otitis media with mastoiditis; chronic otitis.
- **Cardiovascular conditions:** rheumatic fever without cardiac complication; rheumatic fever with cardiac complication; active rheumatic pericarditis; rheumatic chorea; pericardiopathies; mitral valve diseases and endocarditis; aortic valve disease; other endocardial diseases; myocarditis and other specified heart diseases; acute myocardial infarction and sequelae; coronary insufficiency microinfarct; angina pectoris; acute non rheumatic pericarditis; acute, sub-acute and chronic endocarditis; acute myocarditis; non syphilitic aortic aneurysm; aneurysmatic dilatation of great vessels and other aneurysms; peripheral vessel disease; polyarteritis nodosa; other diseases of arteries and arterioles; phlebitis and thromboflebitis of the lower limb; phlebitis and thromboflebitis of other locations; hemorrhoids; esophageal varices; other varices; lymph nodes and vessels affected; displacement of the mediastinum; mediastinal widening; pericardial calcifications; pleuropericardic synches; vascular stasis.

Respiratory conditions: chronic bronchitis; pulmonary emphysema; chronic pharyngitis and

rhinopharyngitis; chronic laryngitis; hay fever; pleural empyema; pleurisy; pleuropulmonar thickening and adherences; other pleural spills; spontaneous pneumothorax; lung and mediastinal abscess; pulmonary congestion and hypostasis; pneumoconiosis; other chronic interstitial pneumonias; bronchiectasis; atelectasis; mediastinitis; irregular edge opacities; micronodular opacities; nodular opacities; macronodular opacities; total or partial opacities; nodular opacities with central transparency; linear opacities; calcified opacities of the lungs and nodes; circumscribed transparencies; diffuse transparencies (pneumothorax); vascular tree reinforcement; thickened hilum.

- **Digestive conditions:** maxillary diseases; salivary gland diseases; esophageal diseases; functional disorders of the stomach; chronic enteritis and ulcerative colitis; anal fissure and fistula; peritoneal adhesions.
- **Conditions of the liver, bile ducts and pancreas:** hepatic cirrhosis; cholelithiasis; cholecystitis and cholangitis; pancreatic diseases.
- **Renal conditions:** acute nephritis; nephrotic syndrome; chronic nephritis; other renal sclerosis; pyelitis; hydronephrosis; kidney and ureteral stones.
- **Urogenital conditions:** urinary system stones; ureteral stenosis; phimosis; testicular atrophy; gynecomastia.
- Skin conditions: pilonidal cyst; pemphigus; erythematosus disease; chronic ulcer of the skin.
- **Rheumatic conditions:** acute pyogenic arthritis; non-pyogenic arthritis; rheumatoid arthritis and related states; osteoarthritis and related states; non-articular rheumatisms; rheumatism in evolution; osteomyelitis and periostitis; deforming osteitis; osteochondritis; intra articular disorders; ankylosis and joint rigidities; connective tissue diseases; hallux valgus and varus.
- **Genetic conditions:** Other congenital malformations of the nervous system; congenital eye anomalies; congenital anomalies of the ear, face and neck; branchial cyst; congenital heart disease; congenital anomalies of the circulatory system; congenital anomalies of the respiratory system; congenital anomalies of genital organs; congenital hydrocele; cystic kidney disease; congenital anomalies of kidney and urinary tract; other kidney specific anomalies; other specific anomalies of the urinary tract; other congenital anomalies of the scapula and upper extremities; other congenital anomalies of the musculoskeletal system; pigmented nevus; sacrococcygeal teratoma; congenital syndromes of the systems and apparatus; nystagmus; abnormal constituents of urine.
- **Trauma:** poorly consolidated fracture; old fracture and its sequels; shortening of a lower member; Volkmann ischemic contracture; sternum or rib fracture.

**Note:** The full list of 506 conditions for exemption of military service was obtained from the Argentine Army, *Oficina de Reclutamiento y Movilización, Estado Mayor del Ejército Argentino*. The medical examinations for our five cohorts were performed between 1975 and 1980. The armed forces' records from the period referred to these medical conditions as "diseases", "disorders", or "pathologies." We avoid using this terminology, and we instead refer to "conditions" (for lack of a better or more encompassing word) that were considered motives for exemption from military service in Argentina at that time. The classification of 155 easy-to-cheat and 105 hard-to-cheat conditions was made with the help of physicians from the Ministries of Defense and Security of Argentina, and occupational physicians in charge of monitoring medical conditions. For 29 conditions, there were no cases in our conscription dataset.

### Appendix 2. Employment data and meritocratic/non meritocratic classification

For employment information, we rely on data on wage earners compiled by a credit scoring agency and based on national social security records. Credit scores in Argentina are typically constructed with public information on formal employment (among other inputs) drawn from the records of the Sistema Integrado Previsional Argentino (SIPA) of the National Social Security Administration (ANSES), the country's social security administration. This database registers mandatory social security contributions made on behalf of all formal wage earners in Argentina by their employers and it is used to compute pensions and other benefits (such as unemployment insurance) for workers. It is a matched employeremployee database that covers the universe of registered (formal) wage earners in the country, and it is linked by an employee's unique national identification number and by an employer's unique tax number.

Our dataset is a subset of these data that contains summary measures of employment histories for the 2010-2016 period for the universe of individuals in the five cohorts we consider (those born between 1958 and 1962). While we did not have access to full employment histories, this database is not a sample of individuals – it contains the information on the full population of formal employees for the cohorts under study.

Appearing in this database implies that the individual was a formal employee in the public or private sector at some point during the 2010-2016 period. The reasons for not appearing in this wage-earner database include inactivity, unemployment, informal employment, self-employment, business ownership, international migration, or death. As described in the text, we deal with attrition from the latter two reasons by matching the data with the 2013 national electoral roll.

The unique national identification number links the conscription records, the 2013 national electoral roll, and the employment information from the credit scoring agency for each individual. As the credit scoring database also matches an individual with his/her employer (from the same SIPA records), and since each employer has its own unique tax identifier, we can establish whether the employee works for a public or private institution. This allows us to define our main outcome variables for all non-attrited individuals in the cohorts under study: *Public Sector Employee* and *Private Sector Employee*.

Based on a list of public sector institutions and their tax identifiers, we requested a breakdown of the public employment indicator that allows to construct two additional variables: *Meritocratic Public Sector Employee* and *Non-Meritocratic Public Sector Employee*. The process of assigning public employees into meritocratic and non-meritocratic employment categories was based on a list of 2,897 public sector institutions (and their employer identifiers). As the database does not distinguish the specific task or position of an individual within her organization, we relied on the characteristics of the employer's recruitment method. In the meritocratic category, we only considered public sector employers that required some type of diploma or an entry examination, or those that subjected incomers to some kind of intensive training and evaluation.

According to this classification, workers in these meritocratic institutions represent 20.9 percent of public employment and 3.51 percent of total formal employment in our sample. The remaining 79.1 percent of public employees (13.24 percent of total formal workers) in our sample are non-meritocratic public sector employees from public divisions that do not require these qualifications.

The following is a summary of the types of public sector organizations included in the meritocratic public sector employer category, with the non-meritocratic group defined as its complement:

#### Meritocratic Public Sector Employers:

- **Universities:** all public universities and its related organizations, such as publishing houses and related public research institutes; the national education council.
- Academic and research-related: public research institutions (such as the National Research Council, the Center for Industrial Technology Research, the Center for Agricultural Technological Research, the Institute for Fisheries Research and Development); regulators requiring technical competencies, such as

the service for food safety and quality and the national administration for drugs and food; the national statistics agency, among several other related institutions.

Health: hospital employees; laboratory employees; other health-related public employers.

- **Judiciary:** all employers related to courts at the federal and provincial level, public prosecutors, public counsels, ombudsman offices, overseeing bodies, and other judiciary-related institutions.
- Armed forces (military): Army, Air Force and Navy; related institutions, such as military social security administration and the national arms factory.
- **Security forces (non-military):** all police forces; the national border force; the national coastguard; and the prisons and corrections service.

We find no effect on meritocratic public employment defined as above, whereas the instrumental variables coefficient for non-meritocratic public employment is strongly significant (see Panel B in Table 2). These results are robust to alternative assignments of public employers to these categories – for instance, adding public banks and major federal organizations (such as regulators and social security administrations) to the definition of meritocratic employment.

# Appendix 3. Additional tables and figures for online publication

| Cohort born in | Population | Lottery cutoff<br>number |
|----------------|------------|--------------------------|
| 1958           | 217,598    | 174                      |
| 1959           | 214,979    | 319                      |
| 1960           | 217,072    | 340                      |
| 1961           | 212,113    | 349                      |
| 1962           | 226,352    | 319                      |
| Total/Average  | 1,088,114  | 300                      |

# Table A1. Population size and cutoff numbers by cohort

Notes: Lottery numbers (provided by the Argentine Army, *Oficina de Reclutamiento y Movilización, Estado Mayor del Ejército Argentino*) ranged from 1 to 1000. The average cutoff is weighted by each cohorts' population. The unweighted average is also 300. The previous year's cutoff for the 1958 cohort was 24.

|   | (1)   | (2)   | (3)          |
|---|-------|-------|--------------|
|   | Mean  | S.D.  | Observations |
| Conscript                               | 45.74 | 49.82 | 1,088,114    |
| Draft Eligible                          | 70.10 | 45.78 | 1,088,114    |
| Draft Exempt                            | 29.90 | 45.78 | 1,088,114    |
| Failed Medical Examination              | 13.61 | 34.29 | 1,088,114    |
| Easy-to-Cheat Conditions                | 7.235 | 25.90 | 1,088,114    |
| Intermediate Conditions                 | 3.947 | 19.47 | 1,088,114    |
| Hard-to-Cheat Conditions                | 2.429 | 15.39 | 1,088,114    |
| Indigenous                              | 2.069 | 14.24 | 1,088,114    |
| Foreign-Born Naturalized Citizen        | 0.263 | 5.125 | 1,088,114    |
| Attrited (not in 2013 Electoral Roll)   | 9.303 | 29.05 | 1,088,114    |
| Public Sector Employee (2010-2016)      | 16.74 | 37.34 | 986,889      |
| Meritocratic Public Sector Employee     | 3.506 | 18.39 | 986,889      |
| Non-Meritocratic Public Sector Employee | 13.24 | 33.89 | 986,889      |
| Private Sector Employee (2010-2016)     | 36.68 | 48.19 | 986,889      |

# Table A2. Descriptive statistics (percentages)

Notes: Observations correspond to men in the 1958-1962 cohorts. Sources for variables: Conscript, Draft Eligible, Draft Exempt, Failed Medical Examination, Easy-to-Cheat Conditions, Intermediate Conditions, Hard-to-Cheat Conditions, Indigenous, Foreign-Born Naturalized Citizen from Argentine Army, Oficina de Reclutamiento y Movilización, Estado Mayor del Ejército Argentino. Attrited (death or international migration) from 2013 Argentine Electoral Roll. Public Sector Employee, Meritocratic Public Sector Employee, Non-Meritocratic Public Sector Employee, and Private Sector Employee from credit scoring agency based on national social security records.

|              | Draft   | Draft    | D:0        |
|--------------|---------|----------|------------|
| Conort       | Exempt  | Eligible | Difference |
| 1958-1962    | 11.30   | 14.60    | -3.30***   |
|              | (0.06)  | (0.04)   | (0.07)     |
| Observations | 325,298 | 762,816  | 1,088,114  |
| 1958         | 12.70   | 14.75    | -2.06***   |
|              | (0.17)  | (0.08)   | (0.20)     |
| Observations | 37,405  | 180,193  | 217,598    |
| 1959         | 12.86   | 16.54    | -3.68***   |
|              | (0.13)  | (0.10)   | (0.17)     |
| Observations | 68,599  | 146,380  | 214,979    |
| 1960         | 11.16   | 13.62    | -2.46***   |
|              | (0.12)  | (0.09)   | (0.15)     |
| Observations | 72,875  | 144,197  | 217,072    |
| 1961         | 10.28   | 13.16    | -2.88***   |
|              | (0.11)  | (0.09)   | (0.15)     |
| Observations | 74,230  | 137,883  | 212,113    |
| 1962         | 10.28   | 14.77    | -4.49***   |
|              | (0.11)  | (0.09)   | (0.15)     |
| Observations | 72,189  | 154,163  | 226,352    |

# Table A3. Failure rate in medical examination (in percentages)by cohort and draft eligibility group

Notes: Lottery numbers (provided by the Argentine Army, *Oficina de Reclutamiento y Movilización, Estado Mayor del Ejército Argentino*) ranged from 1 to 1000. Standard errors in parentheses. \*\*\*Difference significant at the 1% level.

|                              | (1)       | (2)       | (3)        | (4)       | (5)       | (6)        |
|------------------------------|-----------|-----------|------------|-----------|-----------|------------|
|                              | Distance  | Distance  | Distance   | Distance  | Distance  | Distance   |
|                              | to Cutoff | to Cutoff | to Cutoff  | to Cutoff | to Cutoff | to Cutoff  |
| Individual characteristics   |           |           |            |           |           |            |
| Native Citizen-              | 0.00001   | 0.00004   | -0.00002   | -0.00013  | -0.00006  | -0.00005   |
| Non Indigenous               | (0.00027) | (0.00009) | (0.00005)  | (0.00027) | (0.00009) | (0.00005)  |
| Native Citizen-              | -0.00005  | 0.00001   | -0.00001   | 0.00006   | 0.00005   | 0.00003    |
| Indigenous                   | (0.00025) | (0.00009) | (0.00005)  | (0.00025) | (0.00009) | (0.00005)  |
| Foreign-Born                 | 0.00004   | -0.00004  | 0.00003*   | 0.00007   | 0.00002   | 0.00001    |
| Naturalized Citizen          | (0.00009) | (0.00003) | (0.00002)  | (0.00008) | (0.00002) | (0.00001)  |
| Region of residence (age 16) |           |           |            |           |           |            |
| City of Buenos Aires         | -0.00048  | 0.00013   | -0.00003   | -0.00060  | 0.00016   | -0.00002   |
|                              | (0.00048) | (0.00015) | (0.00009)  | (0.00051) | (0.00015) | (0.00009)  |
| Pampeana                     | 0.00107   | -0.00013  | -0.00037** | 0.00109   | -0.00009  | -0.00034** |
| 1 I                          | (0.00085) | (0.00026) | (0.00015)  | (0.00089) | (0.00027) | (0.00016)  |
| Northeast                    | 0.00005   | 0.00018   | 0.00018    | 0.00022   | 0.00009   | 0.00011    |
|                              | (0.00061) | (0.00019) | (0.00011)  | (0.00065) | (0.00019) | (0.00011)  |
| Northwest                    | -0.00094  | -0.00013  | 0.00021**  | -0.00076  | -0.00011  | 0.00027**  |
|                              | (0.00060) | (0.00018) | (0.00011)  | (0.00063) | (0.00019) | (0.00011)  |
| Cuyo                         | 0.00026   | -0.00002  | -0.00000   | -0.00001  | -0.00007  | -0.00000   |
|                              | (0.00044) | (0.00014) | (0.00008)  | (0.00047) | (0.00014) | (0.00008)  |
| Patagonia                    | 0.00004   | -0.00002  | 0.00002    | 0.00006   | 0.00002   | -0.00002   |
| -                            | (0.00033) | (0.00010) | (0.00006)  | (0.00035) | (0.00010) | (0.00006)  |
| Observations                 | 325,298   | 762,816   | 1,088,114  | 295,611   | 691,278   | 986,889    |
|                              |           |           |            | Draft     | Draft     |            |
| Sample                       | Draft     | Draft     | A 11       | Exempt-   | Eligible- | All-Non    |
| Sample                       | Exempt    | Eligible  | All        | Non       | Non       | Attriters  |
|                              |           |           |            | Attriters | Attriters |            |
| Cohort fixed effects         | Yes       | Yes       | Yes        | Yes       | Yes       | Yes        |
| Joint sign. F-test p-value   | 0.771     | 0.738     | 0.127      | 0.760     | 0.931     | 0.269      |

Table A4. Orthogonality of Distance to Cutoff instrument and pre-lottery characteristics

Notes: Standard errors clustered at the last-3-ID-digits/cohort level are shown in parentheses. The observations correspond to men in the 1958-1962 cohorts. Each cell presents the coefficient of the *Distance to Cutoff* variable in a regression in which the dependent variable is each individual characteristic, regressed as a function of this variable and cohort fixed effects. *Distance to Cutoff* is the absolute value of the difference between each individual's lottery number and the conscription cutoff for his cohort, for the draft-exempt (columns 1 and 4) and draft-eligible (columns 2 and 5) samples. For the full sample (columns 3 and 6), this distance is negative for draft-exempt and positive for draft-eligible individuals (as in Figure 1). The samples in columns (4) to (6) exclude individuals who later attrited from our employment sample – those not present in the 2013 electoral roll (see Appendix Table A5). All pre-lottery characteristics are dummy variables that have been normalized to 0/100 for consistency with results in the other tables. The F-statistics test the joint significance of all the individual characteristics and cohort fixed effects. \*Significant at the 10% level. \*\*Significant at the 5% level.

|                         | (1)          | ( <b>2</b> )   | (2)       |
|-------------------------|--------------|----------------|-----------|
|                         | (1)          | (2)            | (5)       |
|                         | Attrited     | Attrited       | Attrited  |
|                         |              |                |           |
| Distance to Cutoff      | -0.00028     | 0.00009        | -0.00014  |
|                         | (0.00053)    | (0.00017)      | (0.00010) |
|                         |              | · · · ·        |           |
| Observations            | 325,298      | 762,816        | 1,088,114 |
| Sample                  | Draft Exempt | Draft Eligible | All       |
| Dependent variable mean | 9.126        | 9.378          | 9.303     |

| Table A5. Attrition | from origina      | l sample as a | function  | of Distance | to Cutoff |
|---------------------|-------------------|---------------|-----------|-------------|-----------|
| Table AS. Authon    | i ii oin oi igina | a sampic as a | i luncuon | of Distance | io Cuiojj |

Notes: Standard errors clustered at the last-3-ID-digits/cohort level are shown in parentheses. The observations correspond to men in the 1958-1962 cohorts. All models are estimated using Ordinary Least Squares and include cohort fixed effects. *Distance to Cutoff* is the absolute value of the difference between each individual's lottery number and the conscription cutoff for his cohort for the draft-exempt and draft-eligible samples. For the full sample (column 3), this distance is negative for draft-exempt and positive for draft-eligible individuals (as in Figure 1). *Attrited* is a dummy variable that equals 1 if the individual is not present in the 2013 Argentine electoral roll (which could be the result of either international migration or death), and 0 otherwise. Dummy variables are normalized to 0/100 so that results represent percentage points.

|                                 | Dublia Soat  | r Employee  | Drivota Saat    | or Employee |
|---------------------------------|--------------|-------------|-----------------|-------------|
|                                 | Fublic Secto | or Employee | Filvale Secto   | or Employee |
|                                 | (1)          | (2)         | (3)             | (4)         |
| E-il-d M-dired E-main direction | 1 06444      | 1 76444     | 1 10***         | 1 51444     |
| Failed Medical Examination      | -1.80***     | -1./0***    | -4.42***        | -4.51***    |
|                                 | (0.12)       | (0.11)      | (0.16)          | (0.14)      |
|                                 | (01.070      | 006 000     | <b>CO1 07</b> 0 | 006 000     |
| Observations                    | 691,278      | 986,889     | 691,278         | 986,889     |
| Sampla                          | Draft        | A 11        | Draft           | A 11        |
| Sample                          | Eligible     | All         | Eligible        | All         |
| Dependent variable mean         | 16.81        | 16.74       | 36.50           | 36.68       |

# Table A6. Failure in medical examination and employmentfor draft eligible and full sample (OLS regressions)

Notes: Standard errors clustered at the last-3-ID-digits/cohort level are shown in parentheses. The observations correspond to men in the 1958-1962 cohorts present in the 2013 electoral roll. All models are estimated using Ordinary Least Squares (OLS) and include cohort fixed effects. *Failed Medical Examination* is a dummy variable that equals 1 if the individual failed the conscription medical examinations, and 0 otherwise. *Public Sector Employee* is a dummy variable that takes the value of 1 if the individual was a wage earner in the public sector at some point in the period 2010 to 2016, and 0 otherwise. *Private Sector Employee* is a dummy variable that takes the value of 1 if the individual was a wage earner in the public sector at some point in the period 2010 to 2016, and 0 otherwise. Bummy variables are normalized to 0/100 so that results represent percentage points. \*\*\*Significant at the 1% level.

|                            | (1)            | (2)            | (3)           |
|----------------------------|----------------|----------------|---------------|
|                            | Failed Medical | Public Sector  | Public Sector |
|                            | Examination    | Employee       | Employee      |
|                            |                |                |               |
| Distance to Cutoff         | -0.0098***     | -0.0017**      |               |
|                            | (0.0006)       | (0.0008)       |               |
| Failed Medical Examination |                |                | 16.87**       |
|                            |                |                | (7.82)        |
| Observations               | 295 611        | 295 611        | 295 611       |
| Estimation mathed          | 015            | 018            | 255,011       |
| Estimation method          | ULS (F)        |                | 2323          |
|                            | (First Stage)  | (Reduced Form) |               |
| Dependent variable mean    | 10.99          | 16.58          | 16.58         |

# Table A7. Medical examination, employment, and distance to cutoff (with control variables)

Notes: Standard errors clustered at the last-3-ID-digits/cohort level are shown in parentheses. The observations correspond to draft-exempt men in the 1958-1962 cohorts present in the 2013 electoral roll. All models include cohort fixed effects and controls for six regions of residence at age 16, whether the individual is a naturalized citizen, and whether he is indigenous. *Distance to Cutoff* is the absolute value of the difference between each individual's lottery number and the conscription cutoff for his cohort. *Failed Medical Examination* is a dummy variable that equals 1 if the individual failed the conscription medical examinations, and 0 otherwise. *Public Sector Employee* is a dummy variable that takes the value of 1 if the individual was a wage earner in the public sector at some point in the period 2010 to 2016, and 0 otherwise. Dummy variables are normalized to 0/100 so that results represent percentage points. In the 2SLS model in column (3), *Failed Medical Examination* is instrumented with *Distance to Cutoff* – the first stage of this regression is presented in column (1). The Montiel-Pflueger effective F statistic for this first-stage regression is 268.93 – critical value of 37.4 for a 5% worst-case bias (Pflueger and Wang 2015; Montiel Olea and Pflueger 2013). \*\*Significant at the 5% level. \*\*\*Significant at the 1% level.

Figure A1. Failure rate in medical examination as a function of draft lottery number by cohort with actual and previous year cutoffs



Note: The total number of observations is 1,088,114 (see Table A.3 for number of observations for each cohort). Actual and previous year cutoffs in solid and dash lines, respectively (see Table A.1 for each specific value). Each figure depicts a binned scatterplot of the failure rate in medical examination by 40 quantiles of the draft lottery number for each cohort. All plots include a control for Air Force draftees which were subject to a more stringent medical examination at the time of incorporation. The plots were made using the binsreg package by Cattaneo et al. (2019).



# Figure A2. Failure rate in medical examination as a function of draft lottery number (without Air Force control)

Note: The number of observations is 1,088,114 (325,298 draft exempt in the range (-300;0] and 762,816 draft eligible in the range (0;700]) and corresponds to men in the 1958-1962 cohorts. The figure depicts a binned scatterplot of the failure rate in medical examination by 40 quantiles of the normalized difference between the draft lottery number and the year's eligibility cutoff for all conditions and also distinguishes between easy-to-cheat, intermediate, and hard-to-cheat conditions. The average cutoff for the 5 cohorts was 300, so for each cohort the distance below the cutoff (i.e., the exempt) was normalized as (-300;0], and as (0;700] for the distance above the cutoff (i.e., for those eligible). The higher levels of failure around 500-600 corresponds to Air Force draftees, who were subject to a more stringent medical examination at the time of incorporation, as conscripts had to be fit to participate in flights. All plots include cohort fixed effects. The plot was made using the binsreg package by Cattaneo et al. (2019).