The racial wealth gap, 1860-2020[1]

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[1] Excellent research assistance was provided by Will McGrew and Isbah Bandeali.

Motivation

- The largest racial economic gap continues to be wealth
  - White to Black wealth ratio in 2019 is 6:1
  - Compared to income ratio of 1.5:1
- The gap has shown remarkable stability over the late 20C
- We know little of its evolution prior to modern wealth data

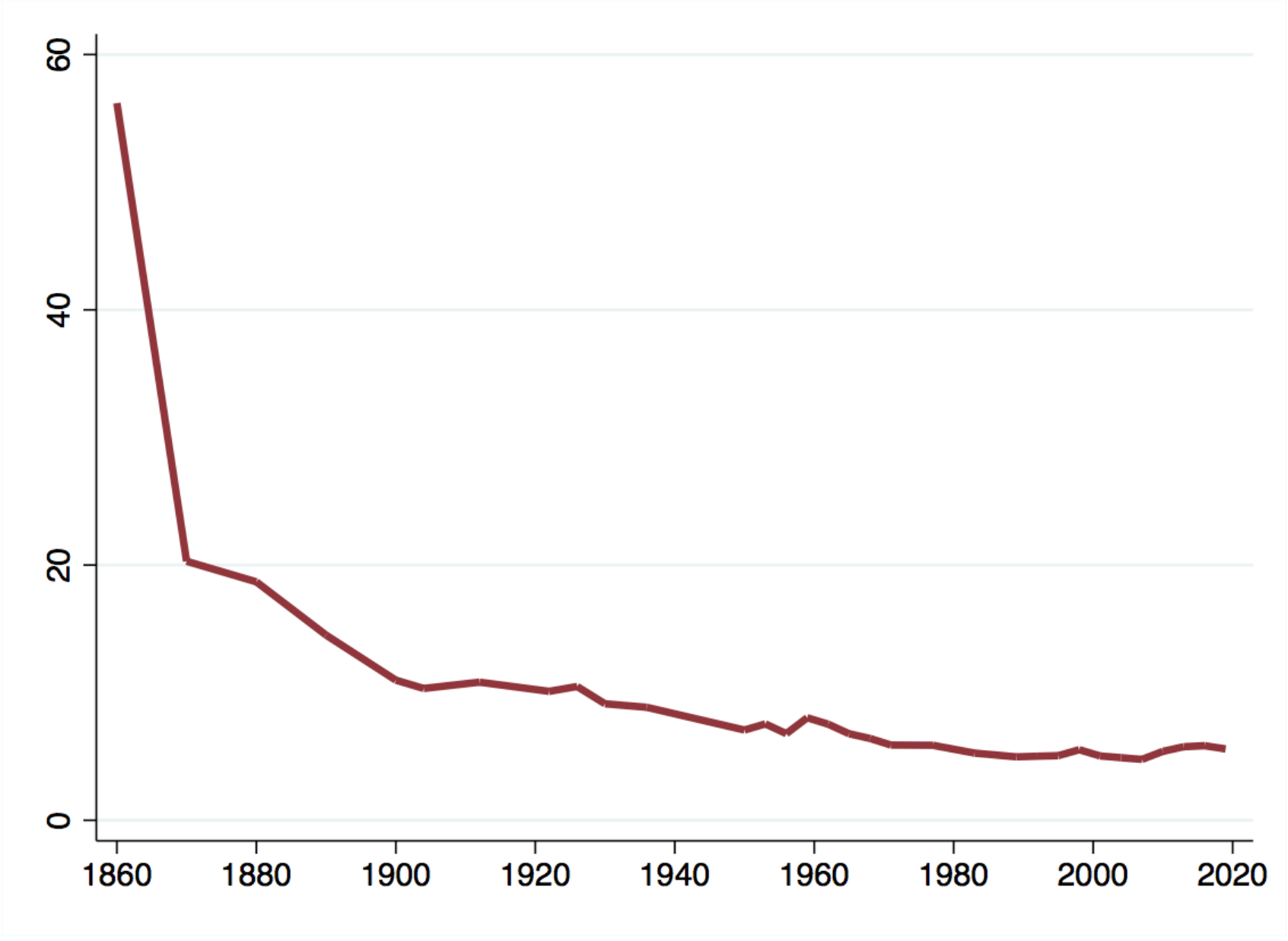
[Du Bois (1901); Spriggs (1984); Margo (1984); Margo & Collins (2011)]

Our project:

- Fill in ~ 100 missing years of data on white-Black wealth gaps
- Combine with Solow-style model to explain persistence
- Explain key mechanisms behind slow convergence
- Shed light on future gap, policy implications (e.g., reparations)

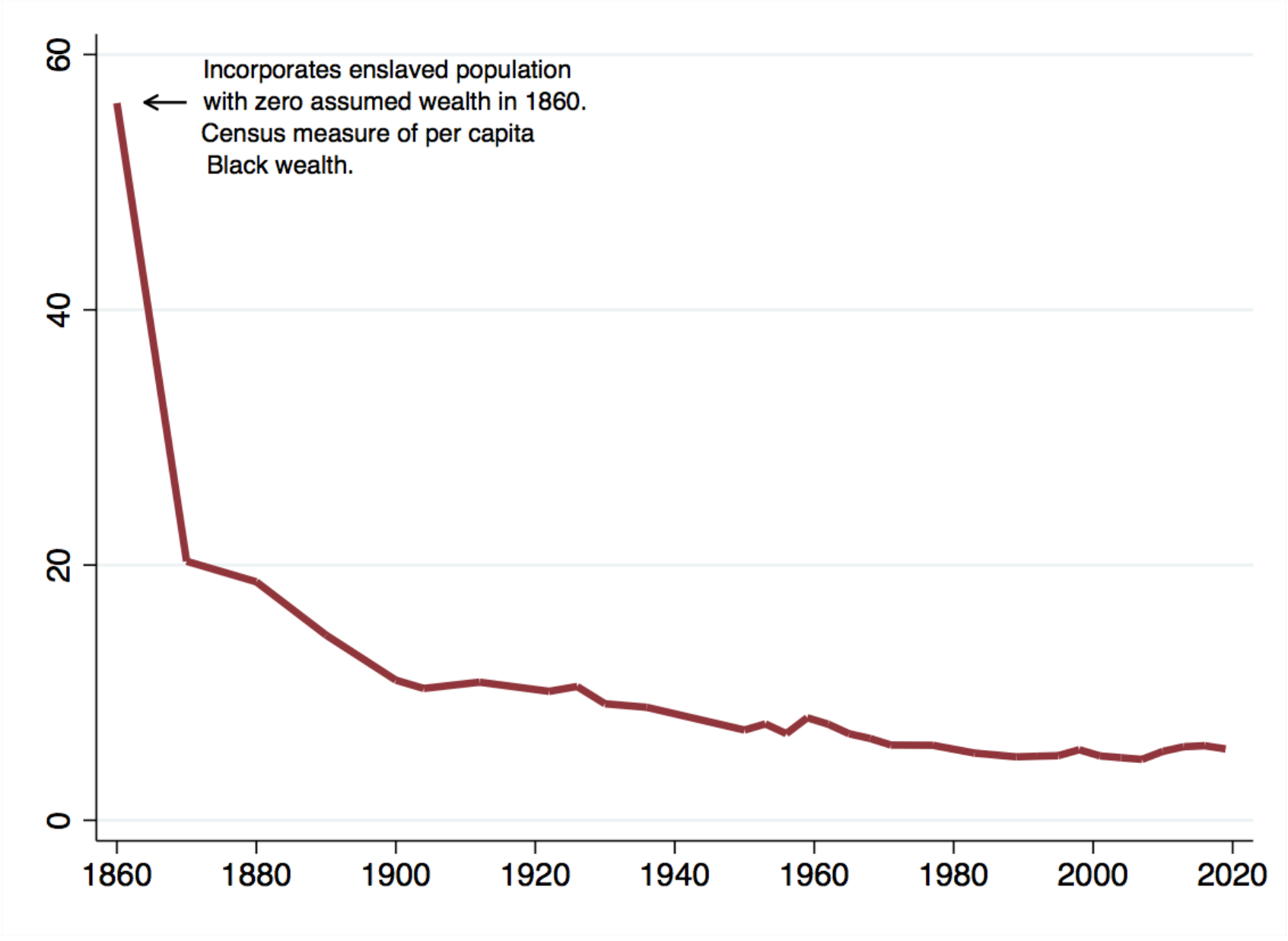
White-Black per capita wealth ratio, 1860-2020

Authors' series



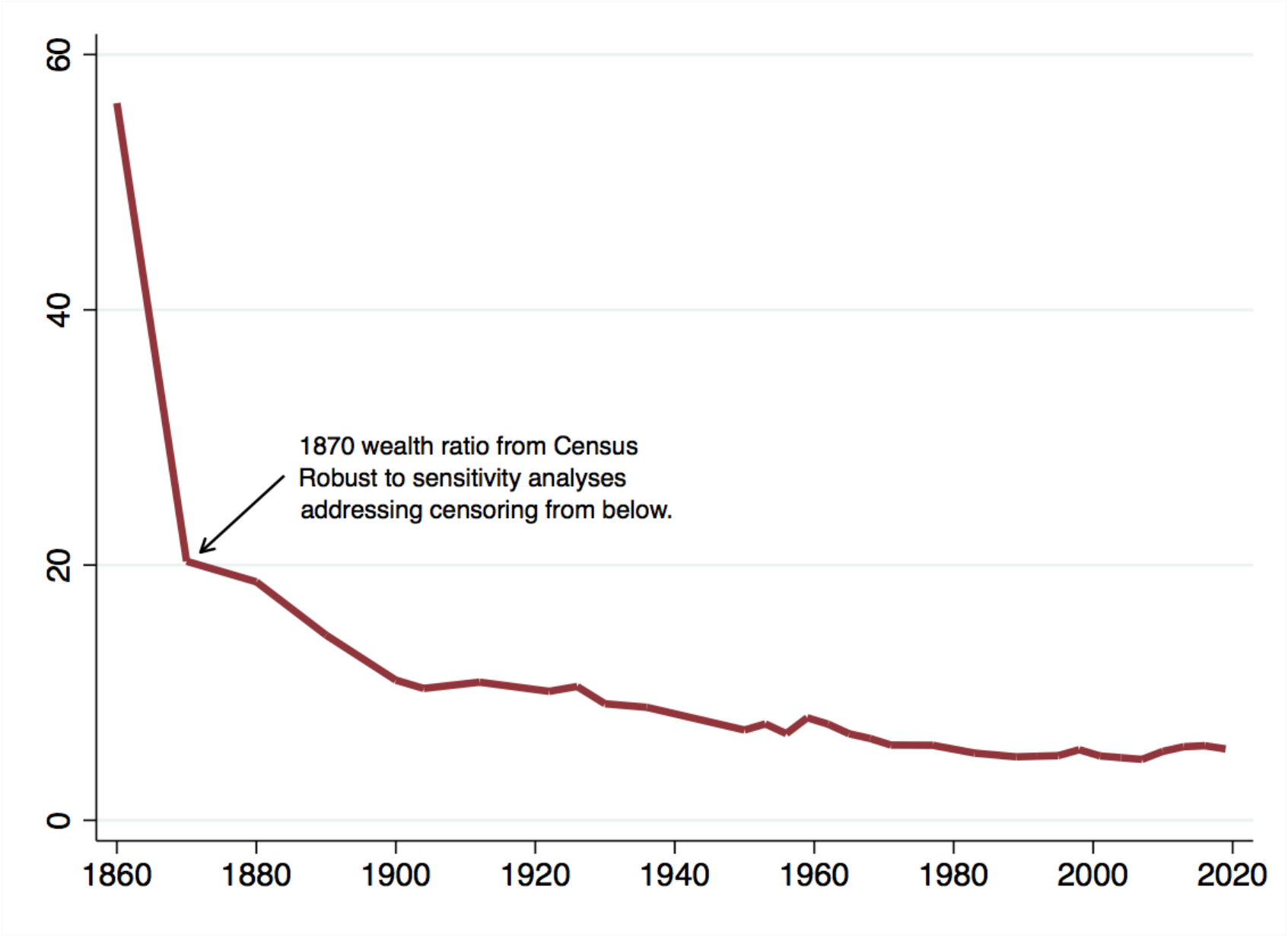
White-Black wealth ratio, 1860-2020

Authors' series



White-Black wealth ratio, 1860-2020

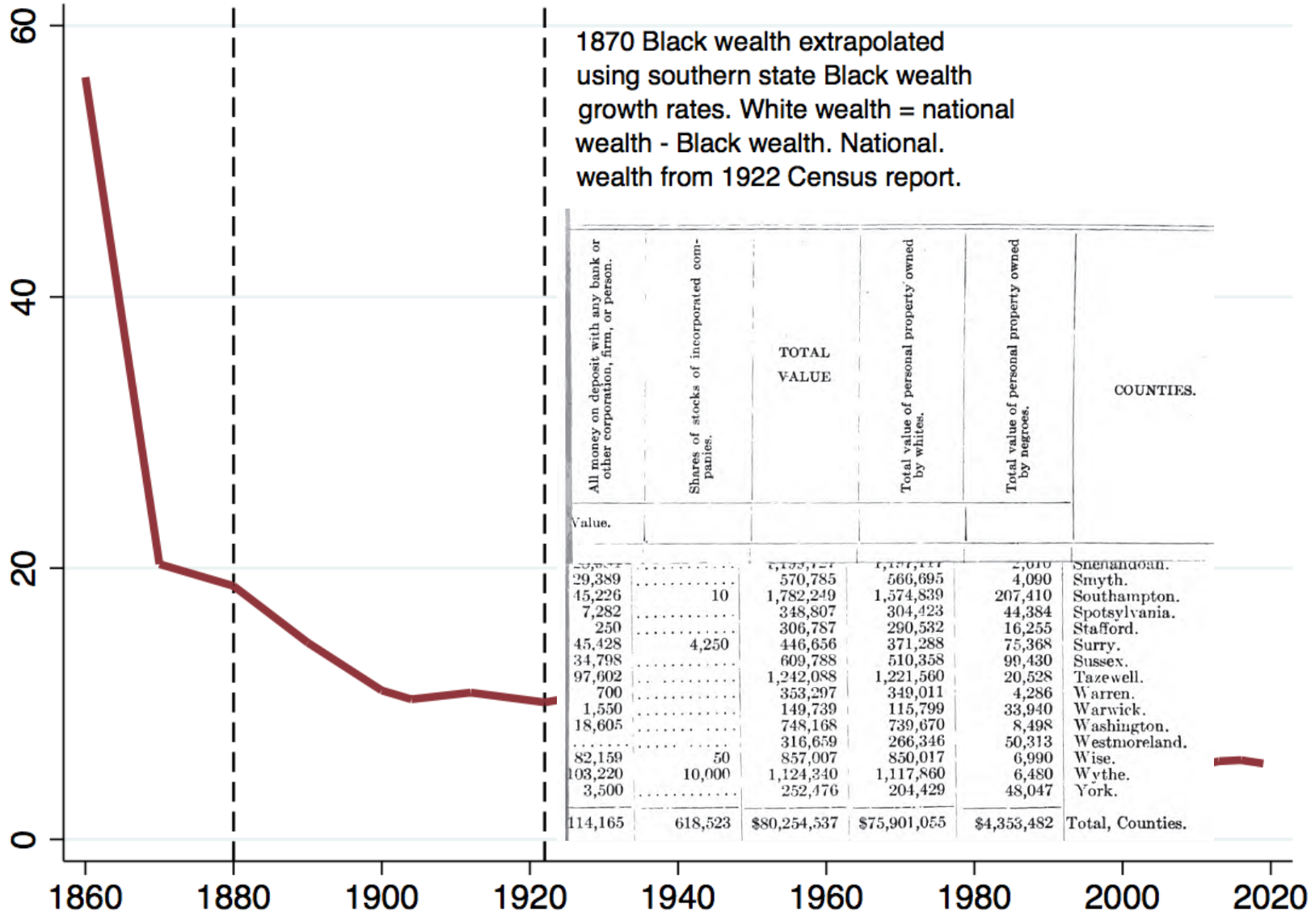
Authors' series



White-Black wealth ratio, 1860-2020

Authors' series

Tax Data

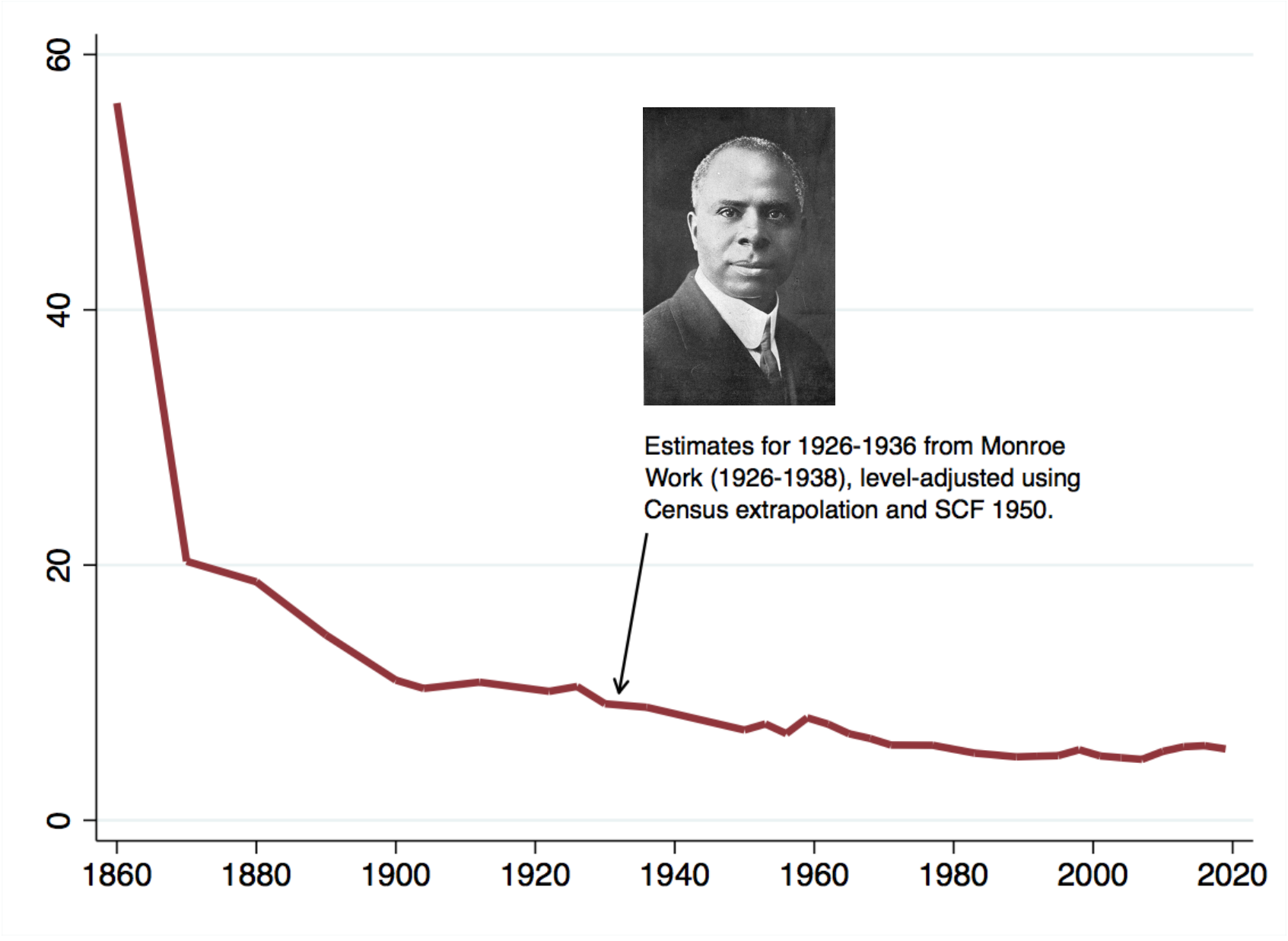


All money on deposit with any bank or other corporation, firm, or person.	Shares of stocks of incorporated companies.	TOTAL VALUE	Total value of personal property owned by whites.	Total value of personal property owned by negroes.	COUNTIES.
Value.					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Shenandoah.
29,389	.....	570,785	566,695	4,090	Smyth.
45,226	10	1,782,249	1,574,839	207,410	Southampton.
7,282	.....	348,807	304,423	44,384	Spotsylvania.
250	.....	306,787	290,532	16,255	Stafford.
45,428	4,250	446,656	371,288	75,368	Surry.
34,798	.....	609,788	510,358	99,430	Sussex.
97,602	.....	1,242,088	1,221,560	20,528	Tazewell.
700	.....	353,297	349,011	4,286	Warren.
1,550	.....	149,739	115,799	33,940	Warwick.
18,605	.....	748,168	739,670	8,498	Washington.
.....	.....	316,659	266,346	50,313	Westmoreland.
82,159	50	857,007	850,017	6,990	Wise.
103,220	10,000	1,124,340	1,117,860	6,480	Wythe.
3,500	.....	252,476	204,429	48,047	York.
114,165	618,523	$80,254,537	$75,901,055	$4,353,482	Total, Counties.

White-Black wealth ratio, 1860-2020

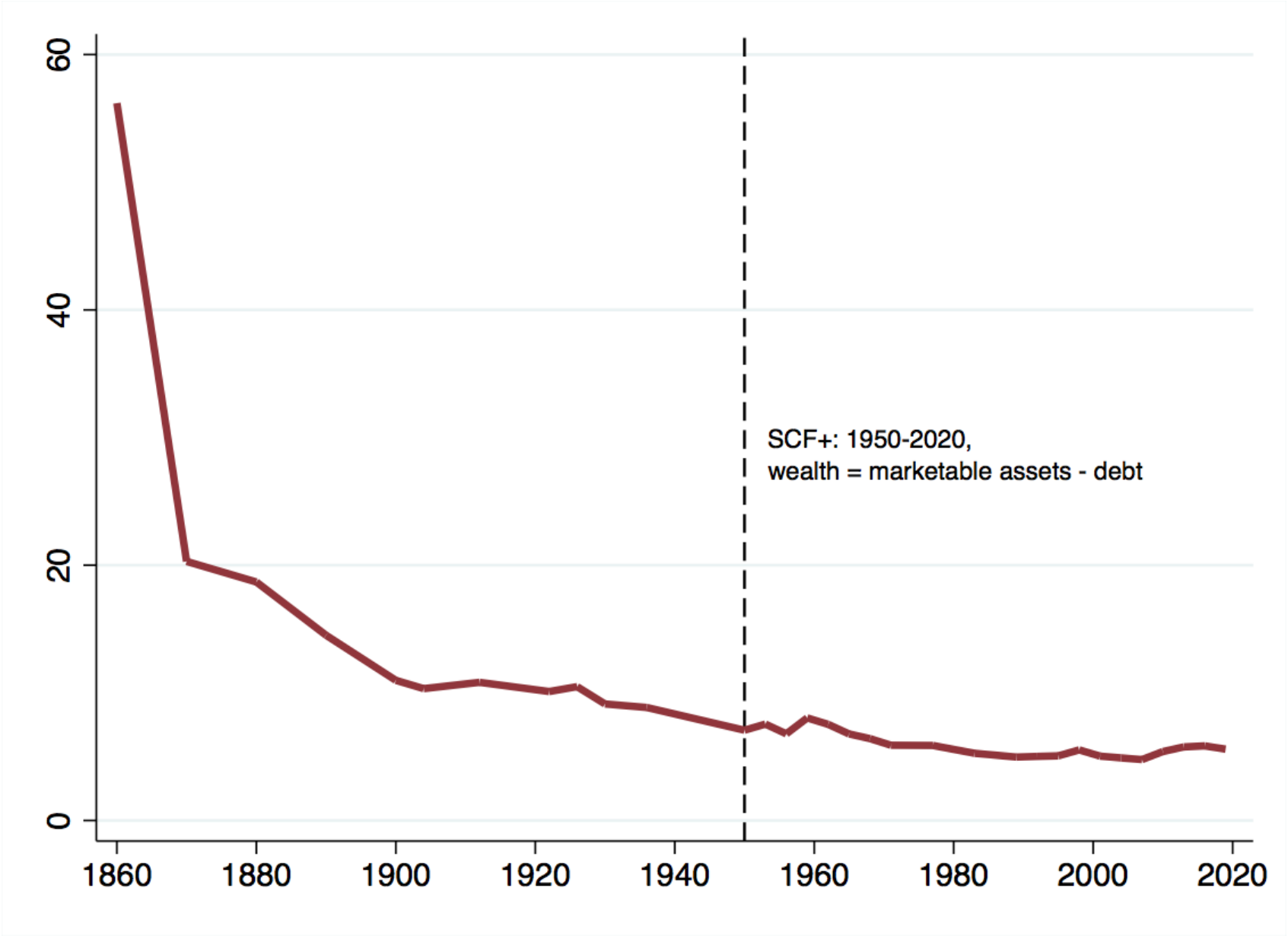
Authors' series

▸ Alt. 1930 estimate



White-Black wealth ratio, 1860-2020

Authors' series ▸ Housing ▸ % Pos.



Key takeaways from the long-run series

- Rapid convergence in first 50 yrs after emancipation
  - In 1860, W-B ratio is 56 to 1
  - By 1920, W-B ratio is $\sim$10 to 1
- Convergence slows dramatically by mid-to-late 20C
  - W-B ratio in 1950s: 7
  - W-B ratio in 2019: 6
- Overall series exhibits a "hockey-stick" shape
- What forces explain this shape of convergence?

Modeling convergence

We draw on the long-run wealth inequality literature (Garbinti et al., 2020; Saez & Zucman, 2013) and use the following wealth accounting equation for each racial group:

$$
\begin{aligned}
W^b_{t+1} &= (1+q^b)\left[W^b_t + s^b(Y^b_t + r^b W^b_t)\right] \\
W^w_{t+1} &= (1+q^w)\left[W^w_t + s^w(Y^w_t + r^w W^w_t)\right]
\end{aligned}
$$

- r = return on wealth, q = capital gains, s = savings rate
- W = wealth, Y = labor income, rW = capital income

Simulating wealth convergence

Thought experiment: what would be the path of convergence assuming equal capital gains, rates of return, and savings rates across racial groups?

- $q = 1\%$, $r = 6\%$, $s = 8\%$

  [Piketty and Zucman (2014), Saez and Zucman (2016)]

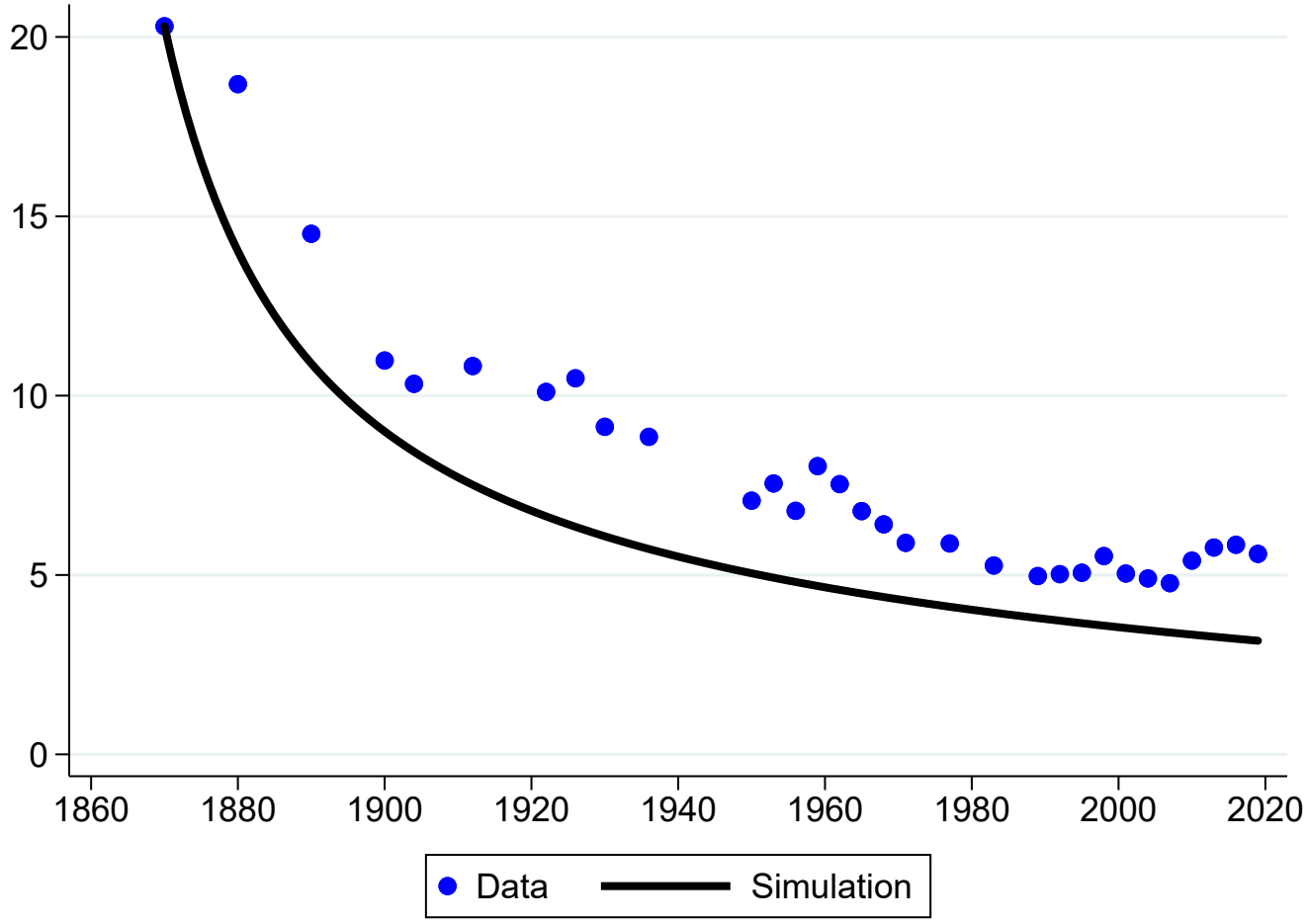
- Labor income evolves with different growth rates

$$\begin{aligned} Y_t^b &= (1 + g^b) Y_{t-1}^b \\ Y_t^w &= (1 + g^w) Y_{t-1}^w \end{aligned}$$

$\Rightarrow g^b = 2.4\%$, $g^w = 1.8\%$ ▸ data

- Initial (1870) wealth & (labor) income gap (W/B): 20 and 3.6

Hockey stick shape of convergence follows from model

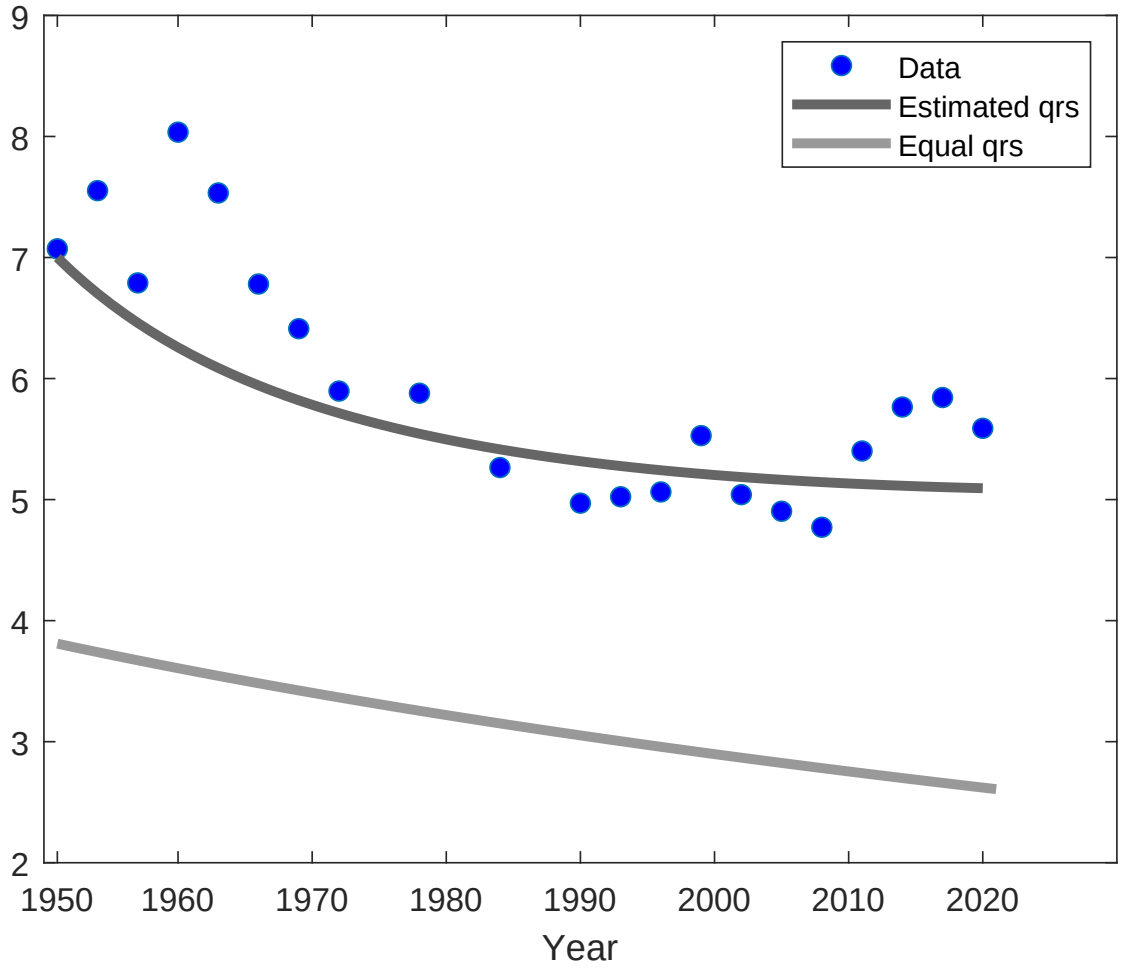


Simulation vs. data

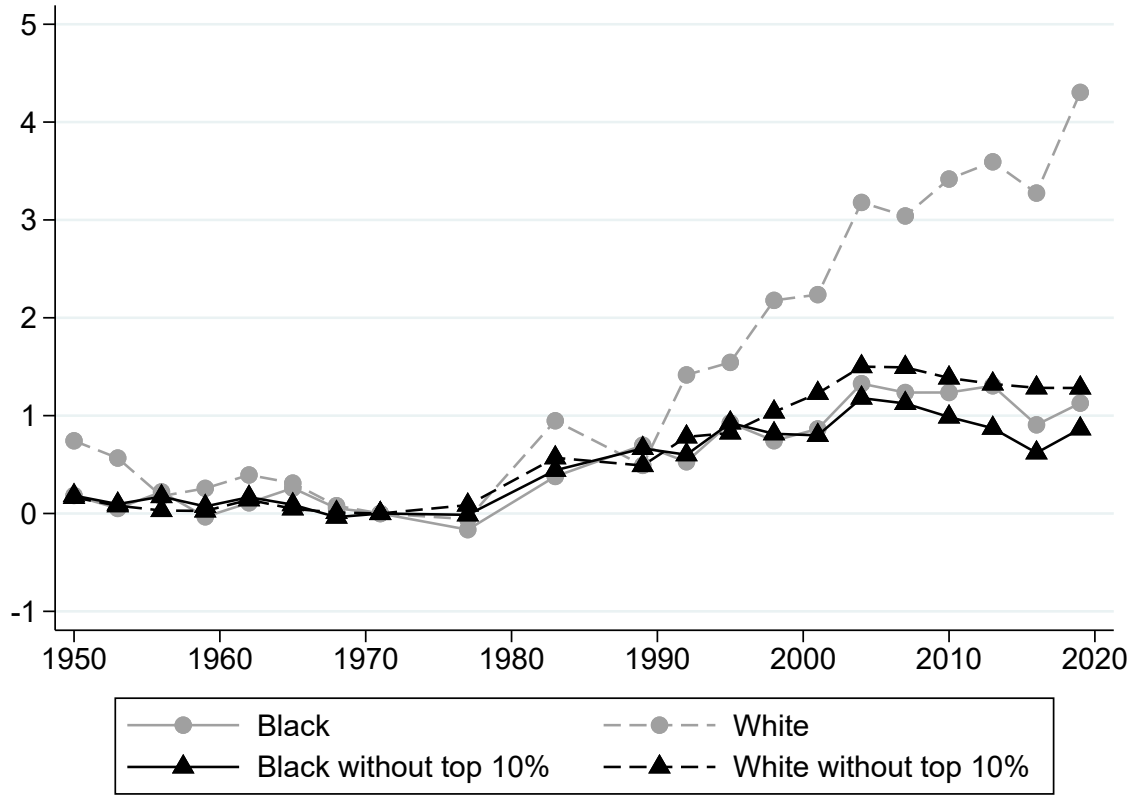
	2020 (data)	2020	2050	2130
Wealth ratio (W/B)	5.7	2.9	2.5	1.8
Income ratio (W/B)	1.5	1.7	1.5	1

- Simulation yields large wealth gap of 2.9 to 1 in 2020
- Despite full income convergence, wealth gap still by 1.8 to 1
- Observed wealth convergence slower
  - Differences in q,r,s help explain this discrepancy
  - Since 1980s: Slight divergence of the racial wealth gap, why?

Dif. wealth growth conditions $\rightarrow$ stalled convergence



Diverging Wealth-to-Income ratios post-1980



$\Rightarrow$ Decreasing importance of savings for wealth accumulation

Heterogeneous capital gains due to portfolio composition

$$q_{total}^{b/w} = \sum_c \omega_c^{b/w} R_c$$

- ω_c: share of asset c (SCF+)
- Assume identical R_c within asset class (JST, FA)
- Period: 1983-2019 ▸ Simulation

	Housing	Equity	Business	Total
Portfolio share				
White (ω^w)	39%	19%	19%	77%
Black (ω^b)	58%	8%	8%	74%
Capital gains				
White (q^w)	0.45%	0.88%	0.78%	**2.72%**
Black (q^b)	0.66%	0.30%	0.38%	**1.43%**

Paths to convergence through q, r, s, or g?

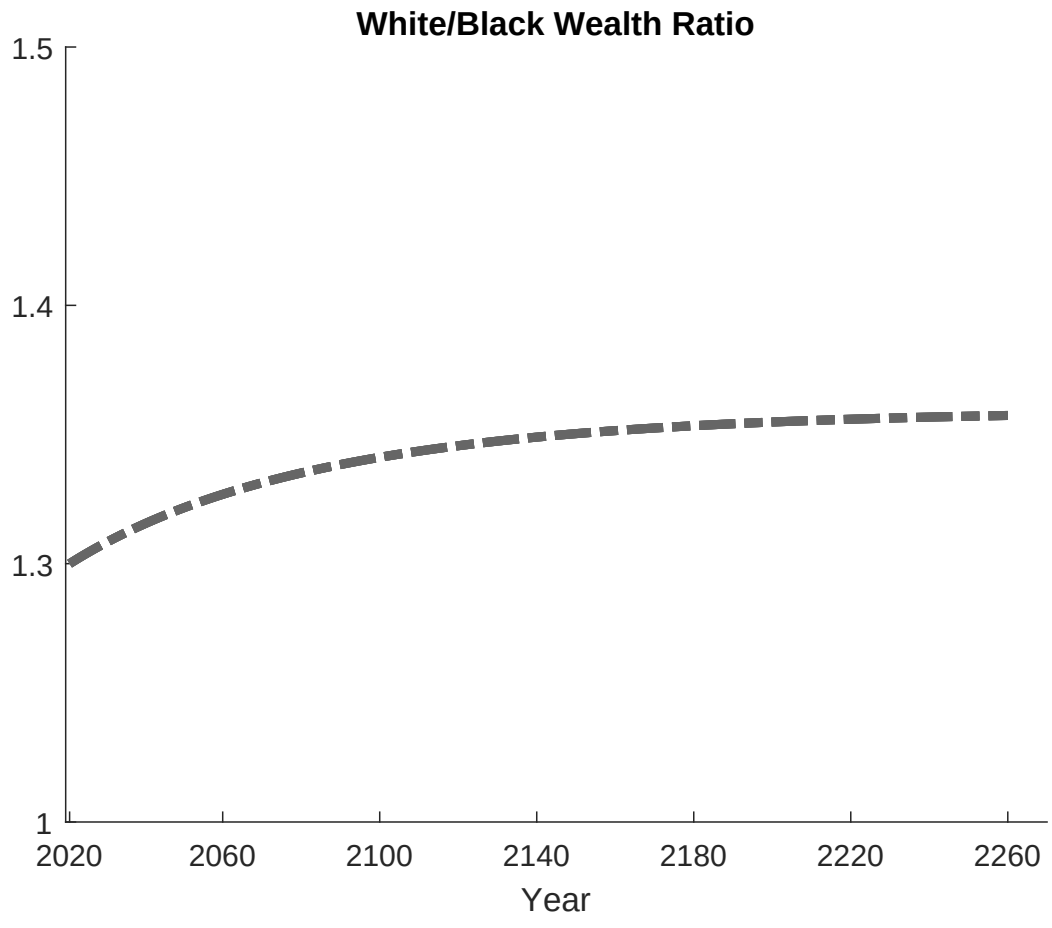
- 2019: Wealth gap still high and persistent (5.7)
  - Wealth accumulating conditions worsened since the 1980s
- What would it take to reach convergence in the near future?
- Estimate q^b, r^b, s^b, or g^b that yield convergence by 2050
  - 5.4% capital gains, 75% rate of return, 31% savings rate
  - Or 9.5% income growth ▸ Stalled income convergence

Reparations

Darity and Mullen (2020)

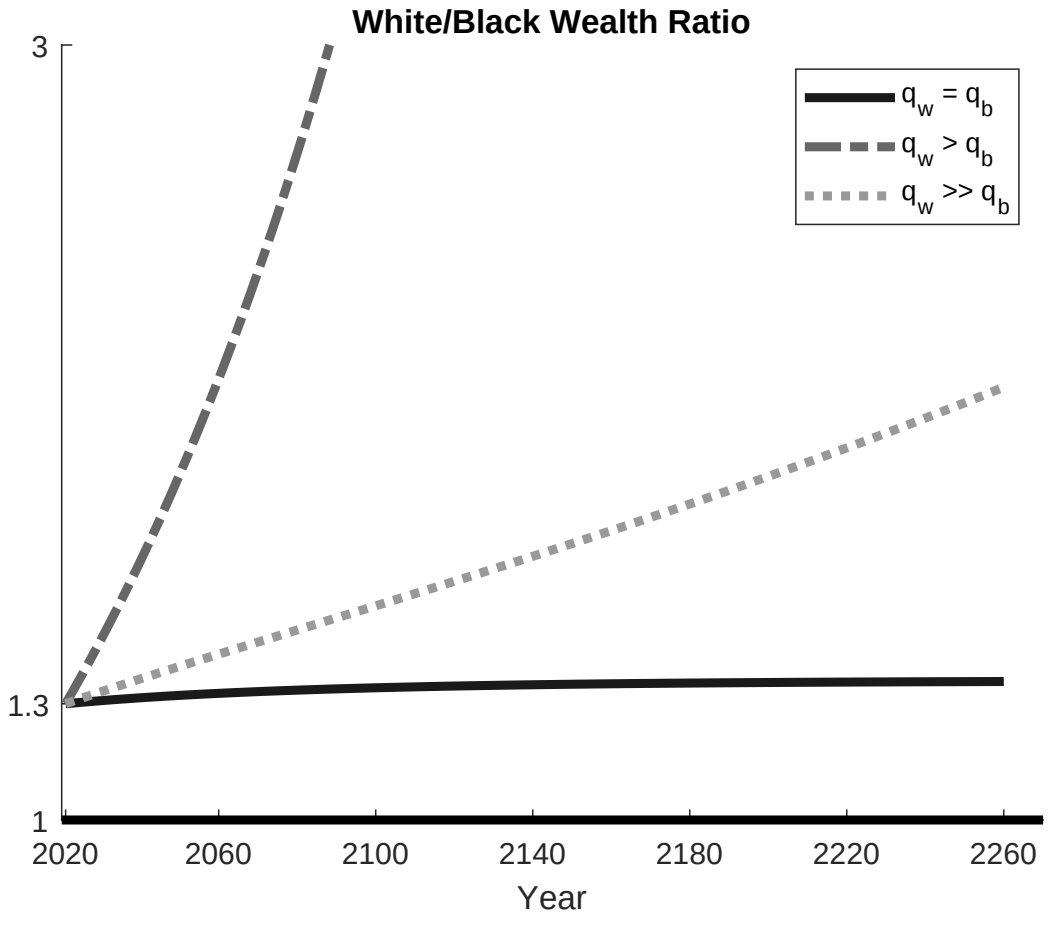
- Reparations = amount that closes racial wealth gap
- Value today: 267,000 USD per person (40 million eligible)
- Per capita wealth ratio (W/B) in 2019: $\frac{416600}{72600} = 5.7$
- Wealth ratio after reparations: 1.3

The effect of reparations



- Average post-1950 income growth rate 1.3% for both groups
- Stabilizes around 1.4, in range where q, r, and s matter

The effect of reparations



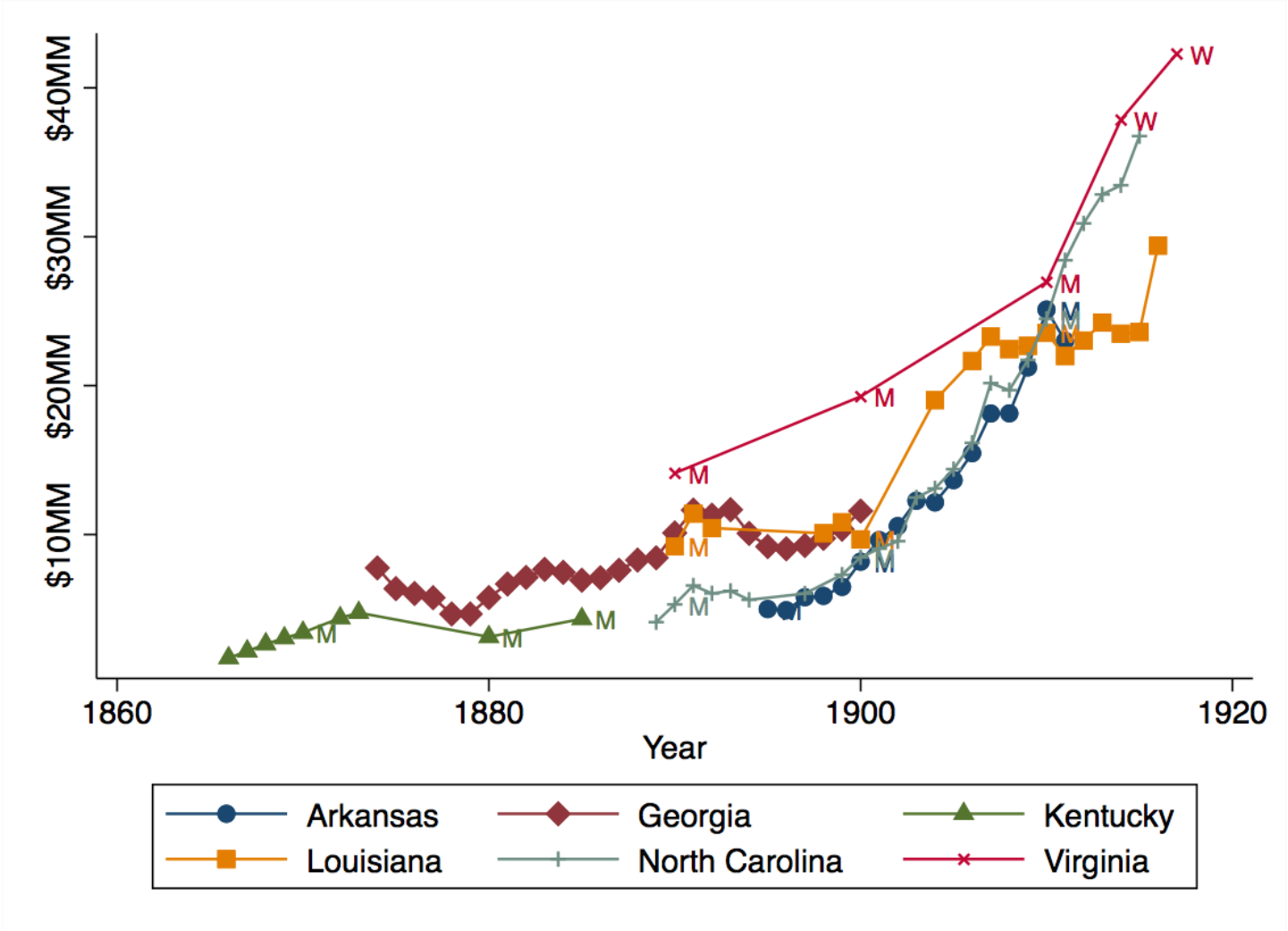
- Stabilizes around 1.4, in range where q, r, and s matter
- Policies targeting q may help maintain post-reparations path

Conclusion

- New white-to-Black wealth ratio for the US, 1860-2020
  - Rapid convergence in decades after Emancipation
  - Slow convergence since early-to-mid 20C
  - Divergence post-1980
- Model insights: wealth convergence a distant scenario, even equal parameters or bold policies
  - Stalled income convergence and rising overall wealth inequality have dimmed prospects for closing wealth gap
  - Extreme savings or income/capital gains advantages for Black individuals needed to reach convergence by 2050
  - Darity & Mullen style reparations yield 1.3 ratio in 2020
  - Post-reparations, policies targeting capital gains critical

Aggregate Black wealth by state, 1863-1917

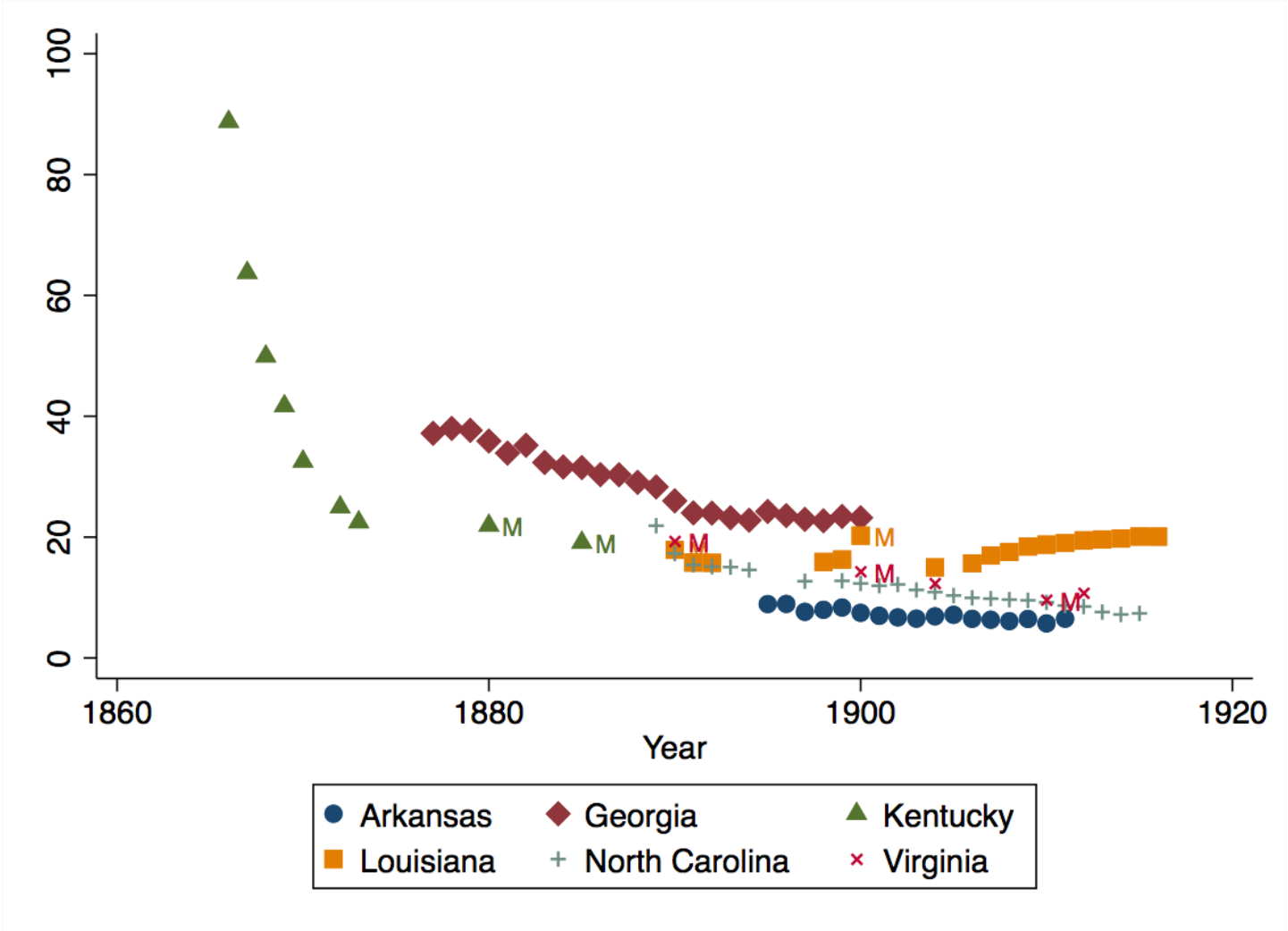
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Data sources: Southern state auditor reports + Margo (1983) + Work (1914-17 eds of *TNY*). *Notes*: 1910-1914$ using Warren-Pearson Index.

White-to-Black per cap wealth ratio, 1863-1917

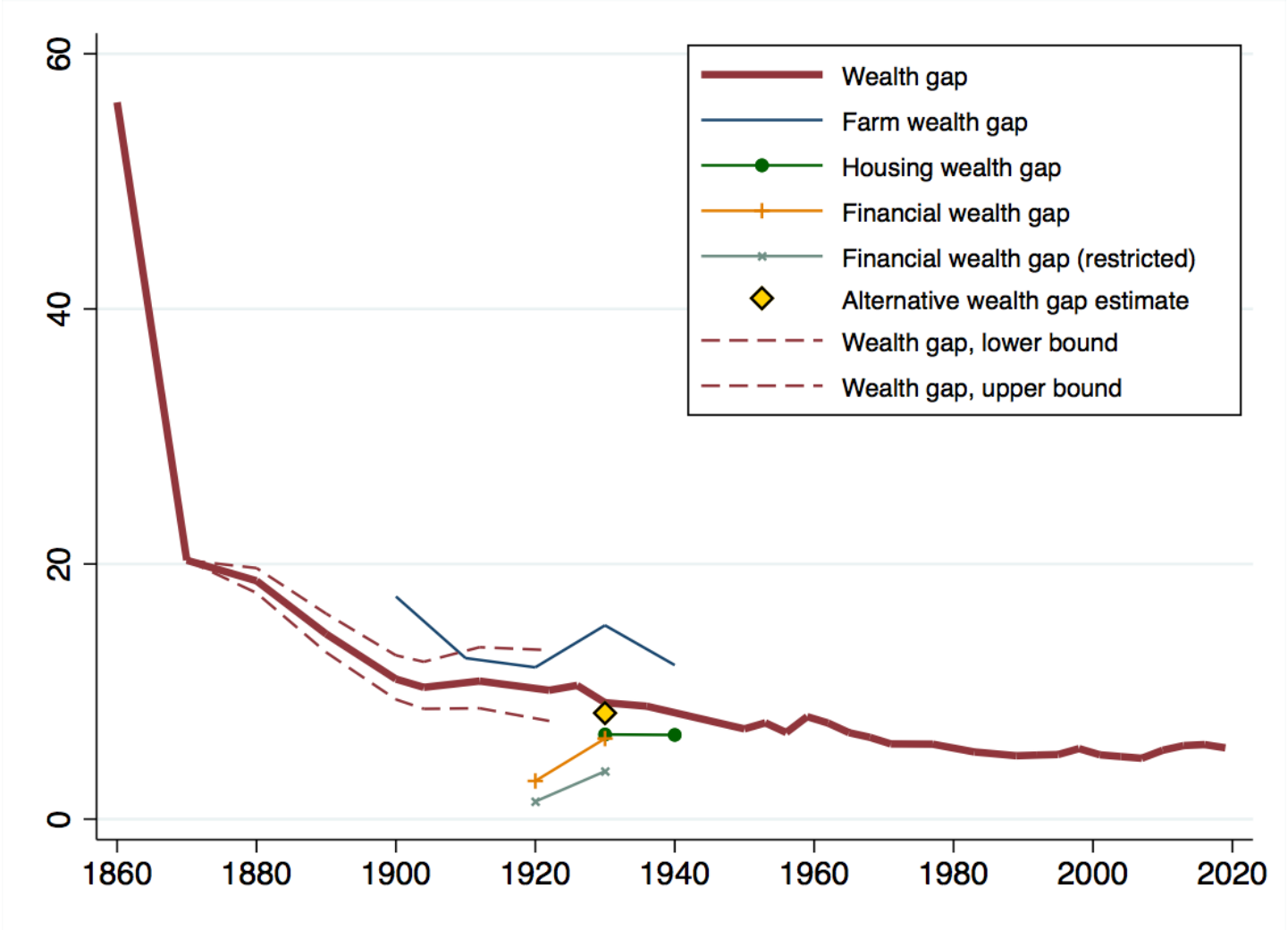
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Data sources: Southern state auditor reports + Margo (1983) + Work (1922) + SZ (2016). *Notes*: 1910-1914$ using Warren-Pearson Index.

Alternative wealth gap estimates for early 20C

Back



Data sources: Censuses of Agriculture & Population; Black banks (Clarke, 2019); Saez & Zucman (2016); Authors' series. *Notes*: All gaps are per capita. Alt. wealth estimate = Farm + Housing + Financial.

Alternative wealth gap estimates for early 20C

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- Farm wealth gap (Census of Agriculture, 1900-1940):

$$\frac{\text{Farm wealth}^{W}/\text{White pop}}{\text{Farm wealth}^{NW}/\text{NW pop}}$$

where $\text{Farm wealth}^{W} = \text{Farm value}^{\text{All}}_{\text{operated}} - \text{Farm value}^{\text{NW}}_{\text{owned}}$
and $\text{Farm wealth}^{NW} = \text{Farm Value}^{\text{NW}}_{\text{owned}}$

Alternative wealth gap estimates for early 20C

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- Housing wealth gap (Census of Population, 1930-1940):

$$\frac{\text{Housing wealth}^{W}/\text{White pop}}{\text{Housing wealth}^{B}/\text{Black pop}}$$

Alternative wealth gap estimates for early 20C

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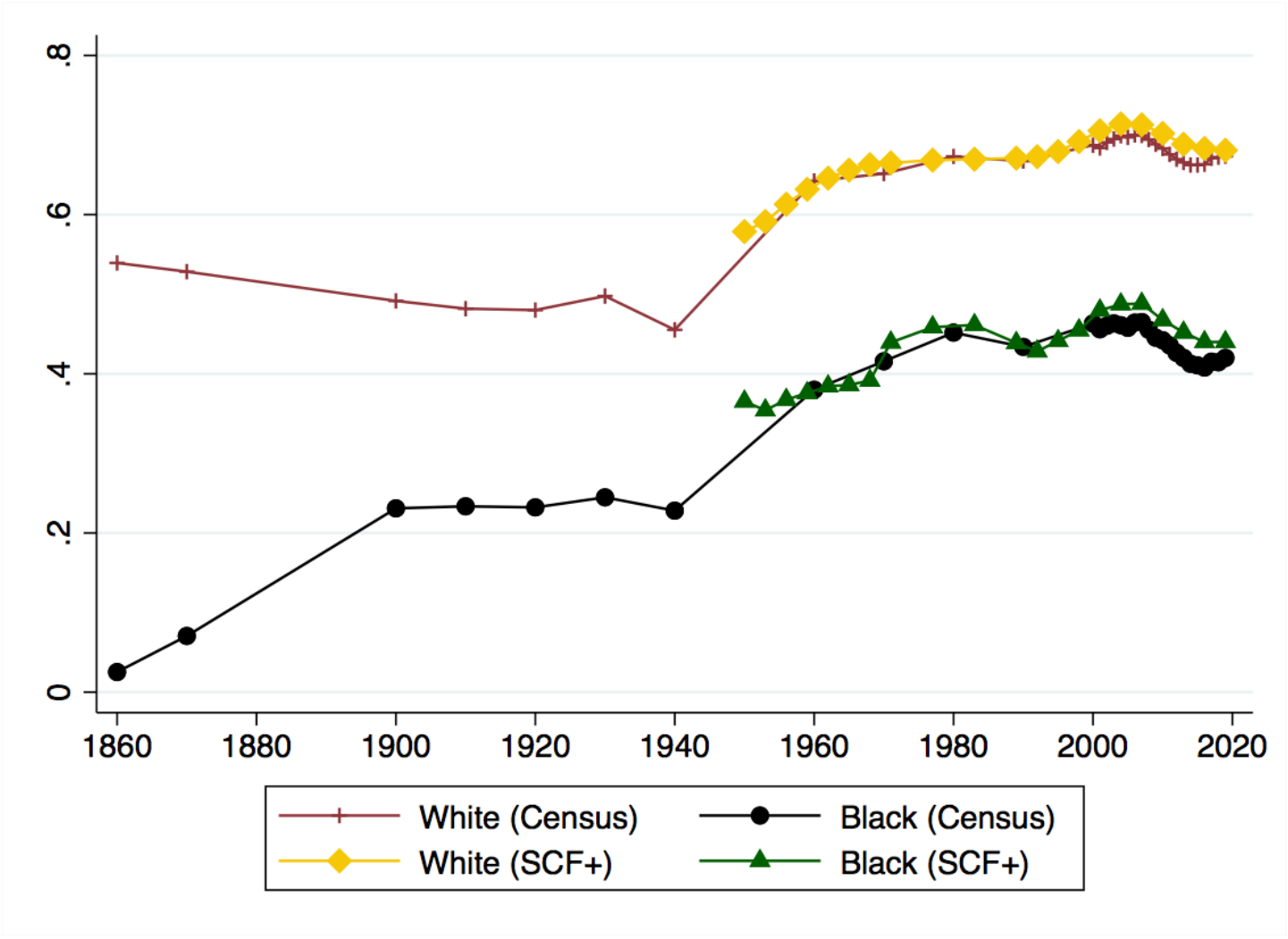
- Financial wealth gap (Clarke (2019); Saez & Zucman (2016)):

$$\frac{\text{Fin. wealth}^{W}/\text{White pop}}{\text{Fin. wealth}^{B}/\text{Black pop}}$$

where $\text{Fin. wealth}^{W} = \text{Resources}^{\text{US banks}} - \text{Resources}^{\text{Black banks}}$
and $\text{Fin. wealth}^{B} = \text{Resources}^{\text{Black banks}}$

The racial housing gap: 1860-2020

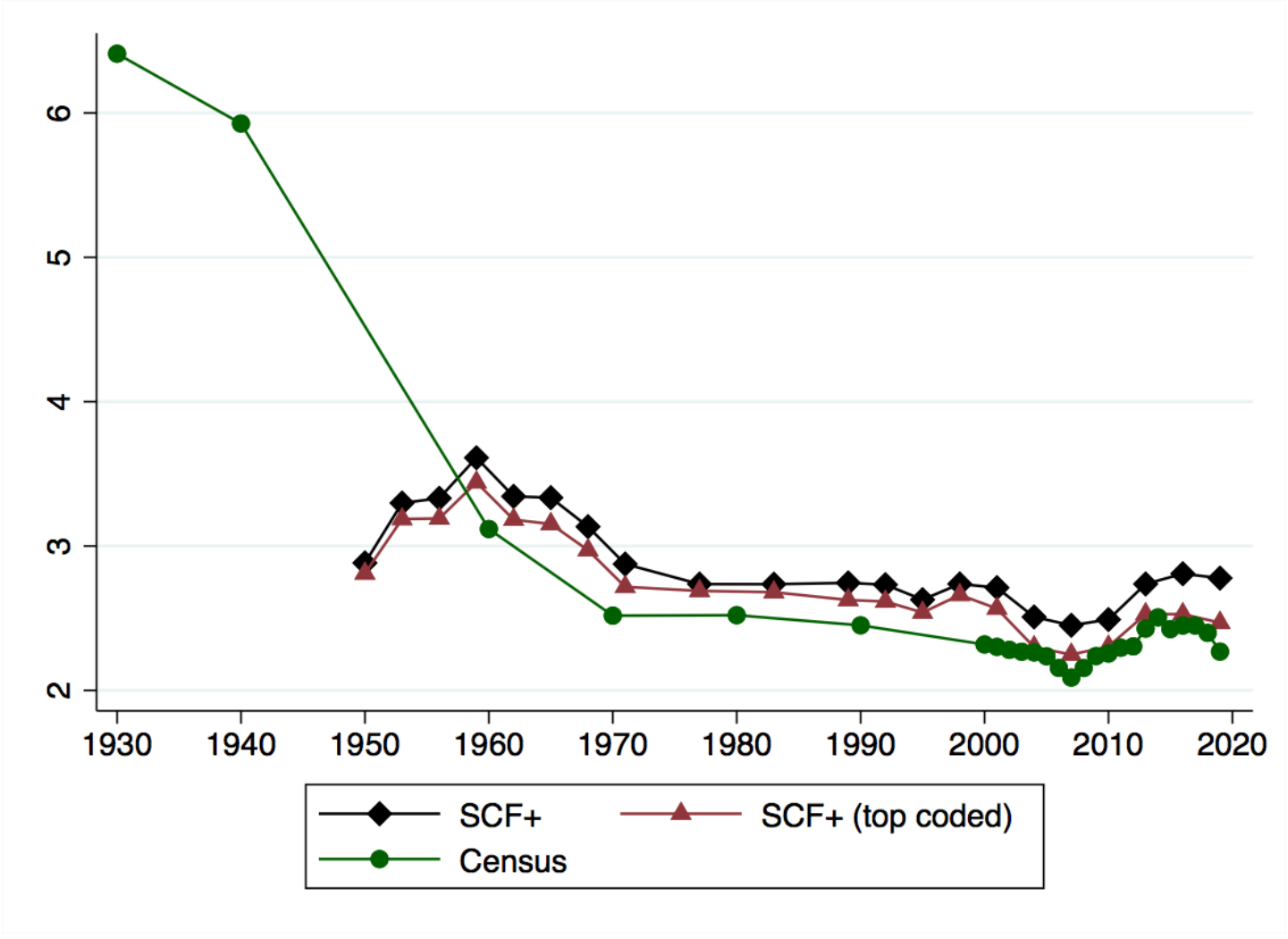
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Data sources: Census of Population; SCF+.

The racial home values gap: 1930-2020

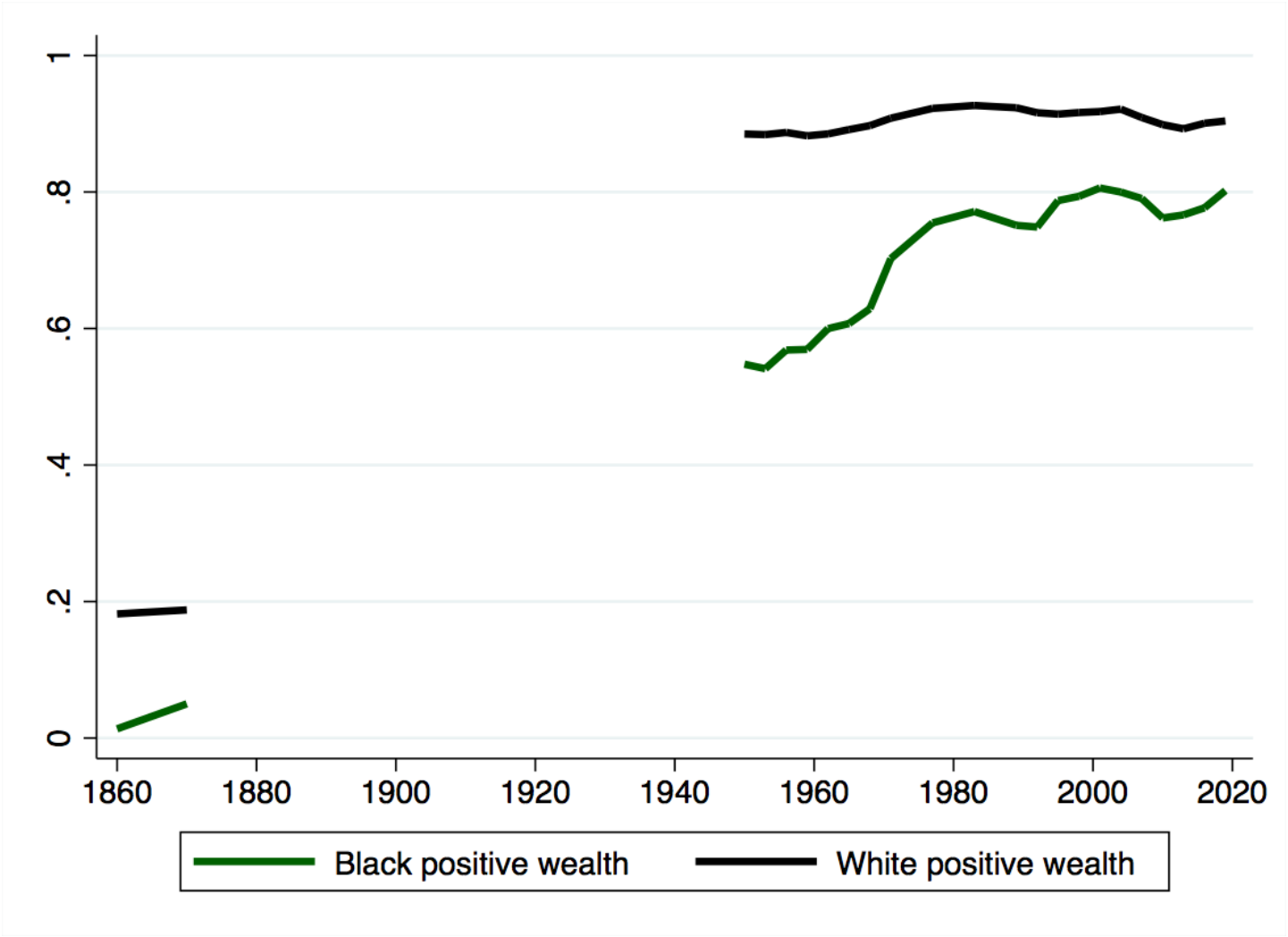
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Data sources: Census of Population; SCF+.

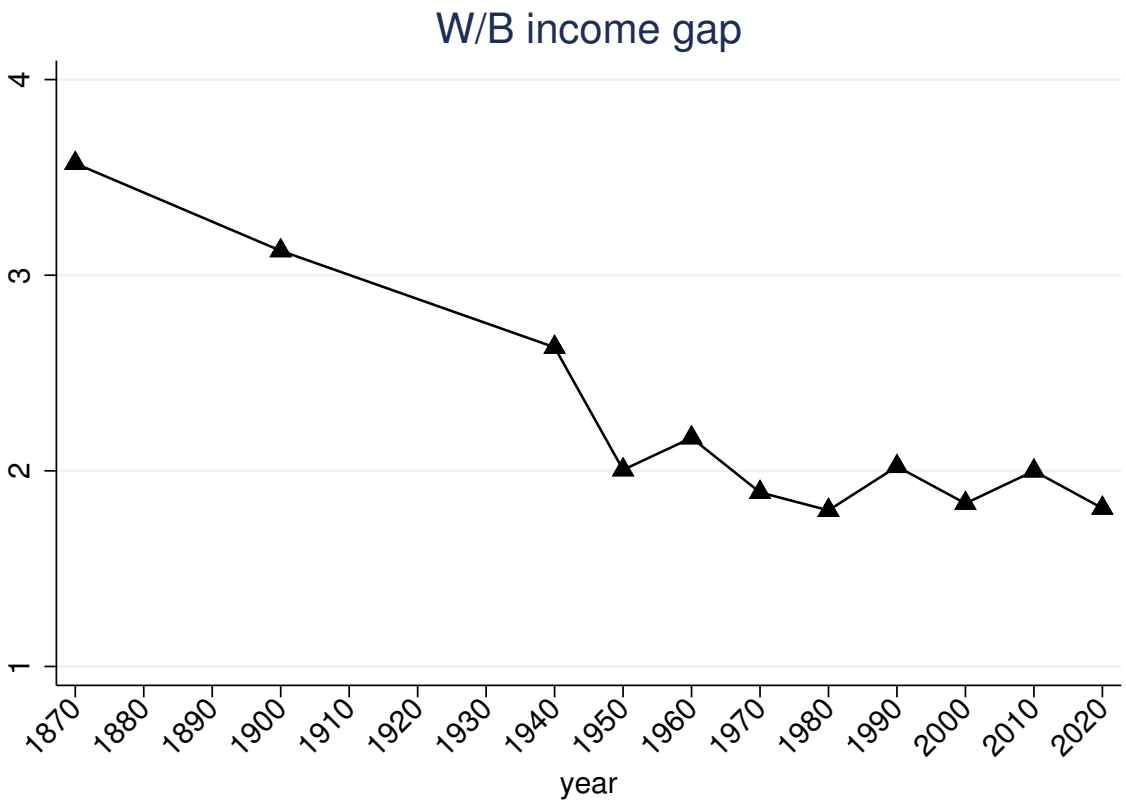
Share with positive wealth by racial group: 1860-2020

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Data sources: Census of Population; SCF+.

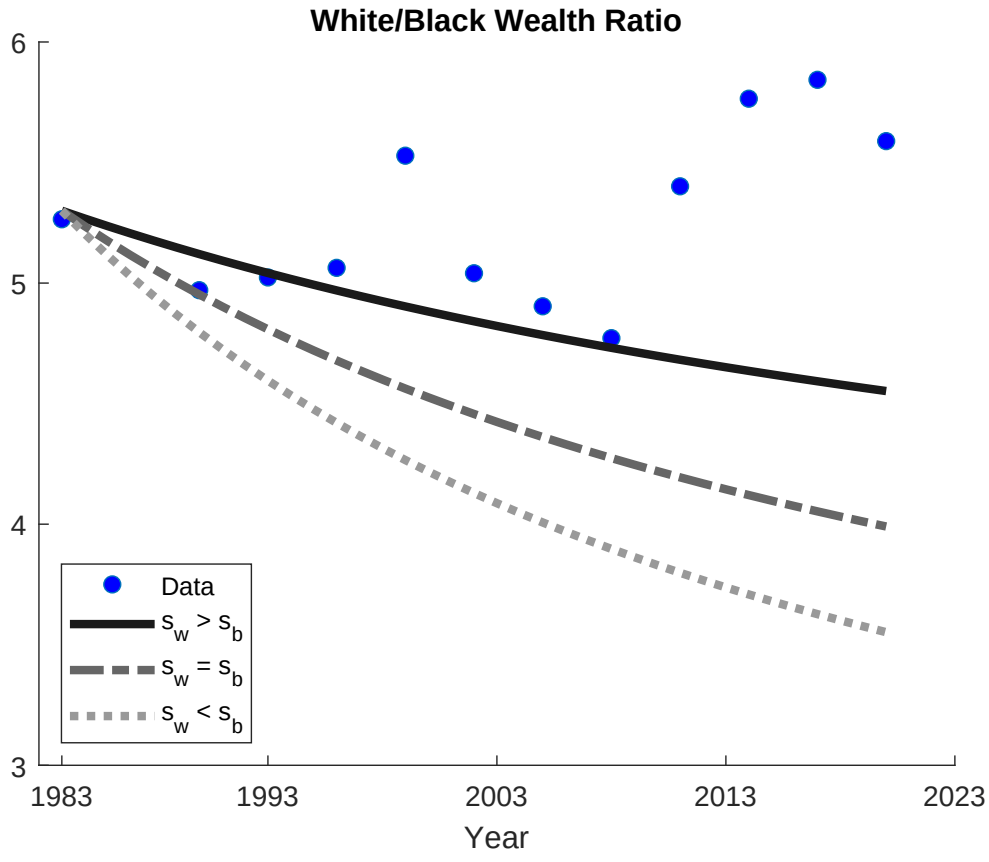
Stalled income convergence



- 1980-2020: $g^b = g^w = 1.3\%$
- Compare 1870-1980: $g^b = 2.6\%$ vs. $g^w = 2\%$

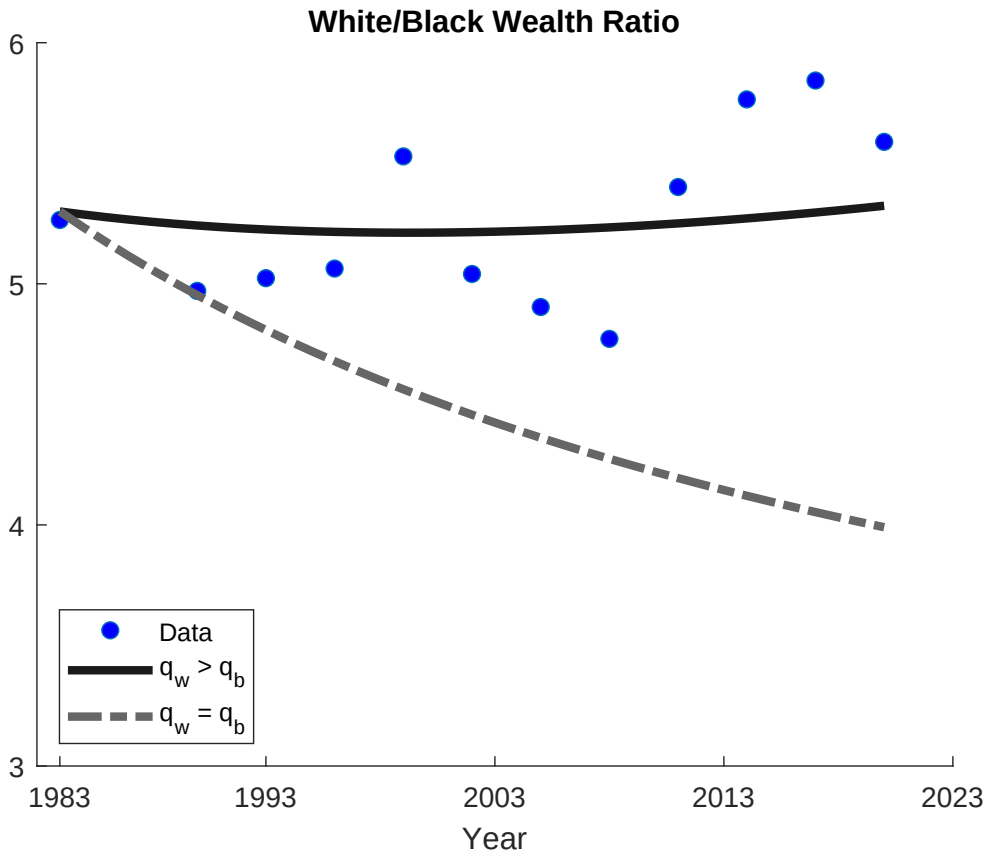
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Wealth convergence under different saving rates



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Increasing importance of capital gains post-1980



- Differences in q change slope of convergence substantially

  ▸ Different s

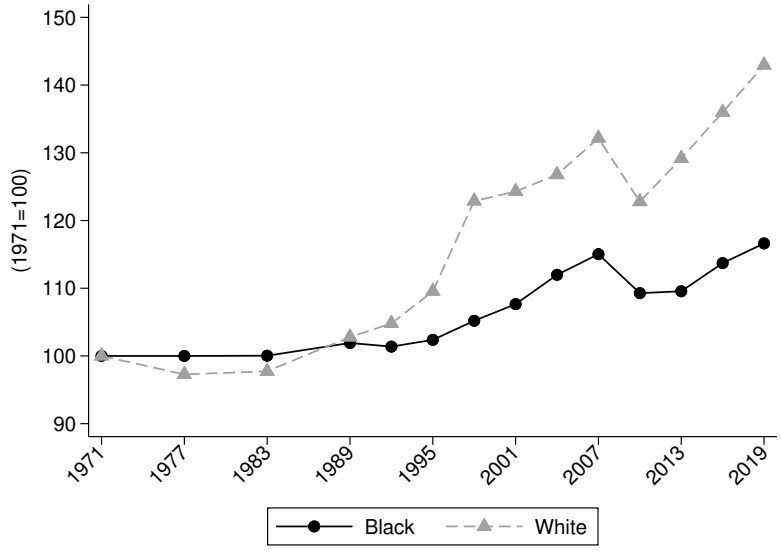
- $q^b < q^w$: captures diverging patterns of observed data

▸ Back

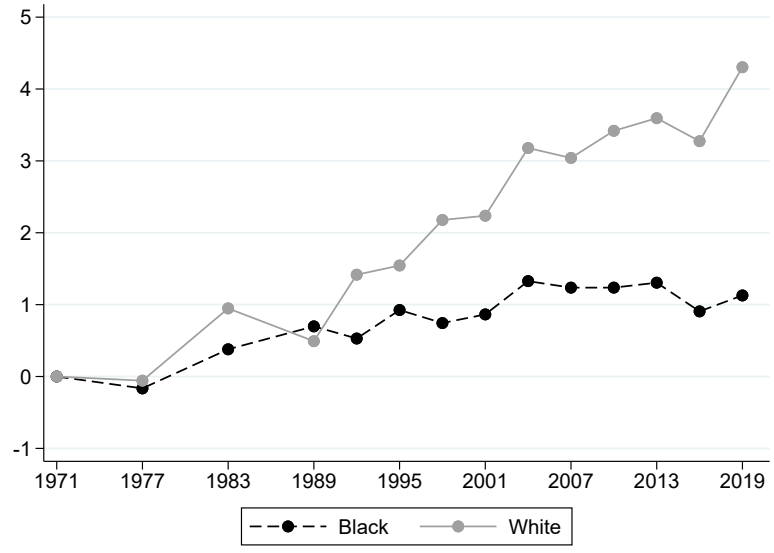
Heterogeneous capital gains within assets

- PSID (1989-2019): Calculate race-specific capital gains on equity, business, and housing

Growth accum. capital gains

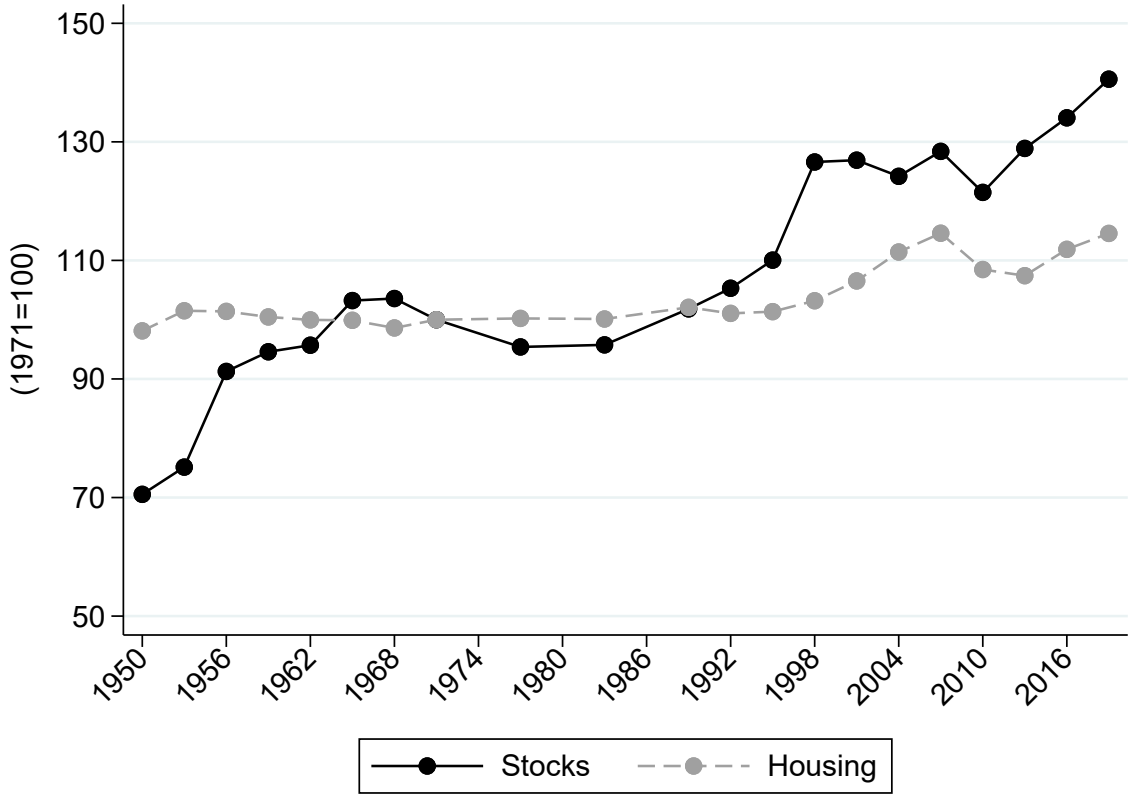


Wealth-to-Income ratio



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Accumulated capital gains across assets



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Different saving rates

- Dynan et al. (2004): Active saving rates 1984-2017
- Panel Study of Income Dynamics

	White	Black
Bottom 50%	6.08%	4.11%
50%-90%	7.97%	6.15 %
Top 10%	10.02%	8.75%
Total	7.23%	5.39%

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Different capital gains

$$CG_w = \sum_c \omega_c CG_c$$

- CG_w: Capital gain on total portfolio, CG_c: Capital gain on asset class c, ω_c: Weight as a share of total wealth
- Data: SCF+, Macrohistory Database, US Financial Accounts

	Average capital gain	White	Black
Equity	5.50%	0.94%	0.28%
Liquid assets	0%	0%	0%
Housing	0.8%	0.30%	0.50%
Business	3.37%	0.81%	0.51%
Total on portfolio	1.99%	2.01%	1.29%

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Different rates of return

$$RR_w = \sum_c \omega_c RR_c$$

- RR_w: Return on total portfolio, RR_c: Return on asset class c, ω_c: Weight as a share of total wealth
- Adopt method of Kartashova (2014) and Xavier (2021) using SCF+

Asset	White	Black
1989-2019		
Interest-earning assets	1.62%	0.53%
Public equity	2.1%	0.59%
Private businesses	12.12%	17.37%
Real estate	3.18%	3.07%
Total yield	4.64%	4.45%

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Income estimation approach adapted from Margo (2016)

1. Use agricultural income to estimate rural Black income
   - Census of Agriculture: Farm income of farm owners and tenants (value farm products - expenditures)
   - Farm laborer wage (Historical Statistics of the United States)
2. Urban Black workers' wages
   - Use Margo (2016) estimates for 1870
   - Estimate using Margo (2016) method for 1900
   - Use IPUMS occ score to calculate median income for urban laborers from 1910-1940
3. Use urban/rural share to calculate Black income per capita

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