Colonization, Social Structure and Development:

the long-term effect of Russian Settlement in the North Caucasus, 1890s-2000s

> Timur Natkhov Higher School of Economics Moscow

Warwick Summer School in Economic Growth July 9th 2014

Motivation

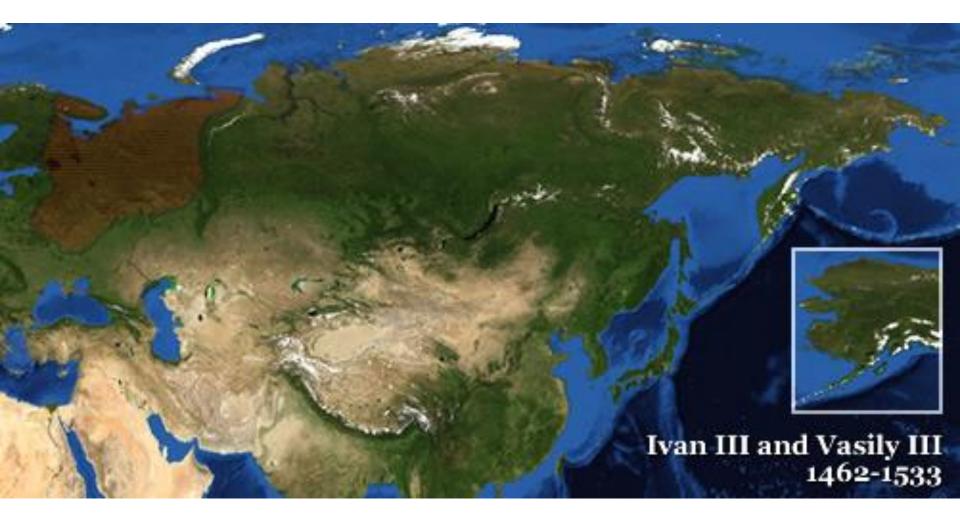
- What are the effects of colonial rule on long-run economic development?
- Some studies find positive effects as a result of settlers' human capital, missionary activity and school building policies (Glaeser et al, 2004; Easterly, Levine, 2012; Woodberry, 2012; Wantchekon, 2013)
- Others show persistent negative effects as a result of extractive institutions (AJR, 2001; Nunn, 2008; Dell, 2010)

Motivation

- Most of these studies exploit one big event European colonization of the Americas, Asia and Africa – as a natural experiment of history (Nunn, 2009; Diamond, Robinson, 2010)
- In this framework the case of the Russian Empire remains relatively unexplored
- However, Russian history offers a perfect laboratory for testing different development theories using detailed data



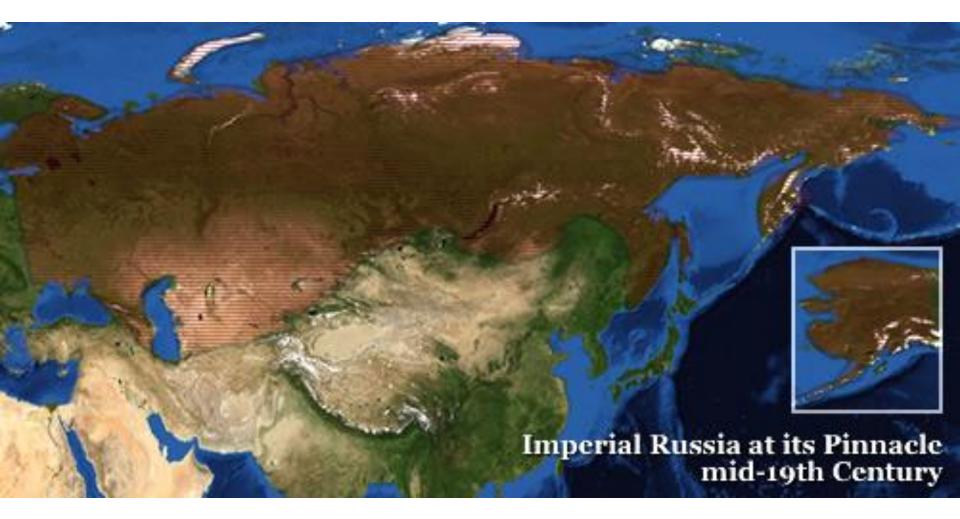












The basic fact about Russian history

"The history of Russia is the history of a country being colonized.

Migration and colonization of the country have been fundamental facts of our history..."

A Course of Russian History (1911)

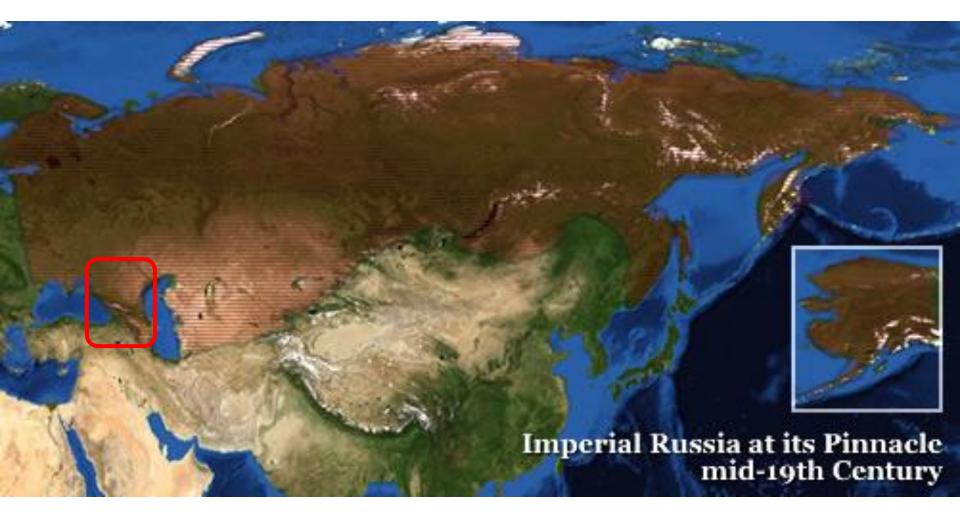
Vasily Klyuchevsky

1841-1911



"At the guarding border of the Moscow state" (Ivanov, 1907)







Presents a historical case that provides an opportunity

- for the empirical investigation of the effect of settlement on *indigenous* population and the subsequent development
- to cope with unobserved heterogeneity better than a cross-country study
 - small size of the region
 - common history



ПЕРВАЯ ВСЕОБЩАЯ ПЕРЕПИСЬ НАСЕЛЕНІЯ Россійской имперіи, 1897 г.

ИЗДАНІЕ ЦЕНТРАЛЬНАГО СТАТИСТИЧЕСКАГО КОМИТЕТА МИМИСТЕРСТВА ВНУГРЕННИХЪ ДФЛЪ. подъ редавцівно н. а. тройницеаго.

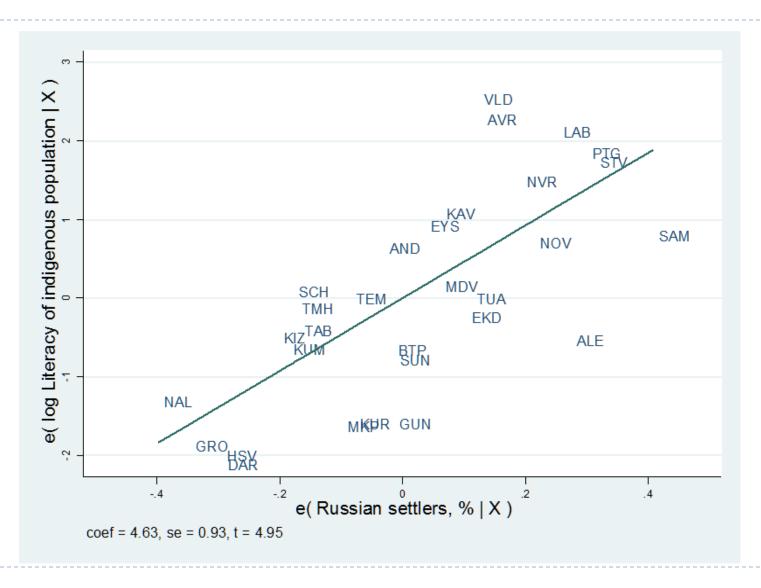
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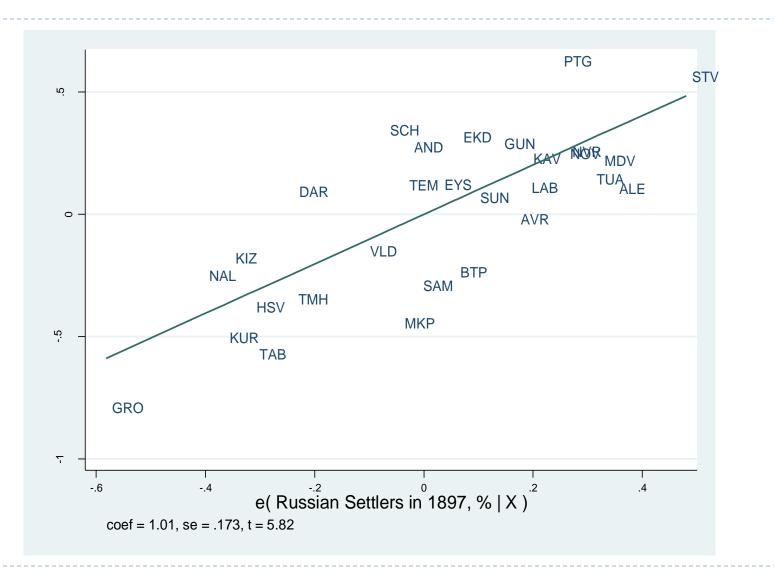
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Settlement and literacy of indigenous population in 1897

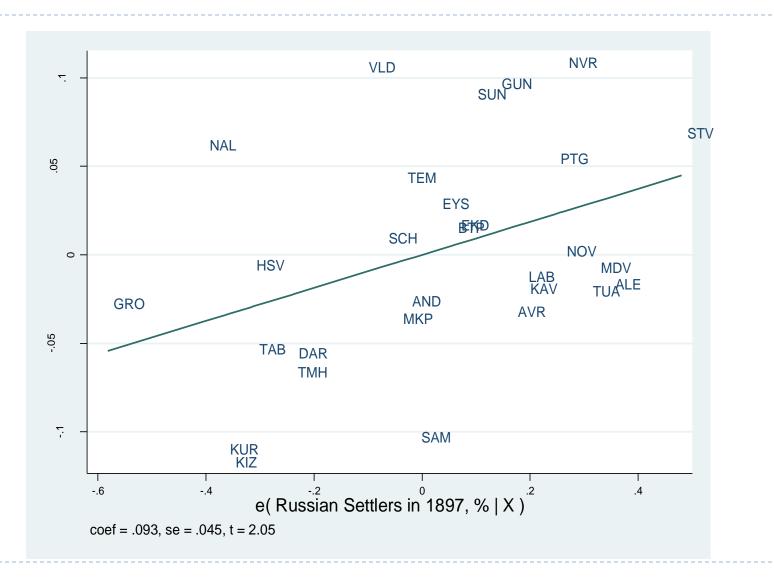


Long-term effects: average income in 2010

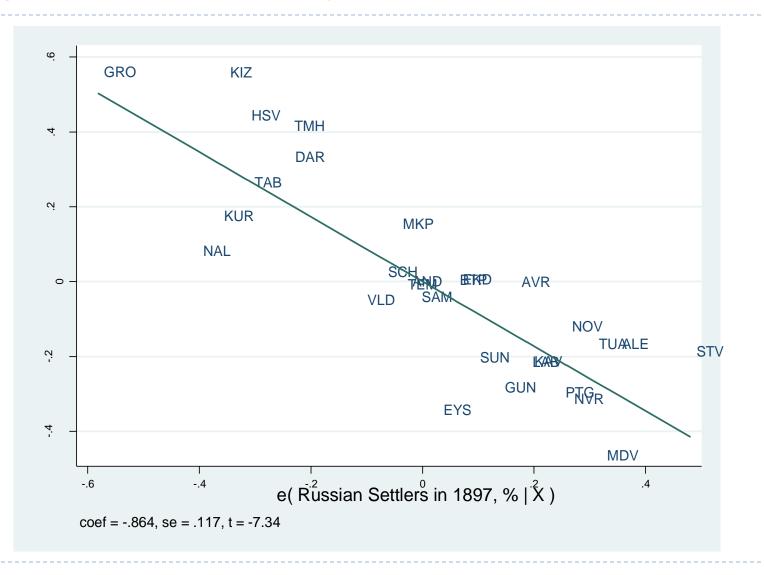
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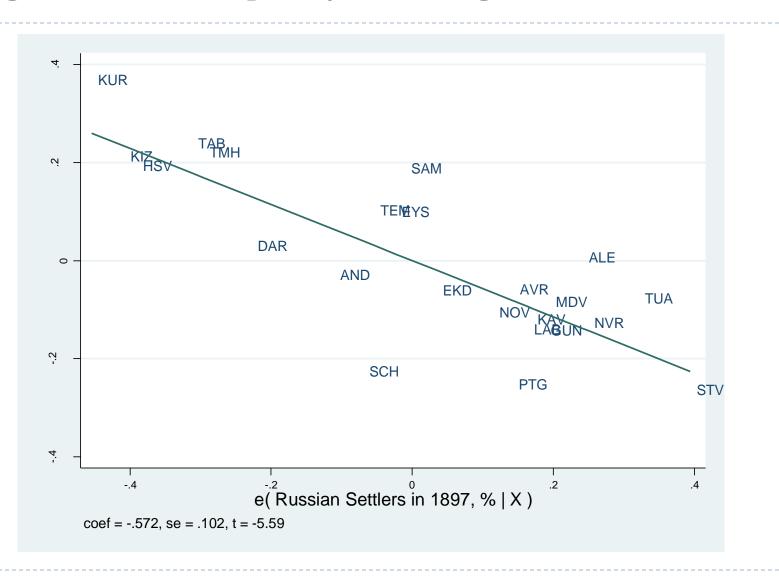
Long-term effects: education of natives in 2002



Long-term effects: fertility in 2011

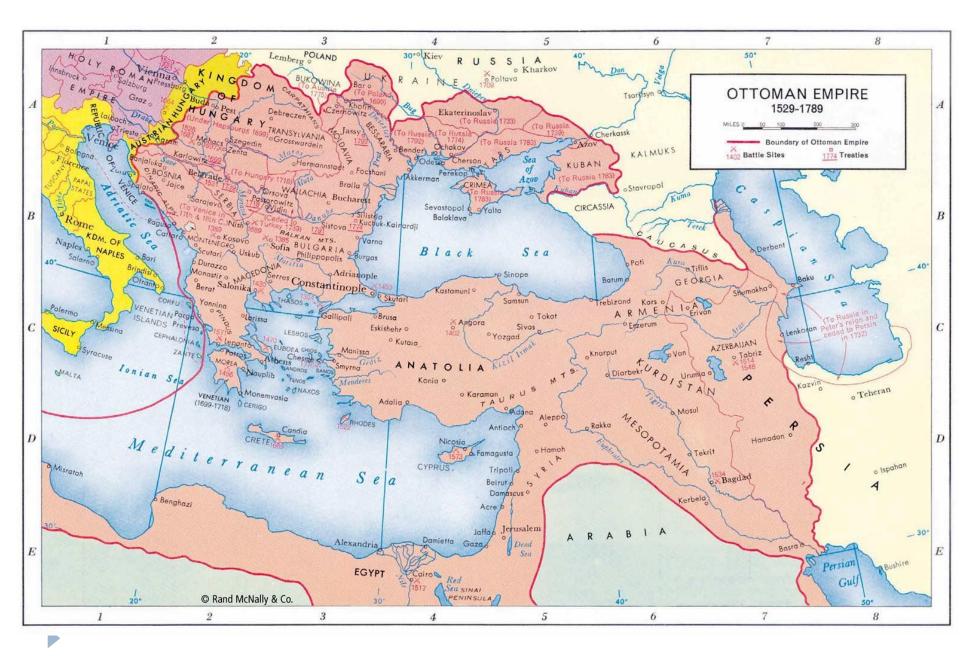


Long-term effects: quality of local governance in 2007



Historians on determinants of colonization

"Unlike the European colonial projects in the Americas and Asia, which were predominantly driven by commercial interests, the **Russian expansion** in the Caucasus throughout the period **was motivated primarily by the government's geopolitical concerns**" (Khodarkovsky, 1999)

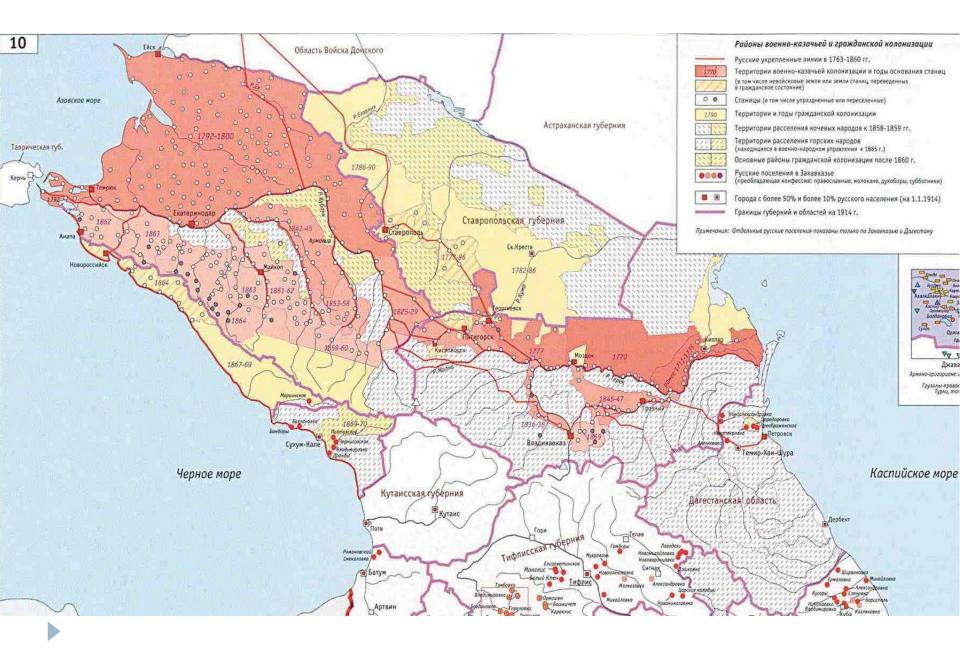


List of Russian-Turkish wars

	War	Results
1	Russo-Turkish War (1568–70)	Ottoman military defeat Ottoman commercial victory
2	Russo-Turkish War (1676–81)	Treaty of Bakhchisaray
3	Russo-Turkish War (1686–1700)	Russia gains possession of Azov
4	Russo-Turkish War (1710–11)	Ottoman victory
5	Austro-Russian–Turkish War (1735–39)	Treaty of Niš (1739)
6	Russo-Turkish War (1768–74)	Russian victory
7	Russo-Turkish War (1787–92)	Russian victory
8	Russo-Turkish War (1806–12)	Russian victory
9	Russo-Turkish War (1828–29)	Russian victory
10	Crimean War (1853–56)	Ottoman, British and French victory
11	Russo-Turkish War (1877–78)	Russian victory

Historians on determinants of colonization

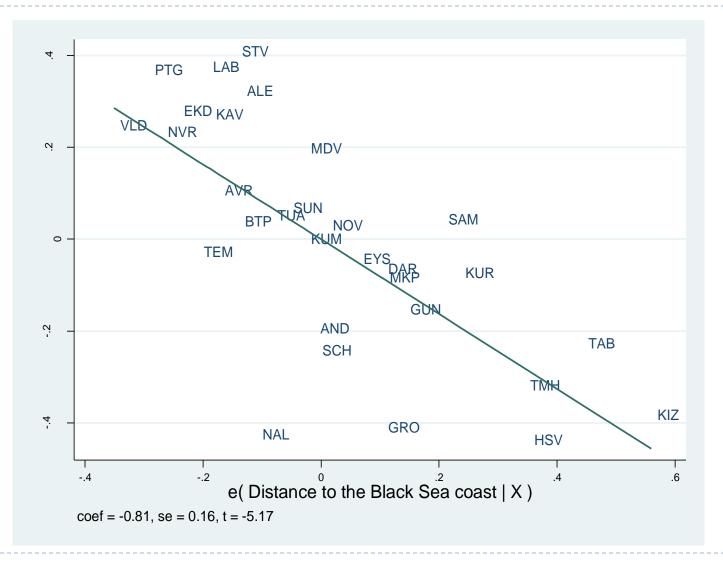
"As Russia extended her southwestern border with Turkey to the northern shores of the Black Sea, the **Caucasus took on strategic importance as the eastern extremity of that border**" (*Rhinelanders, 1975*)



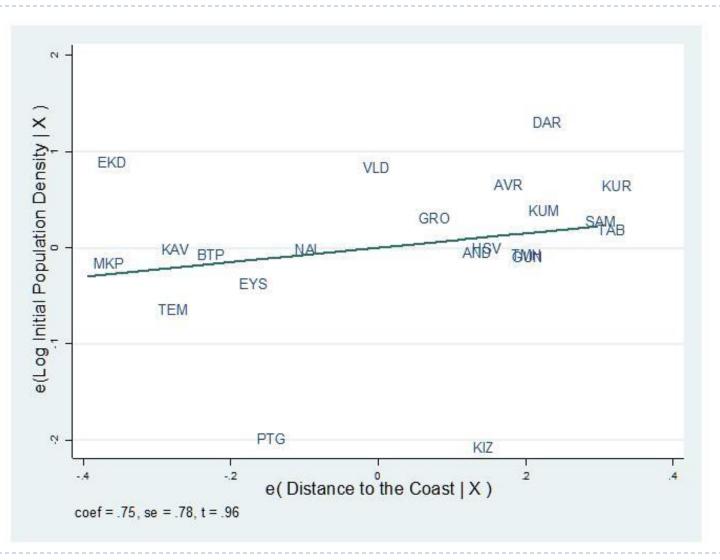
Determinants of Russian Settlement

	Share of Russian settlers in 1897				
	(1)	(2)	(3)		
T • • , • 1 1• ,	0.0217				
Log initial literacy	0.0217	0 1 1 1			
Log initial population density		-0.111			
Elevation	-0.0927	0.1240	-0.0766		
Temperature	-0.0332	0.0456*	-0.0354*		
District area	0.0252**	0.0190	0.0246**		
Distance to the Black Sea	-0.814***	-0.754***	-0.853***		
Constant	1.030***	0.911**	0.991***		
Observations	30	30	30		
R-squared	0.83	0.91	0.82		

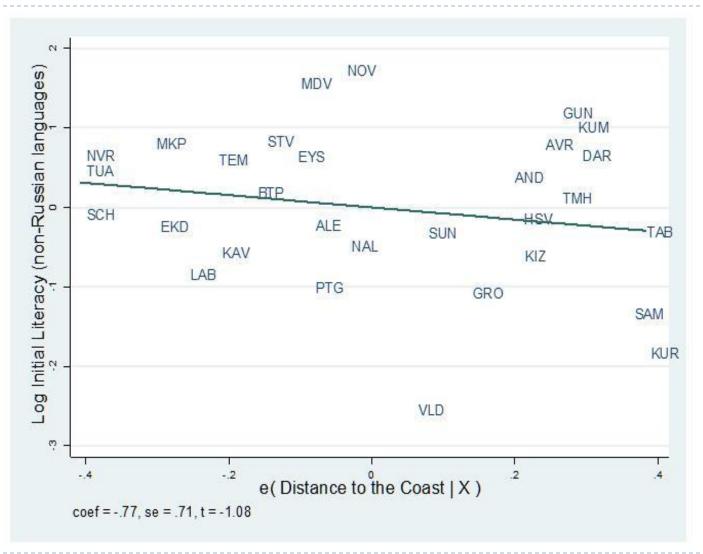
The primary determinant of Russian settlement

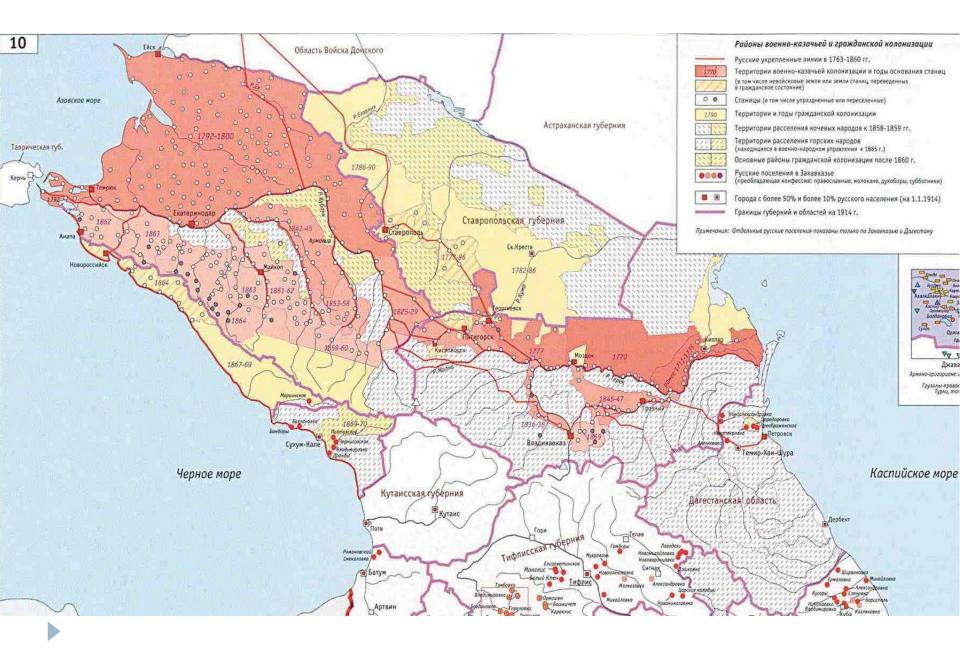


Evidence on exclusion restriction

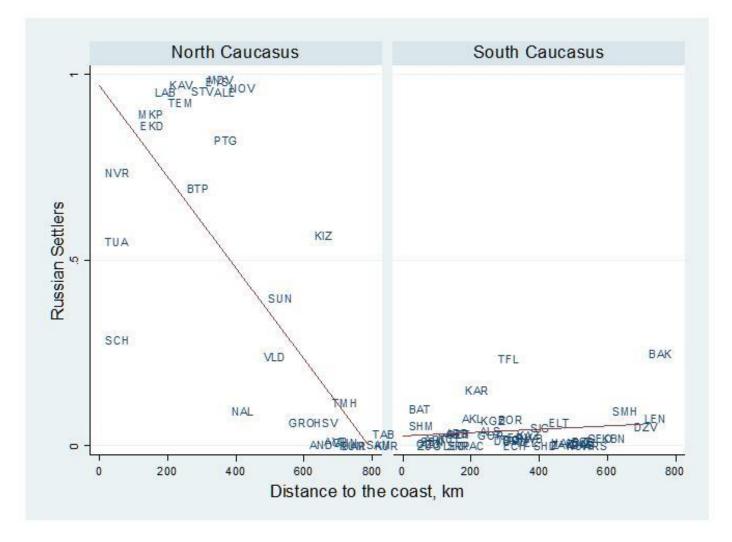


Evidence on exclusion restriction

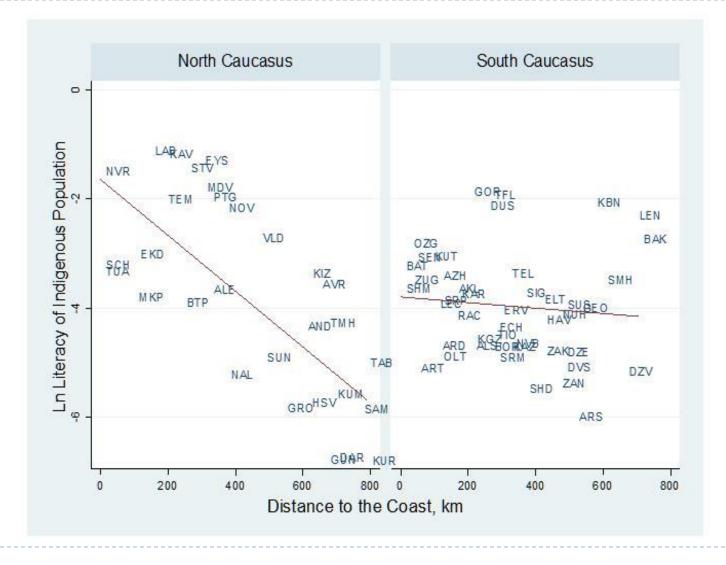




Placebo test for South Caucasus: Russian settlement



Placebo test for South Caucasus: literacy of natives



IV regressions

	Literacy rate among indigenous population				
	(1)	(2)	(3)		
Russian settlers, %	5.587***	5.644***	6.794***		
Settlers' literacy	6.080	2.905	4.258		
Population density		-0.0206	-0.0304		
District area		-0.132	-0.202*		
Elevation			-0.221		
Temperature			-0.194		
Distance to the Black Sea	-0.626***	-0.784***	-0.756***		
First stage F-stat	39.05	19.41	14.11		
Observations	30	30	30		
R-squared	0.74	0.81	0.83		

What are the potential mechanisms?

- State building
- School building
- Social structure

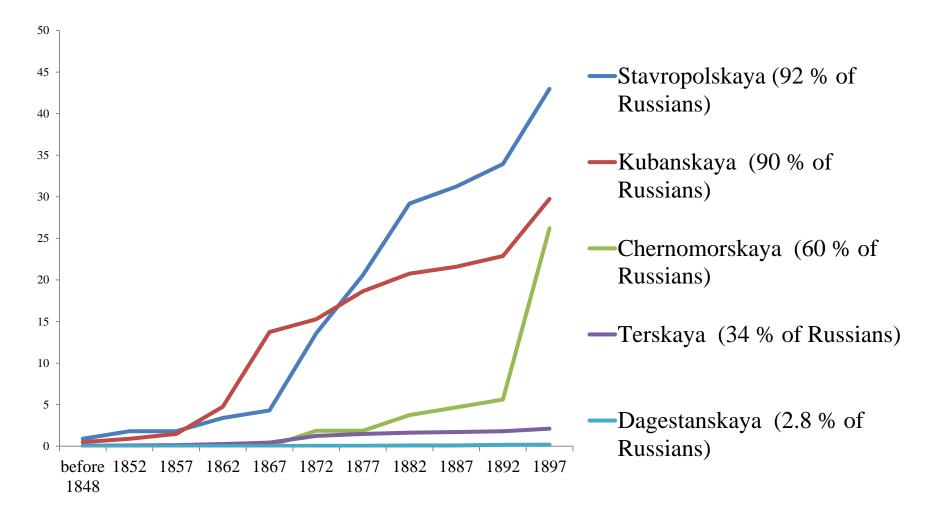
- The absence of centralized political authority the main problem Russian rulers faced in the North Caucasus.
- The colonization "was not so much a question of how to divide and rule as how to unite and absorb" (King, 2008).
- The creation of the Caucasian Vicegerency (namestnichestvo) in 1844 was a first attempt to integrate the region into the imperial administrative system (Rhinelander, 1981).

State building

	Number of Russian civil	Number of Russian
	administrators per	military per thousand of
	thousand of indigenous	indigenous population in
	population in 1897	1897
Russian settlers	0.462**	0.277**
Settlers' literacy rate	0.0931	0.0774
Population density	-0.00107	-6.35e-05
District area	-0.0221	-0.00703
Elevation	-6.10e-07	3.52e-05
Temperature	-0.0167	-0.000745
Constant	0.0656	-0.0443
Observations	30	30
R-squared	0.307	0.319

School building

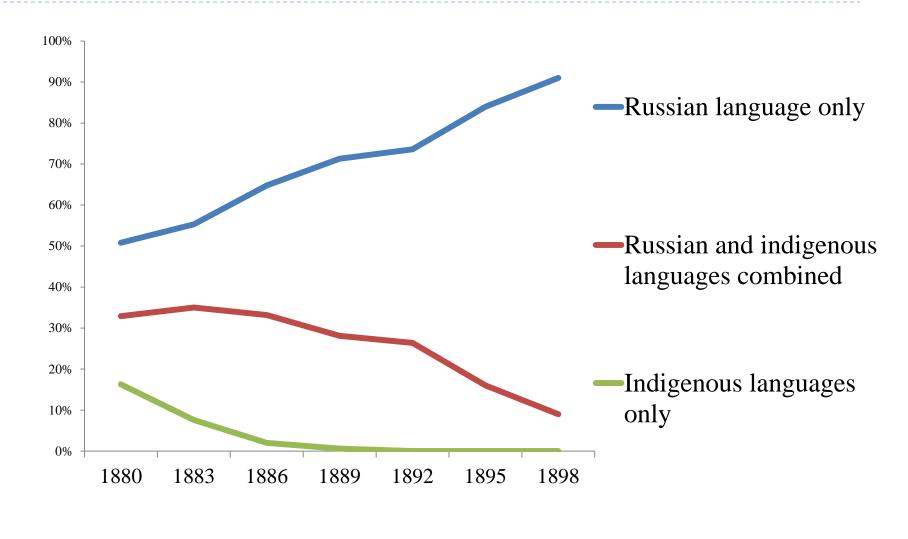
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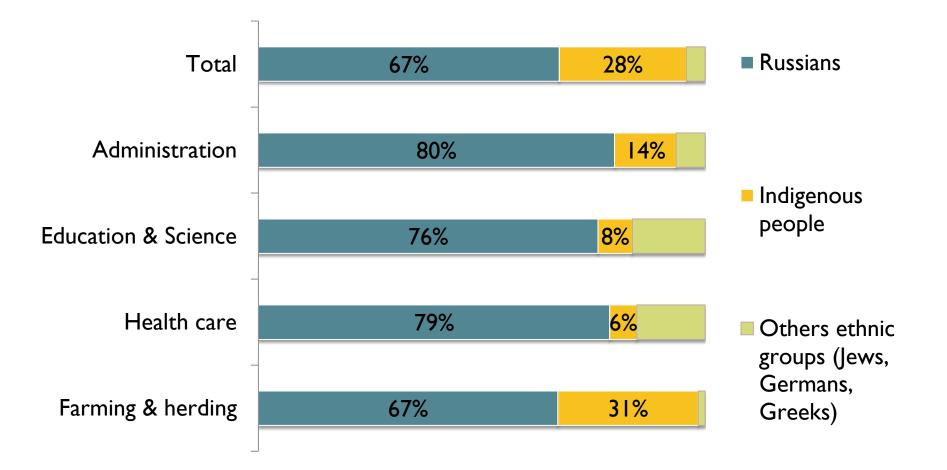
Who had benefited the most?

	Number of schools in 1897	Number of schools per 10 000 of population in 1897	Number of schools per 10 000 of indigenous population in 1897	
Russian settlers	43.66***	2.319***	274.9***	
Settlers' literacy rate	-3.011	-3.323**	115.2	
Population density	0.263**	-0.0637***	0.779	
District area	1.751***	-0.196***	-10.46	
Elevation	0.899*	0.0163	-0.847	
Temperature	0.270	0.227***	-19.61*	
Constant	-19.04**	3.717***	49.38	
Observations	30	30	30	
R-squared	0.932	0.800	0.507	

Building a nation through education



Occupations by ethnicity in 1897



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	Employment in education	Employment in health care	Employment in agriculture
Russian settlers, %	0.617***	0.343***	-12.56
Population density	0.00697	-0.000706	-0.567
District area	-0.181*	-0.139**	8.443
Elevation	0.0901	0.0112	-0.00211
Temperature	0.162	0.0877	-29.00**
Constant	3.540**	2.910***	763.4***
Observations	30	30	30
R-squared	0.407	0.460	0.330

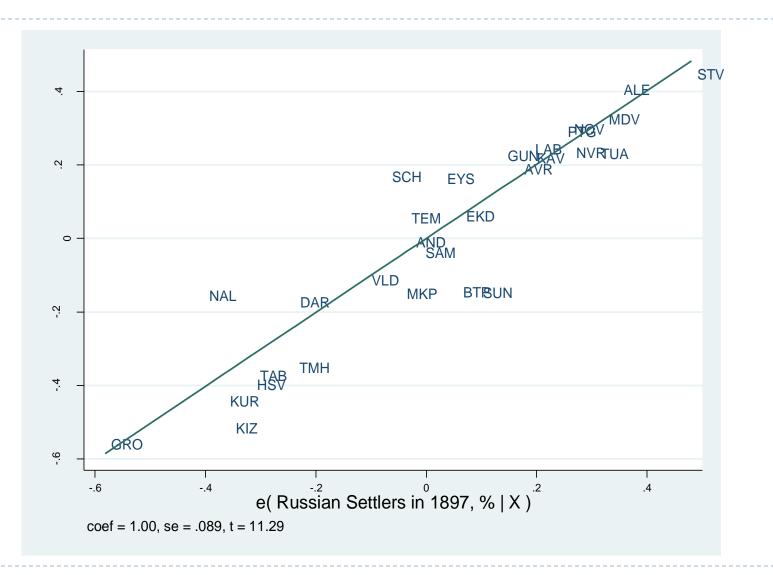
Conclusions

- Russian settlement in late 19th century resulted in human capital accumulation among the native population
 - 10% increase in settlers 🔿 4.5% increase in literacy
- This settlement effect had long-term consequences for local development today
 - income
 - education
 - quality of local governance
- State building, school building and social structure are the most likely channels of influence

Russian history in the colonial framework

- The expansion of the Russian state from a small Moscow principality into one of the largest empires in the world is comparable in speed and magnitude with the expansion of the British, Spanish and French Empires.
- However, unlike the European powers, Russia was a continental Empire (much more like the Habsburg and Ottoman Empires).
- Contiguous land borders with colonized people created different incentives for the metropolis and, as a result, a different set of institutions and policies in the colonies.

Long-term persistence: Russians in 1897 and 2002



Summary statistics

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	Mean	Std.dev.	Min	Max	Ν
Literacy in Russian among indigenous population, %	5.2	8.3	0.10	32.0	30
Literacy in Non-Russian languages among indigenous population, %	6.9	6.1	0.37	26.3	30
Russian settlers, %	47.1	41.2	0.06	98.7	30
Russian settlers' literacy, %	29.5	17.4	11.5	78.6	30
Population density in 1897, per sq. km	22.3	11.0	3.4	55.7	30
Population density in 1865, per sq. km	15.1	9.8	1.5	44.0	30