Labor Market Effects of Temporary Work Visas: Evidence from the Mexican *Bracero* Exclusion

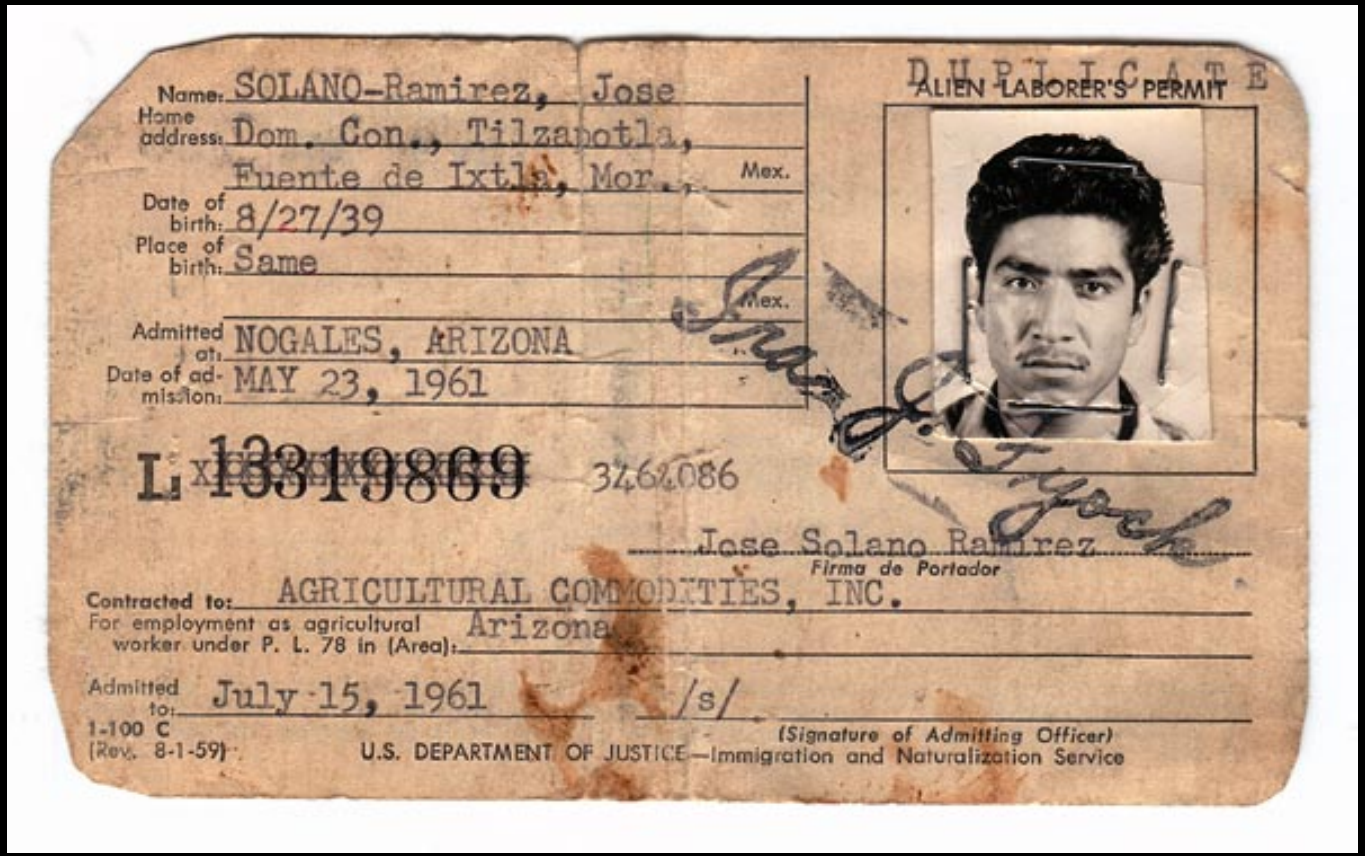
Michael Clemens Ethan Lewis Hannah Postel

AEA Meetings · January 7, 2018

Outline

Outline

Bracero workers



DUPLICATE

ALIEN LABORER'S PERMIT

Name: SOLANO-Ramirez, Jose

Home address: Dom. Con., Tilzapotla, Fuente de Ixtla, Mor., Mex.

Date of birth: 8/27/39

Place of birth: Same Mex.

Admitted at: NOGALES, ARIZONA

Date of admission: MAY 23, 1961

L 13319869 3464086

Jose Solano Ramirez
Firma de Portador

Contracted to: AGRICULTURAL COMMODITIES, INC.

For employment as agricultural worker under P. L. 78 in (Area): Arizona

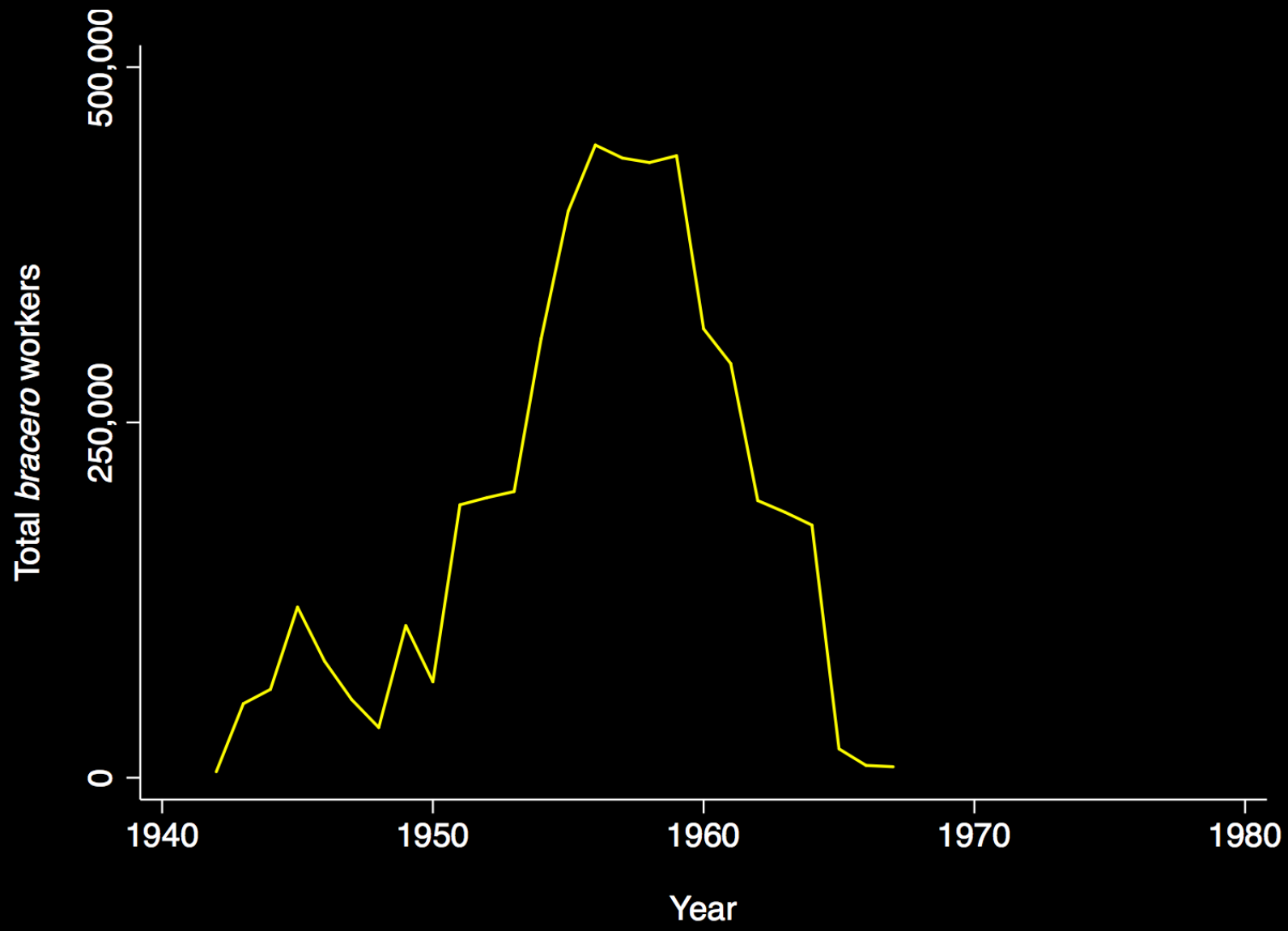
Admitted to: July 15, 1961 /s/
(Signature of Admitting Officer)

I-100 C (Rev. 8-1-59)

U.S. DEPARTMENT OF JUSTICE—Immigration and Naturalization Service

Bracero workers

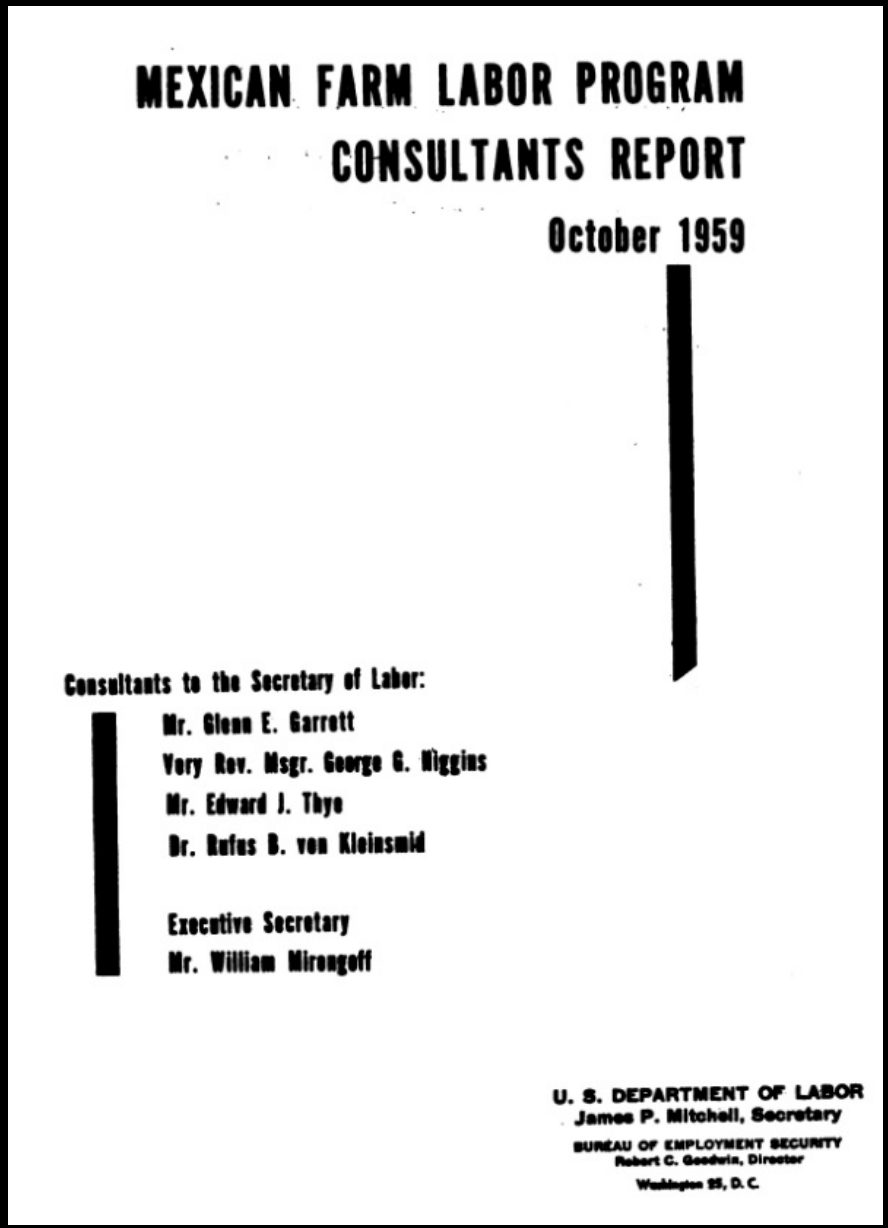
Total *bracero* workers



Labor-market effects

"Studies of the operation of the Mexican labor program have clearly established that it is adversely affecting the wages, working conditions, and employment opportunities of our own agricultural workers."

The 1959 evaluation



MEXICAN FARM LABOR PROGRAM

CONSULTANTS REPORT

October 1959

Consultants to the Secretary of Labor:

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Very Rev. Msgr. George G. Higgins

Mr. Edward J. Thye

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Executive Secretary

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U. S. DEPARTMENT OF LABOR

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Robert C. Goodwin, Director

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The 1959 evaluation

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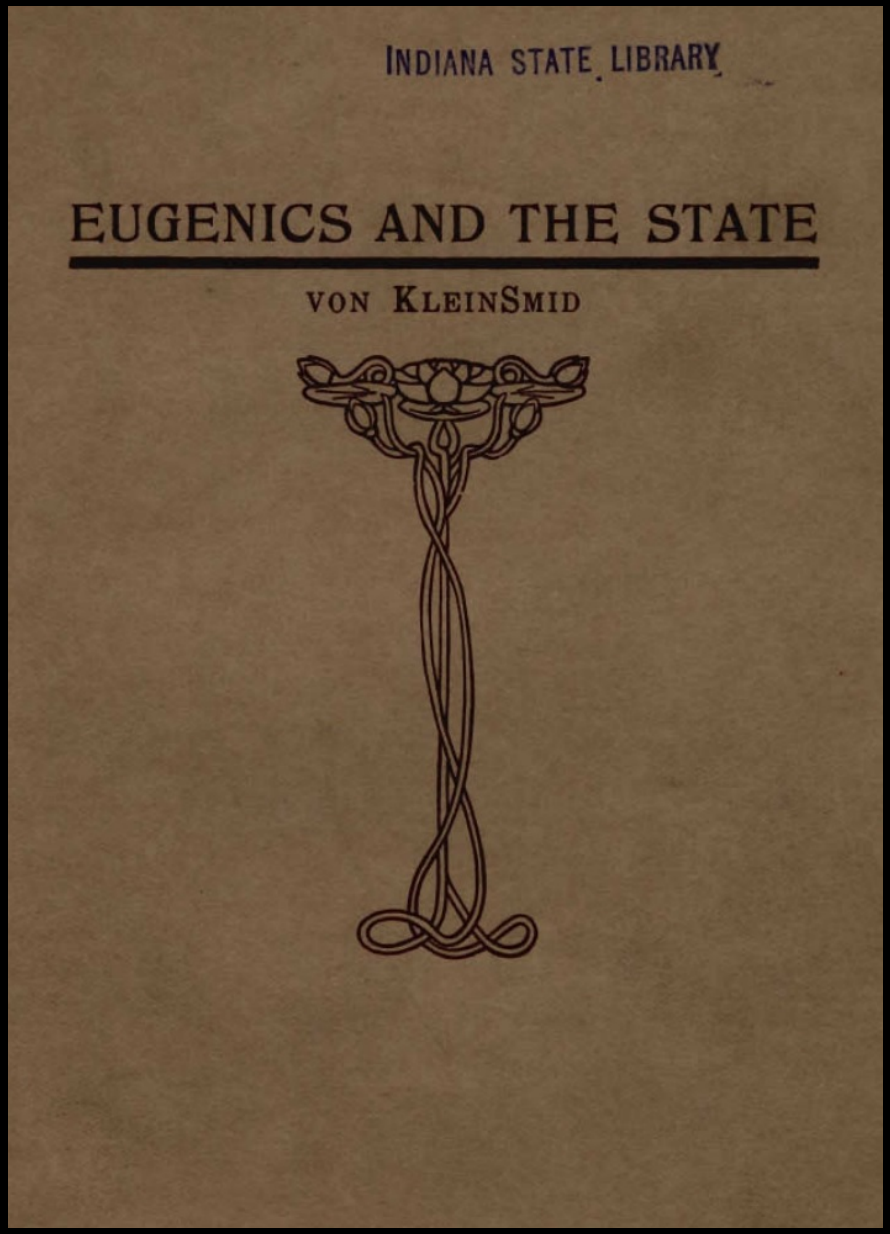


The 1959 evaluation

Perils of the Mexican Invasion

By S. J. Holmes
Professor of Zoölogy, University of California

While still paying for past blunders in the importation of cheap labor, we are now admitting a new menace to national prosperity from across the Rio Grande

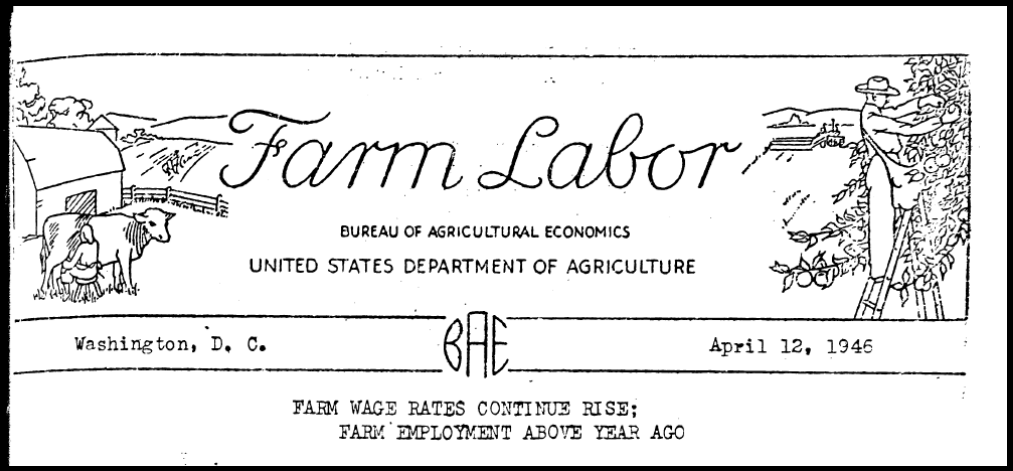
The United States seems fated never to be free from troubles attendant on race and immigration. First it was the negroes — then it was the Chinese and Japanese — and now it is the Mexicans. Soon it will be the Filipinos. Lately the Mexican situation has developed to an acute stage and will doubtless receive much attention during the next session of Congress.

The influx of Mexicans has been

familiar with border conditions consider that it is as great as the number of legal immigrants. The real volume of the influx is a subject upon which the advocates of free Mexican immigration are manifestly quite sensitive, and they endeavor to make out that it is not nearly so great as it seems. In considering any restrictive measures the number of persons apt to be affected is obviously a matter of prime importance.

Outline

Archival data



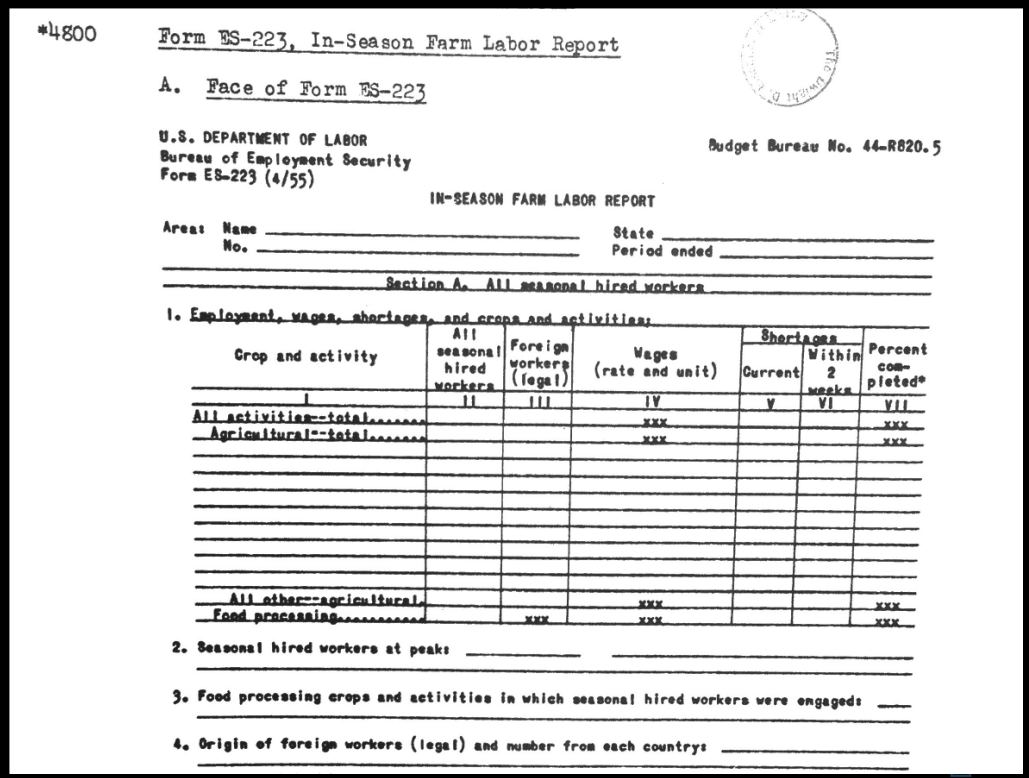
Farm Labor

BUREAU OF AGRICULTURAL ECONOMICS

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. BAE April 12, 1946

FARM WAGE RATES CONTINUE RISE;
FARM EMPLOYMENT ABOVE YEAR AGO



*4800 Form ES-223, In-Season Farm Labor Report

A. Face of Form ES-223

U.S. DEPARTMENT OF LABOR
Bureau of Employment Security
Form ES-223 (4/55)

Budget Bureau No. 44-R820.5

IN-SEASON FARM LABOR REPORT

Area: Name _____ State _____
No. _____ Period ended _____

Section A. All seasonal hired workers

1. Employment, wages, shortages, and crops and activities:

Crop and activity	All seasonal hired workers	Foreign workers (legal)	Wages (rate and unit)	Shortages		Percent completed*
				Current	Within 2 weeks	
I	II	III	IV	V	VI	VII
All activities--total.....			xxx			xxx
Agricultural--total.....			xxx			xxx
All other--agricultural			xxx			xxx
Food processing.....		xxx	xxx			xxx

2. Seasonal hired workers at peak: _____ _____

3. Food processing crops and activities in which seasonal hired workers were engaged: _____

4. Origin of foreign workers (legal) and number from each country: _____

Archival data

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

Farm wage rates: Wage rates by States, April 1, 1945, and April 1, 1946

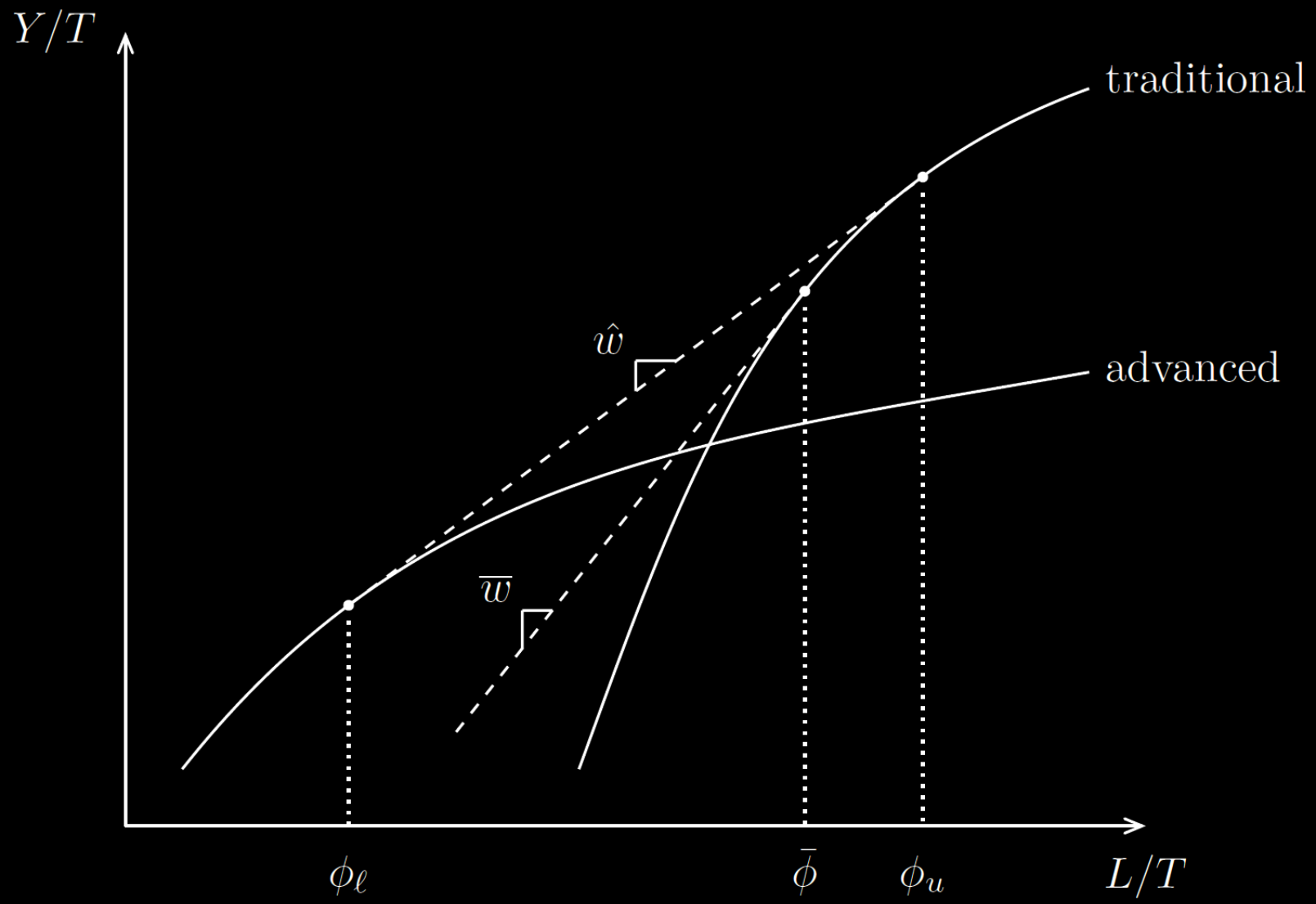
State	Per month with board		Per month without board		Per day with board		Per day without board	
	1945	1946	1945	1946	1945	1946	1945	1946
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Maine	88.50	87.00	121.00	126.00	4.70	4.85	5.70	6.00
N.H.	81.75	89.00	120.00	124.00	4.10	4.40	5.00	5.40
Vt.	83.50	87.00	120.00	120.00	4.10	4.30	5.20	5.40
Mass.	86.25	90.00	132.00	135.00	4.00	4.40	5.20	5.50
R.I.	90.00	88.00	132.00	135.00	4.20	4.20	5.30	5.40
Conn.	85.50	85.75	124.00	128.00	4.00	4.30	5.10	5.50
N.Y.	83.25	94.25	117.00	126.00	4.10	4.35	5.15	5.40
N.J.	83.25	95.00	128.00	131.00	4.40	4.60	5.45	5.50
Pa.	62.00	66.50	91.25	97.75	3.65	3.95	4.50	4.80

- 1 -

Appendix A - Estimated employment and origin of seasonally hired workers in agriculture and food processing by State and selected agricultural reporting areas 1/
End of Period July 1-July 15, 1954

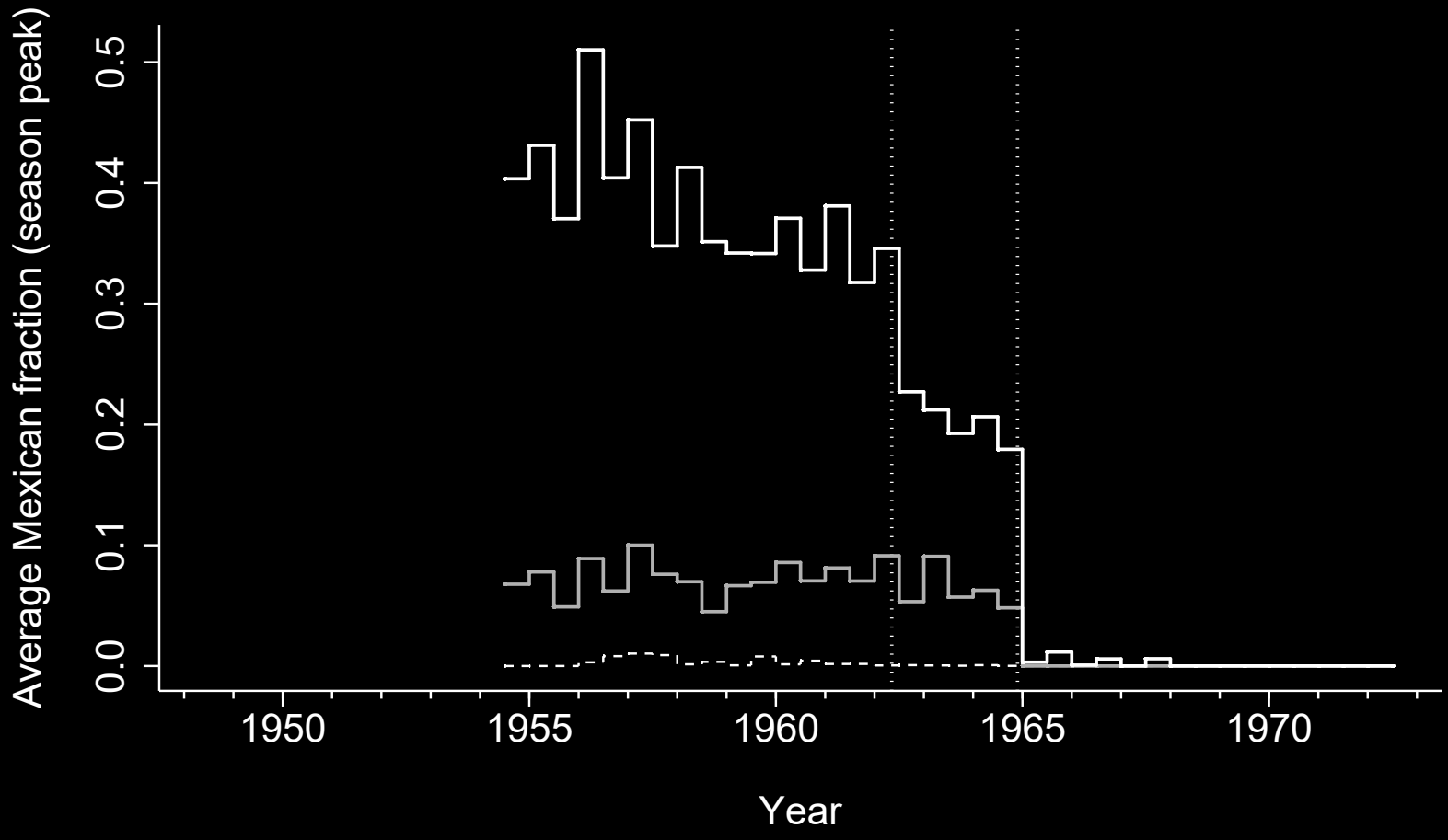
Region, State and agricultural reporting area	Total hired seasonal employment	Agricultural activities									Food processing total
		Total agricultural	Domestic					Foreign			
			Total domestic	Local	Intra-state	Inter-state	Puerto-Rican	Total foreign	Mexican	BWI & others	
U. S. Total	1,023,167	952,335	878,790	628,219	71,283	164,062	15,226	73,545	64,830	8,715	70,832
Eastern Seaboard	220,963	195,603	190,590	126,236	5,303	43,994	15,057	5,013	0	5,013	25,360
Connecticut	11,700	11,700	9,900	7,240	1,100	1,000	560	1,800	0	1,800	0
Delaware	4,644	3,707	3,691	560	0	3,024	107	16	0	16	937
Florida	6,742	6,712	5,773	5,733	0	0	40	939	0	939	30
Central Ridge	2,106	2,076	2,067	2,067	0	0	0	9	0	9	30
Indian River	1,570	1,570	1,432	1,432	0	0	0	138	0	138	0
Lower East Coast	1,646	1,646	935	895	0	0	40	711	0	711	0
Tampa Bay	501	501	420	420	0	0	0	81	0	81	0
Other areas	919	919	919	919	0	0	0	0	0	0	0

Model of induced technical advance

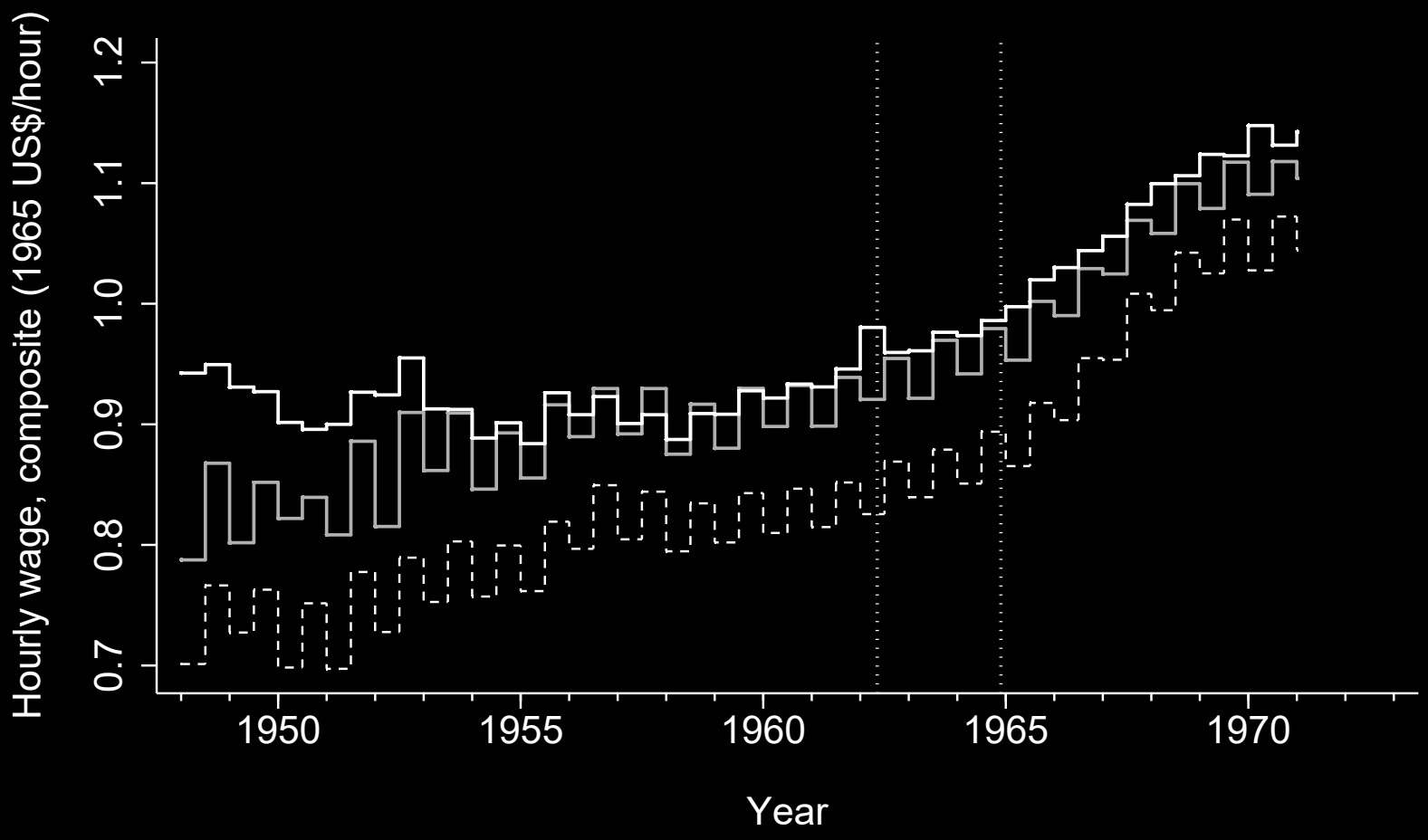


Outline

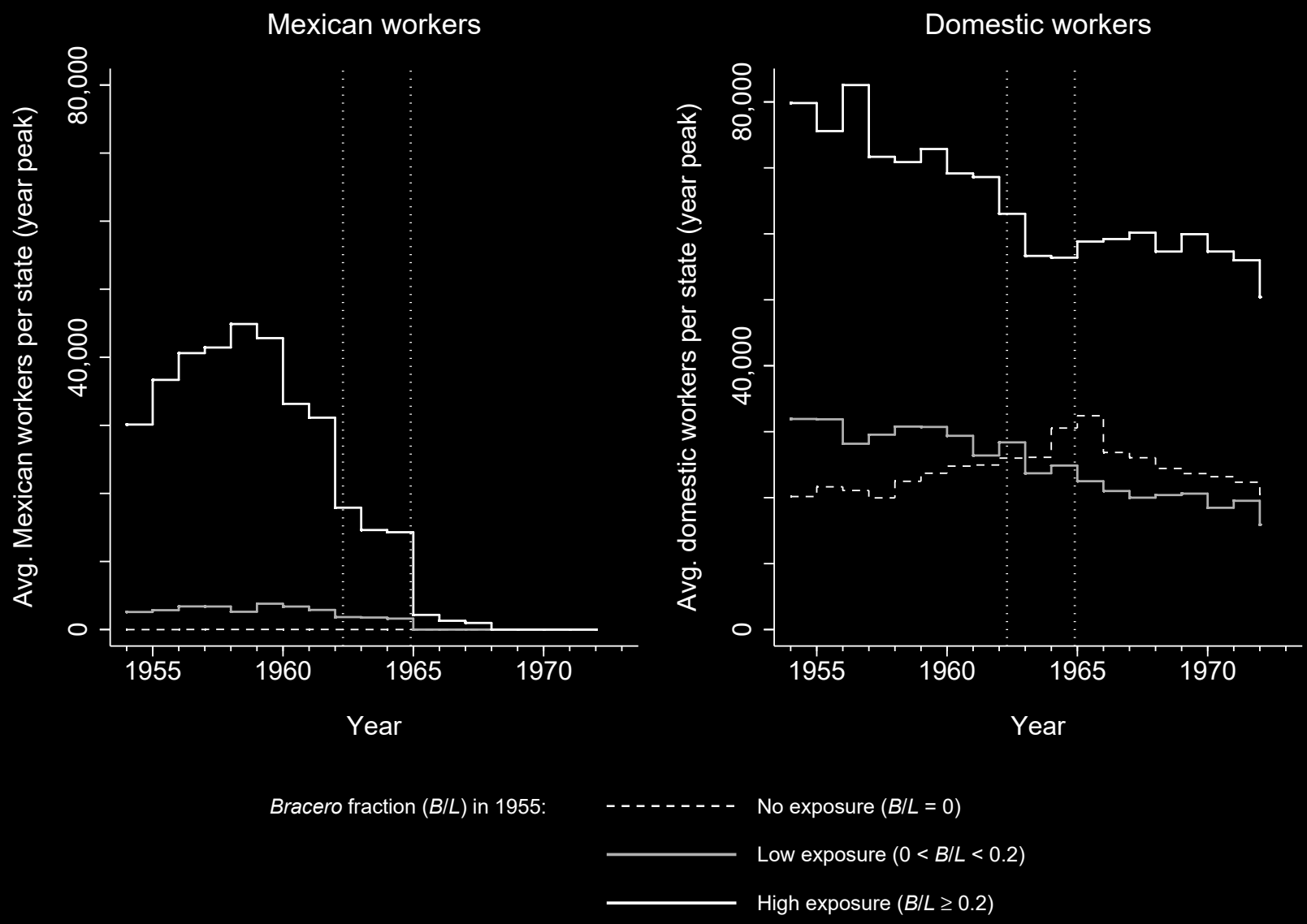
L fraction Mexican



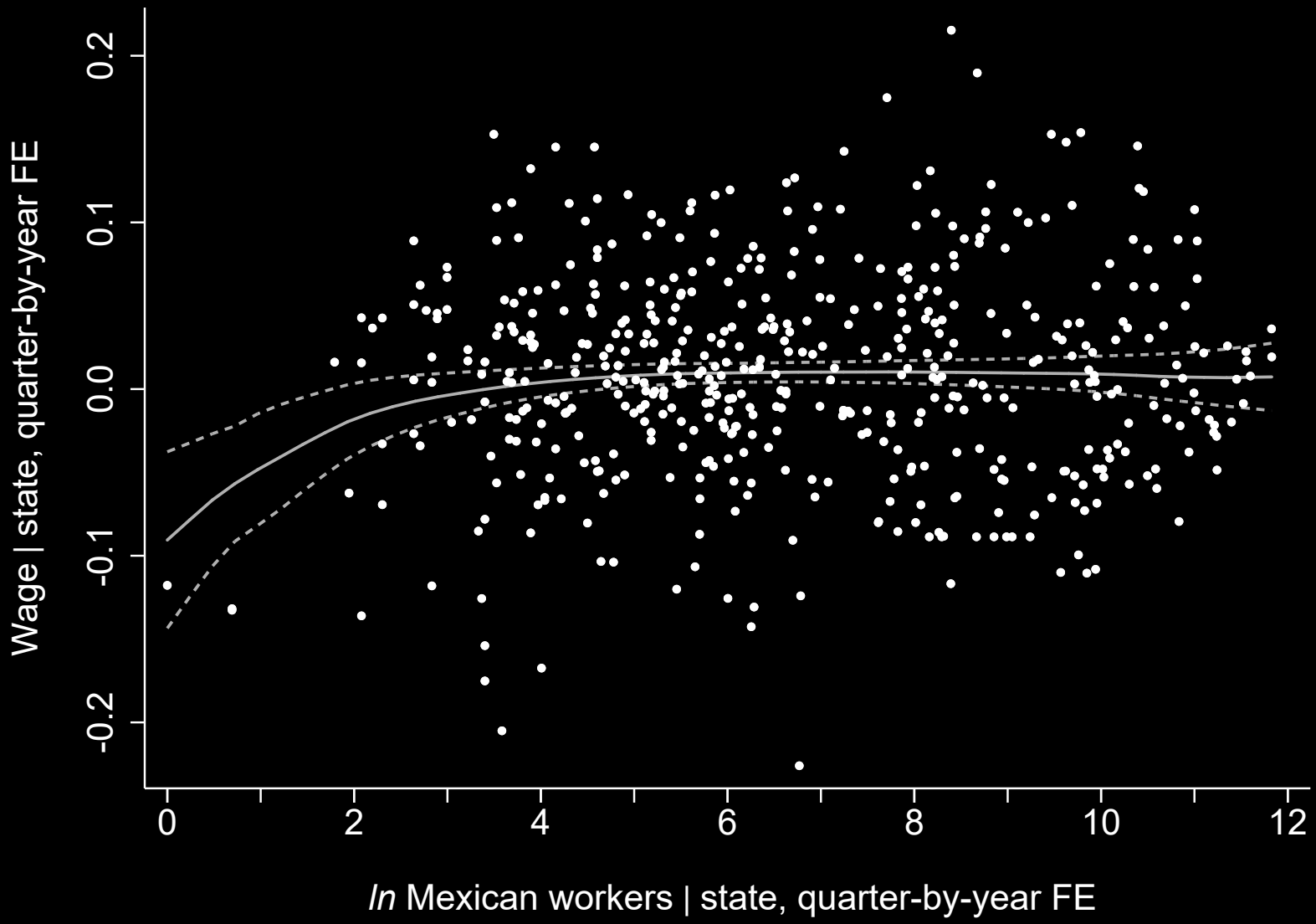
Real wages


Hourly wage, composite (1965 US$/hour)
0.7
0.8
0.9
1.0
1.1
1.2
1950
1955
1960
1965
1970
Year
Bracero fraction (*B*/*L*) in 1955:
No exposure (*B*/*L* = 0)
Low exposure (0 < *B*/*L* < 0.2)
High exposure (*B*/*L* ≥ 0.2)

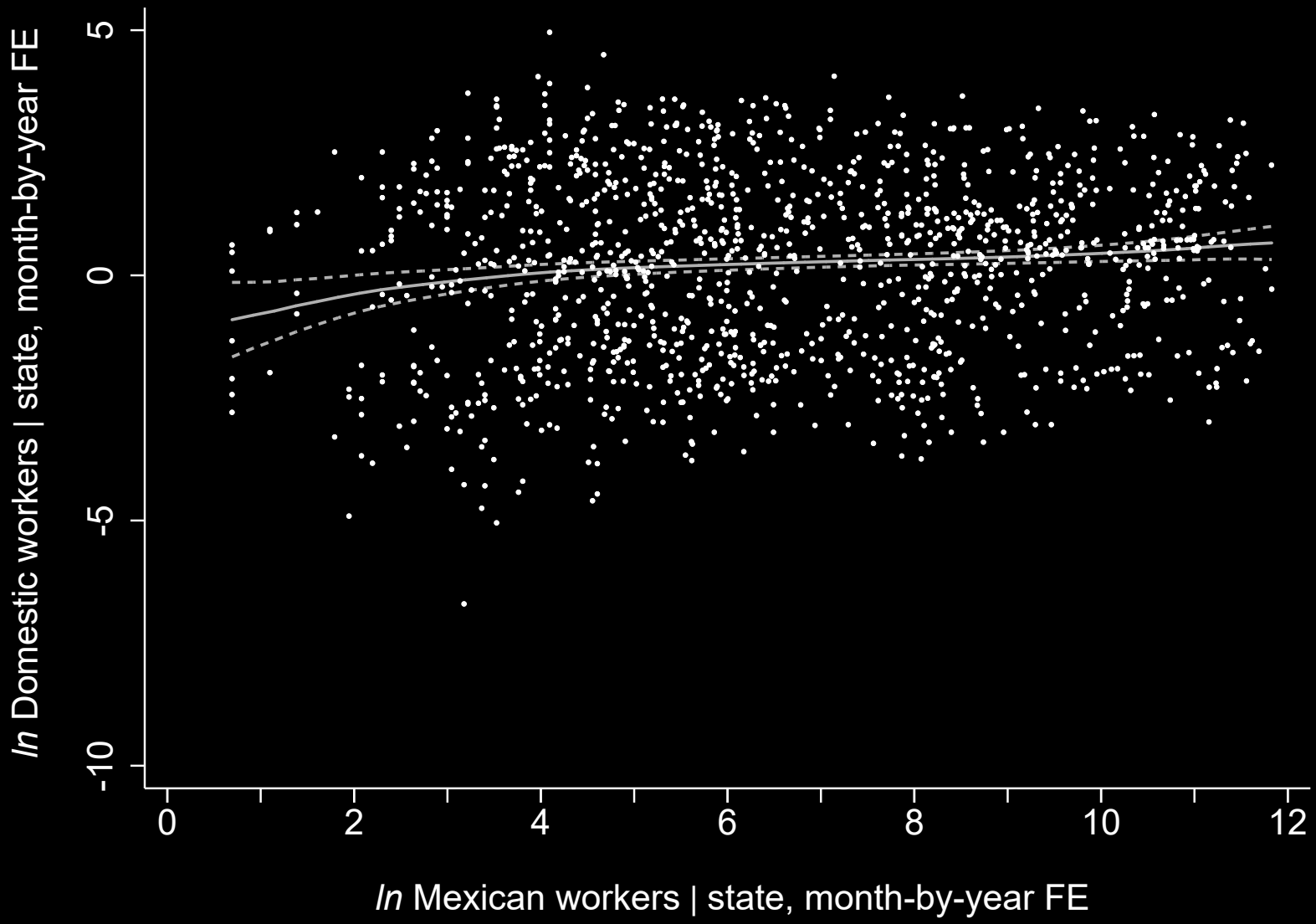
Hired seasonal farm employment



Baltagi-Li semiparametric FE: *Wage*



Baltagi-Li semiparametric FE: *Employment*



Robustness

- → Domestic migrants or year-round
- → Other foreign
- → Pre-trends
- → Treatment year
- → Handling of zeros
- → SUTVA

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Tomato mechanization

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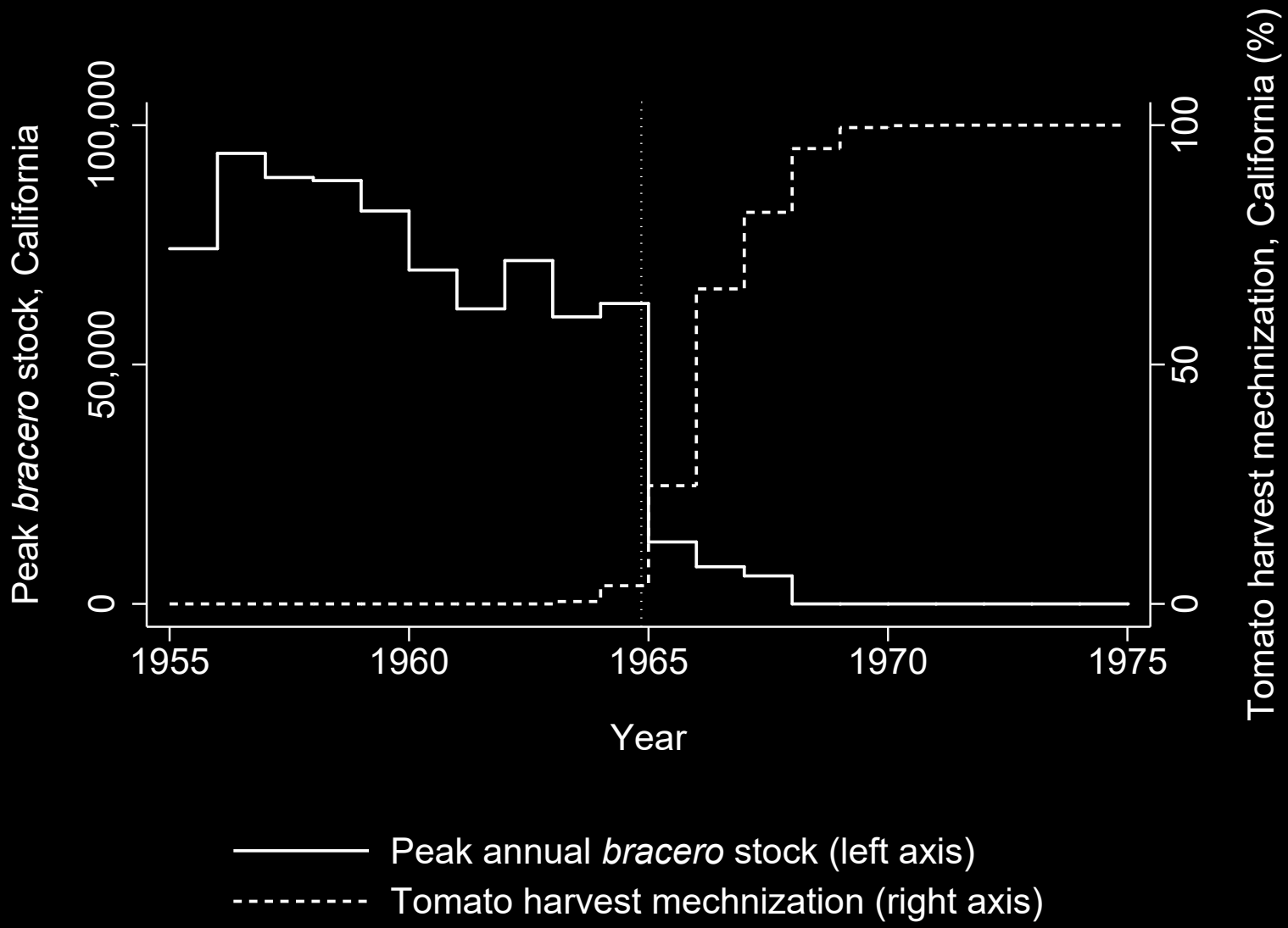
Tomato harvester adoption



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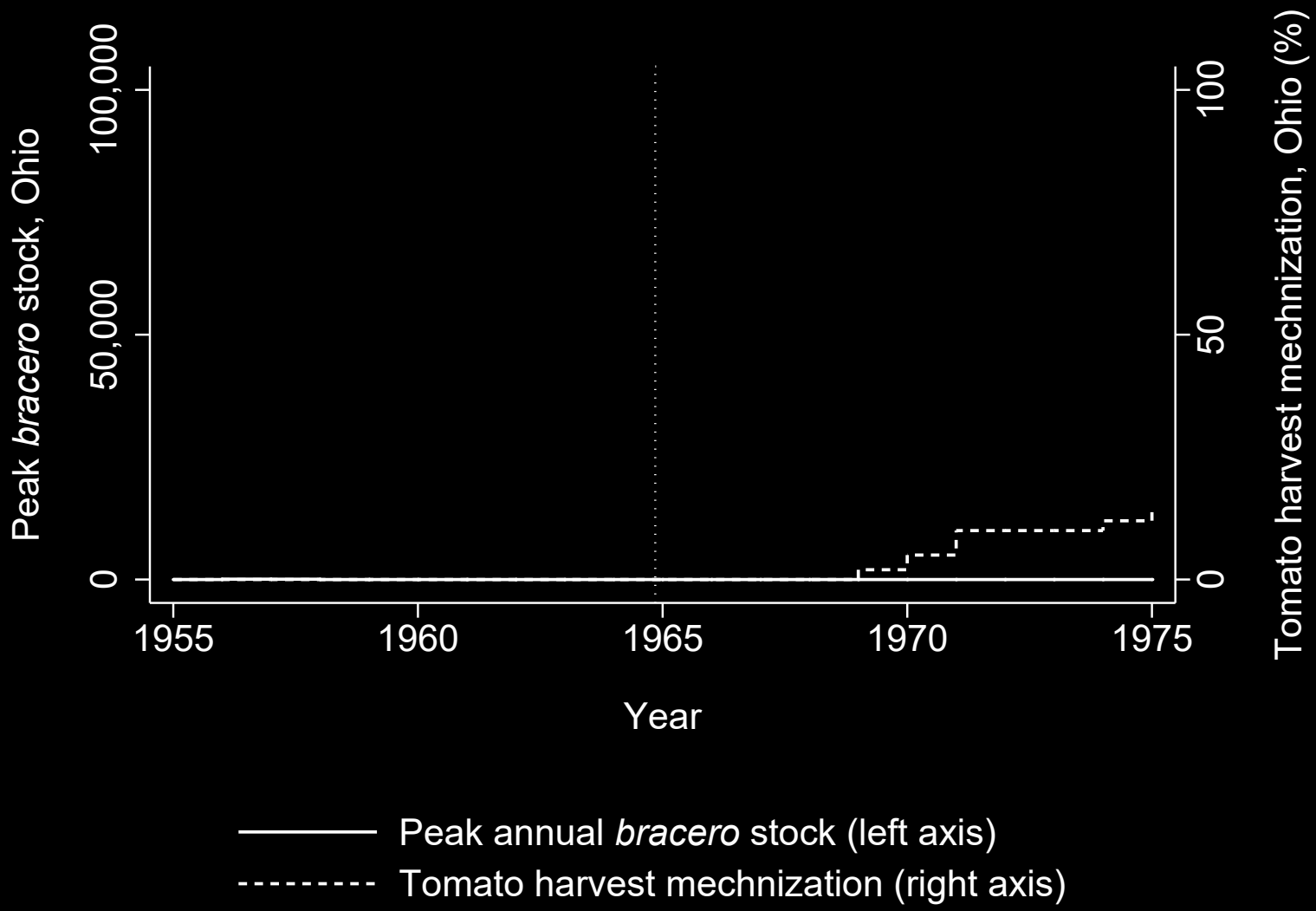
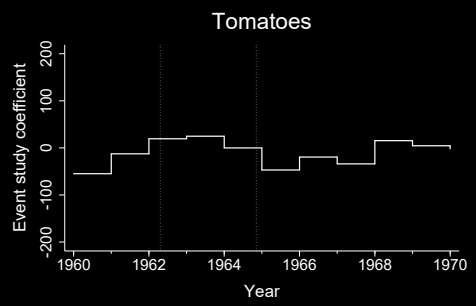
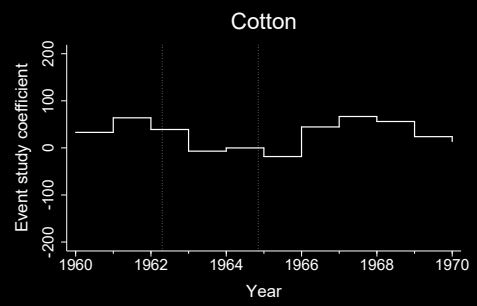
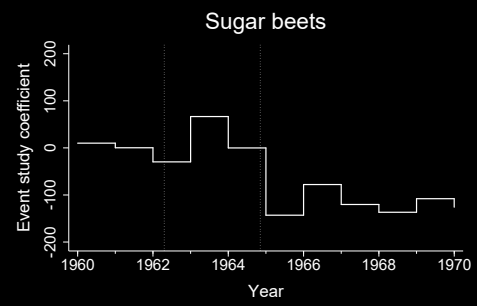
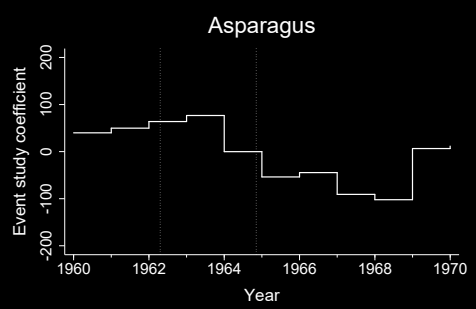


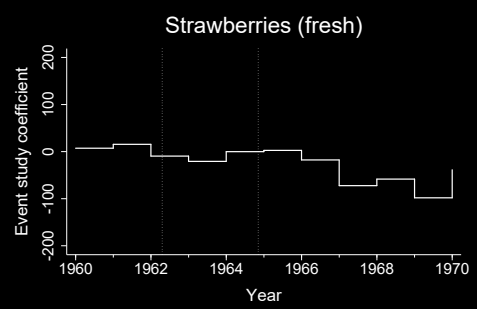
Differential Rybczynski effects: Event study

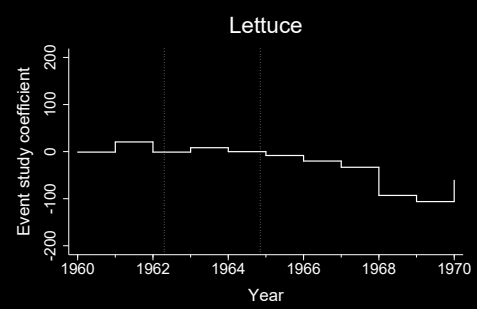


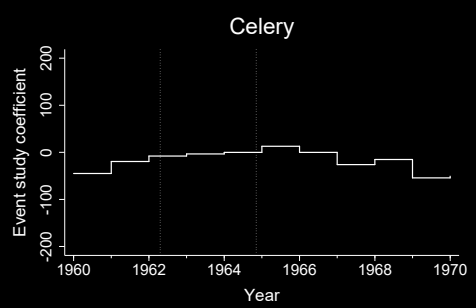


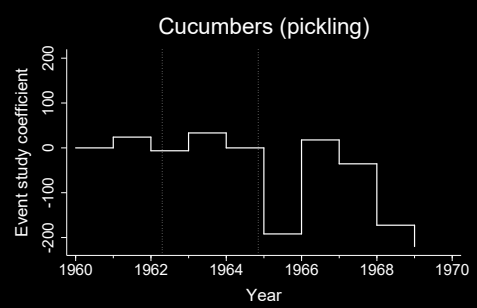


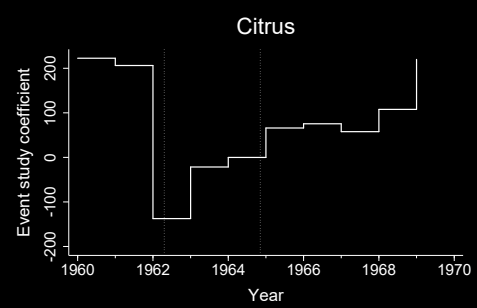












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   - → Direct evidence of tech. advance
   - → Rybczynski effects
   - → Other adjustment margins

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