

Persistent anti-market culture: A legacy of the Holocaust and of the Pale of settlement

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Motivation

- Eastern Europe in XX century experienced one of the most dramatic changes of ethnic and religious composition of the population in the history of mankind
- The Holocaust, redrawing the map after the two world wars, and Stalin's deportations of entire ethnic groups – all contributed to these changes
- The biggest ethnic change:
 - before WW II, Jews accounted for 30% of Eastern European urban population and they are hardly present in the territory nowadays

Special social role of Jews

- Historical sources (Dubnow 1920; Slezkine 2004): Jews performed a particular social function
 - The middle class
 - white collar occupations
 - A driving force of capitalism and market development
 - provided services as market intermediaries and financiers
- Given the important differences in culture, traditional occupations, and social role of Jews compared to
 - non-Jewish groups that lived side-by-side with Jews
 - and migrants who replaced Jews after WWIIone should expect to see long-run social, political, and economic effects of a change in social structure of the population after the Holocaust

Acemoglu, Hassan, Robinson (2010)

- Show that cities and regions in Russia that were more affected by the Holocaust have grown slower and have a larger political support for the Communist party after transition
 - AHR interpretation: destruction of middle class

Possible problems with Dif-in-Dif

- AHR use dif-in-dif exploring differential trends in regions with different % of Jews before the war under and not under German occupation
- Causal identification is difficult due to endogeneity problems
 - Ethnic groups can choose location depending on characteristics of localities which may be correlated with development paths and with German occupation

Research question and idea

- We also aim at estimating long-term effects of the former presence of Jews and their disappearance in Holocaust
- Our idea is to use an arguably exogenous source of variation in Jewish presence in Eastern Europe: **The Pale of Settlement**
 - area in the Russian Empire outside which Jews were not allowed to live
- Holocaust had removed the whole social strata (i.e., Jews) from the Pale, it left the social structure of the population outside the Pale practically intact

Empirical Strategy

- Examine contemporary voting patterns, attitudes of residents, and (scarcely-available) economic outcomes at the two sides of the Pale border
- use regression discontinuity for identification
 - Estimate a jump in contemporary outcomes at the Pale border
- Importantly, today the religious and ethnic mix of populations on the two sides of the Pale border is the same

The Pale of Settlement

- Russian Empire got her Jews after the three partitions of Poland (1772, 1793, 1795) and the Congress of Vienna of 1815 by acquiring new territories where Jews resided since XIV century
 - Before, Jews were present in Russia in very small numbers and were expelled repeatedly by tsars
 - Catherine II was the first to allow Jewish presence in several western provinces (*gubernii*) in 1791
- According to the Pale of Settlement restrictions, Jews were not allowed
 - residency outside the Pale
 - residency in rural areas
- The restrictions were present until the 1917 Russian revolution

Pale in 1897 census: 4.5m Jews (37% of urban population)

	Total		Urban	
	Number of Jewish residents	% of total population	Number of Jewish residents in urban areas	% of urban population
The Pale of Settlement	4 483 300	11.3%	2 083 668	37.0%
including provinces:				
1 Bessarabiya	228 168	11.8%	109 065	37.2%
2 Vilenskaya	202 374	12.7%	85 250	43.1%
3 Vitebskaya	174 240	11.7%	112 480	52.1%
4 Volynskaya	394 774	13.2%	118 727	50.8%
5 Grodnenskaya	278 542	17.4%	146 907	57.7%
6 Ekaterinoslavskaya	99 152	4.7%	62 602	26.0%
7 Kievskaya	430 489	12.1%	142 222	31.0%
8 Kovenskaya	212 028	13.7%	61 694	43.1%
9 Minskaya	343 466	16.0%	132 278	58.8%
10 Moghilevskaya	203 507	12.1%	77 082	52.4%
11 Podoliya	369 306	12.2%	102 204	46.1%
12 Poltavskaya	110 855	4.0%	80 994	29.5%
13 Taurida	55 418	3.8%	34 248	11.8%
14 Chernigovskaya	113 787	5.0%	54 401	26.0%
15 Congress of Poland	1 267 194	13.5%	763 514	34.3%

Borders of the Pale



- The Pale occupied territories of much of Eastern Europe:
 - Parts of contemporary Russia, parts of Ukraine, parts of Latvia, parts of Lithuania, and parts of Poland, and whole of Belarus and Moldova
 - Inside territories of the Russian empire, the Pale border cuts through contemporary Latvia, Russia, and Ukraine

Border of the Pale

- Despite the fact that the Pale allowed Jews in the Russian Empire in areas of historical Jewish residence
- the Pale border (within the Russian Empire) was arbitrary, binding, and enforced
 - Historical sources (e.g., Klier 1986) point out that Catherine II did not know much about the newly acquired territories and sent intelligence to learn about them, but before getting the information, wanted to keep the unknown and alien to Orthodox Russia population away from the central Russia
 - Made a list of Western provinces

Provinces at the Pale border within Russian Empire, 1897 census

	Outside the Pale			Inside the Pale		
	Mean	Min	Max	Mean	Min	Max
% of Jewish population in provinces	0.7	0.2	1.8	7.5	4.0	12.1
% of Jewish population in uyezds (sub-province administrative units)	0.5	0.0	4.7	6.8	0.9	22.3
% of Jews in provincial urban population	4.1	1.4	6.4	37.2	26.0	52.4
	(7 provinces, 76 uyezds)			(5 provinces, 60 uyezds)		

- Discontinuity at the Pale border in % of Jewish urban population persisted to 1939

Preview of findings

The paper has three parts:

1. Establish basic facts about the Pale today:
 - Contemporary residents of the Pale (compared those outside Pale):
 - vote more for communist/socialist parties, express more anti-market and anti-democracy sentiment, express lower satisfaction with economy and transition, engage less in entrepreneurship, and have higher trust
 - no difference in average consumption, education, and relative income
2. Test between the two alternative channels of influence:
 - former presence of Jews vs. new migrant population in areas where Jews used to reside
 - verify that the effect of the Pale is driven by former presence of Jews
3. Suggest two mechanisms behind the effect and provide (suggestive) evidence for both:
 1. Development of anti-market culture and bonding trust among Gentile population at the time when the two groups lived side-by-side
 2. Missing middle class (as in Acemoglu et al. 2010)

Data on outcomes in Eastern European countries

1. Official election data

- % of votes for anti-market (communist/socialist) parties and pro-market (liberal-reform) parties at the electoral district level
 - 3 elections in each country under study b/w 1995-2006

2. Survey data

- “Life in Transition” 2006 survey of 1000 individuals in 50 settlements (PSUs) in each of 28 transition countries
- Questions about attitudes towards market reform, democracy, satisfaction with the state of the economy overall and compared to the pre-transition period, and trust
- Information on self-employment, which is our measure of entrepreneurship, consumption, and income

Political outcomes

- Elections in Russia, Latvia, and Ukraine (3 countries with variation)
- Regions (subnational units) through which the binding Pale border cuts
- OLS, control for region and election dummies, towns and regional centers

Countries in the sample	Vote for communist and socialist parties in a district							
	All countries	All countries	Latvia	Latvia	Russia	Russia	Ukraine (socialist)	Ukraine (socialist)
In Pale	4.675*** [1.612]	5.111*** [1.564]	11.916*** [4.363]	11.823** [4.690]	5.837*** [2.208]	6.572*** [2.169]	2.754*** [0.867]	2.462** [0.962]
On the border	4.563*** [1.159]	4.704*** [1.141]	4.276* [2.146]	4.285* [2.210]	4.530*** [1.339]	4.663*** [1.304]	3.067*** [0.801]	2.977*** [0.808]
Town	3.137	3.142	8.247**	8.523**	1.519	1.473	0.245	0.365
Regional center	5.609		1.026		7.442		-1.781***	
Observations	615	596	90	83	360	348	165	125
R-squared	0.697	0.716	0.725	0.707	0.616	0.661	0.737	0.711
Regional center excluded	No	Yes	No	Yes	No	Yes	No	Yes
Countries in the sample	Vote for market-reform parties in a district							
	All countries	All countries	Latvia	Latvia	Russia	Russia	Ukraine	Ukraine
In Pale	-0.437 [0.791]	-0.219 [0.752]	-6.325*** [2.314]	-6.670*** [2.461]	-0.564 [0.438]	-0.612* [0.367]	0.743 [2.331]	2.089 [2.568]
On the border	-1.317* [0.745]	-1.324* [0.725]	-1.449 [1.226]	-1.599 [1.207]	-0.992** [0.455]	-1.154*** [0.420]	-1.278 [2.274]	-0.613 [2.196]
Town	1.802**	1.575**	-2.997	-3.331	3.074***	3.073***	1.652	1.105
Regional center	5.360		-3.043		10.980**		0.864	
Observations	615	596	90	83	360	348	165	125
R-squared	0.794	0.827	0.731	0.722	0.424	0.393	0.694	0.704
Regional center excluded	No	Yes	No	Yes	No	Yes	No	Yes

Attitudes and economic outcomes from Life in Transition survey

- Again, consider countries with within-country variation in the Pale within Russian Empire: Latvia, Russia, Ukraine
- Look at how attitudes, self-employment, and other economic outcomes are affected by whether PSU is in the Pale or outside
 - Separately for urban and rural settlements (as Jews lived in urban areas)

Methodology

Focus on regression discontinuity at the Pale border

1. **Discontinuity sample approach:** OLS for the whole sample and RD sub-samples, reducing the distance d_i to the border (140, 70, 35 km):

$$y_i = \alpha + \beta p_i + \mathbf{x}_i' \boldsymbol{\gamma} + \varepsilon_i, \text{ s.t. } |d_i| < \Delta$$

2. **Control function approach:** Control for two 4th-order polynomials of distance to the Pale on two sides of the border

$$y_i = \alpha + \beta p_i + f(d_i) + \mathbf{x}_i' \boldsymbol{\gamma} + \varepsilon_i$$

where

$$f(d_i) = \sum_{k=1}^4 \delta_k d_i^k + \sum_{k=1}^4 \phi_k d_i^k p_i$$

Covariates

In regressions for attitudes and self-employment

- Control for
 - Country dummies
 - Individual characteristics:
 - Gender, age (with a quadratic term), education level, consumption level, employment status, ethnic minority, religion
 - Settlement characteristics:
 - Longitude, elevation, metropolitan area (in the urban sample), dummy for Western Ukraine whenever any of the Western Ukrainian PSUs are in the sample, religious fractionalization
- Cluster by PSU

Urban and metropolitan PSUs

	OLS	RD sample 140	RD sample 70	RD sample 35	RD regression	OLS	RD sample 140	RD sample 70	RD sample 35	RD regression
	<u>Prefer market to planed economy</u>					<u>Prefer democracy to autocratic regime</u>				
In Pale	-0.158	-0.159	-0.203	-0.147	-0.159	-0.15	-0.171	-0.246	-0.229	-0.206
	[0.051]***	[0.055]***	[0.058]***	[0.045]***	[0.054]***	[0.062]**	[0.066]**	[0.066]***	[0.042]***	[0.082]**
R-squared	0.11	0.11	0.11	0.15	0.12	0.08	0.09	0.1	0.12	0.11
	<u>Economic situation better today than in 1989</u>					<u>Satisfaction with present state of economy</u>				
In Pale	-0.406	-0.444	-0.349	-0.427	-0.587	-0.223	-0.363	-0.348	-0.311	-0.355
	[0.173]**	[0.167]**	[0.240]	[0.151]**	[0.230]**	[0.107]**	[0.103]***	[0.131]**	[0.159]*	[0.135]***
R-squared	0.19	0.2	0.22	0.16	0.21	0.11	0.11	0.12	0.17	0.13
	<u>Self-employment</u>					<u>Trust</u>				
In Pale	-0.065	-0.087	-0.133	-0.039	-0.101	0.163	0.197	0.215	0.158	0.248
	[0.033]*	[0.051]*	[0.070]*	[0.030]	[0.041]**	[0.043]***	[0.058]***	[0.059]***	[0.060]**	[0.075]***
R-squared	0.04	0.06	0.06	0.05	0.06	0.03	0.06	0.05	0.1	0.05
Observations	1833	996	837	217	1833	1832	996	837	217	1832
PSUs in Pale	31	11	9	6	31	31	11	9	6	31
PSUs outside	61	39	33	5	61	61	39	33	5	61

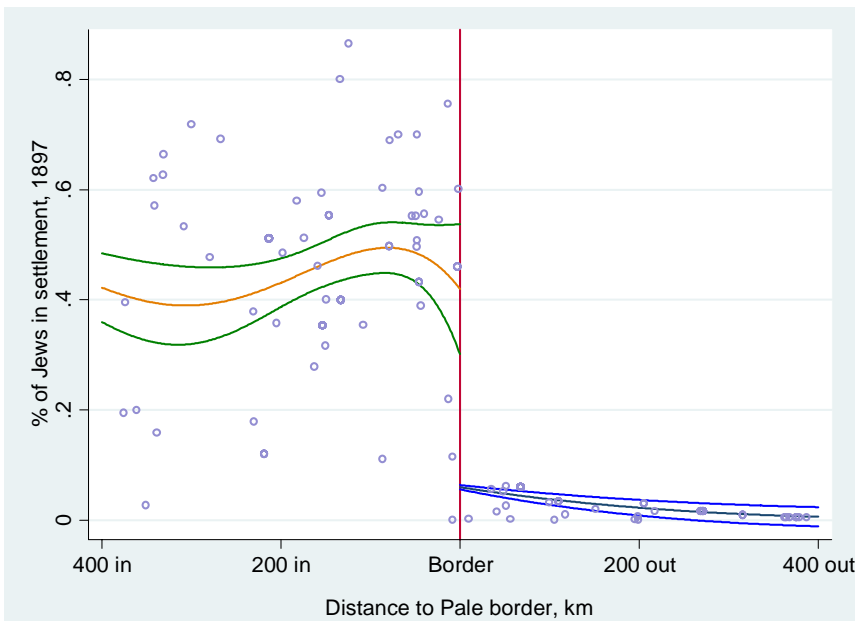
Magnitude: ½ to 1/3 of standard deviations difference in outcomes on two sides

Rural PSUs

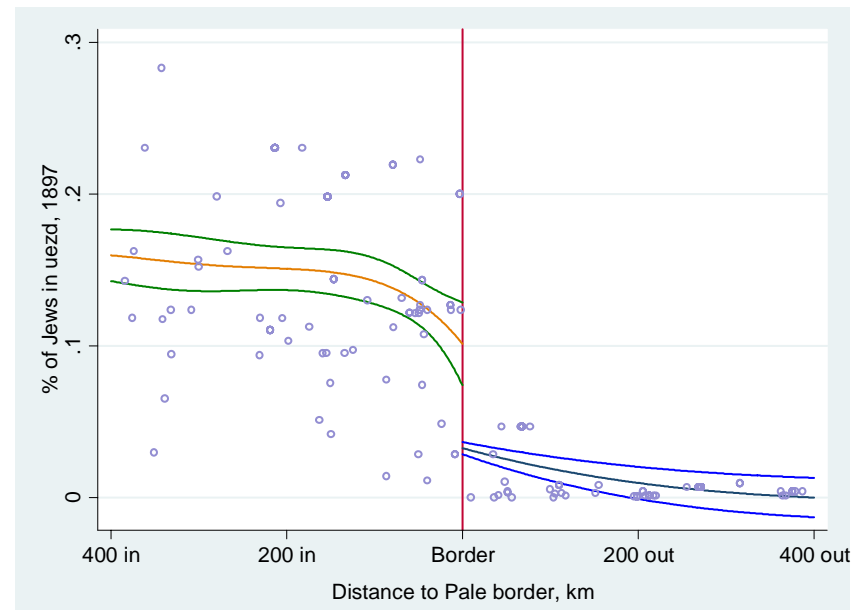
	OLS	RD sample 140	RD sample 70	RD sample 35	RD regression	OLS	RD sample 140	RD sample 70	RD sample 35	RD regression
	<u>Prefer market to planed economy</u>					<u>Prefer democracy to autocratic regime</u>				
In Pale	0.105	0.164	0.143	-0.01	0.133	0.171	0.293	0.266	0.301	0.304
	[0.078]	[0.069]**	[0.073]*	[0.108]	[0.120]	[0.082]**	[0.072]***	[0.078]***	[0.117]**	[0.100]***
R-squared	0.09	0.08	0.1	0.2	0.12	0.08	0.08	0.09	0.11	0.15
	<u>Economic situation better today than in 1989</u>					<u>Satisfaction with present state of economy</u>				
	OLS	RD sample 140	RD sample 70	RD sample 35	RD regression	OLS	RD sample 140	RD sample 70	RD sample 35	RD regression
In Pale	-0.182	-0.08	-0.223	-0.004	-0.277	-0.136	-0.148	-0.169	-0.059	-0.069
	[0.281]	[0.241]	[0.207]	[0.320]	[0.249]	[0.281]	[0.232]	[0.253]	[0.167]	[0.241]
R-squared	0.18	0.13	0.17	0.14	0.22	0.14	0.05	0.07	0.15	0.18
	<u>Self-employment</u>					<u>Trust</u>				
In Pale	0.014	0.027	-0.002	0.162	0.017	0.018	0.066	0.05	0.019	0.058
	[0.025]	[0.061]	[0.068]	[0.152]	[0.072]	[0.106]	[0.119]	[0.138]	[0.202]	[0.141]
R-squared	0.09	0.18	0.21	0.28	0.11	0.06	0.09	0.07	0.2	0.08
Observations	858	419	339	160	858	858	419	339	160	858
PSUs in Pale	15	5	5	3	15	15	5	5	3	15
PSUs outside	28	16	12	5	28	28	16	12	5	28

Graphical representation, % of Jews in Settlements and counties in 1897

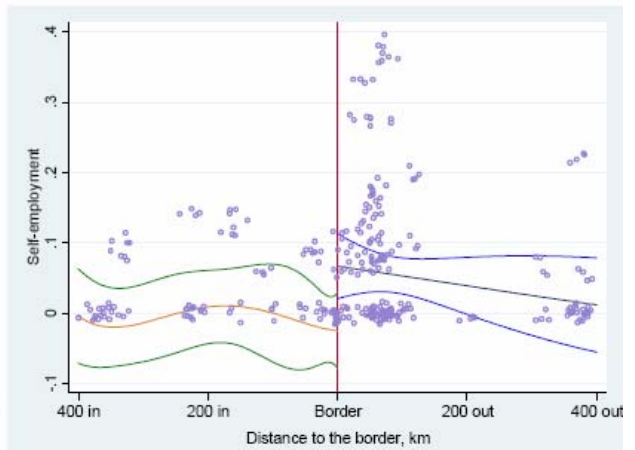
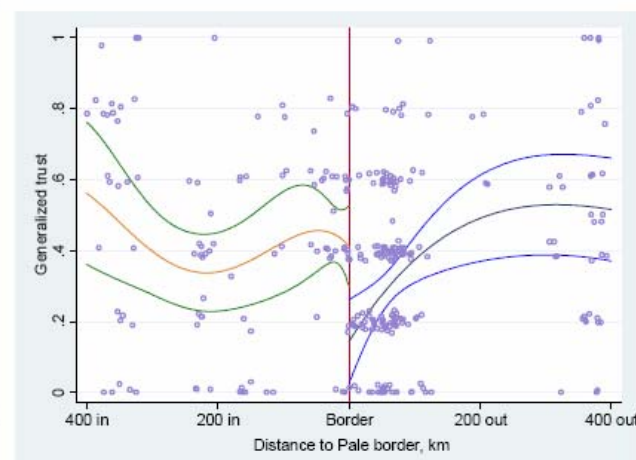
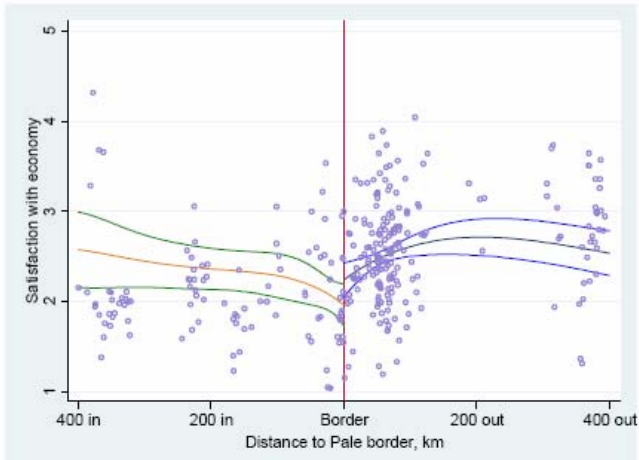
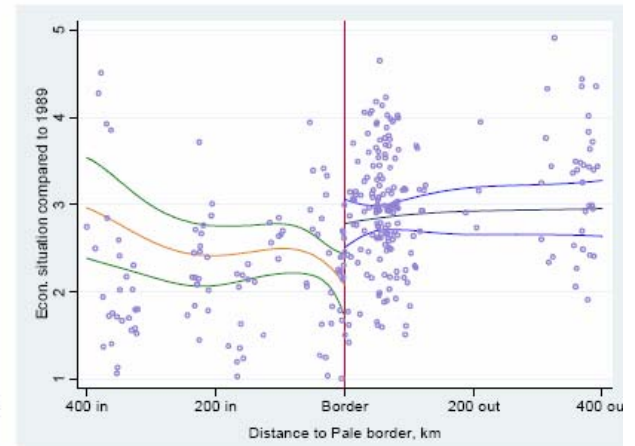
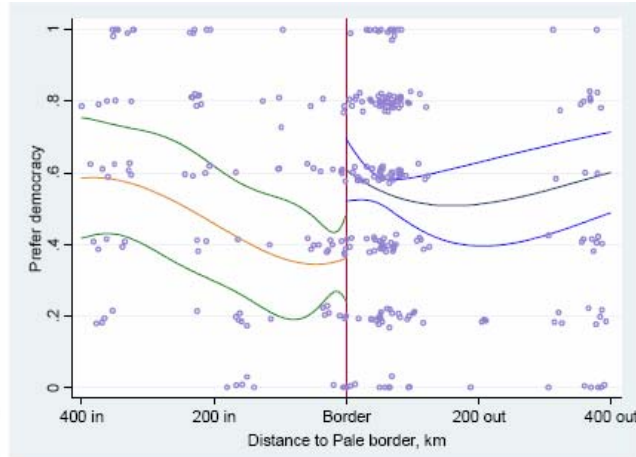
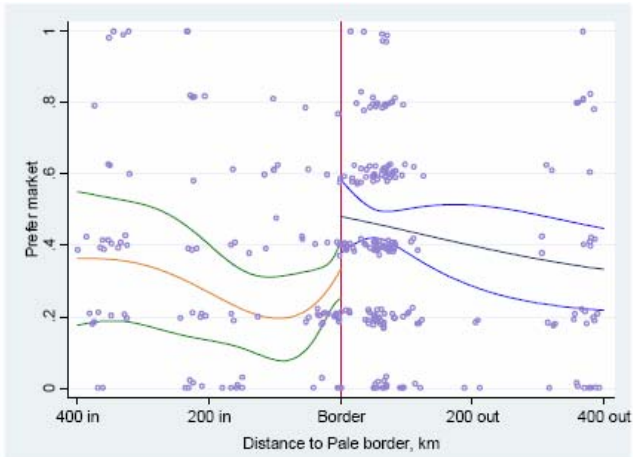
% of Jews in Settlement



% of Jews in Uezd



Graphical representation, outcomes



Baseline results are robust to excluding controls

No discontinuity in control variables

- Take each control variable and all additional geography variables, and estimate discontinuity at the Pale border

$$x_i = \alpha + \beta p_i + \varepsilon_i, \quad |d_i| < \Delta$$

$$x_i = \alpha + \beta p_i + f(d_i) + \varepsilon_i$$

- Find no significant effects
- With one exception of *elevation* (PSUs at the border are 82m higher in the Pale than outside)
 - Verified that elevation does not affect outcomes
 - Control for elevation in all specifications
- Conclude: RD approach is reasonable

Other economic outcomes

No effect for:

- Levels of consumption, education, income
 - as measures by LITs survey
- Growth of city population
 - as measured by historical and contemporary censuses
- Thus, our story is about social and political outcomes and entrepreneurship

IV rescaling: effect of % of Jews in 1897 instrumented by Pale on 2006 outcomes

	Prefer market		Prefer democracy		Econ. situation compared to 1989	
% of Jews in uezd, 1897	-1.989		-1.921		-5.044	
	[0.743]***		[0.863]**		[1.935]**	
% of Jews in settlement, 1897		-0.662		-0.67		-1.54
		[0.170]***		[0.215]***		[0.699]**
Observations	1833	1593	1832	1592	1646	1429
R-squared	0.08	0.1	0.05	0.07	0.16	0.16
PSUs in Pale	31	28	31	28	31	28
PSUs outside Pale	61	52	61	52	61	52
	Satisfaction with economy		Self-employment		Trust	
% of Jews in uezd, 1897	-2.699		-0.76		1.999	
	[1.325]**		[0.407]*		[0.660]***	
% of Jews in settlement, 1897		-0.963		-0.246		0.593
		[0.475]**		[0.128]*		[0.168]***
Observations	1741	1514	1057	932	1803	1564
R-squared	0.1	0.1	0.02	0.01		0.04
PSUs in Pale	31	28	31	28	31	28
PSUs outside Pale	61	52	61	52	61	52

A 10 point increase in % of Jews => 7 percentage point lower support for market

Channels

- The *Pale* may matter because:
 1. Jews lived there before
 2. New population settled once Jews were mass-murded
- Differentiate b/w places with new population as a result of redrawing of European borders, not the Holocaust:
 - Poland’s “western territories”: used to be German, now Polish
 - Kaliningrad (Königsberg): used to be German, now Russian
 - Second Polish Republic outside contemporary Poland: used to be Polish, now Belorussian, Lithuanian, or Ukrainian
 - Kaunas: capital of Lithuania, when Vilnius was in Poland: massive influx of Lithuanians
- **Dummy** for each of the cases: “moved country”

Channels – cont.

- For each PSU in countries of Eastern Europe, we collected information on ethnic composition for two points in time: at the end of the 19th century and of 20th century
 - Construct measures of: 1) change between Jews and Gentiles and 2) change within Gentile groups
- Compare effects of change in ethnic compositions over 100 years:
 - Among groups within Gentile population (instrumented by “moved country”)
 - Between Jews and Gentiles (instrumented by Pale)
- Countries with variation in at least one of the instruments: Belarus, Latvia, Lithuania, Poland, Russia, and Ukraine

First stage, channels

	Change in ethnic composition:					
	Among Gentiles		Jews vs. Gentiles		Among Gentiles	Jews vs. Gentiles
	PSU level				Individual level	
In "moved country"	0.181		0.047		0.122	0.021
	[0.029]***		[0.010]***		[0.026]***	[0.007]***
In Pale		0.01		0.106	0.095	0.077
		[0.019]		[0.005]***	[0.025]***	[0.012]***
Controls	No	No	No	No	All	All
Observations	291	291	291	291	5806	5806
R-squared	0.19	0.00	0.07	0.56	0.5	0.71
F (Moved country)	40.17		20.67		21.84	10.1
F (Pale)		0.29		423.72	15	43.78
F (Both)					18.39	27.91

Second stage, Channels

	Prefer market			Prefer democracy			Econ. Sit. compared to 1989		
Jews vs Gentiles	-1.898	-1.074		-0.772	-0.47		-5.849	-4.697	
	[1.096]*	[0.587]*		[1.053]	[0.659]		[2.463]**	[1.624]***	
Among Gentiles	0.621		0.267	0.228		0.084	0.898		-0.197
	[0.485]		[0.307]	[0.459]		[0.326]	[1.023]		[0.617]
Observations	5799	5799	5799	5799	5799	5799	5179	5179	5179
R-squared	0.04	0.08	0.08	0.05	0.06	0.06	0.13	0.14	0.17
	Satisfaction with economy			Self-employment			Trust		
Jews vs Gentiles	-3.186	-3.069		-1.04	-0.609		1.504	1.4	
	[1.684]*	[1.068]***		[0.630]*	[0.298]**		[0.917]	[0.560]**	
Among Gentiles	0.088		-0.495	0.335		0.091	-0.077		0.2
	[0.747]		[0.512]	[0.353]		[0.226]	[0.407]		[0.281]
Observations	5533	5533	5533	3020	3020	3020	5691	5691	5691
R-squared	0.15	0.16	0.17	0.03	0.06	0.05	0.01	0.02	0.02

- Conclusion:

Pale matters because Jews lived there before, not because new population lives there now

Election results in areas with renewed Gentile population

- In Lithuania and Poland: within-region variation in “moved country”
 - WT for Poland, SPR for Lithuania

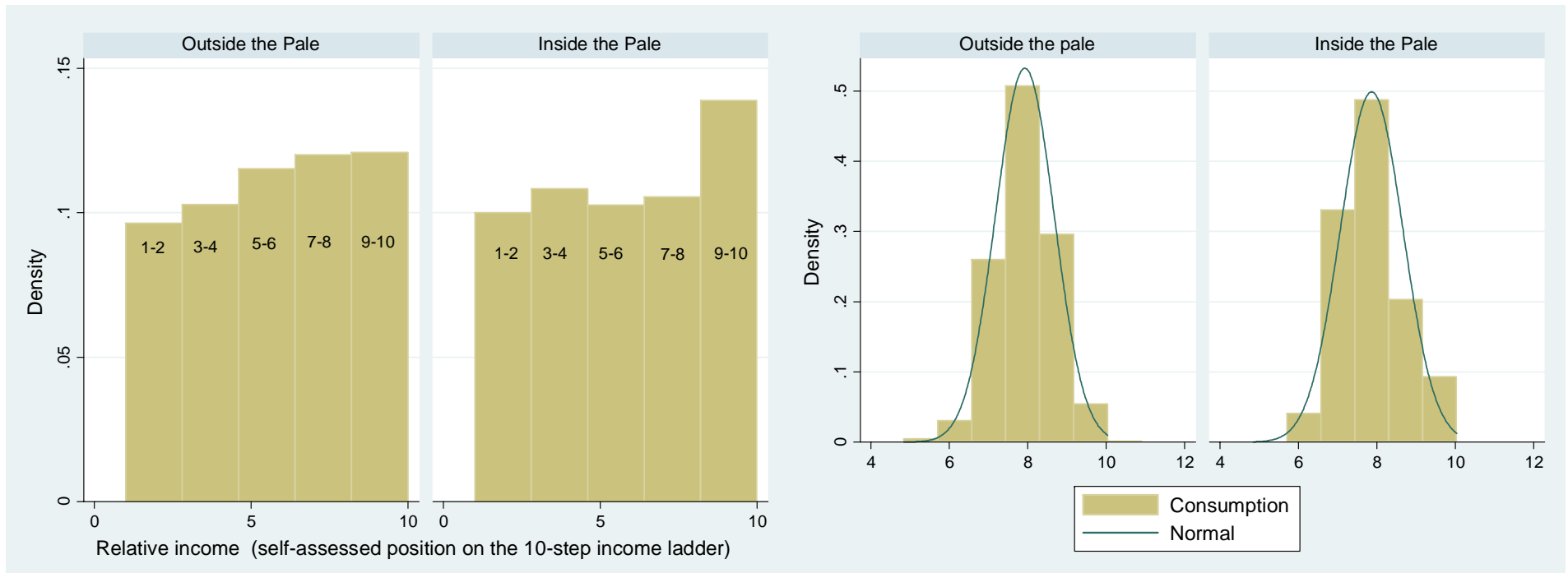
Country sample	Vote for anti-market parties in a district			
	Lithuania	Lithuania	Poland	Poland
In moved country (SPR for Lithuania; WT for Poland)	-8.944***	-10.430***	-4.167***	-4.179***
	[2.523]	[2.689]	[0.900]	[0.905]
Moved country border	-2.710	-3.043	0.000	0.000
	[1.994]	[2.173]	[0.000]	[0.000]
Town	0.000	0.000	-1.11	1.088
Regional center	6.832***		3.535*	
Election & regional dummies	Yes	Yes	Yes	Yes
Observations	72	39	1929	1917
R-squared	0.739	0.753	0.679	0.68
Regional center excluded	No	Yes	No	Yes

- These effects go in the opposite direction from those of the Pale
 - Consistent with our conclusion that the Pale matters because of Jews
- Sociology literature: new migrants are more dynamic and more pro-market because they are not constrained by roots and traditions

Our interpretation of mechanisms (1)

Missing middle class (Acemoglu et al. 2010)

- Jews traditionally were in middle-class occupations
 - Holocaust biased population towards less liberal values and towards less entrepreneurship (as in the Pale Jews were the entrepreneurs)



BUT: “Missing middle class” story has no prediction about trust and the magnitude of differences in distributions of consumption and income is probably too small

Our interpretation of mechanisms (2)

Persistent anti-market culture and bonding trust among Gentiles

- In Pale, the relationship between Jews and Gentiles was dominated by antagonism, suspicion and hatred
- This created pressure on Gentiles inside Pale to develop:
 1. **strong ties of within-group loyalty** in response to traditionally strong ties within Jewish community (“bonding” trust)
 2. values that are contrary to what Jews were associated with. Since Jews represented liberal pro-market ideology, opposition to Jews lead to development of **anti-market culture** among Gentiles
- Outside the Pale local (Gentile) population was not subjected to similar social pressures as it had no experience of living with Jews side-by-side.

Persistence of culture

- Both persisted (though inter-generational transfers)
- The anti-market culture now manifests itself in the anti-market and anti-transition sentiment and low entrepreneurship
- Bonding ties manifest itself in higher trust within the Pale
- No direct evidence on the type of trust observed.
 - Inside the Pale 1.45% of respondents are members of civic organizations compared to 4.10% outside the Pale;
 - Pale is unrelated to trust in government, parliament, courts, and political parties, foreign investors, financial institutions, consumption, and income
- This suggestive evidence is consistent with bonding trust inside Pale, future research is needed to provide systematic evidence on the mechanism

Placebo

- Instead of the true Pale take “placebo Pale,” defined as:
 - West of shifted Pale border shifted by 225, 200, 150, 100, 50, -50, -75, -100, -150, and -225 km
 - to check the size of SEs

	South-West of shifted Pale border
Number of placebo regressions	60
% of coefficients with the same sign as baseline	33.3%
% of coefficients with at least 5% significance level of the same sign as in baseline	3.3%
% of coefficients with at least 1% significance level of the same sign as in baseline	1.7%

- SEs may be too narrow (as there is some unobserved spatial variation), but unlikely that this is decisive for the estimated results

Results are robust to:

- Controlling for
 - Polish-Lithuanian Commonwealth
 - Results are the same for Latvia, all of which was inside the PLC
 - Results are the same if we control for PLC dummy
 - Latitude, temperature, evaporation, cloudiness, precipitation
- Sample being extended to countries with no variation in Pale
 - To estimate controls and polynomials of distance more precisely
 - Results are also robust

Conclusions

- During centuries of Jewish presence in Eastern Europe, non-Jews developed an anti-market culture and within-group loyalty
 - This culture persisted despite the disappearance of the group that was central to its formation
- The Pale of Settlement and the Holocaust have tangible consequences for political and social development of Eastern Europe today

Broader implications:

1. Co-existence of hostile ethnic groups can affect group identity and self-perception of group representatives
 - One group may define itself in opposition to a rival, especially when the rival has easily-observed special characteristics
2. Social interaction within group changes in the presence of a rival group, as group members develop within-group loyalty
3. Attitudes formed in a distant past by a series of historical accidents can persist in the long run and may have important effects on political choices many decades later