Online Appendices

ONLINE APPENDIX 1

Peasants as a residual group. One concern that Chapter 9 anticipates is that, rather than capturing the legacy of the bourgeois strata per se, what the analysis reveals is a more straightforward mechanism of the urban/rural divide,[1] or, indeed, the relative absence of peasant populations rather than the presence of particular estates.[2] We perform additional tests corroborating that the results are not driven by a lower share of peasants in districts. Because peasants constitute the most sizeable share of the "residual category" in the regressions, strictly speaking, we cannot distinguish between the effect of an increase in the share of "educated estates" and that of the decrease of the share of peasants. To deal with this issue, we replicate the regressions controlling for the share of peasants in the regional population. The residual group are then individuals who do not belong to the main estates, as well as smaller groups like nomadic populations in some regions. The results, reported in Table OA1, with some minor exceptions, confirm the findings. Thus, the main results concerning the relationship between the "educated" estates and democratic quality cannot be explained with reference to smaller populations of the peasant estate in the district.

[1] Some of the effects could be associated with the legacy of serfdom. See Johannes C. Buggle and Steven Nafziger, "Long-Run Consequences of Labor Coercion: Evidence from Russian Serfdom," (Williams College, 2016). Discussion and regressions in OA1-OA3 are based on Lankina and Libman, "Two-Pronged Middle Class."

[2] Victor Zaslavsky, "Contemporary Russian Society and its Soviet Legacy: The Problem of State Dependent Workers," in *Social Change and Modernization: Lessons From Eastern Europe*, ed. Bruno Grancelli, De Gruyter Studies in Organization, 45–62 (Berlin: De Gruyter, 1995).

TABLE OA1 *Shares of "educated" estates, share of peasants, and democratic quality in 1996 (*rayon-*level), OLS*

Dep. var.	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates
Meshchane	0.103*	0.019***	0.078	0.014***
	(0.059)	(0.004)	(0.058)	(0.004)
Nobility	0.245	0.029	0.163	0.015
	(0.273)	(0.020)	(0.276)	(0.019)
Clergy	1.738*	0.218***	1.429	0.162**
	(0.987)	(0.072)	(0.980)	(0.069)
Merchants	−1.419	−0.385***	−1.303	−0.367***
	(2.320)	(0.122)	(2.332)	(0.116)
Foreigners	0.015	0.013***	−0.006	0.009***
	(0.034)	(0.003)	(0.033)	(0.003)
Peasants	−0.006	0.001	−0.008	0.000
	(0.014)	(0.001)	(0.013)	(0.001)
Urbanization			0.034***	0.006***
			(0.006)	(0.000)
Constant	33.893***	3.697***	31.720***	3.299***
	(4.723)	(0.107)	(5.098)	(0.124)
R^2	0.43	0.58	0.44	0.64
N	2,064	2,064	2,061	2,061

Note. * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses. All regressions control for *oblast* fixed effects.

ONLINE APPENDIX 2

Population displacement: placebo test of the human capital persistence hypothesis. A second set of tests likewise helps further probe into the validity of the hypothesized causal mechanisms that capture the intergenerational transmission of the legacy of imperial bourgeoisie. As noted in Chapter 9 of the book, a major challenge in analyses of the long-term reproduction of the human dimension of legacies is dealing with the issue of geographical and structural underpinnings of development.[3] The causal mechanisms that I unpacked in the

[3] Irena Grosfeld, Alexander Rodnyansky, and Ekaterina Zhuravskaya, "Persistent Antimarket Culture: A Legacy of the Pale of Settlement after the Holocaust," *American Economic Journal: Economic Policy* 5, no. 3 (2013), 189–226; Daron Acemoglu, Simon Johnson, and James A. Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *The Quarterly Journal of Economics* 117, no. 4 (2002), 1231–94; John D.

book underline the significance of what I call the "institutions of modernity" that constituted hubs of professional expertise, social closure, and autonomy vis-à-vis the state apparatus. I also highlighted intergenerational aspects of value transmission via homologous social networks and familial socialization,[4] as we needed to understand how the legacy survived beyond the generation of professionals at the time of the Revolution. Yet my analysis also underlined the dilemmas involved in distinguishing this channel of legacy transmission given the appropriative logic of Bolshevik developmentalism. In other words, we have yet to more conclusively distinguish the modernization infrastructure that the Bolsheviks appropriated, expanded, and further developed from the social aspects of legacy transmission – a variant of a dilemma famously summarized in the "people" versus the "institutions" debate among economic historians.[5]

Acemoglu and colleagues suggest a useful strategy for isolating the effects of specifically social structural – or cognitional – legacies from those of other aspects of development. Analyzing the implications of the Holocaust in the Western Pale of Settlement, they find that territories most affected also have the worst developmental and democratic outcomes because of the decimation of the professional and enterprising middle class.[6] However horrific the targeted repressions among the "former people," the closest that the Soviet regime came to social cleansing was the removal of scores of the most prominent aristocrats from Leningrad to provincial capitals or their exile to Siberia in the 1930s. The mass stratum from among which the foot soldiers of the Soviet public sector and the professions emerged, as noted, were, however, not the aristocrats but the *meshchane* or less prominent nobles of modest means who were inconspicuous and would have therefore escaped deportations. Furthermore, we cannot replicate Acemoglu and colleagues' test when it comes to the decimation of the Jewish community: territories affected by the Holocaust are largely outside of present-day Russia.

McArthur and Jeffrey D. Sachs, "Institutions and Geography: Comment on Acemoglu, Johnson and Robinson (2000)," *Working Paper* 8114 (Cambridge, MA: National Bureau of Economic Research, 2001); Edward L. Glaeser, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "Do Institutions Cause Growth?," *Journal of Economic Growth* 9, no. 3 (2004), 271–303; Volha Charnysh, "Diversity, Institutions, and Economic Outcomes: Post-WWII Displacement in Poland," *The American Political Science Review* 113, no. 2 (2019), 423–41.

[4] For a discussion of such "cognitional" legacies, see Alberto Simpser, "The Culture of Corruption across Generations: An Empirical Study of Bribery Attitudes and Behavior," *The Journal of Politics* 82, no. 4 (2020), 1373–1389; Alberto Simpser, Dan Slater, and Jason Wittenberg. "Dead but Not Gone: Contemporary Legacies of Communism, Imperialism, and Authoritarianism," *Annual Review of Political Science* 21, no. 1 (2018), 419–39.

[5] Glaeser et al., "Do Institutions Cause Growth?"

[6] Daron Acemoglu, Tarek A. Hassan, and James A. Robinson, "Social Structure and Development: A Legacy of the Holocaust in Russia," *The Quarterly Journal of Economics* 126, no. 2 (2011), 895–946. See also Mevlude Akbulut-Yuksel and Mutlu Yuksel, "The Long-Term Direct and External Effects of Jewish Expulsions in Nazi Germany," *American Economic Journal: Economic Policy* 7, no. 3 (2015), 58–85.

As I write in Chapter 9 of the book, I locate the legacies of ethnic cleansing in the tragic fate of German and other European settlers in the Middle Volga, Siberia, and the Caucasus who were deported to Central Asia. Although Stalin's "killing of nations" affected other ethnic groups,[7] the high human capital of the mostly Protestant and Catholic German settlers makes this community comparable to Jews. German farms and those of Dutch Mennonite settlers were regarded as exemplars of efficient and innovative production;[8] Germans were prominent in the trades and entrepreneurship,[9] as well as in the urban professions.[10] The 1937 "Stalin census" revealed, shortly before deportation, that Protestants boasted considerably higher literacy rates than those who self-identified as Russian Orthodox.[11] Importantly, former German settlements did not become ghost towns where normal economic activity ceased. They were repopulated with mostly ethnic Russian migrants from neighboring and other areas. While we may well find a long-term legacy of German settlers,[12] the result would be less likely considering the thoroughness of ethnic cleansing; the latter historical record makes this group suitable for our placebo test.[13] My assumption is that specific territorially concentrated communities, and the intergenerational reproduction of human capital among them, account for

[7] Robert Conquest, *The Nation Killers* (London: Sphere Books, 1972).

[8] On German and Mennonite agricultural practices, innovation, and emulation by native communities, see David Moon, *The Plough that Broke the Steppes: Agriculture and Environment on Russia's Grasslands, 1700–1914* (Oxford: Oxford University Press, 2013), 209–11, 184–87.

[9] I. A. Savchenko and S. I. Dubinin, *Rossiyskiye nemtsy v samarskom kraye: Istoriko-krayevedcheskiye ocherki [Russian Germans in Samara krai: Historical-local knowledge sketches]* (Samara: Samara University, 1994).

[10] S. G. Vesnina, "Chastnyye tovarishcheskiye russko-nemetskiye uchilishcha v nemetskikh koloniyakh Povolzh'ya: Materialy Rossiysko-Germanskoy nauchnoy konferentsii. Anapa, 22–26 sentyabrya 1994 g. [Private cooperative Russian-German secondary schools in German colonies of the Volga region: Materials of the Russian-German scientific conference. Anapa, 22–26 September 1994]," in *Rossiyskiye nemtsy na Donu, Kavkaze, Volge [Russian Germans in the Don, Caucasus, and Volga territories]*, ed. Ye. A. Sherwud (Moscow: Mezhdunarodnyy soyuz nemetskoy kul'tury, 1995); Dittmar Dahlmann and Ralph Tuchtenhagen, eds., *Zwischen Reform und Revolution: Die Deutschen an der Wolga, 1860–1917* [Between reform and revolution: The Volga Germans, 1860–1917], Vol. 4 (Essen: Klartext, 1994).

[11] Valentina B. Zhiromskaya, I. N. Kiselyov, and Yu. A. Polyakov, *Polveka pod grifom sekretno: Vsesoyuznaya perepis' naseleniya 1937 goda [Half a century under the top secret seal: The all-union population census of 1937]* (Moscow: Nauka, 1996), 100.

[12] The Germanic communities may well have diffused specific values to neighboring populations or their know-how and infrastructures such as schools, clinics, and veterinary facilities continued to drive development, in which case we would expect the developmental legacies to persist. Alternatively, the decimation of these communities, consistent with theorizing into social dislocation, may undermine their otherwise positive legacies or have other implications for monitoring and enforcement of social order. Elina Treyger, "Migration and Violent Crime: Lessons From the Russian Experience," *Georgetown Immigration Law Journal* 27, no. 2 (2013), 257–310; Roberto Stefan Foa and Anna Nemirovskaya, "How State Capacity Varies within Frontier States: A Multicountry Subnational Analysis," *Governance* 29, no. 3 (2016), 411–32.

[13] I thank Volha Charnysh for her suggestion to conceptualize this as a placebo test.

legacy persistence rather than any geographical or other structural variables per se. I therefore expect to see no correlation between the presence of these communities in specific territories in 1897 and developmental outcomes after they were deported in the Soviet period. I test these assumptions in what follows.

For this part of the analysis, I created a dataset with data on thousands of imperial Russia's German settlements from Diesendorf's compendium, [14] to my knowledge the most up-to-date and comprehensive source. We created two variables: a binary variable for *rayony* where a German settlement had been located and one capturing the number of ethnic Germans residing in them. As anticipated, the results presented in Table OA2.1 show that the presence of German settlers is positively related to literacy rates in 1897. Tables OA2.2 and OA2.3, which also include the variables of the *meshchane* and combined educated estates, respectively, demonstrate, however, that there is no relationship between German settlements and education in post-Soviet Russia. We also run a series of regressions looking at the impact of German settlements on democratic quality in contemporary Russia, reporting results that include also the variables of the *meshchane* and combined educated estates, respectively, in Tables OA2.4 and OA2.5. For the German settlements binary variable, no effect is observed in any of the specifications. For the size of the German settlements, we do find some positive relationship with democratic quality. This effect disappears entirely, however, if one excludes only five districts with high populations of ethnic Germans, four in Saratov *oblast* and one in Volgograd *oblast*. In these five districts, the population exceeds the mean in the sample by almost 100 times! Thus, while some legacies could have survived in territories with a comparatively very high population share of ethnic Germans, for the rest of Russia no legacy effect could be observed. The fact that we observe no systematic evidence of German settler effects on Soviet period development or democratic quality contrasts with the effect of the "educated" estates and specifically the *meshchane* – social strata that, as a group, were not targeted for repressions. It also demonstrates that we do not find a significant legacy effect for *any* high human-capital group in tsarist Russia but only for a specific bourgeois stratum, for which the theoretical mechanisms and qualitative evidence support the existence of a legacy. We also performed propensity score matching, using latitude, longitude, and the total size of population to compute propensity scores and the German settlements binary variable as the explanatory variable (Table OA2.6). The idea was to compute the effect of the binary for German settlements on present-day democratic quality by comparing localities close to each other and having a similar population size in the nineteenth century. For the effective number of candidates, we find no effect. For the Vanhanen index, we do find an effect; but once we exclude the abovementioned five outliers, it disappears entirely.

[14] Viktor F. Diesendorf, ed. *Die Deutschen Russlands: Siedlungen Und Siedlungsgebiete: Lexicon [The Russian Germans: Settlements and places of settlement: An encyclopaedic dictionary]* (Moscow: ERD, 2006).

TABLE OA2.1 *Regressions, German settlers and imperial literacy (*rayon-*level), OLS*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Meshchane	0.701***	0.076**	0.130***	0.042	0.071**	0.081**	0.742***	0.077
	(0.040)	(0.033)	(0.030)	(0.034)	(0.033)	(0.032)	(0.076)	(0.089)
Nobility		1.770***	2.121***	1.604***	1.748***	1.995***		1.901***
		(0.247)	(0.165)	(0.247)	(0.247)	(0.243)		(0.425)
Clergy		6.597***	2.271***	7.103***	6.826***	4.732***		6.865***
		(0.509)	(0.674)	(0.510)	(0.508)	(0.510)		(0.877)
Merchants		11.057***	8.678***	11.901***	11.233***	10.164***		12.700***
		(1.076)	(0.756)	(1.107)	(1.076)	(0.872)		(2.878)
Foreigners		0.312***	0.381***	0.325***	0.319***	0.552***		0.212*
		(0.027)	(0.034)	(0.025)	(0.026)	(0.062)		(0.109)
Germans (binary variable)				2.921***				
				(0.596)				
Germans (population)					0.357***			
					(0.103)			
Longitude						−0.093***		
						(0.007)		
Latitude						0.113***		
						(0.041)		
Constant	13.738***	10.168***	11.092***	9.770***	9.928***	10.316***	14.986***	10.122***
	(0.254)	(0.291)	(0.518)	(0.285)	(0.282)	(1.985)	(0.581)	(0.656)
R^2	0.187	0.481	0.846	0.492	0.506	0.564	0.190	0.485
N	2,091	2,091	2,091	2,091	2,091	2,083	413	413
Oblast fixed effects	No	No	Yes	No	No	No		
Uyezd-level data							Yes	Yes

Note. * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses.

TABLE OA2.2 *Regressions, particular social and cultural communities and contemporary education levels (*rayon-*level), OLS*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Meshchane	3.063***	2.623***	2.696***	2.329***	1.206***	2.192***	3.391***	3.054***	3.066***
	(0.346)	(0.383)	(0.399)	(0.347)	(0.301)	(0.280)	(0.380)	(0.345)	(0.346)
Industrial employment		0.476***	0.458***	−0.038	0.061				
		(0.174)	(0.171)	(0.153)	(0.148)				
Old Believers			−0.047	−0.198	−0.044				
			(0.188)	(0.194)	(0.186)				
Catholics			2.828	1.720	0.652				
			(3.667)	(2.942)	(2.605)				
Protestants			−0.810	−0.396	−0.125				
			(1.213)	(0.975)	(0.883)				
Jews			−1.792	−1.787	−1.910*				
			(1.551)	(1.346)	(1.034)				
Urbanization				0.786***	0.565***				
				(0.039)	(0.035)				
Housing					0.000***				
					(0.000)				
Doctors per capita					0.012***				
					(0.003)				
Latitude					−1.157				
					(0.979)				

(*continued*)

TABLE OA2.2 (*continued*)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Longitude					−0.501				
					(0.502)				
Income						0.005***			
						(0.000)			
Germans (binary variable)								4.228	
								(4.149)	
Germans (population)									0.133
									(0.170)
Constant	129.130***	128.552***	108.125***	63.185***	218.368***	−32.336	112.874***	129.256***	129.085***
	(15.938)	(15.910)	(27.144)	(23.349)	(72.064)	(22.421)	(2.207)	(15.937)	(15.944)
R^2	0.47	0.47	0.47	0.63	0.74	0.62	0.08	0.47	0.47
N	1,630	1,630	1,629	1,629	1,458	1,629	1,630	1,630	1,630
Oblast fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes

Note. * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses.

TABLE OA2.3 *Regressions, particular social and cultural communities and contemporary education levels (*rayon-*level), OLS*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Educated estates	2.757***	2.451***	2.544***	2.175***	1.167***	1.945***	3.225***	2.749***	2.760***
	(0.293)	(0.327)	(0.340)	(0.295)	(0.267)	(0.243)	(0.336)	(0.292)	(0.293)
Industrial employment		0.399**	0.379**	−0.097	0.026				
		(0.173)	(0.170)	(0.153)	(0.150)				
Old Believers			0.028	−0.134	−0.010				
			(0.190)	(0.201)	(0.191)				
Catholics			1.362	0.494	−0.033				
			(3.570)	(2.864)	(2.567)				
Protestants			−0.353	−0.014	0.094				
			−0.353	−0.014	0.094				
Jews			−2.056	−1.962	−2.042**				
			(1.490)	(1.303)	(1.011)				
Urbanization				0.781***	0.563***				
				(0.038)	(0.035)				
Housing					0.000***				
					(0.000)				
Doctors per capita					0.012***				
					(0.003)				
Latitude					−1.128				
					(0.965)				

(*continued*)

TABLE OA2.3 (*continued*)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Longitude					−0.440				
					(0.500)				
Income						0.005***			
						(0.000)			
Germans (binary variable)								4.039	
								(4.125)	
Germans (population)									0.137
									(0.170)
Constant	130.941***	129.872***	114.298***	68.618***	210.620***	−34.562	108.956***	131.053***	130.902***
	(15.735)	(15.729)	(26.651)	(22.963)	(71.185)	(22.475)	(2.399)	(15.736)	(15.740)
R^2	0.477	0.479	0.479	0.630	0.743	0.619	0.104	0.477	0.477
N	1,630	1,630	1,629	1,629	1,458	1,629	1,630	1,630	1,630
Oblast fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes

Note. * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses.

TABLE OA2.4 *German settlements and democratic quality in 1996 (*rayon *level), OLS*

Dep. var.	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates
Meshchane	0.100***	0.009***			0.101***	0.009***						
	(0.038)	(0.002)			(0.038)	(0.002)						
Literacy			0.062*	0.004*			0.059*	0.003				
			(0.034)	(0.002)			(0.034)	(0.002)				
Urbanization	0.034***	0.006***	0.033***	0.006***	0.034***	0.006***	0.033***	0.006***	0.036***	0.006***	0.036***	0.006***
	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)
Binary variable, German settlement	−0.287	0.008	−0.516	−0.006					−0.258	0.010		
	(0.550)	(0.036)	(0.549)	(0.036)					(0.554)	(0.037)		
German population					0.028	0.005**	0.013	0.004*			0.024	0.005**
					(0.031)	(0.002)	(0.029)	(0.002)			(0.031)	(0.002)
Constant	31.956***	3.474***	41.495***	2.959***	31.964***	3.474***	41.187***	2.954***	43.358***	3.897***	43.362***	3.898***
	(4.895)	(0.080)	(1.229)	(0.159)	(4.893)	(0.080)	(1.064)	(0.153)	(1.099)	(0.077)	(1.097)	(0.077)
R^2	0.442	0.639	0.444	0.637	0.442	0.640	0.444	0.638	0.440	0.636	0.440	0.637
N	2,061	2,061	2,041	2,041	2,061	2,061	2,041	2,041	2,070	2,070	2,070	2,070

Note. * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses. All regressions control for *oblast* fixed effects.

TABLE OA2.5 *German settlements and democratic quality in 1996* (rayon-*level*), *OLS*

Dep. var.	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates	Vanhanen index	Effective number of candidates
Educated estates	0.089***	0.007***			0.089***	0.007***						
	(0.033)	(0.002)			(0.033)	(0.002)						
Literacy			0.062*	0.004*			0.059*	0.003				
			(0.034)	(0.002)			(0.034)	(0.002)				
Urbanization	0.034***	0.006***	0.033***	0.006***	0.034***	0.006***	0.033***	0.006***	0.036***	0.006***	0.036***	0.006***
	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)	(0.006)	(0.000)
Binary variable, German settlement	−0.299	0.007	−0.516	−0.006					−0.258	0.010		
	(0.550)	(0.036)	(0.549)	(0.036)					(0.554)	(0.037)		
German population					0.028	0.005**	0.013	0.004*			0.024	0.005**
					(0.031)	(0.002)	(0.029)	(0.002)			(0.031)	(0.002)
Constant	31.971***	3.478***	41.495***	2.959***	31.980***	3.478***	41.187***	2.954***	43.358***	3.897***	43.362***	3.898***
	(4.892)	(0.080)	(1.229)	(0.159)	(4.890)	(0.080)	(1.064)	(0.153)	(1.099)	(0.077)	(1.097)	(0.077)
R^2	0.443	0.639	0.44	0.64	0.443	0.640	0.44	0.64	0.44	0.64	0.44	0.64
N	2,061	2,061	2,041	2,041	2,061	2,061	2,041	2,041	2,064	2,064	2,064	2,064

Note. * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Robust standard errors in parentheses. All regressions control for *oblast* fixed effects.

TABLE OA2.6 *Propensity score matching: German settlements and present-day democratic quality*

Dep. var.	Vanhanen index	Vanhanen index	Effective number of candidates
Germans (binary 1vs 0)	1.25** (0.736)	1.103 (0.709)	0.014 (0.06)
N	2,067	2,062	2,067
German pop <40	No	Yes	No

ONLINE APPENDIX 3

Age of the City: The Old and the New Bourgeoisie

Another way of testing the two-pronged middle-class hypothesis that I advance in Chapter 9 of the book is to ascertain covariation between the age of the city and region and the education of the regional workforce. In Table OA3.1, I present two sets of regressions, one employing *meshchane* as a proxy for the "pedigree" bourgeoisie and another one employing the more generic category of the "educated estates." We control for the age of the regional capital city and in one of the specifications for the age of the region, which are computed employing the year of establishment as a higher-level administrative entity in the Russian Empire or the Soviet Union. Both datasets are from Petrov.[15] Russia's regions, featuring very different levels of development, had been "colonized" – in the language of the Russian historian Vasily Klyuchevsky – at different historical time periods. It is possible that territories that had a longer history of settlement and constituted a separate administrative entity for a longer period were able to develop better preconditions for the emergence of the urban educated bourgeoisie. Controlling for the variables does not change the results of our estimations. This indicates that older regions were also more likely to develop a strong educated stratum prior to the Revolution. At the same time, the age of the region and the age of the capital city variables are not related to *contemporary* education levels; in specifications 4 and 7 the variables for the regional age and the age of the capital city appear with a negative sign but are insignificant. I interpret the results broadly as evidence of the mixed legacies of the origins of the white-collar stratum with formal education credentials. Younger cities may boast an educated workforce but, as we know from a battery of tests that I presented in the book, the democratic value proclivities of this constituency are likely to be distinct from those of the "old" bourgeoisie. This is the argument I develop in the book. I also find (Table OA3.2) that the overall share

[15] Nikolai Petrov, "Naslediye imperii i regionalism," [The legacy of empire and regionalism] in *Naslediye imperii i budushcheye Rossii* [The legacy of empire and the future of Russia], ed. Alexander Miller (Moscow: NLO, 2009).

TABLE OA3.1 *Regressions,* meshchane *and the educated estates and post-communist education attainment as measured by share of population with a university degree in 2010 (*oblast*-level), OLS*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Educated estates	0.300***	0.208**	0.295***	0.322***				
	(0.094)	(0.097)	(0.091)	(0.098)				
Meshchane					0.315***	0.196*	0.306***	0.321***
					(0.118)	(0.112)	(0.115)	(0.119)
Income per capita	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Resource extraction share	−0.110***	−0.084***	−0.113***	−0.106***	−0.125***	−0.093***	−0.128***	−0.124***
	(0.033)	(0.027)	(0.034)	(0.031)	(0.034)	(0.028)	(0.035)	(0.033)
Share of ethnic Russians	−0.089***	−0.079***	−0.084***	−0.087***	−0.089***	−0.078***	−0.084***	−0.089***
	(0.020)	(0.022)	(0.019)	(0.020)	(0.021)	(0.024)	(0.020)	(0.022)
Urbanization	0.097**	0.084**	0.103**	0.098**	0.114**	0.095**	0.120**	0.115**
	(0.042)	(0.039)	(0.042)	(0.042)	(0.050)	(0.046)	(0.050)	(0.050)
Distance from Moscow	−0.066	0.109	−0.171	−0.088	−0.079	0.107	−0.180	−0.086
	(0.177)	(0.160)	(0.189)	(0.179)	(0.178)	(0.157)	(0.193)	(0.180)
Average annual educational expenditures, 2003–12		106.362***				0.114***		
		(21.554)				(0.021)		
Age of the capital city			−0.002				−0.002	
			(0.001)				(0.001)	

(*continued*)

Age of the region				−0.004				−0.001
				(0.005)				(0.005)
Constant	15.744***	18.517***	15.902***	16.061***	14.901***	18.191***	15.074***	14.983***
	(2.455)	(2.502)	(2.404)	(2.408)	(2.810)	(2.771)	(2.739)	(2.827)
R^2	0.600	0.672	0.610	0.604	0.570	0.653	0.578	0.570
N	77	77	77	77	77	77	77	77

Note. * p<0.1; ** p<0.05; *** p<0.01. Robust standard errors in parentheses.

TABLE OA3.2 *Regressions, share of* meshchane *and educated estates and the age of the city and region*

Corr. coefficients	Age of the capital city	Age of the region
Educated estates	0.2117	0.4363
	(0.0646)	(0.0001)
Nobility	0.1380	0.4007
	(0.2314)	(0.0003)
Clergy	0.5324	0.4582
	(0.0000)	(0.0000)
Merchants	0.2729	0.3471
	(0.0163)	(0.0020)
Meshchane	0.1677	0.3751
	(0.1449)	(0.0008)

Note. Significance level in parentheses.

of the educated estates is positively associated with the age of the capital city (0.21) and the age of the region (0.44), the latter coefficient being more strongly statistically significant. The share of *meshchane* is also positively related to both the age of the city (0.17) and the age of the region (0.38), but the coefficient is statistically significant only in the second case.

ONLINE APPENDIX 4

The analysis in OA4 validates the choice of Samara as a region that is not an outlier when compared to other districts of the Russian Empire that are presently administratively part of the Russian Federation. The two sets of figures include districts of the Samara *guberniya* presently part of Samara and those that were part of the *guberniya* in the imperial period but were added to other regions after the Bolshevik Revolution. The figures indicate that districts that remain part of present-day Samara had a comparatively high share of "educated estates," the key variable of interest, but are otherwise unremarkable when compared to Russia's other districts (Figure OA4.1). In fact, the share of peasants was comparatively high, something that would challenge simplistic assumptions about structural factors like urbanization per se driving Samara's status as a fairly educated, developed, and politically open region in post-communist Russia. Old Believers, which in the book are linked to the entrepreneurial channel of value transmission among merchants and *meshchane*; and Muslims, which are discussed with reference to the significance of the clergy, an educated estate, in fostering superior education among Tatars, have a comparatively high population share in Samara districts (Figure OA4.2). We also see that the heavily Protestant regions, those with a

high share of historical German settlements, are largely outside of present-day Samara, and it is these districts that also suffered from decimation of the historically high human capital community, as I discuss in the book.

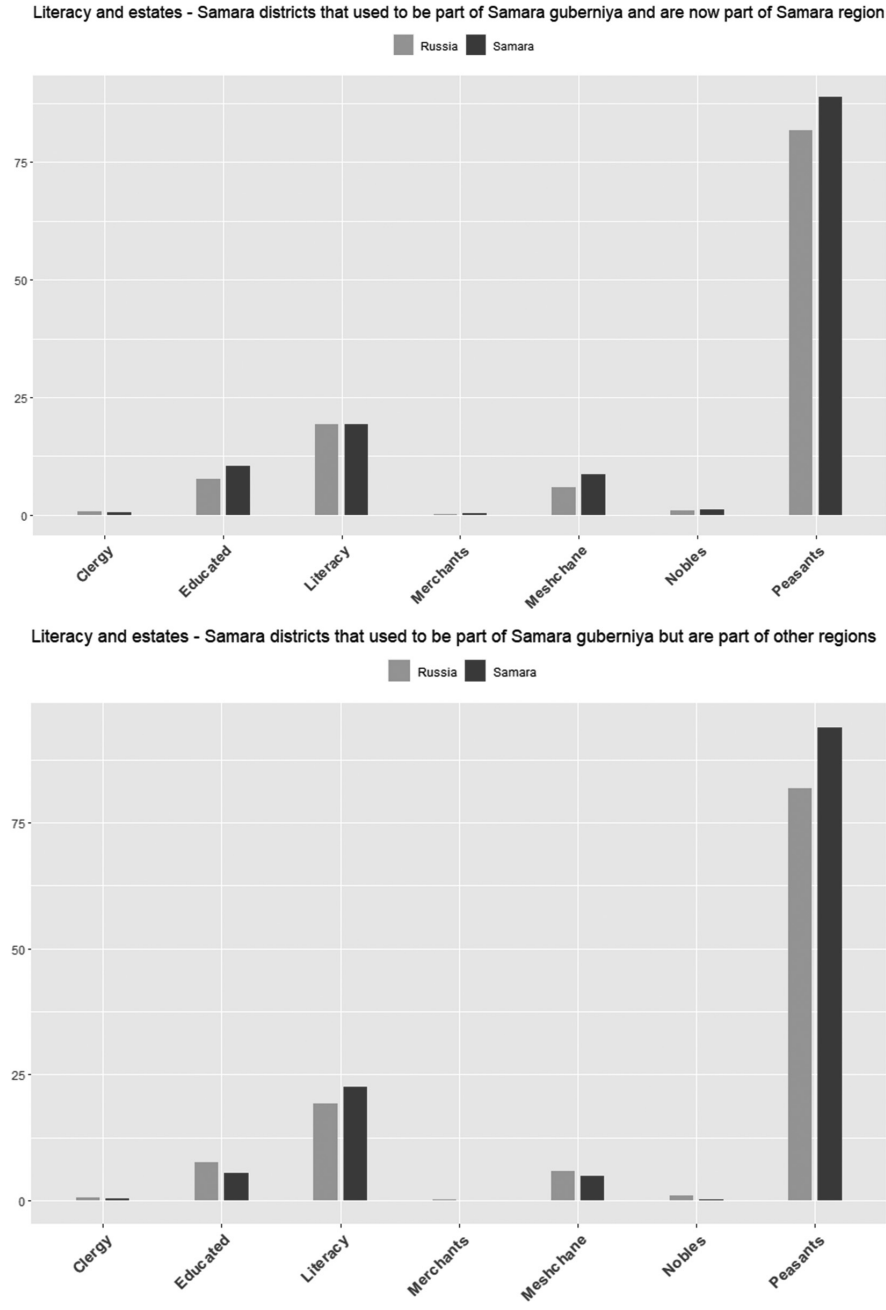

FIGURE OA4.1 Literacy

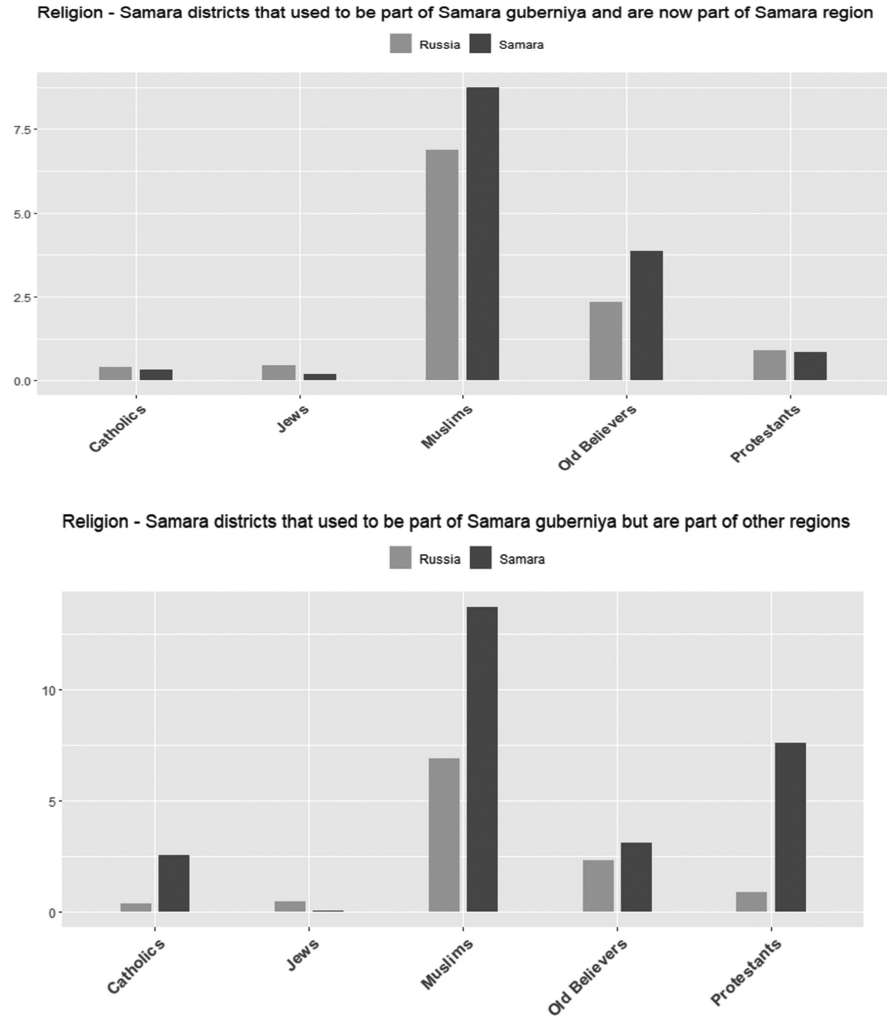

FIGURE OA4.2 Religion

ONLINE APPENDIX 5

Replication Codes for Statistical Analysis in the Manuscript

In what follows, codes to replicate statistical analysis are provided for each chapter. All analyses have been performed using Stata 15, and therefore datasets

provided separately will be in .dta format. The "codebook_oblast" and "codebook_rayon" files provide a description of variables. The codes given in this appendix can be copied and pasted in a .do file. Alternatively, the complete .do file will be provided. The latter can be directly run in Stata. An exception is the social network analysis performed in Chapter 3 using Gephi (see following subsection).

Chapter 3

Social Network Analysis

The social network analysis in Chapter 3 has been generated using Gephi 0.9.2. All analyses are static and refer to either 1916 or 1920 data, for both people and organizations. Edges and nodes tables are provided in Excel files for both people and organizations in 1916 and 1920. Gephi project files can be used to reproduce the analysis. Alternatively, the following steps can be used to replicate the analysis in Gephi.

1. In the data laboratory, import the nodes table in the nodes section. Select undirected and static graph type.
2. Import the edges table in the same way.
3. In the overview, run the following statistics: Average Degree, Avg. Weighted Degree, Network Diameter, Graph Density, HITS, Modularity, PageRank, Connected Components, Avg. Clustering Coefficient, Eigenvector Centrality, Avg. Path Length.
4. Select modularity class as nodes' partition.
5. Select degree as nodes' ranking.
6. Set the layout. As a starting point, the Circle Pack layout has been used, with the following hierarchies and "noverlap" option:
   a. Modularity
   b. Degree
   c. Betweenness (or centrality)
7. The size of nodes has been set using degree as ranking.

Chapter 4

Table 4.1

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
reg engshare60 liter_new ethnreg distance, robust
outreg2 using "literacy", se ctitle(I)
reg engshare65 liter_new ethnreg distance, robust
```

```
outreg2 using "literacy", se ctitle(II)
reg engshare70 liter_new ethnreg distance, robust
outreg2 using "literacy", se ctitle(III)
reg docshare60 liter_new ethnreg distance, robust
outreg2 using "literacy", se ctitle(IV)
reg docshare65 liter_new ethnreg distance, robust
outreg2 using "literacy", se ctitle(V)
reg docshare70 liter_new ethnreg distance, robust
outreg2 using "literacy", se ctitle(VI)
reg engshare60 mechane_new ethnreg distance, robust
outreg2 using "mechane_new", se ctitle(I)
reg engshare65 mechane_new ethnreg distance, robust
outreg2 using "mechane_new", se ctitle(II)
reg engshare70 mechane_new ethnreg distance, robust
outreg2 using "mechane_new", se ctitle(III)
reg docshare60 mechane_new ethnreg distance, robust
outreg2 using "mechane_new", se ctitle(IV)
reg docshare65 mechane_new ethnreg distance, robust
outreg2 using "mechane_new", se ctitle(V)
reg docshare70 mechane_new ethnreg distance, robust
outreg2 using "mechane_new", se ctitle(VI)
reg engshare60 educclass ethnreg distance, robust
outreg2 using "educclass", se ctitle(I)
reg engshare65 educclass ethnreg distance, robust
outreg2 using "educclass", se ctitle(II)
reg engshare70 educclass ethnreg distance, robust
outreg2 using "educclass", se ctitle(III)
reg docshare60 educclass ethnreg distance, robust
outreg2 using "educclass", se ctitle(IV)
reg docshare65 educclass ethnreg distance, robust
outreg2 using "educclass", se ctitle(V)
reg docshare70 educclass ethnreg distance, robust
outreg2 using "educclass", se ctitle(VI)
```

Figure 4.1

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
label var educclass "Educated Estates"
reg engshare60 educclass ethnreg distance, robust
estimates store D
```

```
reg engshare65 educclass ethnreg distance, robust
estimates store F
reg engshare70 educclass ethnreg distance, robust
estimates store G
coefplot (D, label(Engineers 1960) msymbol(T) mlcolor(gs0)) ///
(F, label(Engineers 1965) msymbol(S) mlcolor(gs0)) ///
(G, label(Engineers 1970) msymbol(O) mlcolor(gs0)) ///
, drop(_cons ethnreg distance) xline(0) mfcolor(white) msize(large)
reg docshare60 educclass ethnreg distance, robust
estimates store H
reg docshare65 educclass ethnreg distance, robust
estimates store I
reg docshare70 educclass ethnreg distance, robust
estimates store J
coefplot (H, label(Doctors 1960) msymbol(D) mlcolor(gs0)) ///
(I, label(Doctors 1965) msymbol(X) mlcolor(gs0)) ///
(J, label(Doctors 1970) msymbol(A) mlcolor(gs0)) ///
, drop(_cons ethnreg distance) xline(0) mfcolor(white) msize(large)
```

Summary Statistics Chapter 4

```
use oblast_complete
sum engshare60 engshare65 engshare70 docshare60 docshare65 docshare70
   liter_new mechane_new educclass ethnreg distance
```

Chapter 5

Figures 5.1–5.3

```
use rayon
gen educclass = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_
   kuptsy + perc_estmeshchane
label var educ "University education in the 2010s"
label var literates "Literacy in the Imperial era"
label var perc_estmeshchane "Share of meshchane"
label var educclass "Educated Estates"
graph twoway (lfit educ literates) (scatter educ literates)
graph twoway (lfit educ perc_estmeshchane) (scatter educ
   perc_estmeshchane)
graph twoway (lfit educ educclass) (scatter educ educclass)
```

Table 5.1

```
use rayon
gen educclass = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_
   kuptsy + perc_estmeshchane
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
   + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
   perc_est_other
reg educ perc_estmeshchane dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ1", se ctitle(I)
reg educ perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ1", se ctitle(II)
reg educ perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew urbanization dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ1", se ctitle(III)
reg educ perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew urbanization housing doctors latitude longitude
   dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ1", se ctitle(IV)
reg educ educclass dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ2", se ctitle(I)
reg educ educclass industrial_emp perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ2", se ctitle(II)
reg educ educclass industrial_emp perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew urbanization dreg1-dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ2", se ctitle(III)
reg educ educclass industrial_emp perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew urbanization housing doctors latitude longitude dreg1-
   dreg79 if ddd!=0, robust
outreg2 using "fintabl_educ2", se ctitle(IV)
```

Table 5.2

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
replace eduexp0312av = eduexp0312av/1000
reg educ_2010 mechane_new income_12 natres_share shareruss_2010
   urbanization_2012 distance, robust
outreg2 using "educ_new", se ctitle(I)
reg educ_2010 mechane_new income_12 natres_share shareruss_2010
   urbanization_2012 distance eduexp0312av, robust
```

```
outreg2 using "educ_new", se ctitle(II)
reg educ_2010 educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance, robust
outreg2 using "educ_new2", se ctitle(I)
reg educ_2010 educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance eduexp0312av, robust
outreg2 using "educ_new2", se ctitle(II)
replace eduexp0312av=eduexp0312av*1000
```

Table 5.3

```
use oblast_complete
reg no_vuz_76 liter_new ethnreg distance, robust
outreg2 using "fintabl1sept", se ctitle(I)
reg no_stud_40 liter_new ethnreg distance, robust
outreg2 using "fintabl1sept", se ctitle(II)
reg no_ssuz_76 liter_new ethnreg distance, robust
outreg2 using "fintabl1sept", se ctitle(III)
reg no_ssuz_40 liter_new ethnreg distance, robust
outreg2 using "fintabl1sept", se ctitle(IV)
reg no_vuz_76 mechane_new ethnreg distance, robust
outreg2 using "fintabl1sept2", se ctitle(I)
reg no_stud_40 mechane_new ethnreg distance, robust
outreg2 using "fintabl1sept2", se ctitle(II)
reg no_ssuz_76 mechane_new ethnreg distance, robust
outreg2 using "fintabl1sept2", se ctitle(III)
reg no_ssuz_40 mechane_new ethnreg distance, robust
outreg2 using "fintabl1sept2", se ctitle(IV)
reg no_vuz_76 educclass ethnreg distance, robust
outreg2 using "fintabl1sept3", se ctitle(I)
reg no_stud_40 educclass ethnreg distance, robust
outreg2 using "fintabl1sept3", se ctitle(II)
reg no_ssuz_76 educclass ethnreg distance, robust
outreg2 using "fintabl1sept3", se ctitle(III)
reg no_ssuz_40 educclass ethnreg distance, robust
outreg2 using "fintabl1sept3", se ctitle(IV)
```

Summary Statistics Chapter 5

***rayon**

```
sum educclass perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_
    cath rel_prot perc_rel_jew urbanization housing doctors latitude
    longitude
```

***oblast**

sum educ_2010 no_vuz_76 no_stud_40 no_ssuz_76 no_ssuz_40 mechane_new income_12 natres_share shareruss_2010 urbanization_2012 distance eduexp0312av educclass ethnreg distance liter_new

Chapter 6

Table 6.1

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
reg coop_num liter_new income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg coop_emp liter_new income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
reg coop_num Merchants income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg coop_emp Merchants income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
gen merch_mesh=mechane_new+Merchants
reg coop_num merch_mesh income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg coop_emp merch_mesh income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
reg coop_num Nobility income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg coop_emp Nobility income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
reg coop_num Clergy income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg coop_emp Clergy income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
reg coop_num educclass income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg coop_emp educclass income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
```

Table 6.2

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
* 1) merchants instead of meshchane
reg business Merchants income_12 natres_share shareruss_2010 urbanization_2012 distance, robust
```

```
outreg2 using "fintabl22", se ctitle(I)
reg sme_numb Merchants income_12 natres_share shareruss_2010 urban-
    ization_2012 distance, robust
outreg2 using "fintabl22", se ctitle(II)
reg empl Merchants income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl22", se ctitle(III)
reg turnover Merchants income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl22", se ctitle(IV)
reg pse Merchants income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl22", se ctitle(V)
* 2) merchants+meshchane
reg business merch_mesh income_12 natres_share shareruss_2010 urban-
    ization_2012 distance, robust
outreg2 using "fintabl23", se ctitle(I)
reg sme_numb merch_mesh income_12 natres_share shareruss_2010
    urbanization_2012 distance, robust
outreg2 using "fintabl23", se ctitle(II)
reg empl merch_mesh income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl23", se ctitle(III)
reg turnover merch_mesh income_12 natres_share shareruss_2010 urban-
    ization_2012 distance, robust
outreg2 using "fintabl23", se ctitle(IV)
reg pse merch_mesh income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl23", se ctitle(V)
* 3)nobles
reg business Nobility income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl24", se ctitle(I)
reg sme_numb Nobility income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl24", se ctitle(II)
reg empl Nobility income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl24", se ctitle(III)
reg turnover Nobility income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl24", se ctitle(IV)
reg pse Nobility income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
```

```
outreg2 using "fintabl24", se ctitle(V)
* 4) clergy
reg business Clergy income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl25", se ctitle(I)
reg sme_numb Clergy income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl25", se ctitle(II)
reg empl Clergy income_12 natres_share shareruss_2010 urbanization_2012
    distance, robust
outreg2 using "fintabl25", se ctitle(III)
reg turnover Clergy income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl25", se ctitle(IV)
reg pse Clergy income_12 natres_share shareruss_2010 urbanization_2012
    distance, robust
outreg2 using "fintabl25", se ctitle(V)
* 5) educated estates combined
reg business educclass income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl26", se ctitle(I)
reg sme_numb educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance, robust
outreg2 using "fintabl26", se ctitle(II)
reg empl educclass income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl26", se ctitle(III)
reg turnover educclass income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl26", se ctitle(IV)
reg pse educclass income_12 natres_share shareruss_2010 urbaniza-
    tion_2012 distance, robust
outreg2 using "fintabl26", se ctitle(V)
```

Summary Statistics Chapter 6

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
sum coop_num coop_emp Merchants income_90 urban_90 distance
    Nobility mechane_new Clergy educclass business income_12 natres_share
    shareruss_2010 urbanization_2012 sme_numb empl turnover pse
```

Supplementary Analysis for Chapter 6: Convictions for Speculation

```
use oblast_complete
```

```
gen educclass=mechane_new+Clergy+Nobility+Merchants
gen merch_mesh=mechane_new+Merchants
reg spekulation liter_new income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(I)
reg spekulation mechane_new income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(II)
reg spekulation Merchants income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(III)
reg spekulation merch_mesh income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(IV)
reg spekulation Nobility income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(V)
reg spekulation Clergy income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(VI)
reg spekulation educclass income_90 urban_90 distance, robust
outreg2 using "table1ch6", se ctitle(VII)
```

Chapter 7

Table 7.2

```
use Survey_updated
logit qq13_3 qq11_4, robust
outreg2 using "table2_ch7", se bdec(3) ctitle(I)
logit qq13_3 qq11_4 qq11_1 qq11_2 qq11_3 qq11_6, robust
outreg2 using "table2_ch7", se bdec(3) ctitle(I)
logit qq13_4 qq11_4, robust
outreg2 using "table2_ch7", se bdec(3) ctitle(I)
logit qq13_4 qq11_4 qq11_1 qq11_2 qq11_3 qq11_6, robust
outreg2 using "table2_ch7", se bdec(3) ctitle(I)
logit qq13_6 qq11_4, robust
outreg2 using "table2_ch7", se bdec(3) ctitle(I)
logit qq13_6 qq11_4 qq11_1 qq11_2 qq11_3 qq11_6, robust
outreg2 using "table2_ch7", se bdec(3) ctitle(I)
```

Summary Statistics Chapter 7

```
use Survey_updated
rename qq11_6 foreigners
rename qq13_3 civil_servants
rename qq13_4 intellectual_occupations
rename qq13_6 high_ranked_officials
rename qq11_4 meshchane
rename qq11_1 nobility
rename qq11_2 merchants
```

```
rename qq11_3 clergy
sum civil_servants intellectual_occupations high_ranked_officials mesh-
    chane nobility merchants clergy foreigners
```

Chapter 8

Table 8.1

```
use rayon
ttest literates, by(lager)
ttest perc_est_dvoryane, by(lager)
ttest perc_est_dukhovenstvo, by(lager)
ttest perc_estate_kuptsy, by(lager)
ttest perc_estmeshchane, by(lager)
ttest perc_estkrestyane, by(lager)
ttest perc_foreignnationals, by(lager)
```

Table 8.2

```
use rayon
ttest literates, by(zato)
ttest perc_est_dvoryane, by(zato)
ttest perc_est_dukhovenstvo, by(zato)
ttest perc_estate_kuptsy, by(zato)
ttest perc_estmeshchane, by(zato)
ttest perc_estkrestyane, by(zato)
ttest perc_foreignnationals, by(zato)
```

Summary Statistics Chapter 8

```
use rayon
sum literates perc_est_dvoryane perc_est_dukhovenstvo perc_estate_kuptsy
    perc_estmeshchane perc_estkrestyane perc_estkrestyane lager zato
```

Chapter 9

Table 9.2

```
use rayon
pwcorr perc_est_dvoryane perc_est_dukhovenstvo perc_estate_kuptsy perc_
    estmeshchane, sig
```

Table 9.3

```
use rayon
```

```
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
    + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
    perc_est_other
reg democ_vanhanen_96 perc_estmeshchane dreg1-dreg79 if ddd!=0, robust
outreg2 using "table3", se ctitle(I)
reg efnumk_96 perc_estmeshchane dreg1-dreg79 if ddd!=0, robust
outreg2 using "table3", se ctitle(II)
reg democ_vanhanen_96 perc_estmeshchane industrial_emp dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "table3", se ctitle(III)
reg efnumk_96 perc_estmeshchane industrial_emp dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "table3", se ctitle(IV)
reg democ_vanhanen_96 perc_estmeshchane industrial_emp perc_rel_old-
    bel perc_rel_cath rel_prot perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "table3", se ctitle(V)
reg efnumk_96 perc_estmeshchane industrial_emp perc_rel_oldbel perc_
    rel_cath rel_prot perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "table3", se ctitle(VI)
reg democ_vanhanen_96 perc_estmeshchane industrial_emp perc_rel_old-
    bel perc_rel_cath rel_prot perc_rel_jew latitude longitude dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "table3", se ctitle(VII)
reg efnumk_96 perc_estmeshchane industrial_emp perc_rel_oldbel perc_
    rel_cath rel_prot perc_rel_jew latitude longitude dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "table3", se ctitle(VIII)
reg democ_vanhanen_96 perc_estmeshchane industrial_emp perc_rel_old-
    bel perc_rel_cath rel_prot perc_rel_jew latitude longitude urbanization
    housing doctors dreg1-dreg79 if ddd!=0, robust
outreg2 using "table3", se ctitle(IX)
reg efnumk_96 perc_estmeshchane industrial_emp perc_rel_oldbel perc_
    rel_cath rel_prot perc_rel_jew latitude longitude urbanization housing
    doctors dreg1-dreg79 if ddd!=0, robust
outreg2 using "table3", se ctitle(X)
```

Table 9.4

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
    + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
    perc_est_other
gen educclass = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_
    kuptsy + perc_estmeshchane
```

```
reg democ_vanhanen_96 educclass dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(I)
reg efnumk_96 educclass dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(II)
reg democ_vanhanen_96 educclass industrial_emp dreg1-dreg79 if ddd!=0,
   robust
outreg2 using "table4", se bdec(3) ctitle(III)
reg efnumk_96 educclass industrial_emp dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(IV)
reg democ_vanhanen_96 educclass industrial_emp perc_rel_oldbel perc_
   rel_cath rel_prot perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(V)
reg efnumk_96 educclass industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(VI)
reg democ_vanhanen_96 educclass industrial_emp perc_rel_oldbel perc_
   rel_cath rel_prot perc_rel_jew latitude longitude dreg1-dreg79 if ddd!=0,
   robust
outreg2 using "table4", se bdec(3) ctitle(VII)
reg efnumk_96 educclass industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew latitude longitude dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(VIII)
reg democ_vanhanen_96 educclass industrial_emp perc_rel_oldbel perc_
   rel_cath rel_prot perc_rel_jew latitude longitude urbanization housing
   doctors dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(IX)
reg efnumk_96 educclass industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew latitude longitude urbanization housing doctors
   dreg1-dreg79 if ddd!=0, robust
outreg2 using "table4", se bdec(3) ctitle(X)
```

Table 9.5

```
use oblast_complete
egen duma_avg = rmean(Duma1 Duma2 Duma3 Duma4)
pwcorr duma_avg mechane_new, sig
pwcorr Duma1 mechane_new, sig
pwcorr Duma2 mechane_new, sig
pwcorr Duma3 mechane_new, sig
pwcorr Duma4 mechane_new, sig
```

Table 9.6

```
use oblast_complete
egen duma_avg = rmean(Duma1 Duma2 Duma3 Duma4)
```

```
gen educclass=mechane_new+Clergy+Nobility+Merchants
pwcorr duma_avg educclass, sig
pwcorr Duma1 educclass, sig
pwcorr Duma2 educclass, sig
pwcorr Duma3 educclass, sig
pwcorr Duma4 educclass, sig
pwcorr duma_avg Nobility, sig
pwcorr Duma1 Nobility, sig
pwcorr Duma2 Nobility, sig
pwcorr Duma3 Nobility, sig
pwcorr Duma4 Nobility, sig
pwcorr duma_avg Clergy, sig
pwcorr Duma1 Clergy, sig
pwcorr Duma2 Clergy, sig
pwcorr Duma3 Clergy, sig
pwcorr Duma4 Clergy, sig
pwcorr duma_avg Merchants, sig
pwcorr Duma1 Merchants, sig
pwcorr Duma2 Merchants, sig
pwcorr Duma3 Merchants, sig
pwcorr Duma4 Merchants, sig
```

Figures 9.8–9.12

```
use oblast_complete
label var freepress "Press Freedom Index, 1999"
label var mechane_new "Share of meshchane"
graph twoway (lfit freepress mechane_new) (scatter freepress mechane_new)
gen educclass=mechane_new+Clergy+Nobility+Merchants
label var educclass "Share of educated estates"
graph twoway (lfit freepress educclass) (scatter freepress educclass)
label var docshare65 "Share of Doctors with University Degree)
graph twoway (lfit freepress docshare65) (scatter freepress docshare65)
label var engshare65 "Share of Engineers with University Degree)
graph twoway (lfit freepress engshare65) (scatter freepress engshare65)
label var educ65 "Share of Workforce with University Degree)
graph twoway (lfit freepress educ65) (scatter freepress educ65)
```

Supplementary Analysis for the Appendix: Press Freedom

```
use oblast_complete
pwcorr freepress mechane_new, sig
reg freepress mechane_new income_96 urbanization_1996 shareruss educ
    distance, robust
```

```
reg freepress mechane_new income_96 urbanization_1996 shareruss educ
   distance if mechane_new<15, robust
```

Supplementary Analysis for the Appendix: Industrial Employment and Democratic Quality

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
   + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
   perc_est_other
reg democ_vanhanen_96 intel_emp industrial_emp trade_emp dreg1-dreg79
   if ddd!=0, robust
outreg2 using "footnote_57", se ctitle(I)
reg efnumk_96 intel_emp industrial_emp trade_emp dreg1-dreg79 if ddd!=0,
   robust
outreg2 using "footnote_57", se ctitle(II)
reg democ_vanhanen_96 intel_emp industrial_emp trade_emp urbanization
   dreg1-dreg79 if ddd!=0, robust
outreg2 using "footnote_57", se ctitle(III)
reg efnumk_96 intel_emp industrial_emp trade_emp urbanization dreg1-
   dreg79 if ddd!=0, robust
outreg2 using "footnote_57", se ctitle(IV)
```

Summary Statistics Chapter 9

```
* rayon
use rayon
gen educclass = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_
   kuptsy + perc_estmeshchane
sum perc_est_dvoryane perc_est_dukhovenstvo perc_estate_kuptsy perc_
   estmeshchane intel_emp industrial_emp trade_emp urbanization
   democ_vanhanen_96 efnumk_96 perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew latitude longitude urbanization housing doctors educclass
   germans_dummy germans_population income
* oblast
use oblast_complete
egen duma_avg = rmean(Duma1 Duma2 Duma3 Duma4)
gen educclass=mechane_new+Clergy+Nobility+Merchants
sum freepress mechane_new educclass docshare65 engshare65 educ65
   Duma1 Duma2 Duma3 Duma4 duma_avg mechane_new Clergy Nobility
   Merchants eduexp0312av income_12 natres_share shareruss_2010
   urbanization_2012 distance age_city age_region
```

Analysis in Online Appendix

Table OA1

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
    + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
    perc_est_other
reg democ_vanhanen_96 perc_estmeshchane perc_est_dvoryane perc_est_
    dukhovenstvo perc_estate_kuptsy perc_foreignnationals perc_estkres-
    tyane dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea1", se bdec(3) ctitle(I)
reg efnumk_96 perc_estmeshchane perc_est_dvoryane perc_est_dukho-
    venstvo perc_estate_kuptsy perc_foreignnationals perc_estkrestyane
    dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea1", se bdec(3) ctitle(II)
reg democ_vanhanen_96 perc_estmeshchane perc_est_dvoryane perc_est_
    dukhovenstvo perc_estate_kuptsy perc_foreignnationals perc_estkres-
    tyane dreg1-dreg79 urbanization if ddd!=0, robust
outreg2 using "tablea1", se bdec(3) ctitle(III)
reg efnumk_96 perc_estmeshchane perc_est_dvoryane perc_est_dukho-
    venstvo perc_estate_kuptsy perc_foreignnationals perc_estkrestyane
    dreg1-dreg79 urbanization if ddd!=0, robust
outreg2 using "tablea1", se bdec(3) ctitle(IV)
```

Table OA2.1

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
    + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
    perc_est_other
reg literates perc_estmeshchane if ddd!=0, robust
outreg2 using "tablea3", se bdec(3) ctitle(I)
reg literates perc_estmeshchane perc_est_dvoryane perc_est_dukhovenstvo
    perc_estate_kuptsy perc_foreignnationals if ddd!=0, robust
outreg2 using "tablea3", se bdec(3) ctitle(II)
reg literates perc_estmeshchane perc_est_dvoryane perc_est_dukhovenstvo
    perc_estate_kuptsy perc_foreignnationals dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea3", se bdec(3) ctitle(III)
reg literates perc_estmeshchane perc_est_dvoryane perc_est_dukhovenstvo
    perc_estate_kuptsy perc_foreignnationals germans_dummy if ddd!=0,
    robust
outreg2 using "tablea3", se bdec(3) ctitle(IV)
```

```
reg literates perc_estmeshchane perc_est_dvoryane perc_est_dukhovenstvo
   perc_estate_kuptsy perc_foreignnationals germans_population if ddd!=0,
   robust
outreg2 using "tablea3", se bdec(3) ctitle(V)
reg literates perc_estmeshchane perc_est_dvoryane perc_est_dukhovenstvo
   perc_estate_kuptsy perc_foreignnationals longitude latitude if ddd!=0,
   robust
outreg2 using "tablea3", se bdec(3) ctitle(VI)
* last two specifications
use imperial_full
gen perc_foreign=(FOREIGNNATIONALS*100)/
   POPULATION_TOTAL
gen perc_nobles=(EST_DVORYANE*100)/POPULATION_TOTAL
gen perc_meshchane=(ESTMESHCHANE*100)/POPULATION_TOTAL
gen perc_clergy=(EST_DUKHOVENSTVO*100)/POPULATION_TOTAL
gen perc_merchants=(ESTATE_KUPTSY*100)/POPULATION_TOTAL
gen perc_peasants=(ESTKRESTYANE*100)/POPULATION_TOTAL
reg LITERATES perc_meshchane
outreg2 using "tablea3_1", se bdec(3) ctitle(1)
reg LITERATES perc_meshchane perc_nobles perc_clergy perc_merchants
   perc_foreign
outreg2 using "tablea3_1", se bdec(3) ctitle(2)
```

Table OA2.2

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
   + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
   perc_est_other
reg educ perc_estmeshchane dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(I)
reg educ perc_estmeshchane industrial_emp dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(II)
reg educ perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(III)
reg educ perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew urbanization dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(IV)
reg educ perc_estmeshchane industrial_emp perc_rel_oldbel perc_rel_cath
   rel_prot perc_rel_jew urbanization housing doctors latitude longitude
   dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(V)
reg educ perc_estmeshchane income dreg1-dreg79 if ddd!=0, robust
```

```
outreg2 using "tablea4", se bdec(3) ctitle(VI)
reg educ perc_estmeshchane if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(VII)
reg educ perc_estmeshchane dreg1-dreg79 germans_dummy if ddd!=0, robust
outreg2 using "tablea4", se bdec(3) ctitle(VIII)
reg educ perc_estmeshchane dreg1-dreg79 germans_population if ddd!=0,
   robust
outreg2 using "tablea4", se bdec(3) ctitle(IX)
```

Table OA2.3

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
   + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
   perc_est_other
gen educclass = perc_est_dvoryane + perc_est_dukhovenstvo + perc_esta-
   te_kuptsy + perc_estmeshchane
reg educ educclass dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(I)
reg educ educclass industrial_emp dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(II)
reg educ educclass industrial_emp perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(III)
reg educ educclass industrial_emp perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew dreg1-dreg79 urbanization if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(IV)
reg educ educclass industrial_emp perc_rel_oldbel perc_rel_cath rel_prot
   perc_rel_jew dreg1-dreg79 urbanization housing doctors latitude longi-
   tude if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(V)
reg educ educclass income dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(VI)
reg educ educclass if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(VII)
reg educ educclass germans_dummy dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(VIII)
reg educ educclass germans_population dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea5", se bdec(3) ctitle(IX)
```

Table OA2.4

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
   + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
   perc_est_other
```

```
reg democ_vanhanen_96 perc_estmeshchane germans_dummy urbanization
    dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(I)
reg efnumk_96 perc_estmeshchane germans_dummy urbanization dreg1-
    dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(II)
reg democ_vanhanen_96 literates germans_dummy urbanization dreg1-
    dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(III)
reg efnumk_96 literates germans_dummy urbanization dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "tablea6", se bdec(3) ctitle(IV)
reg democ_vanhanen_96 perc_estmeshchane germans_population urban-
    ization dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(V)
reg efnumk_96 perc_estmeshchane germans_population urbanization
    dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(VI)
reg democ_vanhanen_96 literates germans_population urbanization dreg1-
    dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(VII)
reg efnumk_96 literates germans_population urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(VIII)
reg democ_vanhanen_96 germans_dummy urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(IX)
reg efnumk_96 germans_dummy urbanization dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(X)
reg democ_vanhanen_96 germans_population urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea6", se bdec(3) ctitle(XI)
reg efnumk_96 germans_population urbanization dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "tablea6", se bdec(3) ctitle(XII)
```

Table OA2.5

```
use rayon
gen ddd = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_kuptsy
    + perc_estmeshchane + perc_estkrestyane + perc_foreignnationals +
    perc_est_other
gen educclass = perc_est_dvoryane + perc_est_dukhovenstvo + perc_estate_
    kuptsy + perc_estmeshchane
```

```
reg democ_vanhanen_96 educclass germans_dummy urbanization dreg1-
    dreg79 if ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(I)
reg efnumk_96 educclass germans_dummy urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(II)
reg democ_vanhanen_96 literates germans_dummy urbanization dreg1-
    dreg79 if ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(III)
reg efnumk_96 literates germans_dummy urbanization dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "tablea10", se bdec(3) ctitle(IV)
reg democ_vanhanen_96 educclass germans_population urbanization
    dreg1-dreg79 if ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(V)
reg efnumk_96 educclass germans_population urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(VI)
reg democ_vanhanen_96 literates germans_population urbanization dreg1-
    dreg79 if ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(VII)
reg efnumk_96 literates germans_population urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(VIII)
reg democ_vanhanen_96 germans_dummy urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(IX)
reg efnumk_96 germans_dummy urbanization dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "tablea10", se bdec(3) ctitle(X)
reg democ_vanhanen_96 germans_population urbanization dreg1-dreg79 if
    ddd!=0, robust
outreg2 using "tablea10", se bdec(3) ctitle(XI)
reg efnumk_96 germans_population urbanization dreg1-dreg79 if ddd!=0,
    robust
outreg2 using "tablea10", se bdec(3) ctitle(XII)
```

Table OA2.6

```
*** Propensity score matching
use rayon
teffects psmatch (democ_vanhanen_96) (germans_dummy latitude longitude
    population_total)
```

```
teffects psmatch (democ_vanhanen_96) (germans_dummy latitude longitude
    population_total) if germans_population < 40
teffects psmatch (efnumk_96) (germans_dummy latitude longitude
    population_total)
```

Table OA3.1

```
use oblast_complete
gen educclass=mechane_new+Clergy+Nobility+Merchants
replace eduexp0312av = eduexp0312av/1000
reg educ_2010 educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance, robust
outreg2 using "tablea9", se bdec(3) ctitle(I)
reg educ_2010 educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance eduexp0312av, robust
outreg2 using "tablea9", se bdec(3) ctitle(II)
reg educ_2010 educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance age_city, robust
outreg2 using "tablea9", se bdec(3) ctitle(III)
reg educ_2010 educclass income_12 natres_share shareruss_2010 urban-
    ization_2012 distance age_region, robust
outreg2 using "tablea9", se bdec(3) ctitle(IV)
reg educ_2010 mechane_new income_12 natres_share shareruss_2010
    urbanization_2012 distance, robust
outreg2 using "tablea9", se bdec(3) ctitle(V)
reg educ_2010 mechane_new income_12 natres_share shareruss_2010
    urbanization_2012 distance eduexp0312av, robust
outreg2 using "tablea9", se bdec(3) ctitle(VI)
reg educ_2010 mechane_new income_12 natres_share shareruss_2010
    urbanization_2012 distance age_city, robust
outreg2 using "tablea9", se bdec(3) ctitle(VII)
reg educ_2010 mechane_new income_12 natres_share shareruss_2010
    urbanization_2012 distance age_region, robust
outreg2 using "tablea9", se bdec(3) ctitle(VIII)
replace eduexp0312av=eduexp0312av*1000
```

Table OA3.2

```
use oblast_complete
pwcorr age_city mechane_new, sig
pwcorr age_region mechane_new, sig
pwcorr age_city educclass, sig
pwcorr age_region educclass, sig
pwcorr age_city Nobility, sig
pwcorr age_region Nobility, sig
```

```
pwcorr age_city Clergy, sig
pwcorr age_region Clergy, sig
pwcorr age_city Merchants, sig
pwcorr age_region Merchants, sig
```

Plots OA4

```
use imperial_full
gen educclass=ESTMESHCHANE+ESTATE_KUPTSY+
   EST_DVORYANE+EST_DUKHOVENSTVO
label var blue "used to be Samara gubern., are now Samara region"
label var yellow "used to Samara gubern., are now other regions"
sum LITERATES
sum LITERATES if blue==1
sum LITERATES if yellow==1
sum LITERATES if blue_thirdtype==1
gen perc_nobles=(EST_DVORYANE*100)/POPULATION_TOTAL
sum perc_nobles
sum perc_nobles if blue==1
sum perc_nobles if yellow==1
sum perc_nobles if blue_thirdtype==1
gen perc_educclass=(educclass*100)/POPULATION_TOTAL
sum perc_educclass
sum perc_educclass if blue==1
sum perc_educclass if yellow==1
sum perc_educclass if blue_thirdtype==1
gen perc_meshchane=(ESTMESHCHANE*100)/POPULATION_TOTAL
sum perc_meshchane
sum perc_meshchane if blue==1
sum perc_meshchane if yellow==1
sum perc_meshchane if blue_thirdtype==1
gen perc_clergy=(EST_DUKHOVENSTVO*100)/POPULATION_TOTAL
sum perc_clergy
sum perc_clergy if blue==1
sum perc_clergy if yellow==1
sum perc_clergy if blue_thirdtype==1
gen perc_merchants=(ESTATE_KUPTSY*100)/POPULATION_TOTAL
sum perc_merchants
sum perc_merchants if blue==1
sum perc_merchants if yellow==1
sum perc_merchants if blue_thirdtype==1
gen perc_peasants=(ESTKRESTYANE*100)/POPULATION_TOTAL
sum perc_peasants
sum perc_peasants if blue==1
```

```
sum perc_peasants if yellow==1
sum perc_peasants if blue_thirdtype==1
*
gen perc_oldbel=(REL_OLDBEL*100)/POPULATION_TOTAL
sum perc_oldbel
sum perc_oldbel if blue==1
sum perc_oldbel if yellow==1
sum perc_oldbel if blue_thirdtype==1
gen perc_jew=(REL_JEW*100)/POPULATION_TOTAL
sum perc_jew
sum perc_jew if blue==1
sum perc_jew if yellow==1
sum perc_jew if blue_thirdtype==1
gen perc_prot=(REL_PROT*100)/POPULATION_TOTAL
sum perc_prot
sum perc_prot if blue==1
sum perc_prot if yellow==1
sum perc_prot if blue_thirdtype==1
gen perc_cath=(REL_CATH*100)/POPULATION_TOTAL
sum perc_cath
sum perc_cath if blue==1
sum perc_cath if yellow==1
sum perc_cath if blue_thirdtype==1
gen perc_musl=(REL_MUSL*100)/POPULATION_TOTAL
sum perc_musl
sum perc_musl if blue==1
sum perc_musl if yellow==1
sum perc_musl if blue_thirdtype==1
```