Demand Shocks and Immigrant Employment: Evidence From U.S. Restaurants

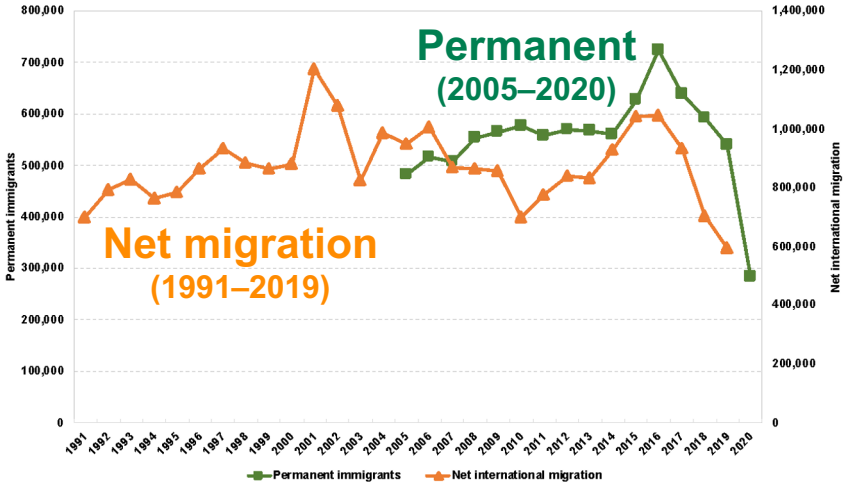
Raymond Robertson, Huyen Pham,
Ernesto Amaral, Suojin Wang,
Areala Mendoza, Nereyda Ortiz Osejo

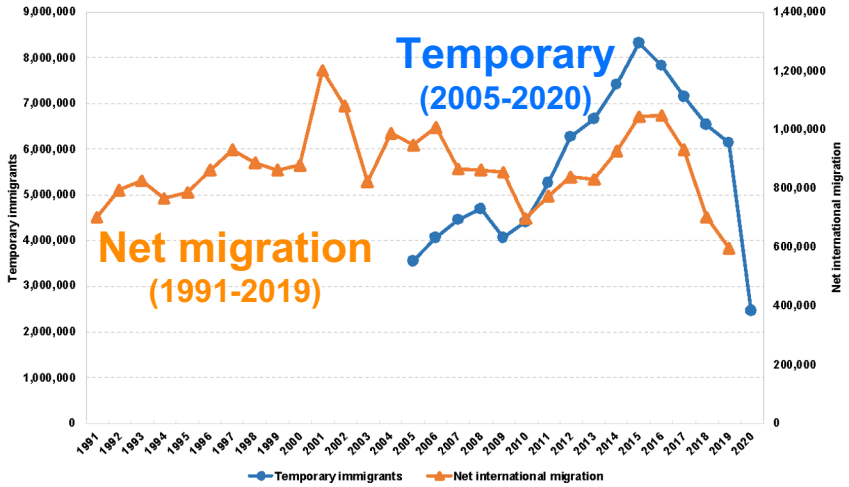
TEXAS A&M UNIVERSITY

Immigration effects on US-born workers

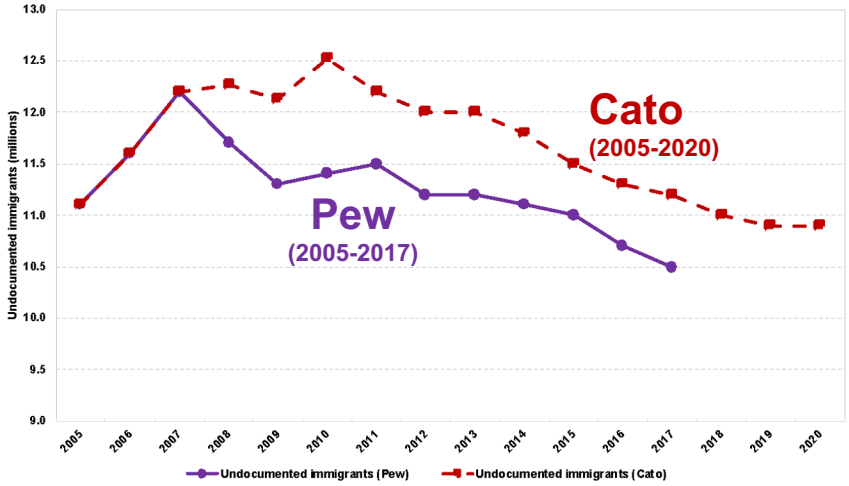
- Depends on degree of competition and degree of substitutability (Borjas, Grogger, Hanson 2008)
- Most intense in low-skill occupations and industries (Mandelman, Zlate 2022)
- Depends on the international tradability of the industry (Burstein, Hanson, Tian, Vogel 2020)
- Depends on the unobserved skills (Peri, Sparber 2009)
- Specialization can mitigate adverse effects and maybe create jobs for US-born workers (Albert 2021)

Flows of immigrants





Stock of undocumented immigrants



Source: US Dept. State, Dept. Homeland Security, Federal Res. Bank of Dallas, Pew Research Center, Cato Institute.

Our contribution

- Analyze effects of a drop in demand for services (COVID-19) and Great Resignation on relative employment of immigrants and US-born workers
- Focus on restaurant workers
  - Low-skill, nontraded industry where immigrant and US-born competition should be most intense
  - 4th largest occupational group in the U.S.
  - By far the lowest-paid occupation group in the country
  - Clear opportunities for specialization (Peri, Sparber 2007; Deming 2017)
  - 8.1% of newly arrived immigrants are in restaurant jobs, compared to 5.3% of other immigrants (2022)

National occupational employment and wage estimates

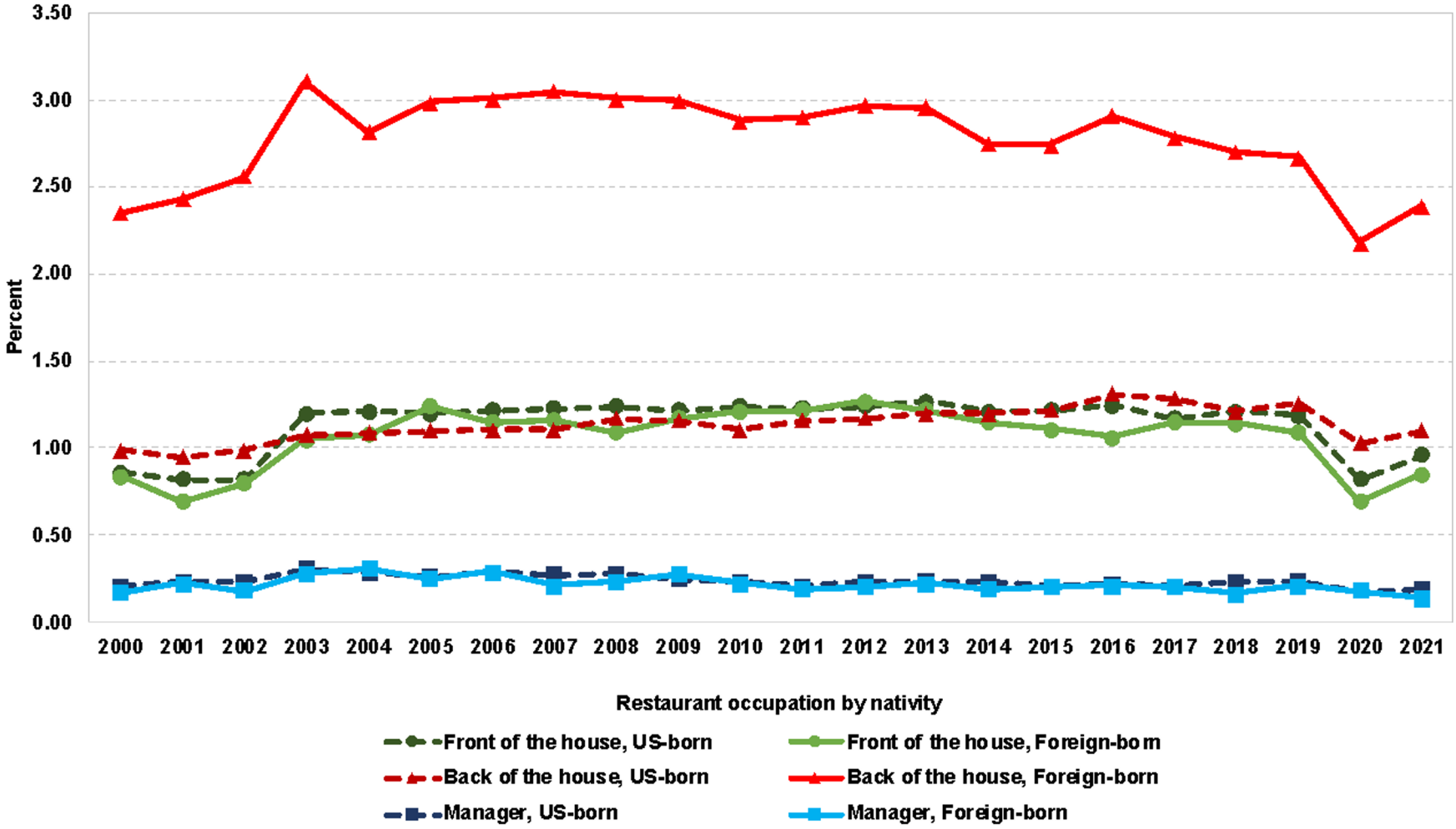
Occupations	Total employed (%)	Mean earnings	Difference from average earnings
Office and Administrative Support Occupations	18.55	$42,391	–34.69%
Sales and Related Occupations	13.12	$45,752	–27.06%
Transportation and Material Moving Occupations	12.02	$39,778	–41.05%
Food Preparation and Serving Related Occupations	**11.26**	**$27,655**	**–77.40%**
Production Occupations	8.52	$41,757	–36.19%
Educational Instruction and Library Occupations	8.14	$60,167	0.33%
Management Occupations	7.46	$126,708	74.81%
Healthcare Practitioners and Technical Occupations	7.08	$76,361	24.17%
Healthcare Support Occupations	6.44	$32,247	–62.04%
Business and Financial Operations Occupations	5.98	$77,091	25.12%

Source: May 2020 Bureau of Labor Statistics (BLS).

Data and methods

- **Current Population Survey (CPS)**
  - 2000–2021 Annual Social and Economic Supplement (ASEC)
  - 2000–2022 Basic Monthly data
    - Multinomial logistic: occupational transition from restaurant (independent) to another occupation next year (dependent)
- **Data collection with restaurant owners/managers**
  - Summer 2020 (n=19)
    - In-depth telephone interviews to understand main issues
  - Summer 2021 (n=457)
    - Survey about changes over time: Jan. 2020 (before pandemic), Jan. 2021 (height of pandemic), time of survey
    - OLS models estimate changes in numbers of workers by nativity and occupation within restaurants

Foreign-born and US-born in restaurant occupations



Source: 2000–2021 ASEC CPS (denominator is population by year for each nativity).

Sample size and row percentage of individuals by nativity and occupation in January 2020 and January 2021

US-born individuals

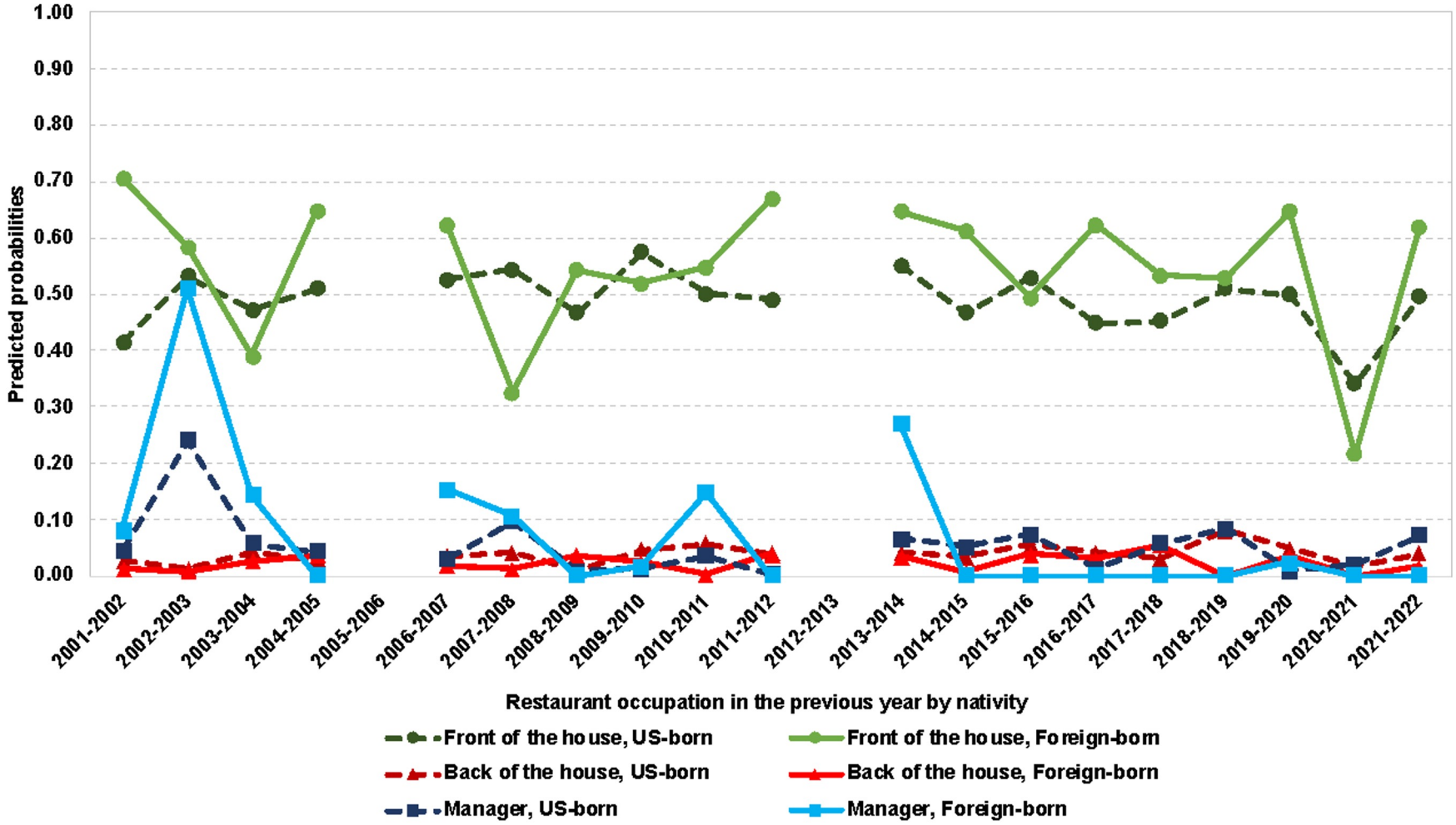
Occupation in January 2020	Occupation in January 2021						
	Front of the house	Back of the house	Manager	Other occupations	Unemployed	Not in the labor force	Total
Front of the house	**86 (34.07%)**	16 (7.54%)	1 (0.59%)	54 (20.82%)	25 (12.97%)	51 (24.01%)	233
Back of the house	9 (1.82%)	132 (34.65%)	7 (2.10%)	93 (32.61%)	22 (7.80%)	66 (21.01%)	329
Manager	1 (2.06%)	6 (9.14%)	18 (26.34%)	23 (42.32%)	6 (12.01%)	5 (8.12%)	59

Foreign-born individuals

Occupation in January 2020	Occupation in January 2021						
	Front of the house	Back of the house	Manager	Other occupations	Unemployed	Not in the labor force	Total
Front of the house	10 (21.59%)	6 (14.15%)	0 (0.00%)	8 (16.16%)	8 (24.40%)	8 (23.70%)	40
Back of the house	0 (0.00%)	**65 (54.86%)**	1 (0.52%)	19 (13.37%)	15 (12.21%)	22 (19.03%)	122
Manager	0 (0.00%)	0 (0.00%)	4 (65.02%)	2 (32.33%)	0 (0.00%)	1 (2.65%)	7

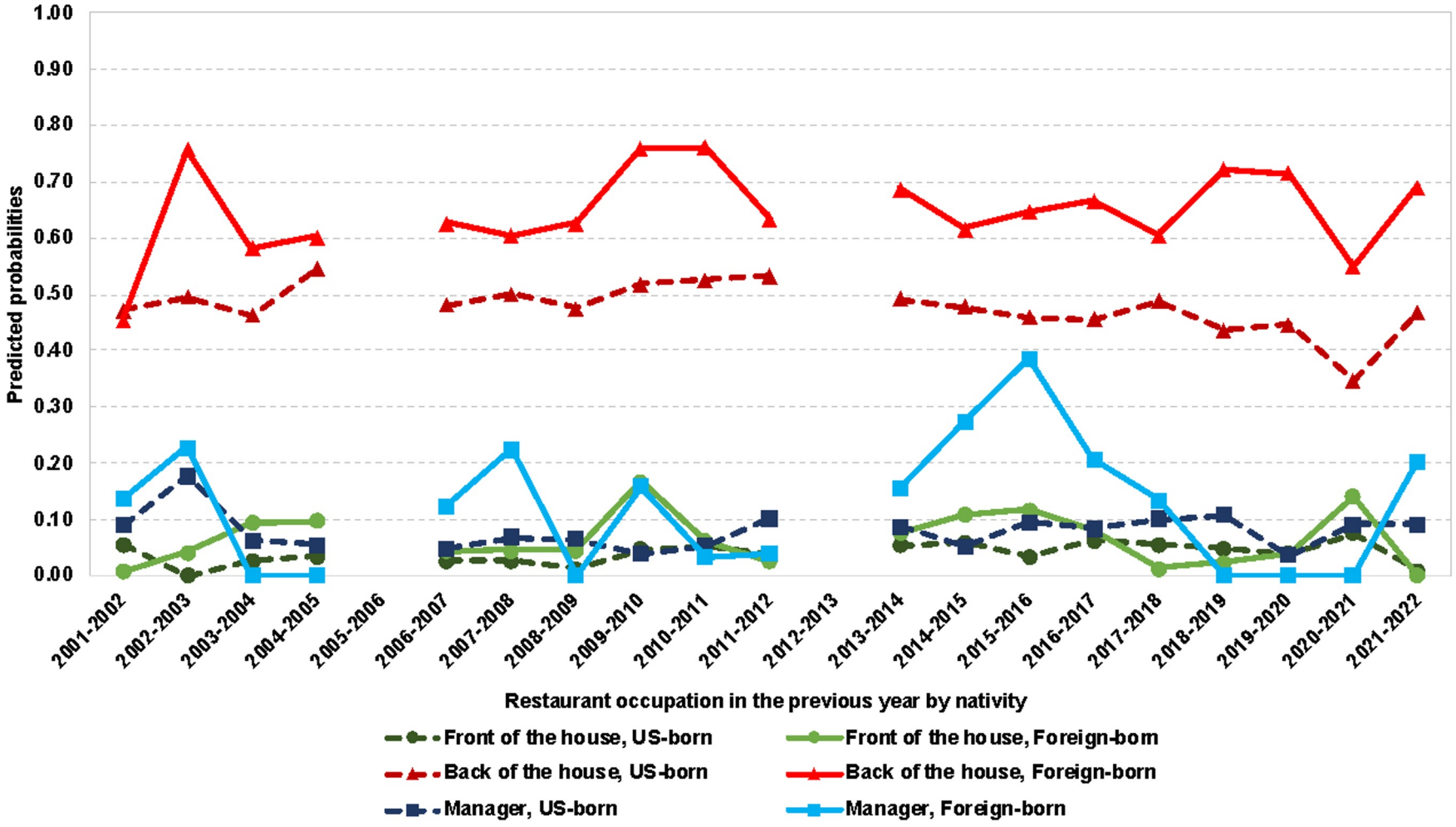
Source: 2020–2021 Monthly CPS.

Predicted probability of being in the front of the house



Source: Multinomial logistic models using the 2000–2022 Monthly CPS (January).

Predicted probability of being in the back of the house



Source: Multinomial logistic models using the 2000–2022 Monthly CPS (January).

Sample size and column percentage of restaurants by type and service

Type of restaurant	Restaurant service				
	Fast food	Upscale fine dining	Casual fine dining	Moderately priced style	Total
Independently owned	22 17.32%	17 53.13%	48 73.85%	148 63.52%	235 51.42%
Franchise	78 61.42%	9 28.13%	6 9.23%	49 21.03%	142 31.07%
Corporate owned	27 21.26%	6 18.75%	11 16.92%	36 15.45%	80 17.51%
Total	127 100.00%	32 100.00%	65 100.00%	233 100.00%	457 100.00%

Source: Nationwide survey with restaurant owners and managers (Summer 2021).

OLS: Changes # US-born workers

Independent variables	Front of the house			Back of the house		
	Jan.2020 to Jan.2021	Jan.2021 to Sum.2021	Jan.2020 to Sum.2021	Jan.2020 to Jan.2021	Jan.2021 to Sum.2021	Jan.2020 to Sum.2021
Type of restaurant						
Independently owned	ref.	ref.	ref.	ref.	ref.	ref.
Franchise	-1.359*	0.151	-1.208	-1.556*	-0.041	-1.597*
Corporate	-1.594*	0.293	-1.301	-1.142*	0.173	-0.970
Type of service						
Fast food	ref.	ref.	ref.	ref.	ref.	ref.
Upscale fine dining	-2.449*	1.994*	-0.455	-0.316	2.628*	2.311*
Casual fine dining	-3.757**	4.288***	0.530	-2.104*	3.299**	1.194
Moderately priced style	-2.316*	1.950*	-0.365	-0.807	0.820	0.013
Constant	-0.401	1.003	0.601	-0.282	0.445	0.164
R^2	0.025	0.029	0.007	0.015	0.026	0.025
Observations	457	457	457	457	457	457

Note: ***Significant at p<0.01, **Significant at p<0.05, *Significant at p<0.1 (one-tailed test).

Source: Nationwide survey with restaurant owners and managers (Summer 2021).

OLS: Changes # foreign-born workers

Independent variables	Front of the house			Back of the house		
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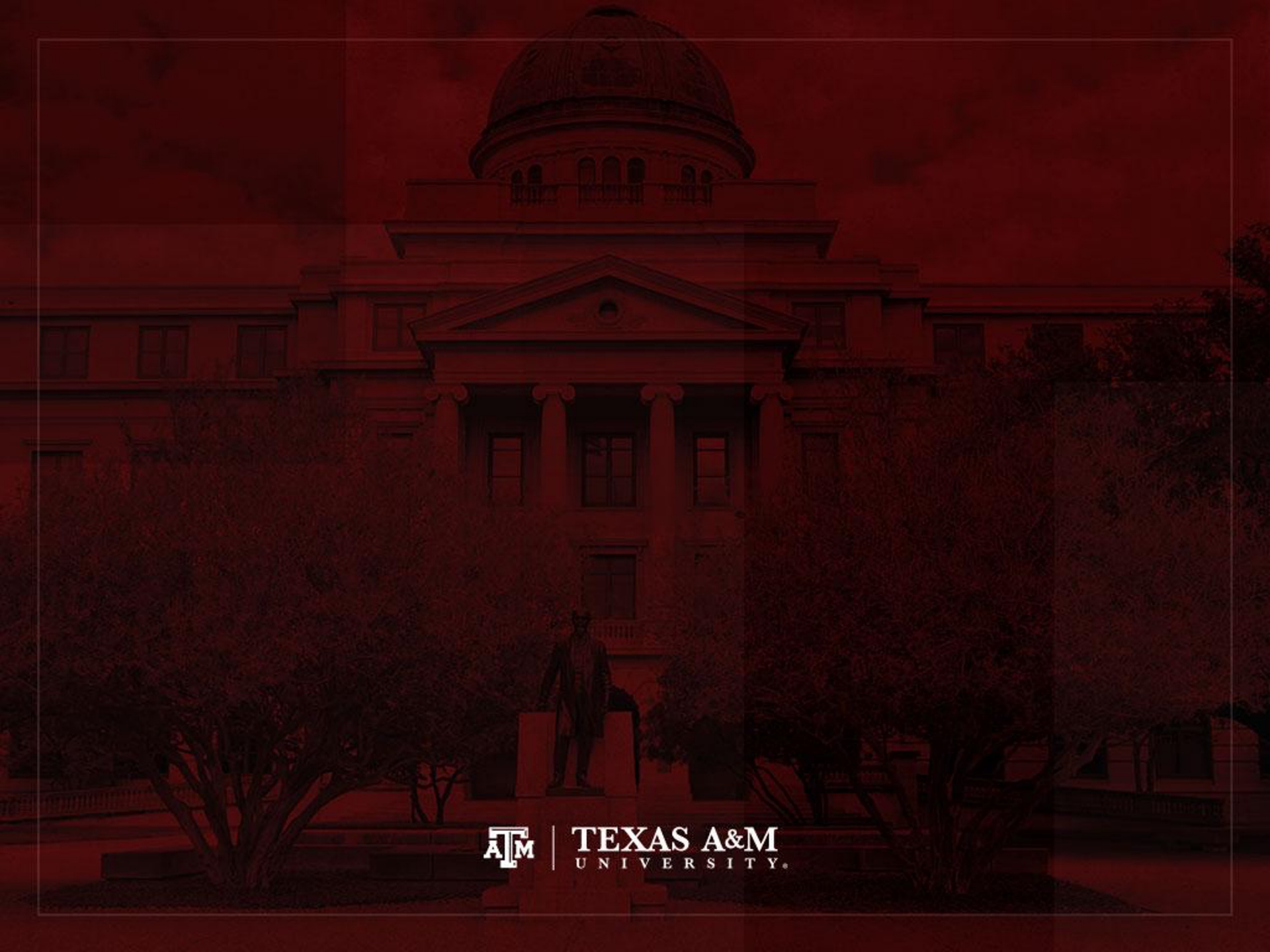
Type of restaurant						
Independently owned	ref.	ref.	ref.	ref.	ref.	ref.
Franchise	-0.403	0.380	-0.023	-0.854*	0.060	-0.795*
Corporate	-0.796*	1.297*	0.501	0.444	-0.110	0.333
Type of service						
Fast food	ref.	ref.	ref.	ref.	ref.	ref.
Upscale fine dining	-0.519	0.131	-0.389	-1.475*	0.433	-1.042
Casual fine dining	-1.001*	1.848**	0.847	-1.285*	1.147*	-0.138
Moderately priced style	-0.813*	0.281	-0.533	-0.933*	0.164	-0.768*
Constant	0.188	0.113	0.301	0.289	0.759*	1.047*
R^2	0.014	0.033	0.014	0.014	0.008	0.012
Observations	457	457	457	457	457	457

Note: ***Significant at p<0.01, **Significant at p<0.05, *Significant at p<0.1 (one-tailed test).

Source: Nationwide survey with restaurant owners and managers (Summer 2021).

Final considerations

- Why is recovery slower for foreign-born?
  - Newly arrived immigrants are more likely to be in restaurant occupations (lower earnings), since they are less established than other immigrants
  - Thus, lower flows of documented immigrants and (probably) lower flows of undocumented immigrants might decrease supply of workers to restaurants
- We are developing a simulation model
  - It predicts little changes in immigrant employment when demand falls, which is what we find with CPS and our survey data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