

ON SUBREGIONAL DIFFERENCES IN ATTITUDES TOWARD PETTY CORRUPTION IN THE RUSSIAN FAR EAST

ELENA DENISOVA-SCHMIDT

UNIVERSITY OF ST.GALLEN (HSG)

ANNA SOLOVYEVA

UNIVERSITY OF FRIBOURG

Abstract: This study examines differences in experiences with petty corruption and attitudes toward it among residents of four major urban centers in Russia's Far East, the country's largest but understudied macro-region. Analyzing our own survey data, we find that one subregion stands out from the other three considered in the study. Residents of the Sakha Republic (Yakutia) demonstrate more negative attitudes toward corruption and report less frequent occurrences of petty corruption. Our qualitative findings confirm the existence of a distinct subregional pattern in perceived petty corruption. We hypothesize that the detected difference in attitudes may be rooted in the national composition of the Sakha Republic (Yakutia), which, in contrast to the other regions under study, is dominated by native people. As an extension of our main analysis, we explore the conditional correlations between individual characteristics and perceptions of corruption (while accounting for region of residence) and observe several interesting patterns.

Dr. Elena Denisova-Schmidt (elena.denisova-schmidt@unisg.ch), Department of Russian Culture and Society, School of Humanities and Social Sciences, University of St.Gallen (HSG), Müller-Friedberg-Strasse 8, 9000 St. Gallen, Switzerland; Dr. Anna Solovyeva (anna.solovyeva@unifr.ch.), Applied Econometrics - Evaluation of Public Policies, Department of Economics, University of Fribourg, Bd. de Perolles 90, 1700 Fribourg, Switzerland.

The Far East is Russia's largest macro-region, accounting for about 40% of the country's total territory. Despite the abundance of land and valuable natural resources (over 80% of Russia's diamond reserves, 40% of its gold reserves, over 50% of its forests, about 20% of its oil resources, and more), the harsh cold climate, long distances to the central part of the country, and outmigration of the population due to economic hardship since the collapse of the Soviet Union have resulted in a rather scarce population of just over 8 million people, or 6% of Russia's total population. It is the combination of the Far East's enormous territory, natural resources, low population, and geographical proximity to emerging economic powers in Asia (China, Korea, and Japan) that have caused the Russian Government to recognize the region as a territory of special geostrategic importance for ensuring territorial integrity and security as well as sustainable socio-economic development.¹ Since the early 2010s, the government has implemented a complex package of stimulus measures aimed at accelerating the socio-economic development of the Far East. Despite some recent positive economic trends, such as the rapid growth of industrial production, the population continues to leave the Far East. Certainly, there are several fundamental and well-understood factors—such as high prices, poor infrastructure, low incomes, and a lack of economic prospects—that contribute to the unappealing living conditions.² Yet other factors may have been overlooked.

For instance, although corruption may not be the number one reason for the loss of population in the Far East, it certainly aggravates the situation. Over the past few years, the Russian Far East has become the site of several high-profile corruption cases involving regional governors and city mayors; there have also been instances of fraud at the Vostochny space center and in various spheres of public life—including in higher education.³ Yet only a handful of papers have examined public opinion and individual experiences with corruption in the Far East,⁴ even though

¹ Sovet Federatsii Federal'nogo Sobraniia Rossiiskoi Federatsii. 2020. *Resoliutsiia "O prioritnykh napravleniakh sotsial'no-ekonomicheskogo razvitiia Dal'nego Vostoka"* [Resolution "Priority Areas of Socio-Economic Development of the Far East"], At <http://council.gov.ru/activity/documents/113573/>.

² Vserossiiskii Tsentr Izucheniia Obshchestvennogo Mneniia (WCIOM). 2017. *Indeks razvitiia chelovecheskogo kapitla na Dal'nem Vostoke* [Index of Human Capital Development in the Far East], At <https://wciom.ru/analytical-reviews/analiticheskii-obzor/dalnij-vostok-monitoring-migratsionnoj-situacii>.

³ See the recent discussions in Elena Denisova-Schmidt, Martin Huber, Elvira Leontyeva, and Anna Solovyeva. 2021. "Combining Experimental Evidence with Machine Learning to Assess Anti-Corruption Educational Campaigns among Russian University Students." *Empirical Economics* 60: 1661–1684. <https://doi.org/10.1007/s00181-020-01827-1>; Svetlana Barsukova and Elena Denisova-Schmidt. 2021. "Double Standards as Modus Operandi: Mixing Business and Politics in Russia." *Europe-Asia Studies* (online first). <https://doi.org/10.1080/09668136.2021.1913100>.

⁴ See the recent discussion in Leonid Blyakher. 2019. "Regions in Search of a Violent En-

regional corruption in Russia is widely discussed in the literature.⁵

Our study looks at people's experiences with and attitudes toward corruption in their daily lives. The main research question guiding this investigation is whether there are differences in perceptions of petty corruption *across* the subregions of the Far East.⁶ Given the size of the Far East territory and the distinct historical, cultural, and socio-economic circumstances, one can expect to find differences in attitudes. Analyzing survey data collected by our research group among residents of the capitals of four out of the 11 federal subjects of the Far East, we apply a quasi-experimental econometric method (inverse probability weighting) to estimate regional differences while controlling for the respondents' key demographic and socio-economic characteristics. Analysis of open-ended questions and focus group discussions complements our quantitative results by providing broader context.

In addition to shedding light on perceptions of corruption in this under-researched region, we aim to contribute to the growing literature on informality in Russia and beyond.⁷ Informality is an innovative approach that aims to address the failure of anti-corruption measures and reforms.⁸ It serves as "an umbrella term for a variety of social and cultural phenomena," including "open secrets, unwritten rules and hidden practices of getting things done."⁹ By asking questions about personal experience, we captured the practices following the logic of Ludwig Wittgenstein's "language games"¹⁰ and used the language of our respondents, such as *trepreneur*." *Demokratizatsiya: The Journal of Post-Soviet Democratization* 27: 1: 51–74. muse.jhu.edu/article/715965.

⁵ cf. Richard Rose and William Mishler. 2010. "Experience versus Perception of Corruption: Russia as a Test Case." *Global Crime* 11: 2: 145–163. [10.1080/17440571003669175](https://doi.org/10.1080/17440571003669175); Alexander Libman, and Vladimir Kozlov. 2013. "Sub-National Variation of Corruption in Russia: What Do We Know About It?" *REGION: Regional Studies of Russia, Eastern Europe, and Central Asia* 2: 2: 153–180; Günther G. Schulze, Bambang S. Sjahri, and Nikita Zakharov. 2016. "Corruption in Russia." *Journal of Law and Economics* 59: 1: 135–171. <https://doi.org/10.1086/684844>.

⁶ See interesting discussions of corruption perceptions by Naci Mocan. 2008. "What Determines Corruption? International Evidence from Microdata." *Economic Inquiry* 46: 4: 493–510; Dilyan Donchev and Gergely Ujhelyi. 2014. "What Do Corruption Indices Measure?" *Economics & Politics* 26: 2: 309–331. <https://doi.org/10.1111/ecpo.12037>; Jerg Gutmann, Fabio Padovano, and Stefan Voigt. 2020. "Perception vs. Experience: Explaining Differences in Corruption Measures Using Microdata." *European Journal of Political Economy* 65, 101925. DOI: [10.1016/j.ejpeco.2020.101925](https://doi.org/10.1016/j.ejpeco.2020.101925).

⁷ Alena Ledeneva. 2018. *The Global Encyclopaedia of Informality*. London: UCL Press. Volume I; Alena Ledeneva. 2018b. *The Global Encyclopaedia of Informality*. London: UCL Press. Volume II.

⁸ Alena Ledeneva, Roxana Bratu, and Philipp Köker. 2017. "Corruption Studies for the Twenty-First Century: Paradigm Shifts and Innovative Approaches." *Slavonic and East European Review* 95: 1: 1–20. DOI: [10.5699/slaveasteurorev2.95.1.0001](https://doi.org/10.5699/slaveasteurorev2.95.1.0001).

⁹ Ledeneva, *The Global Encyclopaedia of Informality*, Vol. 1, p. 1.

¹⁰ Ludwig Wittgenstein. 2020. *Philosophische Untersuchungen*. Frankfurt am Main: Suhrkamp Verlag.

“using connections to solve problems,” “offering money to road police to avoid paying fines,” or “receiving an ‘envelope’ wage,” all of which are actually “favoritism,” “bribery,” and “fraud”—various forms of corruption, which Transparency International (TI) defines as “the abuse of entrusted power for private gain.” The context and the scale are usually labeled as “petty” corruption, as opposed to “grand” corruption. Table 1 summarizes our approach.

Table 1. Language of Ordinary Citizens vs TI Classification

| Language of Ordinary Citizens | TI Term |
|---|--------------------------------------|
| Giving presents to teachers, doctors, and childcare providers | ~ Gift |
| Using connections to solve problems | ~ Favoritism (Nepotism/Patronage) |
| Forging signatures and documents | ~Fraud |
| Offering money to road police to avoid fines | ~Bribery |
| Offering money to state officials | ~Bribery |
| Giving money to professors to pass exams | ~Bribery |
| Giving money to get children accepted into childcare, school, and higher education institutions | ~Bribery |
| Receiving an “envelope” wage | ~Fraud |

Source: Compiled by the authors on the basis of Transparency International. 2009. *The Anti-Corruption Plain Language Guide*, At http://www.transparency.org/whatwedo/publication/the_anti_corruption_plain_language_guide, accessed August 30, 2021.

Our findings demonstrate that experiences with and attitudes toward corruption among the population of the Far East differ across the subregions. On average, respondents in Yakutsk (Sakha Republic [Yakutia]) tend to have more negative views of corruption and experience corruption to a lesser extent than residents of the other subregions under study (Khabarovskii Krai, Primorskii Krai, and Amurskaia Oblast). We do not find any statistically significant subregional differences in terms of the perceived impact of corruption on various aspects of people’s lives (career opportunities, quality of life, children’s future, health, and security) or on their opinions as to whether corruption can be eradicated in Russia. In an extension of our main analysis, we do, however, find differences in corruption perceptions by gender, age, education, professional status, and income group.

In what follows, we detail our approach to research design and data collection (Section 2) and identification of subregional effects and data analysis (Section 3). The findings are reported in Section 4. Section 5 concludes.

Research Design and Data

The survey was conducted in the late summer and early fall of 2019 on behalf of our research team by a group of sociologists in four regional capitals in the Russian Far East: Yakutsk (Sakha Republic [Yakutia]), Khabarovsk (Khabarovskii Krai), Vladivostok (Primorskii Krai), and Blagoveshchensk (Amurskaia Oblast).¹¹ Interviewers approached potential respondents in public places, such as large shopping centers, cinemas, and city squares, and invited them to participate in a survey on local community problems on condition of anonymity. Such a convenience sampling approach is not uncommon in empirical studies, despite its shortcomings; in our case, it was chosen due to the limited resources available for the research project. Interviews lasted about 15 minutes on average and were conducted in Russian.

A total of 559 respondents were surveyed. Table 2 provides average values for the main demographic and socio-economic characteristics for the overall sample and broken out by city. In the total sample, 57% of respondents are female. Younger people aged 18–29 are overrepresented at 45%, while the middle age group (30–45 years) accounts for 26% and the remaining 29% are people older than 45 years of age. The prevalence of younger respondents in the sample is explained by the fact that the study was carried out in public places with a significant turnover of younger people. About 42% of respondents are married and 44% have children. Respondents' education level is quite high—close to 60% have higher education. As for respondents' professional level, 39% are professionals or managers, 32% are blue-collar workers or small entrepreneurs, and the remaining 30% do not work (including retirees, homemakers, students, and unemployed individuals). The sample is almost evenly split into three income groups: 30% have rather low income and can afford only food or food and clothes; 38% make enough money to buy food and clothes but barely any other durable consumer goods; and the remaining third encompasses people who can afford durable consumer goods but not very expensive purchases (e.g., car, apartment, etc.) and people who can afford pretty much anything.

¹¹ The survey was also administered in Komsomolsk-on-Amur but the respondent group was unrepresentative of the city population, so we excluded the Komsomolsk sample from this analysis.

Table 2. Descriptive Statistics

| Variable | Total | Yakutsk | Khab. | Vlad. | Blagov. |
|--|--------------|----------------|--------------|--------------|----------------|
| Female | 0.572 | 0.673 | 0.634 | 0.400 | 0.675 |
| Age 18–29 | 0.454 | 0.257 | 0.574 | 0.424 | 0.475 |
| Age 30–45 | 0.259 | 0.406 | 0.215 | 0.215 | 0.275 |
| Age over 45 | 0.288 | 0.337 | 0.210 | 0.362 | 0.250 |
| Married | 0.418 | 0.545 | 0.294 | 0.439 | 0.519 |
| Children present | 0.445 | 0.670 | 0.271 | 0.472 | 0.525 |
| Higher education | 0.574 | 0.838 | 0.435 | 0.590 | 0.550 |
| Professional level: professional or manager | 0.386 | 0.688 | 0.232 | 0.391 | 0.380 |
| Professional level: blue collar or small entrepreneur | 0.317 | 0.156 | 0.316 | 0.408 | 0.316 |
| Professional level: do not work | 0.297 | 0.156 | 0.453 | 0.201 | 0.304 |
| Income: enough for food only or food and clothes only | 0.300 | 0.337 | 0.346 | 0.284 | 0.179 |
| Income: enough to buy food, clothes, and barely any other consumer goods | 0.379 | 0.286 | 0.361 | 0.409 | 0.474 |
| Income: can afford consumer goods and more (upper income group) | 0.320 | 0.378 | 0.293 | 0.307 | 0.346 |
| <i>N</i> | 559 | 102 | 198 | 179 | 80 |

Source: Compiled by the authors on the basis of research.

Note: Missing values are excluded.

Item nonresponse was moderate. The largest number of missing

values are in response to the question on the meaning of corruption—up to 9.3% missing for some response categories. The number of missing values in other covariates is smaller and does not exceed 3.6%. In estimations, we introduce binary indicators for missing values in covariates while replacing actual missing values with zeros.

Identification and Estimation

In this study, we attempt to estimate subregional differences in people's experiences with and attitudes toward petty corruption while controlling for their main demographic and socio-economic characteristics. The remaining subregional differences in the outcomes are likely be driven by distinct political and cultural circumstances in the regions under study. Our identification problem can be formally presented based on the potential outcome framework.¹² For each individual i in the sample, for $i = 1, \dots, N$, let $D \in \{1, 2, \dots, R\}$ denote a city where the individual resides. Y_i is the observed outcome measuring the individual's experience with corruption or perception thereof. $\{Y_i^1, Y_i^2, \dots, Y_i^R\}$ denotes a vector of potential outcomes associated with each individual and region; these are hypothetical outcomes that would have been realized if an individual i had moved to a region $D = 1, 2, \dots, R$ while having all his other characteristics unchanged. For each individual, only one potential outcome is observed—the potential outcome associated with residence in the current city (Y_i^D if $d = D_i$)—while all other potential outcomes are counterfactual. Hence, the effect of residing in a particular city cannot be uncovered at the individual level.

We are thus interested in the *average* effects of a place of residence (a reference subregion) on people's attitudes. More precisely, this corresponds to the mean difference in the potential outcomes Y^1 and Y^d for residents of the reference subregion:

$$E[Y^1 - Y^d | D = 1], d \in \{2, \dots, R\}$$

where Y^1 is the potential outcome when residing in the reference subregion and Y^d is the potential outcome for residents of the reference subregion (represented by $D = 1$) when residing in a non-reference subregion. The above notation demonstrates that multiple effects can be assessed depending on what subregion is chosen for the potential outcome Y^d . This notion is related to the concept of the evaluation of multiple treatments previously considered in the works of Imbens, Lechner, and Frölich.¹³

¹² Donald B. Rubin, 1974. "Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies." *Journal of Educational Psychology* 66: 5: 688–701. <https://doi.org/10.1037/h0037350>.

¹³ Guido W. Imbens. 2000. "The Role of the Propensity Score in Estimating Dose-Response

To identify the average treatment effects of interest, we rely on the conditional independence assumption (CIA).¹⁴ This assumption states that all individual characteristics associated with residence and perception of corruption are observable and can be accounted for in our estimations. This implies that for every individual in reference subregion $D = 1$, we can find individuals in one of other subregions, $D = d$, who are identical with respect to his relevant characteristics so that the latter can serve as counterfactual observations. Using X to denote all observed individual characteristics, we formally state the CIA as follows:

$$Y^d \perp D \mid X \quad \forall d.$$

With this assumption, the potential outcome for residing in either the reference subregion or a particular non-reference subregion (used in paired comparisons) is independent of the actual residence after controlling for covariates X for any sub-group of individuals residing in the reference or a particular non-reference subregion. The CIA is not testable, but the richer the set of observed covariates that are simultaneously correlated with the place of residence and with the perception of corruption, the more likely is the CIA to be satisfied. Our estimations contain a number of individual socio-economic and demographic characteristics that typically affect the choice of a place of residence and may also shape attitudes toward corruption.

Another assumption required for identification is a common support that implies that no combination of covariates X can perfectly predict an individual's place of residence; in other words, individuals with the same values of vector X can be found in the reference subregion and a non-reference subregion. This ensures that we find comparable individuals in the reference and non-reference subregions.

$$\Pr(D = 1 \mid X, D = 1, d) < 1 \quad \forall x \text{ in the support of } X \text{ and } d \in \{2, \dots, R\}.$$

Under the two above assumptions, the average subregional effect on individuals residing in the reference subregion is identified as:¹⁵

Functions." *Biometrika* 87: 3: 706–710. <https://www.jstor.org/stable/2673642>; Michael Lechner. 2001. "Identification and Estimation of Causal Effects of Multiple Treatments under the Conditional Independence Assumption." In Michael Lechner and F. Pfeiffer, eds., *Econometric Evaluation of Labour Market Policies*. Heidelberg: Physica; Markus Frölich. 2004. "Programme Evaluation with Multiple Treatments." *Journal of Economic Surveys* 18: 181–224. <https://doi.org/10.1111/j.0950-0804.2004.00001.x>.

¹⁴ Michael Lechner. 1999. "Earnings and Employment Effects of Continuous Off-the-Job Training in East Germany After Unification." *Journal of Business & Economic Statistics* 17: 1: 74–90. <https://www.jstor.org/stable/1392240>.

¹⁵ The second equality follows from (i) Assumption 1 implying $E[Y \mid X, D = d] = E[Y^d \mid X, D = d]$ (ii) Assumption 2 implying the expectation of $E[Y \mid X, D = d]$ can be taken

$$\begin{aligned}\theta^{1d} &= E[Y^1 - Y^d | D = 1] = E[Y | D = 1] - E[E[Y | X, D = d] | D = 1] \\ &= E[Y | D = 1] - E[E[Y | p^{1d}(x), D = d] | D = 1], d \in \{2, \dots, R\}\end{aligned}$$

In the above expression, $p^{1d}(x) = \Pr(D = 1 | X, D = 1, d)$ denotes the conditional probability—that is, the propensity—of residing in the reference subregion given characteristics X in the sub-population of individuals in the reference subregion and in one comparison subregion identified by d . Rosenbaum and Rubin were among the first to demonstrate the balancing property of the propensity score, as it adjusts for differences in covariates X between the reference and comparison groups.¹⁶

We apply inverse probability weighting (IPW) to estimate the average treatment effects of interest using the “teffects” command in Stata. The IPW estimator reweights the comparison outcomes with the inverse of the propensity score $p^{1d}(x)$ to attain balance in the distribution of characteristics X between the residents of the reference subregion and of a particular comparison subregion.¹⁷

$$\hat{\theta}^{1d} = \frac{1}{N_{D=1}} \sum_{i=1}^N I\{D_i = 1\} Y_i - \left[\frac{1}{N_{D=d}} \sum_{j=1}^N I\{D_j = d\} Y_j \cdot \frac{\frac{\hat{p}^{1d}(x_j)}{1 - \hat{p}^{1d}(x_j)}}{\sum_{j=1}^N \frac{I\{D_j = d\} \cdot \hat{p}^{1d}(x_j)}{1 - \hat{p}^{1d}(x_j)}} \right],$$

$d \in \{2, \dots, R\}.$

In our estimations, we chose Yakutsk (Sakha Republic (Yakutia)) to be the reference city ($D = 1$) to which the remaining three subregions are compared. The Sakha Republic (Yakutia) is somewhat different from the other three subregions, as almost half of its population consists of native Yakuts, or Sakha people,¹⁸ in contrast to the other three subregions, which are predominantly Russian (native Russians account for nearly 90% of their respective populations). This is likely to result in certain local peculiarities and traditions dominating in Yakutsk; it might shape people’s attitudes and values as well. We therefore expect differences in opinions

over X given $D = 1$; and (iii) the law of iterated expectations implying that $E[Y^d | D = 1] = E[E[Y^d | X, D = 1] | D = 1]$. The third equality follows from the balancing property of propensity score suggested by Rosenbaum and Rubin (1983), who showed that controlling for $p^{1d}(X)$ is asymptotically as good as controlling for X directly—see Paul R. Rosenbaum and Donald B. Rubin. 1983. “The Central Role of the Propensity Score in Observational Studies for Causal Effects.” *Biometrika* 70: 1: 41–55. <https://doi.org/10.1093/biomet/70.1.41>.

¹⁶ Rosenbaum and Rubin, “The Central Role of the Propensity Score.”

¹⁷ The term $\sum_{j=1}^N \frac{I\{D_j = d\} \hat{p}^{1d}(x_j)}{1 - \hat{p}^{1d}(x_j)}$ is added for normalization to ensure that the weights add up to one in the comparison group.

¹⁸ Territorial Body of the Federal State Statistics Service for the Republic of Sakha (Yakutia). 2010. *Vserossiiskaia perepis' naseleniia 2010. Natsional'nyi sostav naseleniia po munitsipal'nym raionam i gorodskim okrugam* [All-Russian Population Census 2010. Ethnic Composition of the Population by Municipal and Urban Districts].

about petty corruption between Yakutsk and each of the comparison subregions, but we do not hypothesize the direction of such differences.

The estimated average effects show how, on average, residents of Yakutsk would have perceived corruption had they been exogenously relocated to one of the comparison subregions, while all their characteristics affecting the perception of corruption remain unchanged.

In the first step, the propensity score is estimated based on a multinomial logit model. Individual characteristics included in the multinomial logit specification are gender, age group, marital status, presence of children, higher education, professional level, and income category (see Table 5 in the Appendix¹⁹). Next, the estimated inverse-probability weights are used to compute the weighted averages of the outcomes in each non-reference subregion. The differences between the average of the reference subregion and the weighted averages of each non-reference subregion represent the average subregional effects of interest.

To ensure sufficient overlap, we set the tolerance level for the propensity scores at 1e-3 and trim observations below this threshold to prevent any single observation getting too large of a weight.²⁰ In total, 20 observations (14 from Blagoveshchensk and six from Khabarovsk) with extremely small propensity scores are excluded, resulting in the sample size of 539 units used in our estimations. Table 6 in the Appendix summarizes the estimated propensity scores, demonstrating the minimum, mean, and maximum values.

As our analysis estimates regional effects on a range of outcome variables, there arises an issue of multiple hypothesis testing resulting in an increased false positive rate, whereby some rejections of zero effects are incorrect. We apply the Benjamini-Hochberg correction procedure for controlling for the expected proportion of falsely rejected null hypotheses—that is, the false discovery rate (FDR)—to families of outcome variables.²¹ First, the procedure ranks individual p -values in ascending order ($P_1 \leq P_2 \leq \dots P_m$). The null hypotheses are then rejected for the largest p -value P_i that satisfies the condition $P_i \leq \frac{i}{m} Q$, where i is the p -value's rank, m is the total number of tests (p -values), and Q is the chosen FDR, and all the p -values are smaller than P_i . For the Benjamini-Hochberg correction, we choose a rather conservative level of FDR of 0.25, implying

¹⁹ All Appendix tables are available for download from <https://demokratizatsiya.pub/journalplus.php>.

²⁰ We also conducted estimations without trimming observations with extreme propensity scores. The estimated effects are stable, as their signs and significance remain largely unchanged.

²¹ Yoav Benjamini and Yosef Hochberg. 1995. "Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing." *Journal of the Royal Statistical Society B* 57: 289–300. <https://www.jstor.org/stable/2346101>.

that we are willing to accept up to 25% of statistically significant results being false positives.

Additionally, we explore the conditional correlations between individual characteristics and perceptions of corruption while controlling for place of residence using a multiple linear regression that can be formulated as follows:

$$Y_{i,j} = \beta_0 + \sum_{k=1}^k \beta_k X_{i,j} + \lambda_j + e_{i,j}$$

where $Y_{i,j}$ measures the outcomes related to perception of corruption for individual i in region j , $X_{i,j}$ is a vector of individual characteristics available in the data and β_k is a vector of respective regression coefficients, λ_j is a vector of binary variables for the region of residence, and $e_{i,j}$ is the error term. A linear regression model assumes a linear relationship between explanatory variables and the outcome variable, which may be violated in practice as the true (population) relationship between the outcome and the explanatory variables is not known. Another key assumption of linear regression states that there are no unobserved factors in the error term correlated with explanatory variables, which implies that no key explanatory variables (correlated with both other explanatory variables and the outcome) are omitted from the equation. In our analysis, this means that we are able to account for all variables that are simultaneously related to the explanatory demographic and socio-economic characteristics included in the estimation (gender, age, marital status, presence of children, education, profession, income, and region of residence) and to corruption perceptions, our outcome of interest. Since both of the stated assumptions of the linear regression model may be violated, we cautiously avoid causal interpretation of the results of this regression analysis when discussing them in the Results section.

Results

This section summarizes our findings for subregional differences in individual experiences with petty corruption and attitudes toward it. Before we proceed to discuss those subregional differences, we demonstrate correlation between direct and indirect experiences with petty corruption. The first such question is about how frequently, respondents believe, their acquaintances and other residents of their city engage in various corrupt practices; this can be viewed as the perceived frequency of corruption in the subregion. direct and indirect experiences with petty corruption found in our survey. This is followed by a question about corrupt practices used by respondents themselves, which is a proxy for the actual frequency of petty corruption. We find a positive, relatively strong, and statistically

significant correlation between pairs of items in the two questions for the perceived and actual corruption experience, as demonstrated in Table 3. The more frequently respondents report use of specific corruption practices, the more frequently, on average, they believe others use those practices. Indeed, many experiments conducted in countries with systemic corruption, like Costa Rica and Ukraine, as well as in less corrupt environments like the US, suggest that individual tolerance and practice increase if people believe that corruption is widespread around them.²²

Table 4 presents the results for subregional differences in perceived and first-hand experience with corruption. Column 2 provides the average values of responses from residents of Yakutsk, Sakha Republic (Yakutia), our reference subregion. The unadjusted mean differences between Yakutsk and each of the other three regional capitals (Khabarovsk, Vladivostok, and Blagoveshchensk) are in Columns 3–5. The estimated subregional effects (along with respective *p*-values) are in Columns 6–8; these effects represent differences in the outcomes between Yakutsk and each of the three remaining capitals after adjusting for covariates *X* using the IPW technique. The *p*-values are shown in parentheses underneath each point estimate.

We find statistically significant regional differences in people's experiences with petty corruption. Overall, compared to Yakutsk, the residents of the other regional capitals report more frequent use of corrupt practices on average. Almost all the differences discussed in the paragraphs below are statistically significant at the 1–5% significance level.

Before we go on to discuss the subregional differences in certain corrupt practices, it is worth noting that among the reported corrupt practices in which fellow city residents engage, two items—presents to doctors, teachers, and childcare providers, and the use of connections to solve problems—stand out as much more frequent, on average, than other practices, such as forging signatures, bribing various officials, and receiving undeclared “envelope” wages (see Table 4). This may suggest that the former two practices are more socially acceptable and might not even be viewed as manifestations of corruption. In fact, some researchers view giving gifts to doctors and civil servants not as petty corruption but rather as informal practices that are often criminalized but are socially acceptable

²² Ana Corbacho, Daniel W. Gingerich, Virginia Oliveros, and Mauricio Ruiz-Vega. 2016. “Corruption as a Self-Fulfilling Prophecy: Evidence from a Survey Experiment in Costa Rica.” *American Journal of Political Science* 60: 4: 1077–1092. <https://www.jstor.org/stable/24877473>; Elena Denisova-Schmidt, Martin Huber, and Yaroslav Prytula. 2015. “An Experimental Evaluation of an Anti-Corruption Intervention among Ukrainian University Students.” *Eurasian Geography and Economics* 6: 713–734. <https://doi.org/10.1080/15387216.2016.1155467>; Elena Denisova-Schmidt, Martin Huber, and Yaroslav Prytula. 2019. “The Effects of Anti-Corruption Videos on Attitudes toward Corruption in a Ukrainian Online Survey.” *Eurasian Geography and Economics* 60: 3: 304–332. <https://doi.org/10.1080/15387216.2019.1667844>.

Table 3. Pairwise Correlation Matrix for Perceived and Actual Experience with Corruption

| Frequency of corruption practices used by others/by respondent | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Giving presents to teachers, doctors, and childcare providers | 0.480* | | | | | | | |
| Using connections to solve problems | | 0.479* | | | | | | |
| Forging signatures and documents | | | 0.496* | | | | | |
| Offering money to road police to avoid fines | | | | 0.433* | | | | |
| Offering money to state officials | | | | | 0.399* | | | |
| Offering money to professors to pass exams | | | | | | 0.396* | | |
| Giving money to get children accepted to childcare, school, and higher educational institutions | | | | | | | 0.347* | |
| Receiving "envelope" wage | | | | | | | | 0.533* |

Source: Compiled by the authors on the basis of research.

Note: Asterisk (*) denotes statistical significance at the 1% level.

in certain communities. Such practices are believed to develop and spread in societies where official systems fail to function effectively. Our qualitative data suggest the ambivalence of both practices. Presents to schoolteachers, for example, might be part of the academic tradition, like bringing flowers to a teacher on the first day of school, or they might be a precondition for being accepted to an educational institution. As one respondent noted, “didn’t buy a fur coat for the director, did not enter [the school].” Presents to doctors might be for speeding up a necessary appointment—“You bring a box of chocolates and a bottle of champagne to the doctor for being accepted before others”—or they might just be a gesture of gratitude for good treatment or a kind of “pre-payment” in order to ask for a favor next time. All these are captured as a “present” in our survey, but they are obviously completely different.²³

Regarding the perceived frequency of corrupt practices used by fellow residents, as well as by respondents themselves, residents of Blagoveshchensk believe others give presents to doctors, teachers, and childcare providers more frequently, on average, than Yakutia residents report (see Table 4). Residents of all three comparison subregions tend to report more frequent bribing of road police officers and professors as well as receipt of an “envelope” wage by their fellow city residents compared to respondents in Yakutsk. These effects are statically significant at the 1 and 5% levels and are particularly large in magnitude in Khabarovsk and Vladivostok. We also find that residents of Khabarovsk report more frequent bribing of state officials (significant at the 5% level) and of employees of educational institutions (at the 1% level) by fellow city residents.

Comparing the frequency of corrupt practices used by respondents themselves, we find that residents of Blagoveshchensk give gifts to doctors, teachers, and childcare providers more frequently (significant at the 1% level), on average, than Yakutians. Residents of Khabarovsk and Vladivostok tend to give bribes to road police officers, other state officials, university professors, and educational institutions more often, on average, than residents of Yakutsk. These differences are statically significant at up to the 5% level. Residents of Khabarovsk also report receiving “envelope” wages significantly (at the 1% level) more frequently.

²³ See more on favors after socialism in David Henig and Nicolette Makovicky. 2017. *Economies of Favour after Socialism*. Oxford: Oxford University Press. For more on favors in Russia, see Alena Ledeneva. 2017. “The Ambivalence of Favour: Paradoxes of Russia’s Economy of Favours.” In David Henig and Nicolette Makovicky, eds. *Economies of Favour after Socialism*. Oxford: Oxford University Press.

Table 4. Regional Differences in Experience with Corruption

| Outcome | Ref. mean Yakutsk | Raw differences | | | Adjusted differences | | |
|---|-------------------------|-------------------|-------------------|-------------------|----------------------|-------------------|-------------------|
| | | Khab. | Vlad, | Blag. | Khab. | Vlad. | Blag. |
| <i>Perceived frequency of corruption practices used by other people [1]</i> | | | | | | | |
| Giving presents to teachers, doctors, and childcare providers | 3.526 | -0.301 (0.050) | -0.154 (0.325) | 0.257 (0.136) | -0.031 (0.882) | 0.157 (0.483) | 0.614 (0.006) |
| Using connections to solve problems | 3.344 | -0.268 (0.069) | -0.446 (0.003) | -0.484 (0.004) | -0.089 (0.727) | -0.337 (0.205) | -0.297 (0.286) |
| Forging signatures and documents | 1.674 | 0.086 (0.511) | 0.311 (0.024) | 0.110 (0.475) | 0.077 (0.686) | 0.207 (0.318) | 0.082 (0.703) |
| Offering money to road police to avoid fines | 1.667 | 0.426 (0.003) | 0.833 (0.000) | 0.140 (0.399) | 0.677 (0.001) | 0.960 (0.000) | 0.471 (0.034) |
| Offering money to state officials | 1.691 | 0.412 (0.004) | 0.573 (0.000) | -0.133 (0.380) | 0.461 (0.044) | 0.376 (0.128) | -0.094 (0.697) |
| Giving money to professors to pass exams | 1.581 | 0.740 (0.000) | 0.917 (0.000) | 0.084 (0.563) | 1.012 (0.000) | 1.085 (0.000) | 0.369 (0.015) |
| Giving money to get children accepted to childcare, school, and higher educational institutions | 1.903 | 0.558 (0.000) | 0.147 (0.331) | -0.199 (0.227) | 0.803 (0.000) | 0.313 (0.104) | -0.008 (0.966) |

| | | | | | | | |
|---------------------------------|-------|------------------|------------------|------------------|------------------|------------------|------------------|
| Receiving “envelope” wage | 2.128 | 0.870 (0.000) | 0.469 (0.010) | 0.191 (0.354) | 1.271 (0.000) | 0.687 (0.009) | 0.633 (0.019) |
|---------------------------------|-------|------------------|------------------|------------------|------------------|------------------|------------------|

Frequency of corruption practices used by respondents themselves [2]

| | | | | | | | |
|--|-------|-------------------|-------------------|------------------|-------------------|------------------|------------------|
| Giving presents to teachers, doctors, and childcare providers | 2.594 | -0.326 (0.032) | -0.067 (0.673) | 0.443 (0.017) | -0.058 (0.811) | 0.071 (0.777) | 0.597 (0.032) |
|--|-------|-------------------|-------------------|------------------|-------------------|------------------|------------------|

| | | | | | | | |
|--|-------|-------------------|------------------|-------------------|------------------|------------------|------------------|
| Using connections to solve problems | 2.263 | -0.253 (0.056) | 0.022 (0.871) | -0.209 (0.163) | 0.055 (0.762) | 0.161 (0.414) | 0.013 (0.950) |
|--|-------|-------------------|------------------|-------------------|------------------|------------------|------------------|

| | | | | | | | |
|---|-------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Forging signa- tures and documents | 1.526 | 0.003 (0.980) | 0.165 (0.150) | -0.131 (0.229) | -0.197 (0.333) | -0.174 (0.410) | -0.353 (0.089) |
|---|-------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|

| | | | | | | | |
|--|-------|------------------|------------------|------------------|------------------|------------------|------------------|
| Offering money to road police to avoid fines | 1.083 | 0.076 (0.194) | 0.603 (0.000) | 0.032 (0.618) | 0.129 (0.004) | 0.459 (0.000) | 0.096 (0.160) |
|--|-------|------------------|------------------|------------------|------------------|------------------|------------------|

| | | | | | | | |
|--|-------|------------------|------------------|-------------------|------------------|------------------|------------------|
| Offering money to state officials | 1.177 | 0.034 (0.652) | 0.270 (0.003) | -0.071 (0.367) | 0.134 (0.011) | 0.158 (0.011) | 0.008 (0.872) |
|--|-------|------------------|------------------|-------------------|------------------|------------------|------------------|

| | | | | | | | |
|---|-------|------------------|------------------|-------------------|------------------|------------------|------------------|
| Giving money to professors to pass exams | 1.083 | 0.260 (0.000) | 0.529 (0.000) | -0.018 (0.693) | 0.314 (0.000) | 0.409 (0.000) | 0.046 (0.183) |
|---|-------|------------------|------------------|-------------------|------------------|------------------|------------------|

| | | | | | | | |
|---|-------|-------------------|------------------|------------------|------------------|------------------|------------------|
| Giving money to get children accepted to childcare, school, and higher educational institutions | 1.229 | -0.033 (0.688) | 0.195 (0.042) | 0.006 (0.946) | 0.112 (0.045) | 0.152 (0.010) | 0.099 (0.131) |
|---|-------|-------------------|------------------|------------------|------------------|------------------|------------------|

| | | | | | | | |
|---------------------------------|-------|------------------|------------------|------------------|------------------|------------------|------------------|
| Receiving “envelope” wage | 1.347 | 0.587 (0.000) | 0.402 (0.002) | 0.115 (0.370) | 0.627 (0.000) | 0.252 (0.109) | 0.081 (0.607) |
|---------------------------------|-------|------------------|------------------|------------------|------------------|------------------|------------------|

Source: Compiled by the authors on the basis of research.

Notes: Estimated treatment effect coefficients with p-values in parentheses. Outcomes range from 1 (“never”) to 5 (“systematically”).

As for definitions of corruption (Table 5), it is worth noting that profoundly negative synonyms of corruption, such as “crime” and “evil,” receive more agreement, on average, than more lenient definitions like “tradition” and “national peculiarity.” Thus, there appears to be a general understanding that corruption is an adverse phenomenon. At the same time, there are some subregional differences: residents of the comparison subregions are less likely, on average, to view corruption as a “crime” than their counterparts in Yakutsk (the effects are significant at the 1 and 5% levels). People in Vladivostok are more likely to perceive corruption as “a part of life” than residents of Yakutsk (the difference is significant at the 10% level).

We do not find any statistically significant subregional differences in the perceived effect of corruption on various aspects of life, such as career opportunities, quality of life, children’s futures, health, and security. Interestingly, the effect of corruption on one’s career opportunities is viewed less negatively than its effects on other spheres of life, which may indicate that it is socially acceptable to engage in corrupt practices (e.g., nepotism, favoritism, etc.) for purposes of career development. Furthermore, no subregional differences are detected in respondents’ opinions as to whether corruption can be overcome in Russia, with the average value lying about halfway between “yes” and “no.”

To safeguard against the issue of multiple hypothesis testing, we compute Benjamini-Hochberg statistics for groups of outcomes (by survey questions), assuming a false discovery rate of 25%. Table 8 in the Appendix shows individual p-values alongside the Benjamini-Hochberg critical values. The results of the Benjamini-Hochberg procedure suggest that nearly all individually statistically significant coefficients are indeed significant.

Table 5. Regional Differences in Perceptions of Corruption

| Outcome | Ref. mean Yakutsk | Raw differences | | | Adjusted differences | | |
|--|-------------------------|-------------------|-------------------|-------------------|----------------------|-------------------|-------------------|
| | | Khab. | Vlad. | Blag. | Khab. | Vlad. | Blag. |
| <i>What does corruption mean to you? [3]</i> | | | | | | | |
| Source of income | 3.612 | -0.379 (0.064) | -0.178 (0.397) | -0.192 (0.425) | -0.297 (0.371) | -0.047 (0.894) | -0.243 (0.521) |
| Crime | 4.726 | -0.065 (0.471) | -0.247 (0.018) | -0.141 (0.178) | -0.248 (0.000) | -0.350 (0.000) | -0.271 (0.001) |
| Part of life | 2.741 | -0.056 (0.764) | 0.469 (0.018) | -0.196 (0.349) | 0.070 (0.804) | 0.520 (0.092) | -0.254 (0.405) |
| Solution to problems | 3.598 | -0.265 (0.157) | -0.047 (0.80) | -0.274 (0.206) | 0.066 (0.824) | 0.066 (0.837) | -0.054 (0.872) |
| Compensation for low wages | 3.125 | -0.482 (0.012) | -0.167 (0.393) | -0.305 (0.177) | -0.210 (0.523) | -0.204 (0.548) | -0.191 (0.602) |
| Temporary situation | 2.938 | -0.564 (0.002) | -0.204 (0.292) | -0.256 (0.248) | -0.251 (0.368) | -0.018 (0.951) | -0.141 (0.649) |
| Tradition | 2.695 | -0.133 (0.473) | 0.228 (0.231) | -0.350 (0.100) | 0.155 (0.581) | 0.384 (0.211) | -0.172 (0.576) |
| National peculiarity | 2.415 | 0.015 (0.933) | 0.394 (0.031) | -0.091 (0.669) | -0.131 (0.661) | 0.081 (0.791) | -0.257 (0.428) |
| Evil | 4.389 | 0.087 (0.513) | -0.184 (0.212) | -0.010 (0.949) | -0.062 (0.639) | -0.241 (0.122) | -0.198 (0.260) |
| <i>How, do you think, does corruption affect the following aspects of your life? [4]</i> | | | | | | | |
| Your career opportunities | 1.875 | 0.167 (0.178) | 0.330 (0.012) | 0.046 (0.728) | -0.237 (0.338) | -0.117 (0.648) | -0.247 (0.343) |
| Your quality of life | 1.917 | -0.022 (0.853) | 0.202 (0.124) | 0.155 (0.300) | -0.072 (0.554) | 0.053 (0.718) | 0.135 (0.420) |
| Your children's future | 1.742 | 0.086 (0.472) | 0.229 (0.073) | 0.303 (0.047) | 0.098 (0.57) | 0.071 (0.696) | 0.341 (0.105) |
| Your health | 1.787 | 0.296 (0.013) | 0.367 (0.004) | 0.335 (0.034) | 0.234 (0.233) | 0.225 (0.267) | 0.286 (0.196) |
| Your security | 1.688 | 0.182 (0.108) | 0.320 (0.009) | 0.307 (0.038) | 0.151 (0.391) | 0.131 (0.479) | 0.311 (0.136) |
| <i>In your opinion, can corruption be overcome in Russia? [5]</i> | 2.804 | -0.190 (0.205) | -0.386 (0.010) | -0.264 (0.122) | -0.019 (0.929) | -0.139 (0.524) | 0.035 (0.879) |

Source: Compiled by the authors on the basis of research.

Notes: Estimated treatment effect coefficients with p-values in parentheses. Responses to outcome [3] are 1 (“no”), 2 (“rather no”), 3 (“don’t know”), 4 (“rather yes”), and 5 (“yes”); outcome [4] ranges from 1 (“very negative”) to 5 (“fully positive”); and outcome [5] ranges from 1 (“certainly no”) to 5 (“certainly yes”).

As an extension of our main analysis, we also explore conditional correlations between individual characteristics and perceptions of corruption (while accounting for region of residence) using multiple linear regression. In what follows, we discuss the conditional correlations that are statistically significant at the 1-5% levels. Considering the perceived frequency of corruption practices (Table 9 in the Appendix), the results suggest that women and younger adults demonstrate higher perceived petty corruption in the form of presents to teachers and childcare providers. Individuals in managerial positions tend to indicate higher perceived frequency of forging signatures and documents. With regard to receiving “envelope” wages, women indicate a lower perceived frequency of this corrupt activity, while those with higher education tend to indicate it as a more frequent phenomenon. We find similar patterns when examining regressions for actual (first-hand) corruption experiences, which is unsurprising given that perceived and first-hand corruption are strongly correlated (see Table 10 in the Appendix). Women, younger adults (18–29 years), and parents are among those who more frequently give presents to teachers, doctors, and childcare providers. At the same time, women appear to less frequently give money to get children accepted to childcare, school, and higher educational institutions, which is somewhat surprising given the traditional gender roles in Russian families, which mean that women are more likely to deal with issues related to children’s education; apparently this task is delegated to fathers or other mediators. Respondents whose professions fall into the category “blue collar, entrepreneur, or military” tend to more frequently bribe road police to avoid paying fines than those in other professions. As for receiving “envelope” wages, women are less often exposed to this practice, while individuals in the low-income group are more likely to get paid in this manner. It is worth noting that the included individual demographic and socio-economic characteristics, as well as a respondent’s region of residence, explain only between about 5 and 10% of variation in the perceived frequency of corrupt practices and between 6 and 20% of variation in the actual frequency of corrupt practices, which means that 80–95% of the variation in these outcome variables is due to factors unobserved in our data.

Examining conditional correlations for the meaning of corruption (see Table 11 in the Appendix), women are less likely to define it as a

source of income. Younger adults are substantially less likely to view corruption as a part of life or a tradition and more likely to define it as a crime compared to other age groups, while adults aged 30–45 and those with high incomes are less likely to consider corruption a compensation for low wages. Looking at the professional and income groups, managers and individuals with low incomes are more likely to accept corruption as a part of life, while the view of corruption as a national peculiarity is more frequently shared by employed people than by those who do not work. Respondents with higher education are less likely to call corruption “evil” than people with other educational levels. We do not find any statistically significant correlations between individual characteristics and perceived impacts of corruption on various spheres of people’s lives, with the exception that individuals with higher education view the impact of corruption on their children’s future more negatively than those with less education (see Table 11 in the Appendix). For the meaning of corruption and its perceived impact, the included regressors explain a very small share of variation—on average, 5 and 3%, respectively.

Finally, we analyze the information provided by respondents in two open-ended questions contained in the survey and six focus group discussions. Qualitative results are meant to supplement the quantitative findings and provide a meaningful context. One of the first questions in the survey (prior to any corruption-related inquiries) was open-ended, asking respondents to name the most concerning local problems. While issues such as poor road conditions (poor quality, narrow roads, traffic jams, lack of parking spaces, etc.) and inefficient transport systems, utilities, and infrastructure (the condition of courtyards, porches, urban spaces, dirt and garbage in the streets, etc.), as well as high prices accompanied by low wages top the list of the most frequently cited local problems in all four subregions, corruption is mentioned much less often—by between 1 and 5 people in each subregion, trailing behind ecological and climate concerns but comparable in frequency to issues in the healthcare and education systems. It therefore appears that corruption does not stand out as a particularly acute problem among residents of the participating subregions.

Another open-ended question about the current situation with corruption and recent corruption cases in the respondent’s city and region was asked toward the end of the survey. A considerable proportion (about 40–50%) of respondents either did not answer the question or provided meaningless responses (“prefer not to think about it,” “don’t follow this topic,” “not interested,” etc.). Among respondents who gave meaningful answers to this question, the majority noted the presence of corruption in the country and their region and demonstrated negative attitudes toward it and toward corrupt officials. We also observe a recurring narrative (among a minority of respondents) regarding the persistence and invincibility of

corruption and skepticism about the fight against corruption; such statements were found in each of the four subregions.

Interestingly, we note a few distinct narratives mentioned by respondents in two subregions. In Khabarovsk, five out of 100 meaningful answers conveyed that the level of corruption in the region is either lower than in the rest of the county or on the decline. In Yakutsk, out of the 58 who provided meaningful answers to this open-ended question, four respondents indicated the selective nature of the investigation of corruption cases; as one respondent formulated it, “Corruption cases are initiated when there is a need to get rid of ‘unwanted’ people.” In addition, several respondents to the survey, as well as participants in the focus groups in Yakutsk, mentioned an issue closely related to corruption: *mestnichestvo*, which was originally a traditional system of high-level state appointments based on the noble hierarchy of a clan. Today, the word has taken on a broader meaning, encompassing the election, selection, and promotion of government officials based mostly on nepotism. As noted by one participant in the focus group discussion in Yakutsk, “This problem is everywhere in the national republics. Take, for example, Tatarstan, Chechnya, the North Caucasus, and Yakutia [Sakha Republic]—it is the same everywhere—clannishness, relatives, all of them together are in power.” Indeed, although the official narrative is that the government provides equal opportunities for all citizens, ethnicity might in reality be crucial in some regions. Being a member of a national and/or religious minority might be ambivalent, however: it might be a benefit (consider the majority of Yakuts and Tatars in their respective local governments) but it could be a burden (some potential candidates even change their surnames to hide their heritage).²³

Discussion and Conclusions

This article examined regional differences in experiences with petty corruption and perceptions thereof among residents of the capitals of four subregions in the Russian Far East. We applied the inverse probability weighting technique to account for dissimilarities in respondents’ individual characteristics—such as gender, age, marital status and presence of children, education, professional level, and income group—that may affect one’s exposure to corruption. After the residents of different subregions are made comparable in terms of these characteristics, the remaining differences in corruption experiences and perceptions are likely to be related to

²³ For more on ethnic and religious minorities in Russia, see, for example, Gulnaz Sharafutdinova. 2015. “Elite Management in Electoral Authoritarian Regimes: A View from Bashkortostan and Tatarstan.” *Central Asian Affairs*, 117–139. <https://doi.org/10.1163/22142290-00202001>; Catherine Suart. 2019. “Diversifying the Super-Rich: Forbes-Listed Russians from a Muslim Background.” In Peter J. S. Duncan and Elisabeth Schimpfössl, eds. *Socialism, Capitalism and Alternatives: Area Studies and Global Theories*. London: UCL Press, 33–48.

specific cultural, social, political, and economic circumstances in those subregions.

We find substantial heterogeneity in the outcomes of interest across the considered subregions even after adjusting for background characteristics. Residents of Yakutsk (Sakha Republic - Yakutia) appear to be more critical of the notion of corruption and report less frequent occurrences of perceived corruption (i.e., corruption exercised by acquaintances and fellow residents) as well as of first-hand petty corruption compared to residents of the other three subregions. At the same time, no statistically significant subregional differences are found for the perceived impact of corruption on various spheres of everyday life, such as career opportunities, quality of life, children's futures, health, security, and the belief that corruption can be overcome in Russia. Further examination of conditional correlations between corruption perceptions and individual characteristics reveals differences in the frequency of corruption practices and the definitions of corruption by gender, age, education, professional status, and income group.

A limitation of this study is that we cannot use our data to look inside the "black box" of causal mechanisms and thereby explain why respondents in the Sakha Republic appear to be more critical of the notion of corruption and report less frequent occurrences of perceived corruption, as well as less first-hand petty corruption, than residents of the other three subregions. Our data do not allow us to control for any additional factors potentially linked to corruption attitudes, such as the respondent's ethnicity, religion,²⁴ or titular language.

Given the distinct national composition of the Sakha Republic (Yakutia) compared to the other three regions under consideration, these uncontrolled factors may prove to be critical for explaining regional differences in corruption attitudes. One possibility hinted at in the qualitative part of our investigation is that, in Sakha, clannishness and indigenous networks are used in place of more well-known forms of corruption, such as bribery, to solve problems. Alternatively, some scholars and practitioners discuss the role of "civic nationalism" in mitigating corruption.²⁵ In his controversial article, de las Casas argues that a nationalistic mindset might diminish corruption in two ways: "if bureaucrats are highly nationalistic, they are also more sensitive to any damage to society, and less prone to abuse public office," while a nationalistic public "is less likely to accept

²⁴ For a discussion of shamanism in Yakutia, see Emilie Maj. 2012. "Internationalisation with the Use of Arctic Indigeneity: The Case of the Republic of Sakha (Yakutia), Russia." *Polar Record* 48: 3: 210–214. doi:10.1017/S003224741100060X.

²⁵ See the recent discussion in Grant W. Walton. 2021. "Can Civic Nationalism Reduce Corruption? Transnational and Translocal Insights from Solomon Islands." *Political Geography* 89. <https://doi.org/10.1016/j.polgeo.2021.102422>.

government corruption.”²⁶

Regarding the language issue, our survey was conducted in Russian, but the Yakut language is also widely used in daily life in the Sakha Republic (Yakutia). Not using the titular language meant that we were probably unable to capture some indigenous peculiarities.²⁷ The first two volumes of the *Encyclopaedia of Informality*²⁸ indicate only a few indigenous informal practices in their respective titular languages (not Russian), including *adat* in Chechnya²⁹ and *ch'ir* in Chechnya and Ingushetia.³⁰ Future studies should take this possible language issue into account and ensure that local staff are engaged to conducting interviews in the native language(s).

Notwithstanding these limitations, the study suggests that federal policymakers should examine and be aware of the regional context when developing and conducting anti-corruption policies and campaigns. Similarly, regional governments should be sensitive to the local context when adopting anti-corruption campaigns and policy measures that have proved successful in other areas of the country. If the population in some regions is sufficiently aware of and sensitized to the issue of corruption, policymakers can save resources by eschewing awareness campaigns and instead focusing their efforts on other anti-corruption activities. Furthermore, there may be regional variations in predominant forms of high-level corruption, which should also be carefully considered by the federal authorities. For example, as we discovered, *mestnichestvo* (a form of nepotism) and selective corruption cases are more prominent in the Sakha Republic (Yakutia) than in other subregions in the Russian Far East.

Another type of heterogeneity deserves a closer examination by both scholars and practitioners: that among various informal practices. Our study indicates that presents to doctors, teachers, and childcare providers, as well as the use of personal connections, are more prevalent than other forms of petty corruption. Decision-makers should look more closely at why so many gifts are being brought to kindergartens, schools, and other institutions, and try to change the context, whether by making

²⁶ Gustavo de las Casas. “Is Nationalism Good for You?” *Foreign Policy*. October 8, 2009, At <https://foreignpolicy.com/2009/10/08/is-nationalism-good-for-you>.

²⁷ Donna Bahry, Mikhail Kosolapov, Polina Kozyreva, and Rick K. Wilson. 2005. “Ethnicity and Trust: Evidence from Russia.” *The American Political Science Review* 99: 4: 521–532. <https://doi.org/10.1017/S0003055405051853>; Sansar Tsakhirmaa. 2020. “Comparative Ethnic Territorially Based Autonomy in Tatarstan, Bashkortostan, and Yakutia of Russia: An Analytical Framework.” *Nationalities Papers* 48: 5: 891–914. doi:10.1017/nps.2019.77; Vera Solovyeva and Vera Kuklina. 2020. “Resilience in a Changing World: Indigenous Sharing Networks in the Republic of Sakha (Yakutia).” *Polar Record* 56. doi:10.1017/S0032247420000406.

²⁸ Ledeneva. 2017. “The Ambivalence of Favour ...”

²⁹ Nicol  Ford. 2018. “Adat.” In Alena Ledeneva, ed., *The Global Encyclopaedia of Informality*, Vol. I. London: UCL Press.

³⁰ Emil Aslan Souleimanov. 2018. “Ch’ir.” In Alena Ledeneva, ed., *The Global Encyclopaedia of Informality*, Vol. I. London: UCL Press.

kindergartens more accessible or better subsidizing secondary schools and hospitals such that students will continue bringing flowers to their teachers on the first day of school (September 1) and not use gifts to substitute for state financial support, while patients will bring presents only as a token of gratitude after a long-term treatment and not to obtain access to health services. Moreover, perhaps petty corruption should not be fought at all (at least not at the moment)—this is a situation where less is more. If the population is far more worried about the quality of roads and expensive housing, then these issues are what decision-makers and other practitioners should focus on.

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