

# Frontier Gender Norms: History and Legacy

Samuel Bazzi  
*UC San Diego*

Abel Brodeur  
*Univ. of Ottawa*

Martin Fiszbein  
*Boston Univ.*

Joanne Haddad  
*ECARES*

NBER Summer Institute  
*Gender in the Economy: Change and Persistence of Norms*

July 28, 2022

## Motivation

- ▶ Gender inequity has been and still is a fundamental dimension of inequality in human societies
- ▶ Large productivity losses from female labor misallocation

## Motivation

- ▶ Gender inequity has been and still is a fundamental dimension of inequality in human societies
- ▶ Large productivity losses from female labor misallocation
- ▶ Substantial variation in gender inequality in the world
  - ▶ across countries, within countries
  - ▶ over time: change but also persistence

## Motivation

- ▶ Gender inequity has been and still is a fundamental dimension of inequality in human societies
- ▶ Large productivity losses from female labor misallocation
- ▶ Substantial variation in gender inequality in the world
  - ▶ across countries, within countries
  - ▶ over time: change but also persistence
- ▶ Sources of variation in gender roles
  - ▶ technology
  - ▶ culture
  - ▶ institutions
  - ▶ (geography)



## Motivation

- ▶ Gender inequity has been and still is a fundamental dimension of inequality in human societies
- ▶ Large productivity losses from female labor misallocation
- ▶ Substantial variation in gender inequality in the world
  - ▶ across countries, within countries
  - ▶ over time: change but also persistence
- ▶ Sources of variation in gender roles
  - ▶ technology
  - ▶ culture
  - ▶ institutions
  - ▶ (geography)
- ▶ *This paper:* a persistent cultural imprint of American frontier history on gender norms

# Frontier Conditions and Women's Lives

## Isolation

1. **low density**: isolation from others within given county
2. **remoteness from urban centers**: limited government and social infrastructure

# Frontier Conditions and Women's Lives

## Isolation

1. **low density**: isolation from others within given county
2. **remoteness from urban centers**: limited government and social infrastructure

## Distinctive demographics

- ▶ sharply **male-biased** sex ratios
- ▶ disproportionately **prime-age** adult

# Frontier Conditions and Women's Lives

## Isolation

1. **low density**: isolation from others within given county
2. **remoteness from urban centers**: limited government and social infrastructure

## Distinctive demographics

- ▶ sharply **male-biased** sex ratios
- ▶ disproportionately **prime-age** adult

## Women on the Frontier

- ▶ more likely to be **married** (early, with older men)
- ▶ **high fertility** (proxied by child-women ratios)
- ▶ **low LFP**, but among working women, **higher status occupations**

# Frontier conditions and gender roles: a view from economics of the family

## ▶ **Isolation** from extended family and social networks

- ▶ most goods and services home-produced → increased domestic burden, esp. for women (Greenwood, Seshadri & Yorukoglu 2005; Cavalcanti & Tavares 2008)
- ▶ lack of protection against violence or outside options (Figueredo et al 2001)

## ▶ **High fertility**

- ▶ high demand for children due to land abundance (Ashraf & Galor 2010; Easterlin 1976, Steckel 1992)
- ▶ gap in desired fertility (Anderson & Ray 2010; Doepke & Tertilt 2018; Ashraf, Field, Voena & Ziparo 2020)
- ▶ increased domestic burden (Kleven, Landaïs & Søgaaard 2019)

## ▶ **Imbalanced sex ratios**

- ▶ favors masculinity norms, violence (Baranov, De Haas & Grosjean 2022)
- ▶ (favors female bargaining power → greater leisure) (Grosjean & Khattar 2019)

# The Legacy of the Frontier on Gender Norms

We trace out the frontier legacy w/ measure of total frontier experience (TFE) historically

- ▶ FLFP remained persistently lower in high-TFE counties

# The Legacy of the Frontier on Gender Norms

We trace out the frontier legacy w/ measure of total frontier experience (TFE) historically

- ▶ FLFP remained persistently lower in high-TFE counties
- ▶ Low FLFP  $\neq$  greater leisure; rather, more domestic work  
(likely mirroring the historical domestic burden, though lack time use data then)

# The Legacy of the Frontier on Gender Norms

We trace out the frontier legacy w/ measure of total frontier experience (TFE) historically

- ▶ FLFP remained persistently lower in high-TFE counties
- ▶ Low FLFP  $\neq$  greater leisure; rather, more domestic work  
(likely mirroring the historical domestic burden, though lack time use data then)
- ▶ Conservative gender attitudes incl. among women
- ▶ Lower participation in politics



# Contributions to the Literature

## 1. Cultural and Historical Origins of Gender Norms

e.g., Fernandez et al, 2004; Fernandez & Fogli, 2009; Fogli & Veldkamp, 2011; Alesina et al, 2013

→ frontier settlement and conservative gender norms, distinctive geography of gender inequality

## 2. Historical Debates: Women on the Frontier

e.g., Fragher, 2008; Jeffrey, 1998; Jensen, 1981; Myres, 1982

→ reconciling seemingly competing historical narratives with quantitative analysis and insights from family economics

## 3. Comparative Perspective: Settlement of Australia and Gender Norms

Baranov et al, 2020, 2021; Grosjean & Khattar, 2019

→ new insights on social isolation mechanism, possibly distinct in U.S.

# Roadmap

Introduction

Historical Background

Fertility and Gender Inequality on the Frontier

The Frontier Legacy in the Long Run

Conclusion

# Roadmap

Introduction

Historical Background

Fertility and Gender Inequality on the Frontier

The Frontier Legacy in the Long Run

Conclusion

## Mapping the Frontier

- ▶ Census started tracking frontier in 1874, noticing settlement contours

# Mapping the Frontier

- ▶ Census started tracking frontier in 1874, noticing settlement contours

- ▶ We **follow Turner (1893) & Census (1890)**

*The most significant thing about the American frontier is, that it lies at the **hither edge of free land**. In the census reports it is treated as **the margin of that settlement which has a density of two or more to the square mile**. The term is an elastic one, and for our purposes does not need sharp definition. We shall consider the **whole frontier belt** including the Indian country and the outer margin of the 'settled area' of the census reports.*

# Mapping the Frontier

- ▶ Census started tracking frontier in 1874, noticing settlement contours

- ▶ **We follow Turner (1893) & Census (1890)**

*The most significant thing about the American frontier is, that it lies at the **hither edge of free land**. In the census reports it is treated as **the margin of that settlement which has a density of two or more to the square mile**. The term is an elastic one, and for our purposes does not need sharp definition. We shall consider the **whole frontier belt** including the Indian country and the outer margin of the 'settled area' of the census reports.*

- ▶ **Frontier declared 'closed' in 1890**, according to Turner & Census:

*up to and including 1890 the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that **there can hardly be said to be a frontier line**.*

# Mapping the Frontier

- ▶ Census started tracking frontier in 1874, noticing settlement contours

- ▶ **We follow Turner (1893) & Census (1890)**

*The most significant thing about the American frontier is, that it lies at the **hither edge of free land**. In the census reports it is treated as **the margin of that settlement which has a density of two or more to the square mile**. The term is an elastic one, and for our purposes does not need sharp definition. We shall consider the **whole frontier belt** including the Indian country and the outer margin of the 'settled area' of the census reports.*

- ▶ **Frontier declared 'closed' in 1890**, according to Turner & Census:

*up to and including 1890 the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that **there can hardly be said to be a frontier line**.*

- ▶ Frontier as a “**form of society rather than an area**” (Turner, 1896)

# Mapping the Frontier

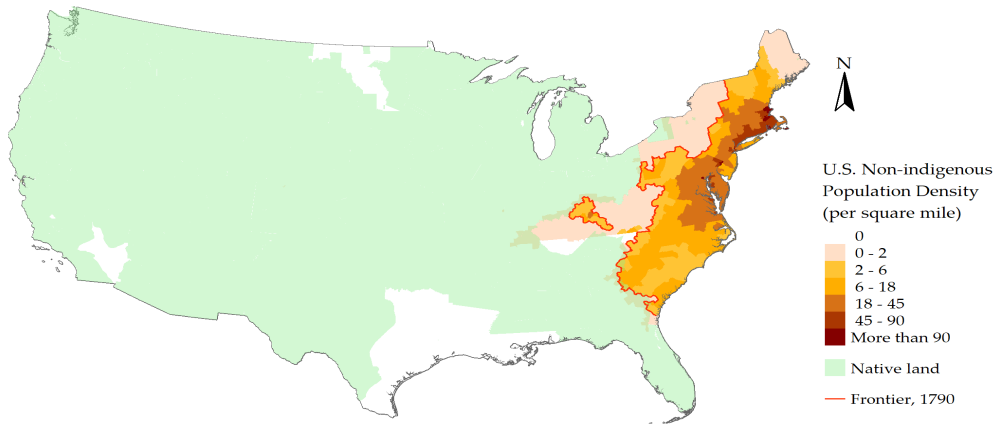
- ▶ **Locate frontier line and trace it over time**
  - ▶ contour line for population density of 2 people/mi<sup>2</sup>



# America's Westward Expansion

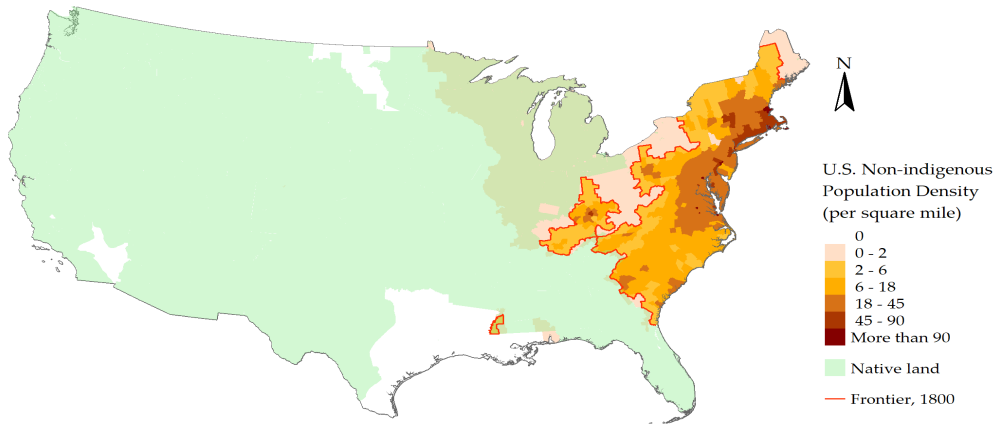
# America's Westward Expansion

1790



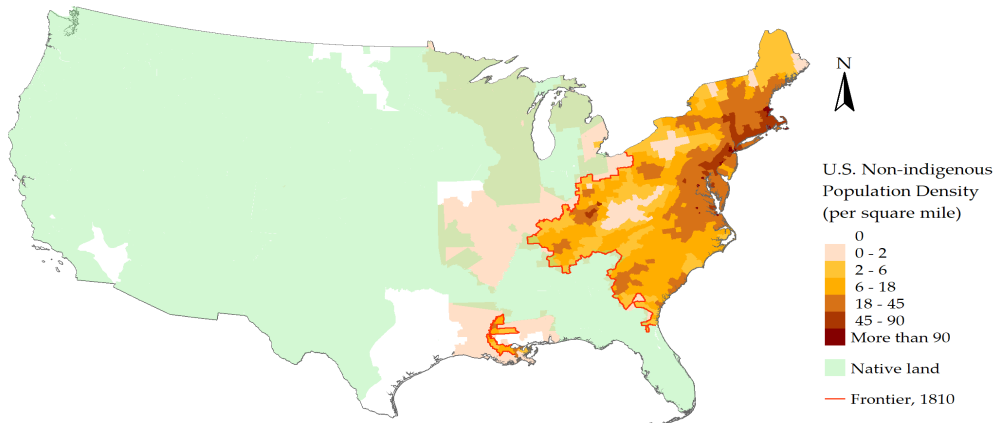
# America's Westward Expansion

1800



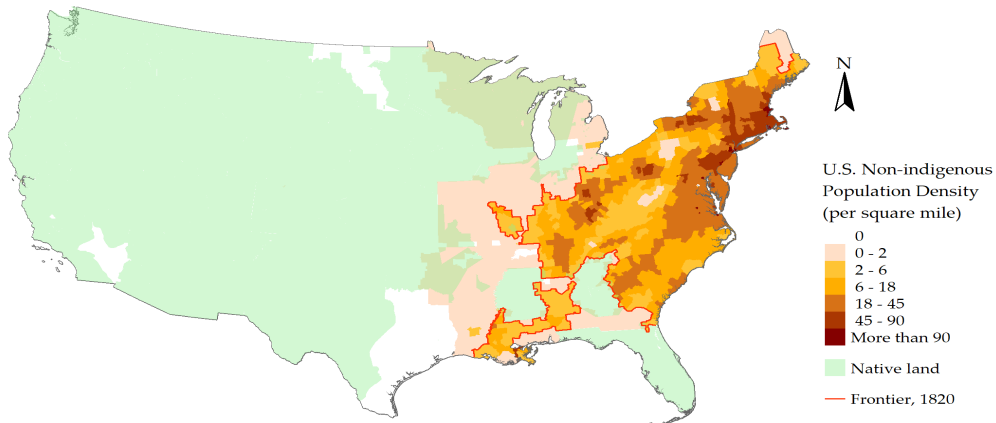
# America's Westward Expansion

1810



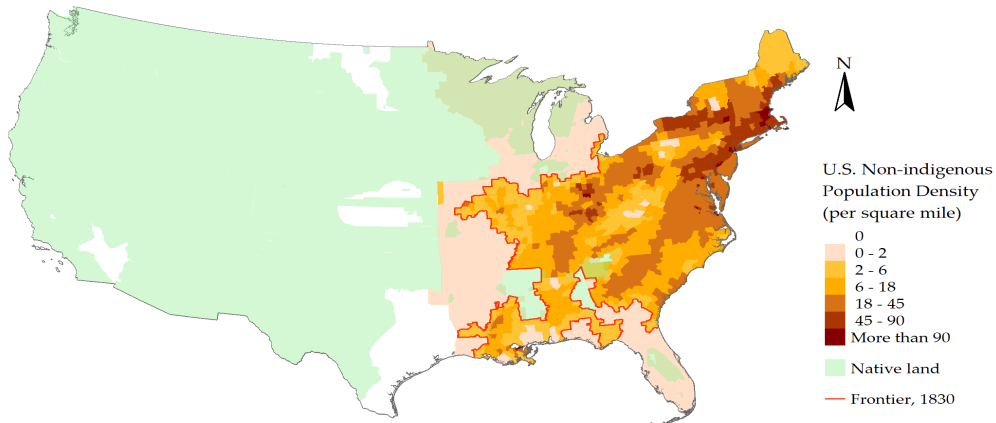
# America's Westward Expansion

1820



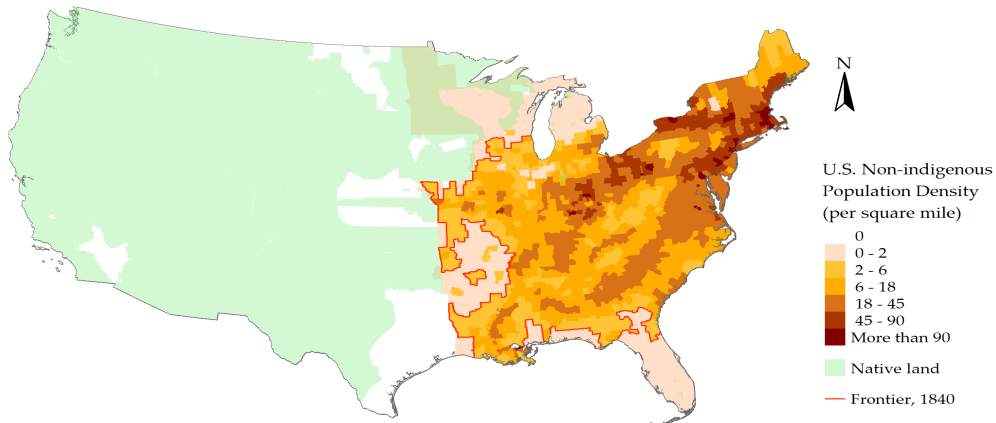
# America's Westward Expansion

1830



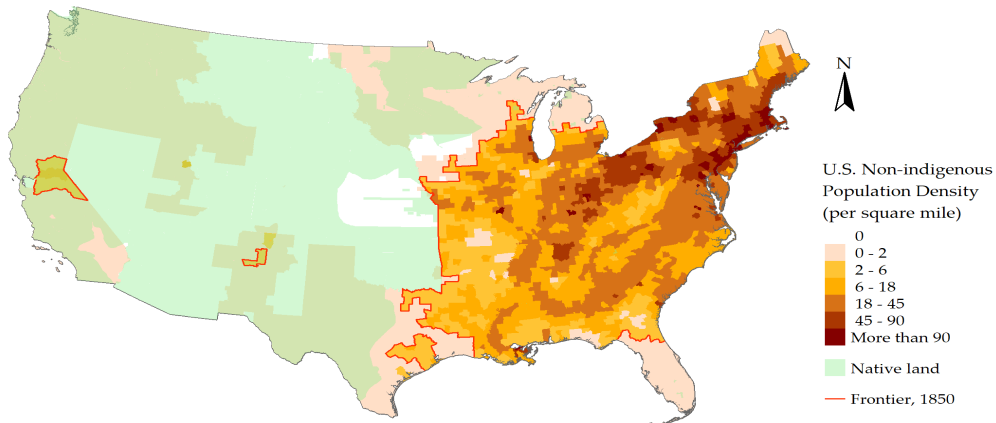
# America's Westward Expansion

1840



# America's Westward Expansion

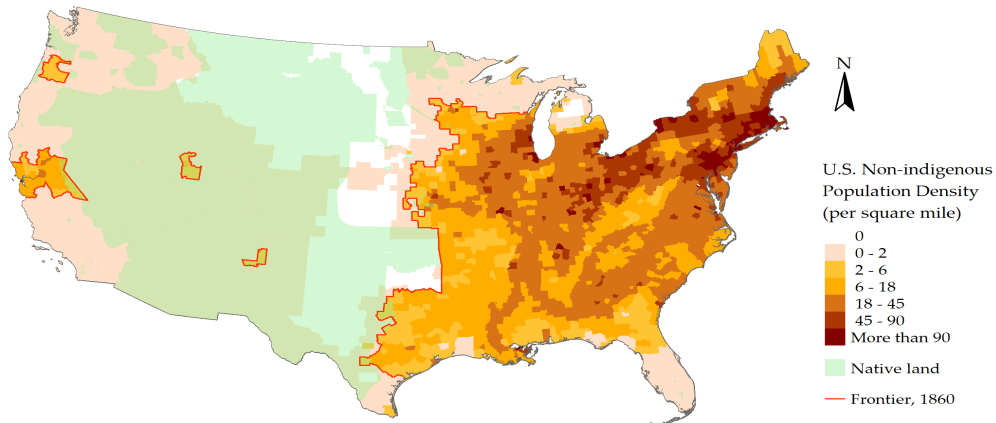
1850





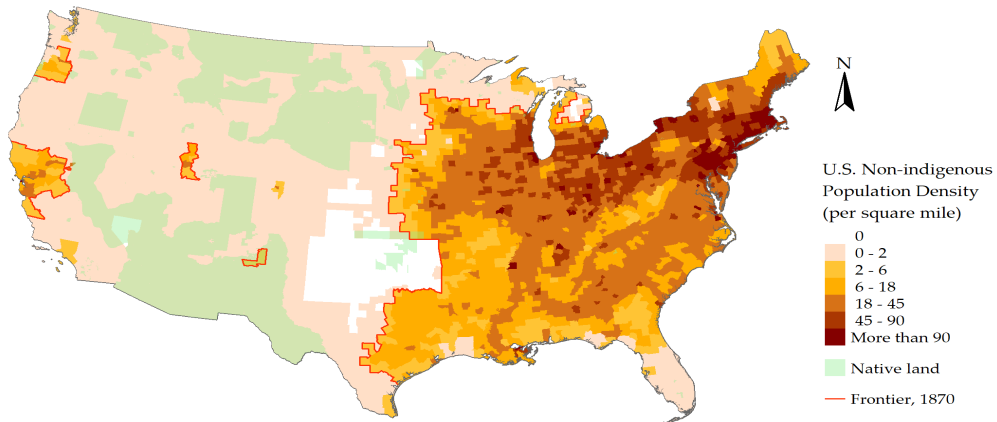
# America's Westward Expansion

1860



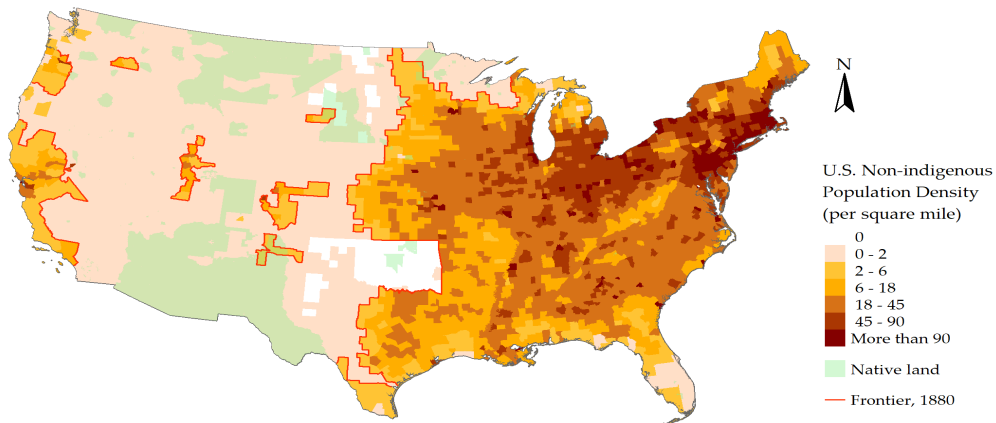
# America's Westward Expansion

1870



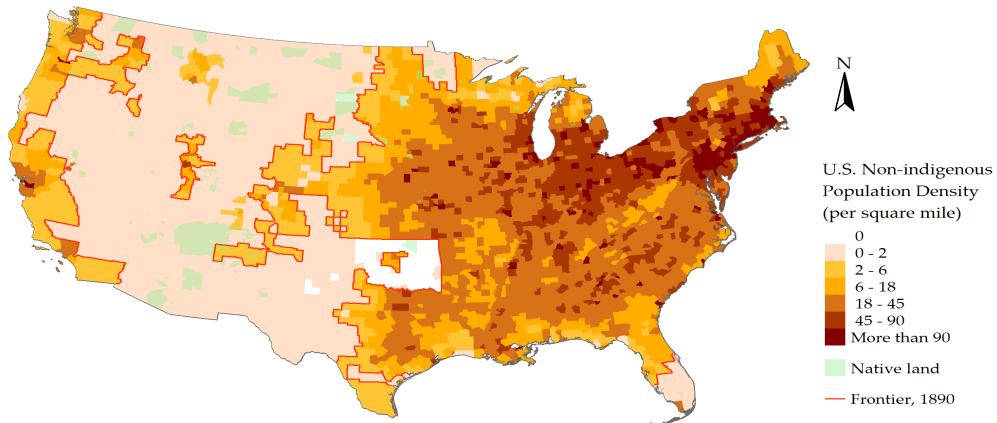
# America's Westward Expansion

1880



# America's Westward Expansion

1890



## Mapping the Frontier

- ▶ **Locate frontier line and trace it over time**
  - ▶ contour line for population density of 2 people/mi<sup>2</sup>

## Mapping the Frontier

- ▶ **Locate frontier line and trace it over time**
  - ▶ contour line for population density of 2 people/mi<sup>2</sup>
  - ▶ for intercensal years we interpolate population density

# Mapping the Frontier

- ▶ **Locate frontier line and trace it over time**
  - ▶ contour line for population density of 2 people/mi<sup>2</sup>
  - ▶ for intercensal years we interpolate population density
- ▶ Define **frontier counties**: “margins of civilization” on “frontier belt”
  1. counties with centroid within 100 km
  2. population density < 6 people/mi<sup>2</sup> (Census cutoff for “fully settled”)

# Mapping the Frontier

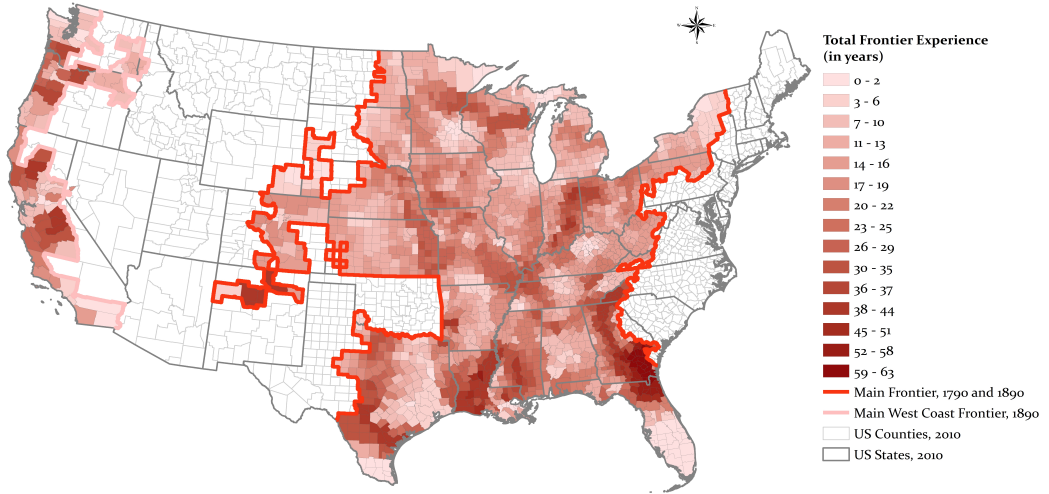
- ▶ **Locate frontier line and trace it over time**
  - ▶ contour line for population density of 2 people/mi<sup>2</sup>
  - ▶ for intercensal years we interpolate population density
- ▶ Define **frontier counties**: “margins of civilization” on “frontier belt”
  1. counties with centroid within 100 km
  2. population density < 6 people/mi<sup>2</sup> (Census cutoff for “fully settled”)
- ▶ **Our measure generalizes** prior, period-specific approaches
  - ▶ Steckel (1989): frontier  $\approx$  Minnesota, Iowa, Kansas, Texas, and west
  - ▶ Ferrie (1997): frontier  $\approx$  90° west longitude between 1850 and 1870



# Mapping the Frontier

- ▶ **Locate frontier line and trace it over time**
  - ▶ contour line for population density of 2 people/mi<sup>2</sup>
  - ▶ for intercensal years we interpolate population density
- ▶ Define **frontier counties**: “margins of civilization” on “frontier belt”
  1. counties with centroid within 100 km
  2. population density < 6 people/mi<sup>2</sup> (Census cutoff for “fully settled”)
- ▶ **Our measure generalizes** prior, period-specific approaches
  - ▶ Steckel (1989): frontier  $\approx$  Minnesota, Iowa, Kansas, Texas, and west
  - ▶ Ferrie (1997): frontier  $\approx$  90° west longitude between 1850 and 1870
- ▶ **Measure of total frontier experience (TFE)**
  - ▶ total number of years spent on the frontier between 1790 and 1890

# Total Frontier Experience (TFE), 1790–1890



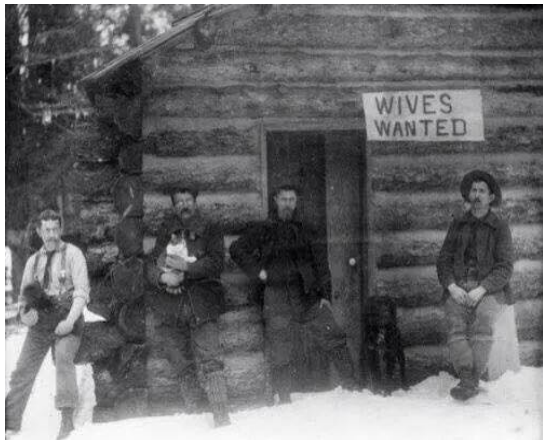
range of 0 to 63 years, mean of 18 years, std. dev. of 11 years

# Images of Frontier Society

## Images of Frontier Society



## Images of Frontier Society

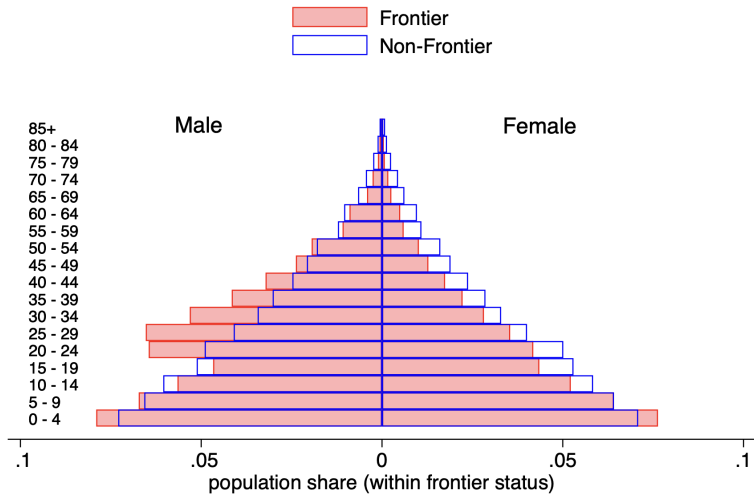


## Images of Frontier Society



# Frontier Demographics

# Frontier Demographics





# Two historical narratives of gender roles on the frontier

## 1. Frontier women as **entrepreneurial, independent**

Economic necessity and labor scarcity → blurred gender roles, empowered women

*... by the demands it made on human beings for survival, **frontier economy established a certain rough egalitarianism** which challenged other, long-established concepts of propriety. (Flexner & Fitzpatrick, 1996)*

*Men and women generally had different roles to play, but the mutuality between the sexes enforced by **the needs of homesteading expanded women's power to negotiate and win.** (Harris, 1984)*

## 2. Frontier women as **home-bound**

Increased domestic burden, no empowerment → asymmetric erosion of gendered work

*Even though frontier conditions forced them into manly pursuits and led them to modify some of their standards, they hardly pressed for a liberation from female norms and culture. Much of the 'freedom' which women experienced was the freedom to work even harder than they had before, with dramatic results" (Jeffrey, 1979)*

# Frontier conditions and gender roles: a view from economics of the family

## ▶ **Isolation** from extended family and social networks

- ▶ most goods and services home-produced → increased domestic burden, esp. for women (Greenwood, Seshadri & Yorukoglu 2005; Cavalcanti & Tavares 2008)
- ▶ lack of protection against violence or outside options (Figueredo et al 2001)

## ▶ **High fertility**

- ▶ high demand for children due to land abundance (Ashraf & Galor 2010; Easterlin 1976, Steckel 1992)
- ▶ gap in desired fertility (Anderson & Ray 2010; Doepke & Tertilt 2018; Ashraf, Field, Voena & Ziparo 2020)
- ▶ increased domestic burden (Kleven, Landaïs & Søgaaard 2019)

## ▶ **Imbalanced sex ratios**

- ▶ favors masculinity norms, violence (Baranov, De Haas & Grosjean 2022)
- ▶ (favors female bargaining power → greater leisure) (Grosjean & Khattar 2019)

# Roadmap

Introduction

Historical Background

Fertility and Gender Inequality on the Frontier

The Frontier Legacy in the Long Run

Conclusion

## Marriage, Fertility, and Female Labor on the Frontier

$$x_{ct} = \alpha + \beta \text{frontier}_{ct} + \theta_{d(c)} + \theta_t + \varepsilon_{ct}$$

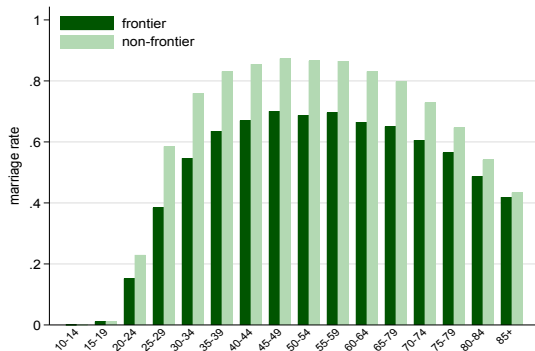
# Marriage, Fertility, and Female Labor on the Frontier

$$x_{ct} = \alpha + \beta \text{frontier}_{ct} + \theta_{d(c)} + \theta_t + \varepsilon_{ct}$$

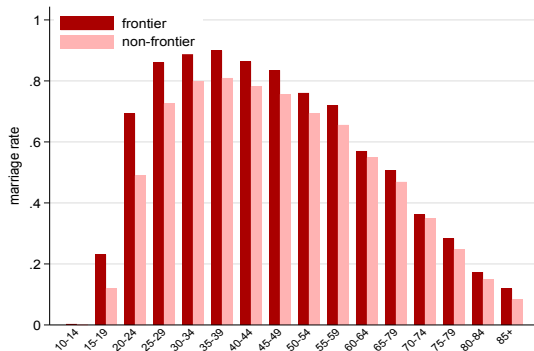
	Marriage Patterns			
	Share of Women Ever Married	Share of Men Ever Married	Age Gap Between Spouses	Women's Divorce Rate
	(1)	(2)	(3)	(4)
Frontier	0.0491*** (0.005)	-0.0624*** (0.007)	0.239*** (0.066)	-0.0014*** (0.000)
Dep. Var. Mean (non-frontier)	0.70	0.58	4.36	0.004
Dep. Var. Std. Dev. (non-frontier)	0.04	0.05	2.02	0.003
Division Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓

# Marriage Rates by Age

## Men



## Women



## Marriage, Fertility, and Female Labor on the Frontier

$$x_{ct} = \alpha + \beta \text{frontier}_{ct} + \theta_{d(c)} + \theta_t + \varepsilon_{ct}$$

# Marriage, Fertility, and Female Labor on the Frontier

$$x_{ct} = \alpha + \beta \text{ frontier}_{ct} + \theta_{d(c)} + \theta_t + \varepsilon_{ct}$$

	Family and Work			
	Child-Women Ratio (Fertility) (1)	Share of Households w/ Grandmother (2)	Female Labor Force Participation (3)	Gender Occupational Segregation (4)
Frontier	68.67*** (11.289)	-0.0055*** (0.001)	-0.025*** (0.007)	0.030*** (0.010)
Dep. Var. Mean (non-frontier)	671	0.018	0.12	0.82
Dep. Var. Std. Dev. (non-frontier)	119	0.006	0.13	0.22
Number of County-Years	6,048	5,844	4,905	4,818
Division Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓



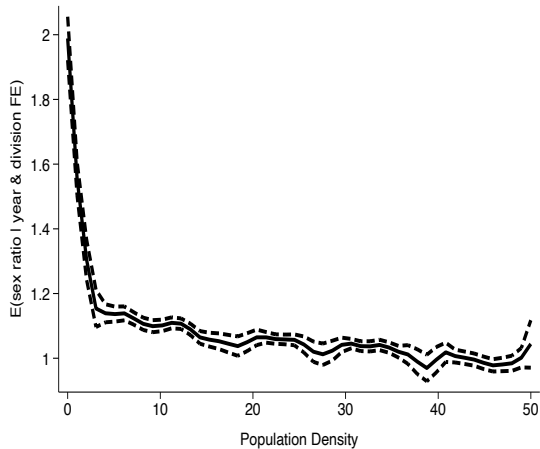
## Semiparametric Analysis

$$x_{cdt} = g(\text{isolation}_{cdt}) + \theta_d + \theta_t + \varepsilon_{cdt}$$

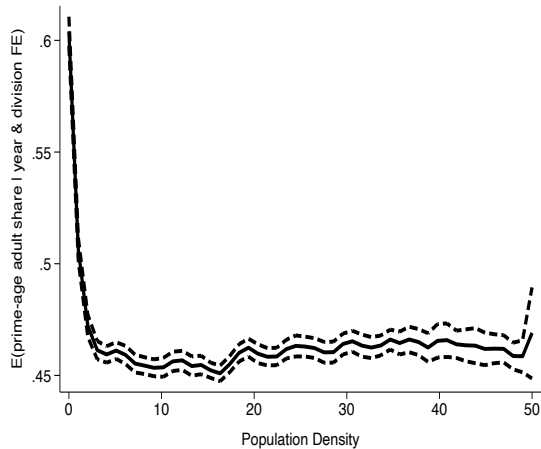
# Semiparametric Analysis

$$x_{cdt} = g(\text{isolation}_{cdt}) + \theta_d + \theta_t + \varepsilon_{cdt}$$

**Sex Ratio (Male/Female)**



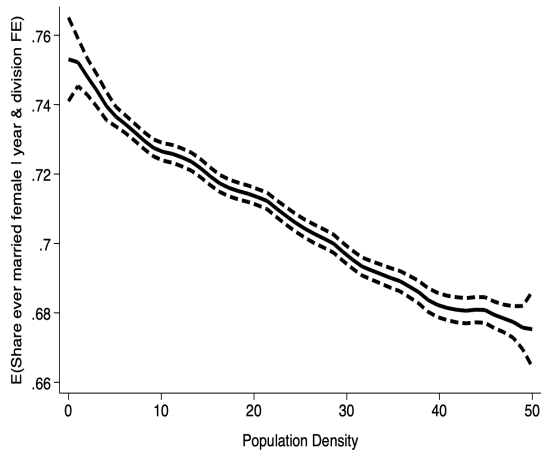
**Share of Prime Age Adults**



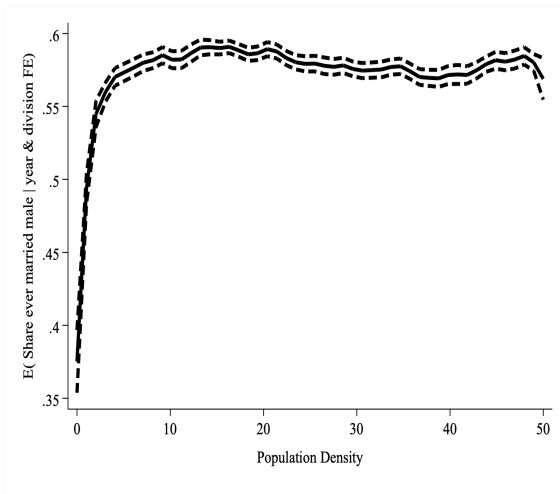
# Semiparametric Analysis

$$x_{cdt} = g(\text{isolation}_{cdt}) + \theta_d + \theta_t + \varepsilon_{cdt}$$

## Share of Women Ever Married



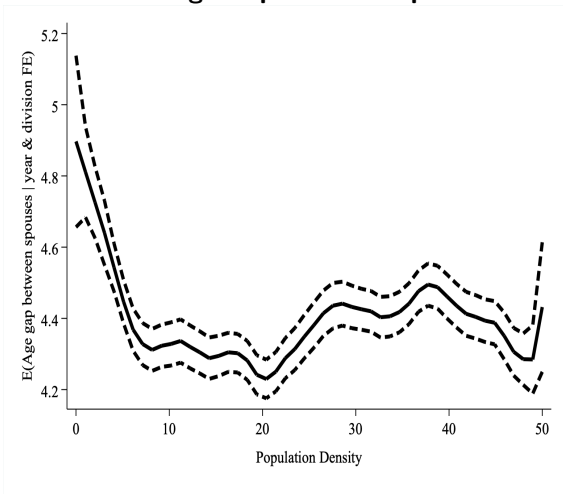
## Share of Men Ever Married



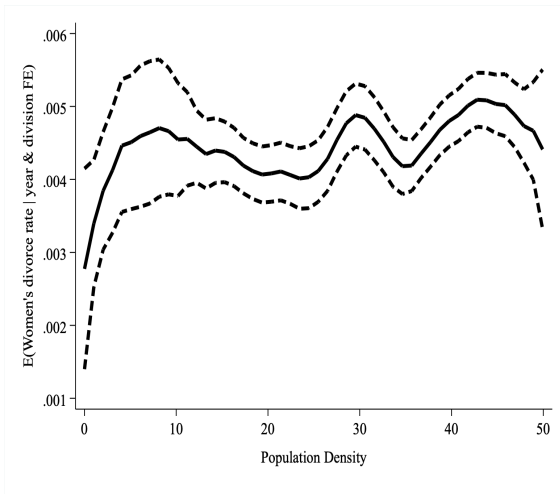
# Semiparametric Analysis

$$x_{cdt} = g(\text{isolation}_{cdt}) + \theta_d + \theta_t + \varepsilon_{cdt}$$

## Age Gap between Spouses



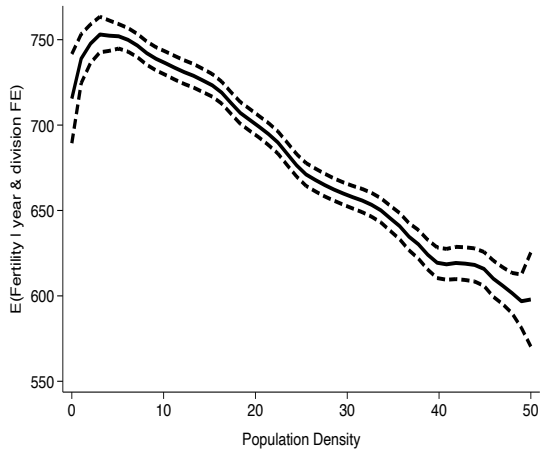
## Women's Divorce Rate



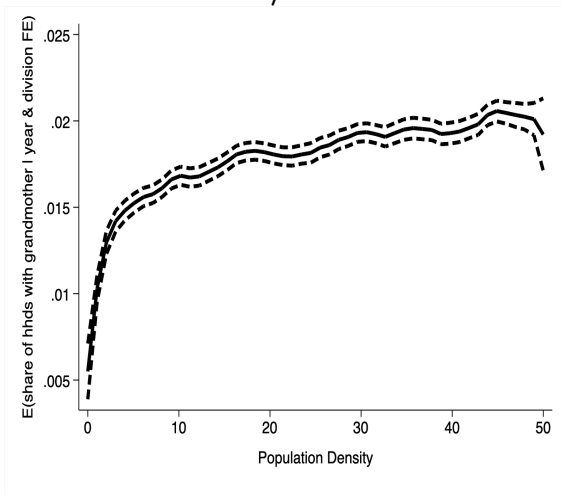
# Semiparametric Analysis

$$x_{cdt} = g(\text{isolation}_{cdt}) + \theta_d + \theta_t + \varepsilon_{cdt}$$

Child-Women Ratio



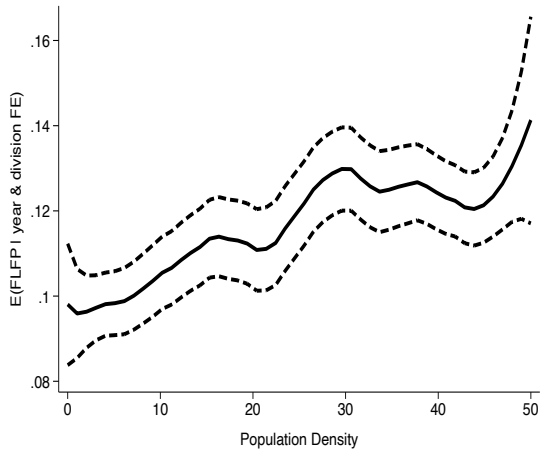
Share of HH's w/ Grandmother



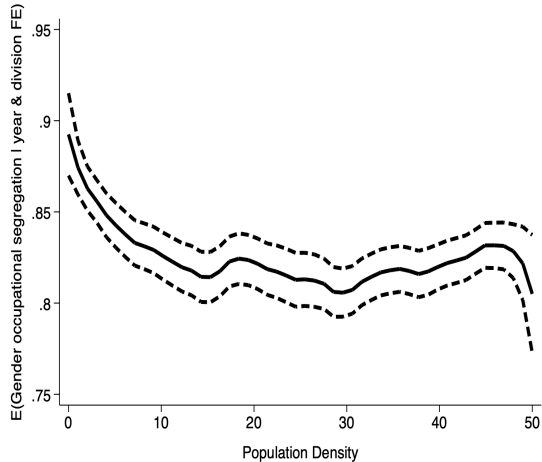
# Semiparametric Analysis

$$x_{cdt} = g(\text{isolation}_{cdt}) + \theta_d + \theta_t + \varepsilon_{cdt}$$

## Female Labor Force Participation



## Occupational Segregation



# Assessing Female Economic Empowerment on the Frontier

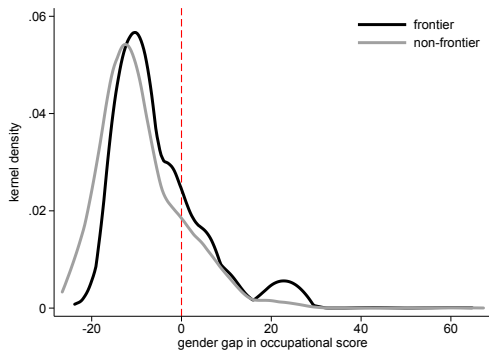
# Assessing Female Economic Empowerment on the Frontier

	Occupational Score		Literacy Rate		School Attendance	
	Women	Women rel. to men	Women	Women rel. to men	Girls	Girls rel. to boys
	(1)	(2)	(3)	(4)	(5)	(6)
Frontier	1.052*** (0.278)	0.072*** (0.020)	0.049*** (0.016)	0.023** (0.009)	-0.114*** (0.017)	0.046** (0.021)
Dep. Var. Mean (non-frontier)	12.6	0.74	0.77	0.92	0.49	0.99
Dep. Var. Std. Dev. (non-frontier)	2.92	0.17	0.25	0.16	0.23	0.17
Number of County-Years	4,795	4,795	6,048	6,047	6,035	5,941
Division Fixed Effects	✓	✓	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓	✓	✓



# An Upper Tail of Economically Empowered Women

Distribution of the Gender Gap in Occupational Scores, 1860



- ▶ mass in upper tail: occscore=42
- ▶ “managers, officials and proprietors”
- ▶ in practice: hotel keepers, restaurant keepers, saloon keepers and bartenders, traders and dealers

# The Role of Sex Ratios

	Marriage Patterns				Family and Work			
	Share of Women Ever Married (1)	Share of Men Ever Married (2)	Age Gap Between Spouses (3)	Women's Divorce Rate (4)	Fertility: Child-Women Ratio (5)	Share of Households w/ Grandmother (6)	Female Labor Force Participation (7)	Gender Occupational Segregation (8)
<i>Panel A. Non-Frontier Counties</i>								
Sex Ratio	0.195*** (0.024)	-0.318*** (0.026)	1.124*** (0.258)	-0.00192* (0.001)	222.3*** (53.756)	-0.0203*** (0.002)	-0.0749* (0.041)	0.0637* (0.034)
Dep. Var. Mean	0.70	0.58	4.36	0.004	671.84	0.01	0.12	0.82
Dep. Var. Std. Dev.	0.04	0.05	2.02	0.003	119.30	0.006	0.13	0.22
Number of County-Years	5,313	5,313	5,313	1,653	5,313	5,210	4,342	4,300
<i>Panel B. Frontier Counties</i>								
Sex Ratio	-0.00286 (0.006)	-0.0603*** (0.020)	0.141 (0.102)	-0.000625*** (0.000)	11.35 (28.370)	-0.00179** (0.001)	0.0136*** (0.005)	0.00108 (0.002)
Dep. Var. Mean	0.76	0.51	4.63	0.003	774.73	0.01	0.07	0.85
Dep. Var. Std. Dev.	0.09	0.11	2.13	0.003	217.20	0.01	0.10	0.23
Number of County-Years	735	735	733	181	735	632	563	518

# Roadmap

Introduction

Historical Background

Fertility and Gender Inequality on the Frontier

The Frontier Legacy in the Long Run

Conclusion

## Estimating the Long-Run Legacy of TFE

$$y_c^t = \alpha + \beta_t \text{ total frontier experience}_c + \mathbf{x}_c' \gamma + \theta_{s(c)} + \varepsilon_c$$

- ▶ total frontier experience<sub>c</sub> (TFE): number of decades on the frontier
- ▶  $\beta_t$ : allow TFE relationship to vary over time
- ▶  $\mathbf{x}_c$ : predetermined geographic and agroclimatic controls  
(lat., long., area, temp., rain, distance to waterways, potential agri. prod., ...)
- ▶  $\theta_{s(c)}$ : state fixed effects
- ▶ Clustered se's: 60 mi<sup>2</sup> grid; spatial HAC 100–1000 km; state

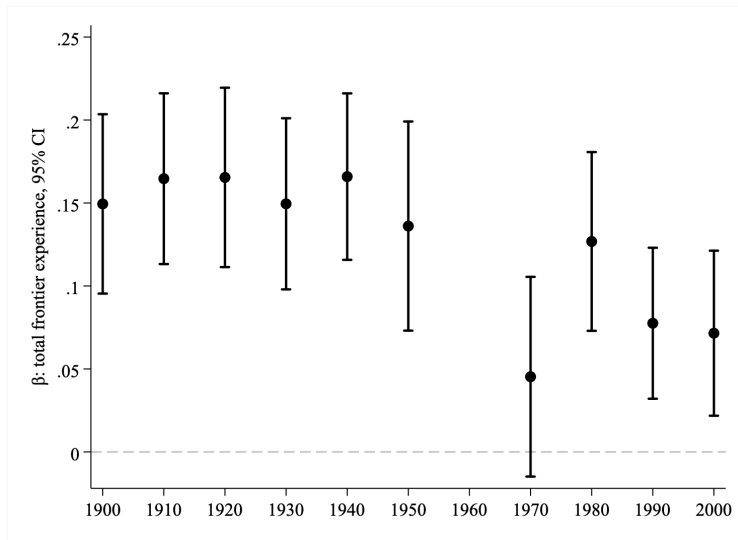
# The Frontier Legacy of Gender Inequality in the Long Run

	Child-women Ratio (Fertility) (1)	Share Ever Married Female (2)	Share Ever Married Male (3)	Age Gap Spouses (4)	Female Labor Force Participation (5)	Gender Gap Labor Force Participation (6)	Gender Occupational Segregation (7)
(A) Outcomes Measured in 1940							
total frontier experience	13.131*** (2.019)	0.005*** (0.001)	0.002** (0.001)	0.059*** (0.013)	-0.015*** (0.002)	-0.019*** (0.002)	0.007*** (0.002)
Dep. Var. Mean	375.70	0.78	0.69	4.44	0.17	0.22	0.71
Dep. Var. Std. Dev.	79.15	0.03	0.04	0.62	0.06	0.07	0.06
Number of Counties	2,032	2,032	2,032	1,987	2,033	2,033	2,032

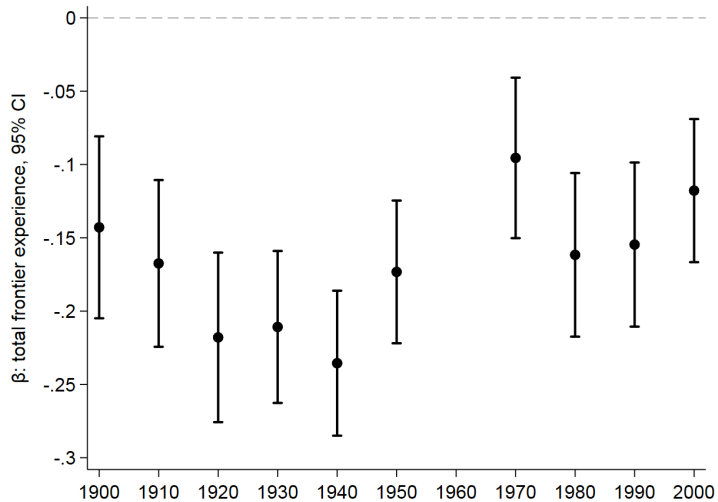
# The Frontier Legacy of Gender Inequality in the Long Run

	Child-women Ratio (Fertility) (1)	Share Ever Married Female (2)	Share Ever Married Male (3)	Age Gap Spouses (4)	Female Labor Force Participation (5)	Gender Gap Labor Force Participation (6)	Gender Occupational Segregation (7)
(A) Outcomes Measured in 1940							
total frontier experience	13.131*** (2.019)	0.005*** (0.001)	0.002** (0.001)	0.059*** (0.013)	-0.015*** (0.002)	-0.019*** (0.002)	0.007*** (0.002)
Dep. Var. Mean	375.70	0.78	0.69	4.44	0.17	0.22	0.71
Dep. Var. Std. Dev.	79.15	0.03	0.04	0.62	0.06	0.07	0.06
Number of Counties	2,032	2,032	2,032	1,987	2,033	2,033	2,032
(B) Outcomes Measured in 2000							
total frontier experience	2.493*** (0.881)	0.009*** (0.001)	0.008*** (0.001)		-0.008*** (0.002)	0.001 (0.003)	
Dep. Var. Mean	269.33	0.81	0.74		0.54	0.81	
Dep. Var. Std. Dev.	34.61	0.05	0.05		0.06	0.09	
Number of Counties	2,036	2,036	2,036		2,036	2,036	
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes

# The Frontier Legacy of Gender Inequality: Child-Women Ratios



# The Frontier Legacy of Gender Inequality: FLFP





# The Frontier Legacy of Upper Tail Working Women

	Occupational Score		At least High School Graduates	
	Women's	Women Rel. to Men	Share Female	Women Rel. to men
	(1)	(2)	(3)	(4)
(A) Outcomes Measured in 1940				
total frontier experience	0.099* (0.051)	0.017*** (0.003)	-0.010*** (0.002)	-0.002 (0.005)
Dep. Var. Mean	18.04	0.91	0.21	1.33
Dep. Var. Std. Dev.	2.46	0.13	0.08	0.19
Number of Counties	2,032	2,032	2,032	2,032
(B) Outcomes Measured in 2000				
total frontier experience			-0.008*** (0.002)	0.000 (0.001)
Dep. Var. Mean			0.77	1.02
Dep. Var. Std. Dev.			0.08	0.04
Number of Counties			2,034	2,034
State FE	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes

# The Frontier Legacy of Gendered Time Use

	Minutes Per Day Allocated to ...				
	Work	Leisure	Household Activities	Other	Leisure Share
	(1)	(2)	(3)	(4)	(5)
(A) Women Only					
total frontier experience	3.792* (1.945)	-7.357*** (1.807)	3.627* (1.884)	0.086 (2.424)	-0.005*** (0.001)
Number of Individuals	10,177	10,177	10,177	10,177	10,177
Dep. Var. Mean	137	266	225	800	0.19
Dep. Var. Std. Dev.	220	181	184	184	0.13
(B) Men Only					
total frontier experience	-3.581 (2.427)	0.672 (2.733)	2.936 (1.864)	0.123 (2.181)	0.000 (0.002)
Number of Individuals	9,416	9,416	9,416	9,416	9,416
Dep. Var. Mean	221	316	135	756	0.22
Dep. Var. Std. Dev.	271	217	155	187	0.15
State Fixed Effects	Yes	Yes	Yes	Yes	Yes
Survey Wave Fixed Effects	Yes	Yes	Yes	Yes	Yes
Geographic Controls	Yes	Yes	Yes	Yes	Yes
Individual Demographic Controls	Yes	Yes	Yes	Yes	Yes

## Frontier Legacy of Gender Norms

[illegible]

# Frontier History around Women in Politics

	Rep. Voted For Suffrage in 1919 (1)	Share Women House Reps. 1917–2020 (2)	Temperance Movement Activities (3)	NWP Actions For Suffrage 1914–1922 (4)	Share Women All Politics 1900–2000 (5)
total frontier experience, cong. district	0.044 (0.027)	-0.002 (0.009)			
total frontier experience, county			-0.0259*** (0.007)	-0.005* (0.003)	-0.015* (0.008)
Number of Observations	223	226	1,743	2,034	5,856
Dep. Var. Mean	0.70	0.07	0.18	0.01	0.09
Dep. Var. Std. Dev.	0.45	0.13	0.39	0.10	0.34
State Fixed Effects			Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes

# Conclusion

- ▶ Frontier settlement was integral to American culture and identity
  - ▶ Settlers forged local norms and institutions at critical juncture of development
  - ▶ Lasting imprint on gender norms
- ▶ Frontier conditions and gender roles
  - ▶ historically, women were more likely to marry, and did so earlier, with older men
  - ▶ higher fertility, low FLFP (though with a thick upper tail)
  - ▶ seemingly conflicting historical narratives about women on the frontier are complementary
- ▶ Mechanisms for persistence
  - ▶ social norms
  - ▶ weak political representation