"Deny Thy Father and Refuse Thy Name"

Nation Building and the Salary Differential of Family Name Changers in Hungary

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Motivation

- In most of the economics literature, culture is either taken as exogenously given or as changing sluggishly
- This paper: culture/identity can change on the short run
  - **Changing a minority surname increased the salary of a worker** - individual level empirical evidence from 19/20th century Hungary
  - **Name-based discrimination affected reported cultural composition within a generation** - model-based, settlement level empirical evidence from the censuses

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Details and preview of the results

- Context: Hungary 1870-1914
  - Hungarian speakers become a majority from 1880 to 1910 (natives speakers: 45% to 54.5%, non-natives: 11.5% to 22.5%)
  - Formal step of assimilation: **the family name change**
- We combine unique data from the period...
  - **All individual cases** of family name changes
  - **Two** independent, hand collected samples of individuals' wages and occupations
  - **Administrative records** (marriages, census)
- ... to estimate the **causal salary impact of name change** using **pooled OLS and IV** (+5.8% to +14%)
- Build a **model** on assimilation to evaluate the societal impact of name change on cultural diversity

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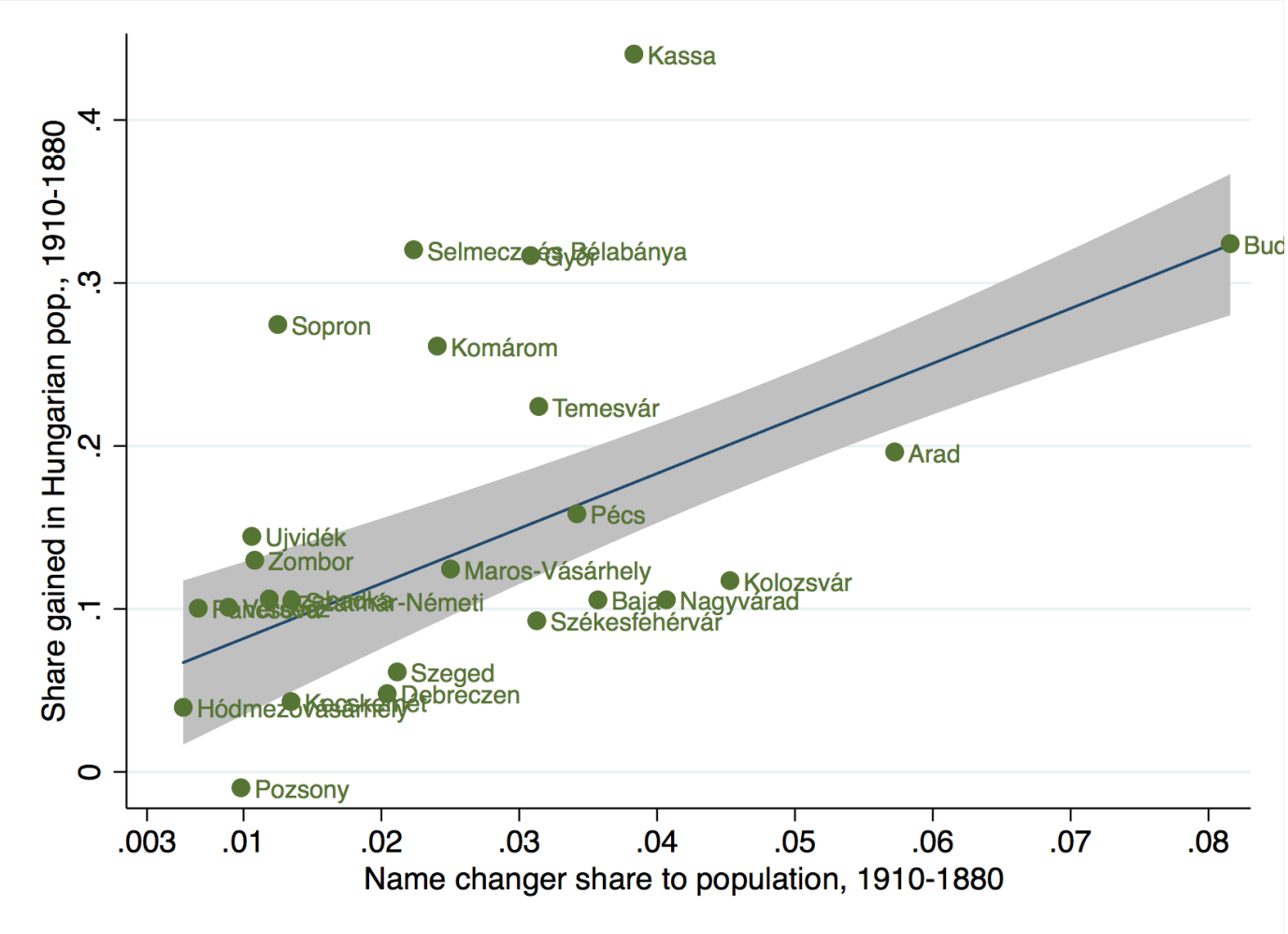
Motivating evidence: name changing and shrinkage of linguistic diversity



Outline

1. Contribution
2. Background an Data
3. Empirical Strategy and Results
4. Societal Impact and Counterfactuals

Contribution

- **Name based discrimination & name change, identity manipulation** - our paper looks at own outcomes of a non-immigrant worker upon changing own identity (Bertrand and Mullainathan, 2004 ; Arai and Thoursie 2009, Biavaschi et al 2013, Algan et al. 2013 ; Cassan 2015, Nix and Quian 2015, Jia and Persson 2017)
- **Nation building** - economic incentives worked on the short run in changing culture (Alesina Giuliano Reich 2019, Alesina Reich Riboni 2017, Aghion et al 2015; Aspachs-Bracons et al 2008, Fouka 2016, Clots-Figueras and Masella 2016; Depetris-Chavin et al. 2018; Alesina and Fuchs-Schündeln 2007, Cantoni et al. 2014; Bazzi et al. 2019)

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Background - a multiethnic, multireligious country

- During the Austria-Hungary period (1867-1918) the **Hungarian elite wants to forge a nation state** through assimilation
  - Linguistic minorities: Germans, Slovaks, Romanians (13%-13%-17%) religious minorities: Jews (5%), Orthodox Christians (15%) (1880 census data)
  - Nudging and positive propaganda, e.g. promoting "Hungarianization" of the family name as nationalist "pledge of allegiance" of the individual
  - Example: Schmidt $\rightarrow$ Kovács, Rosenthal $\rightarrow$ Rózsavölgyi etc.
- Family name changing is a **costly** step (not cheap talk, credible and conditionable signal):
  - administrative costs: time and paperwork
  - psychological costs: identification with family and ethnicity
  - social costs: worker might be scorned by family and others from minority

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Data: name changing & hand-collected worker data sets

- Universe of family name changing documents in the time period
  - Old and new family names, given names, year and residence upon name change, year and place of birth, religion, profession
- Two data sets on workers and wages
  - **Municipal workers** of Budapest (**public sector**) - pooled cross section from 1904, 1907, 1909, 1912; $N = 3700$
  - **Reserve officers** of the Royal Hungarian Army (**"private sector"**); Military training BUT retain civilian jobs $\rightarrow$ army records civilian wages; Pooled cross section from 1869-1915; $N = 2400$
  - **Variables**: salary, occupation, year and place of birth, religion, schooling, family background

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Estimating the surname salary premium

- we run the following pooled OLS regression

$$log(salary)_{it} = \alpha + \beta * changer_{it} + \gamma * controls_{it} + \lambda_t + \varepsilon_{it}$$

- $changer_i$ is a dummy indicating if person i has changed his family name until the year t;
- Controls: age and its square, experience and its square, occupation dummies, Jewish dummy, schooling controls
- Main identification threat: selection - name changing is correlated with unobserved skills $\rightarrow$ biased estimate of β, impact is not causal

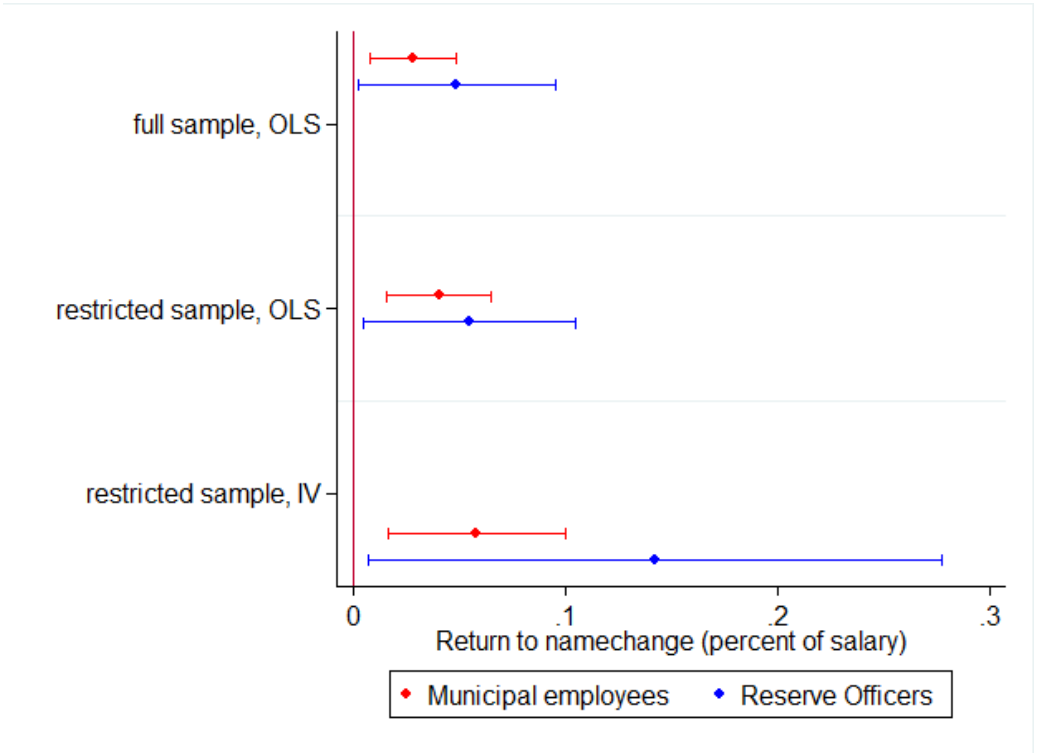
IV: definition & intuition

- **IV: name distinctiveness measure** (similar to Fryer & Levitt, 2004); natural logarithm of the overrepresentation of a family name among changers relative to the population :

$$IV_n = log\left[\frac{P(old\ name|name\ changer)}{P(old\ name)}\right]$$

- Idea: the **wage is depending on the name changing** decision, but **not on name distinctiveness** (the boss knows you, your background, sees your papers)
- A distinctively minority surname affects discrimination outside of the workplace $\rightarrow$ **name change is more likely**
- no systematic relationship between observed skills and IV($\rightarrow$); no relationship between IV and salary conditional on name changing($\rightarrow$)

Results



- salary premium: (i) Municipal Empl.: 3 extra year of experience (ii) Reserve O.: 4 extra years of schooling (→link to table)

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Impacts on society

- **Result to this point:** Name changing had a causal impact on salaries.
- **From now:** How does name changing alter the composition of the population over time?
  1. We build a simple **model of economic selection** into assimilation (based on standard Roy-Borjas self-selection model)
  2. Test its independent **predictions**
  3. **Population level analyis**: impact of economic incentives on observed cultural diversity

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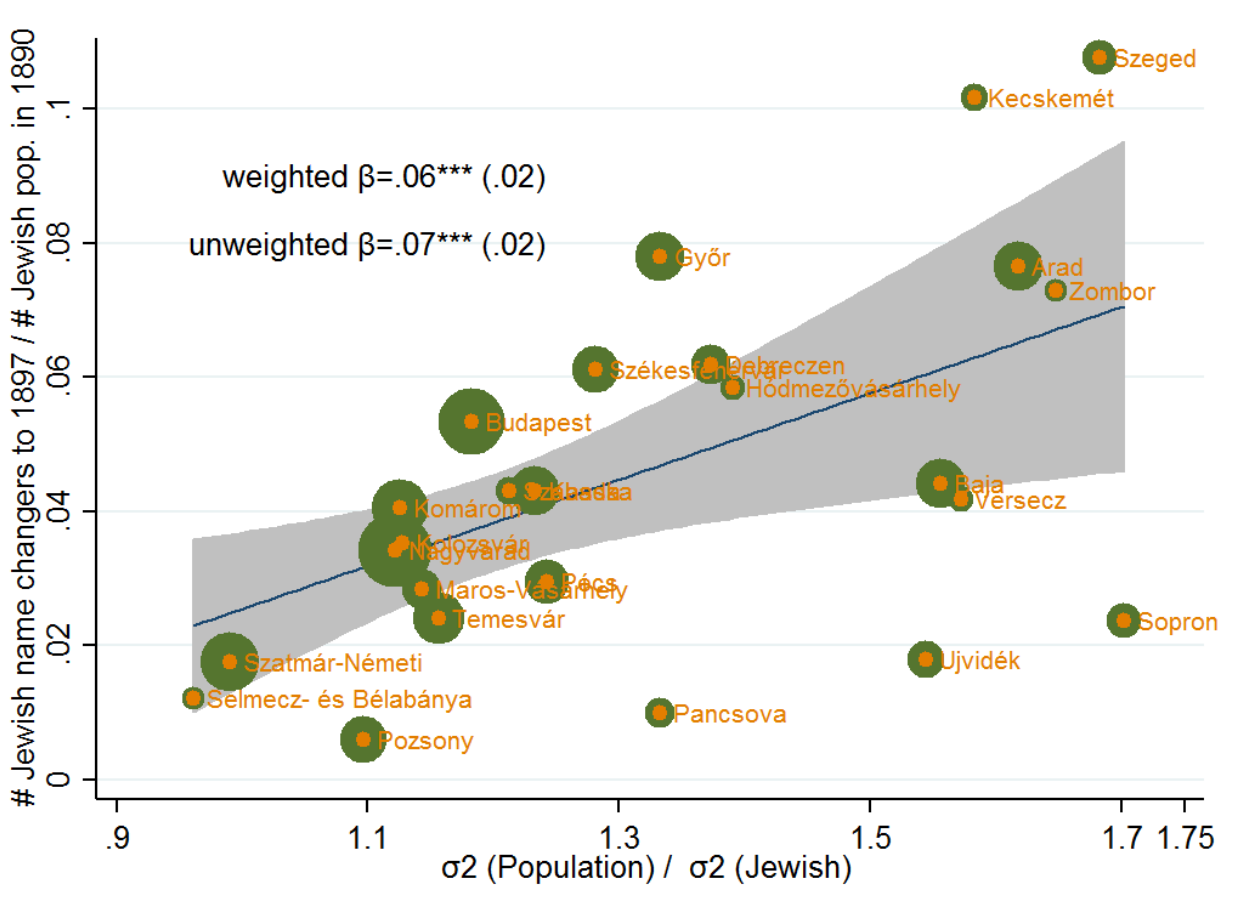
Snapshot of the results

- **The Roy-Borjas model:**
  - workers consider their potential wages in Foreign country and in Domestic country, then make an immigration decision
  - self-selection into immigration depends on relative distribution of skills/productivity in two countries
- **Our model:**
  - workers of minority background decide on name change (and assimilation) based on their potential utilities in both states
    - Fixed wage premium + different random returns to name change
    - Utility cost of assimilation based on community size
  - result: there should be more name changing where the Majority skill distribution is more dispersed than the Minority

Snapshot of the results

- **Example:** Jewish minority → more skilled with less variance in skills than Christians (majority); The bigger the variance ratio σ_H/σ_J , the more name changers between 1890 and 1898.



Ongoing work

- Counterfactual analysis using census records - how did name changing effect cultural diversity between 1880 and 1910?
  - Data for each settlement in 1900 and 1910
  - Wage structure on town level and the share of non-Hungarians in jobs
  - Community level controls
- Nation building outcomes: intermarriage
- Private sector samples: archival records of individual firms
- Compare different regimes: name changing under right-wing authoritarianism

Summary

- We showed that the family name was endogenous in Hungary; name changers enjoyed higher salaries than people with non-Hungarian names
- This was a result of an active policy to homogenize the population
- It impacted the composition of Hungarian society on the long run
- Bottom line: culture & identity responds to economic incentives

Thank you for your attention!

Results

	OLS Full log(salary)	OLS Restr. log(salary)	IV Restr. log(salary)		First stage Changer
			Panel A - Budapest Employees		
Changer	0.0276**	0.0400***	0.0578**	log(overrep)	0.108***
	(0.0124)	(0.0149)	(0.0253)		(0.00371)
Obs.	3,711	2,070	2,070		2,070
			Panel B - Reserve Officers		
	0.0485*	0.0544*	0.142*	log(overrep)	0.0666***
	(0.0283)	(0.0306)	(0.0823)		(0.00450)
	2,477	1,372	1,372		1,372

(→link to main text)

IV and observable skills - Budapest Employees

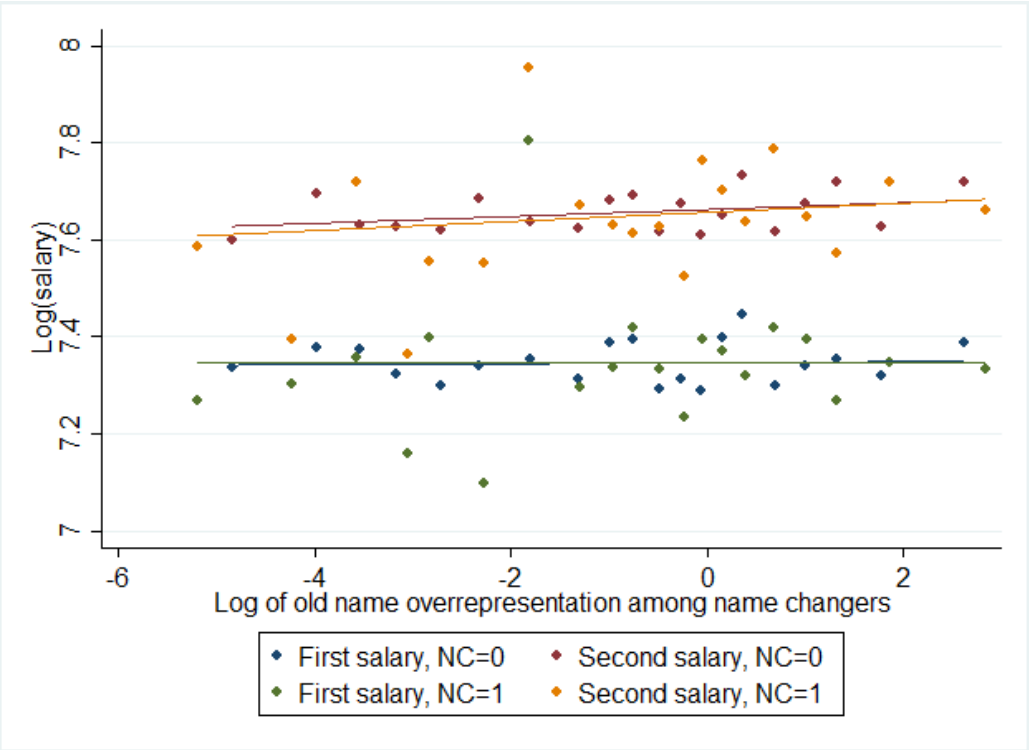
	log(overep)		log(overep)		log(overep)	
High school	-0.0898	(0.223)	-0.143	(0.223)	-0.450**	(0.221)
No mental score	0.117	(0.248)	0.0958	(0.245)	0.260	(0.241)
GPA=2	-0.0330	(0.265)	-0.0881	(0.265)	-0.0682	(0.255)
GPA=3	-0.180	(0.262)	-0.230	(0.261)	-0.115	(0.253)
GPA=4	-0.588*	(0.346)	-0.477	(0.346)	-0.391	(0.340)
GPA=5	-2.675***	(0.551)	-3.105***	(0.740)	-2.650***	(0.710)
High sch*Jewish					1.710***	(0.179)
Year	yes		yes		yes	
Occupation					yes	
Obs.	2070		2070		2070	

IV and observable skills - Reserve Officers

	log(overep)		log(overep)		log(overep)
Yrs. school	-0.249			-0.260	-0.088
	(0.227)			(0.227)	(0.203)
Sq. yrs. sch.	0.009			0.009	0.003
	(0.008)			(0.008)	(0.007)
Training		0.049		0.044	0.0068
		(0.204)		(0.216	(0.195)
Clerical Occ.			0.102	0.107	0.134
			(0.118)	(0.125)	(0.118)
Jewish					1.669***
					(0.110)
Year	yes	yes	yes	yes	yes
Obs.	1331	1331	1331	1331	1331

(→link to main text)

Salary and IV - Municipal Employees



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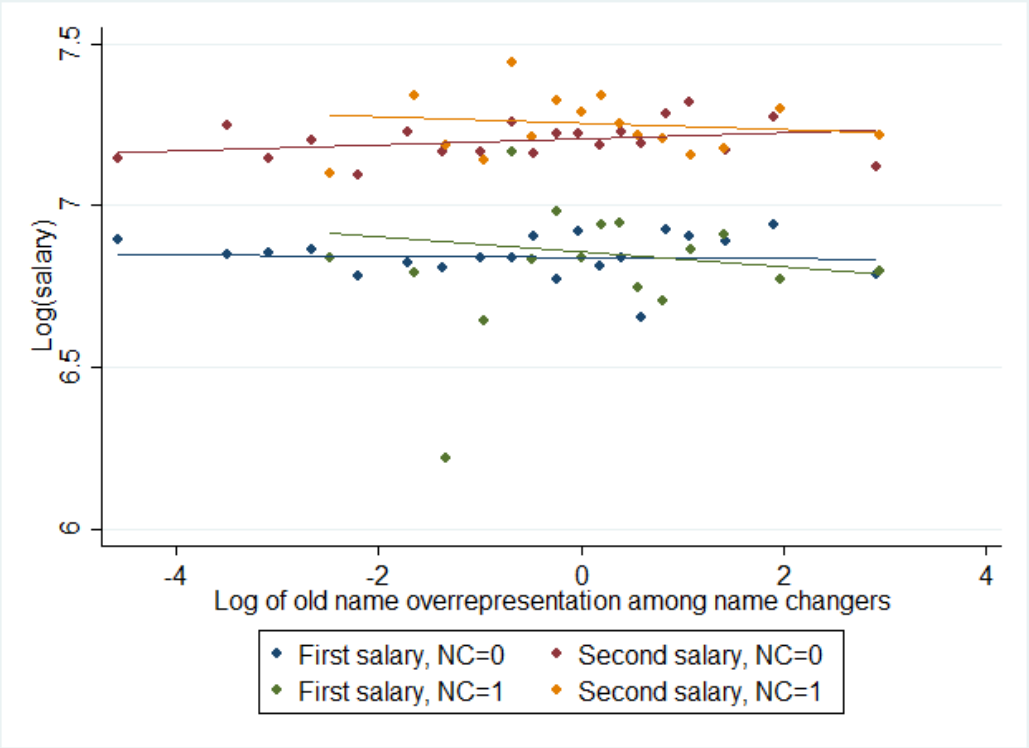

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