# Demand Shocks and Immigrant Employment: Evidence from US Restaurants During the COVID-19 Pandemic and Recovery

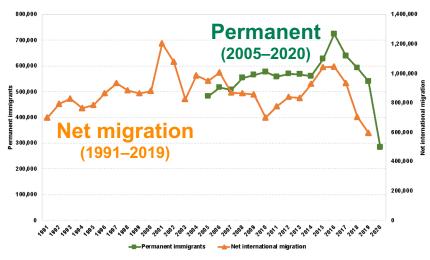
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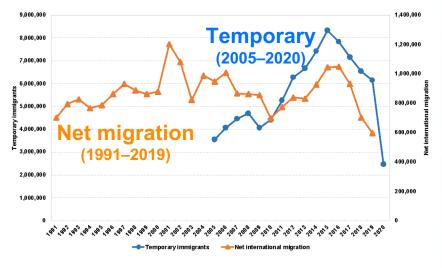


### Immigration effects on US-born workers

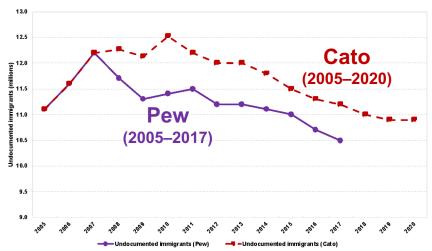
- Depends on degree of competition and degree of substitutability (Borjas, Grogger, Hanson 2008)
- Most intense in low-skill occupations and industries (Mandelman, Zlate 2022)
- Depends on the international tradability of the industry (Burstein, Hanson, Tian, Vogel 2020)
- Depends on the unobserved skills (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





#### 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
  - 4<sup>th</sup> largest occupational group in the U.S. (2020)
  - 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%



#### Data and methods

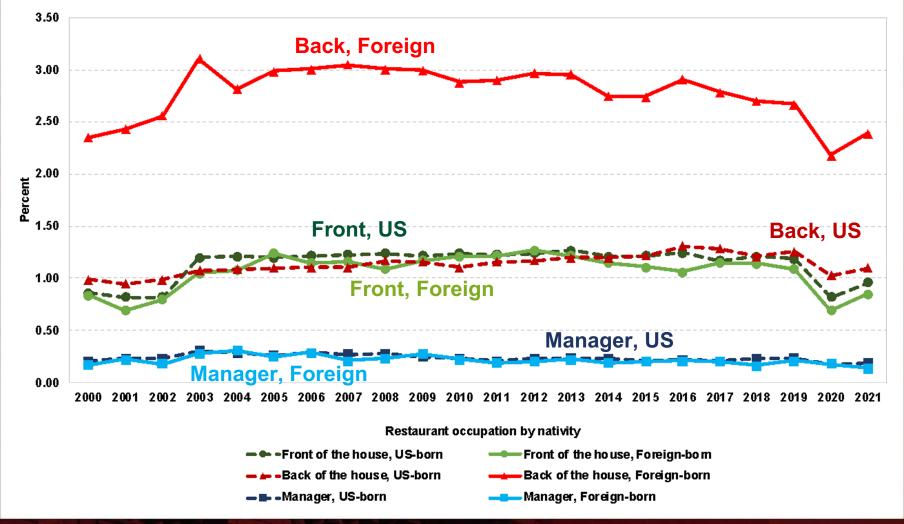
- Current Population Survey (CPS)
  - 2000–2021 Annual Social and Economic Supplement (ASEC)
  - 2000–2022 Basic Monthly data
    - Multinomial logistic: occupational transition to next year
      - From restaurant (independent) to another occupation (dependent)
      - From all occupations (independent) to restaurant (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

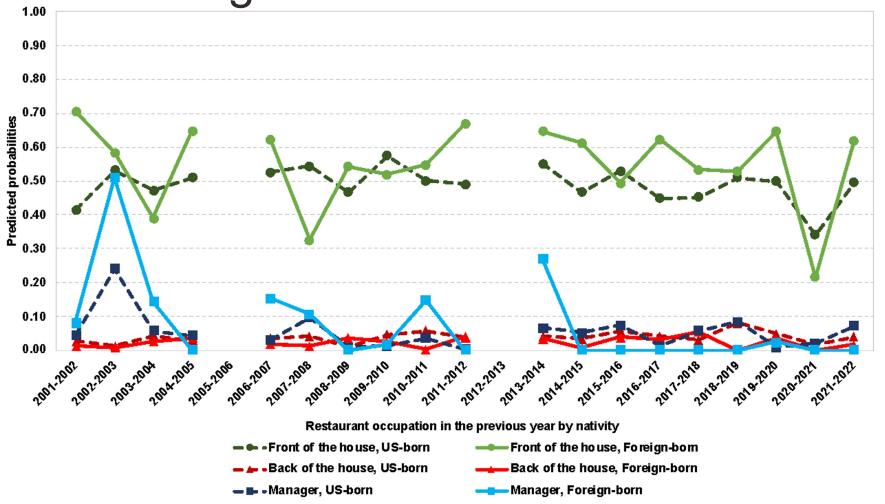


## Foreign-born and US-born in restaurant occupations



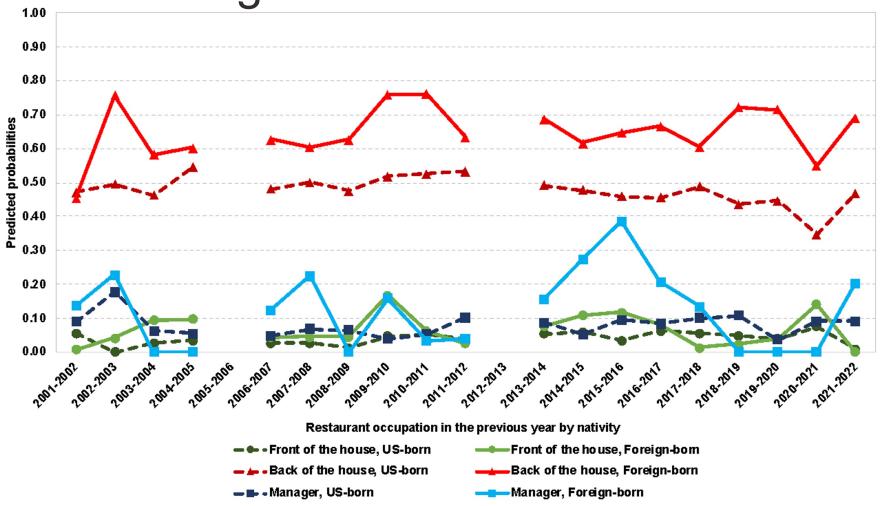
#### From front of the house:

Foreign-born have deeper 2021 decline of moving out from front of the house

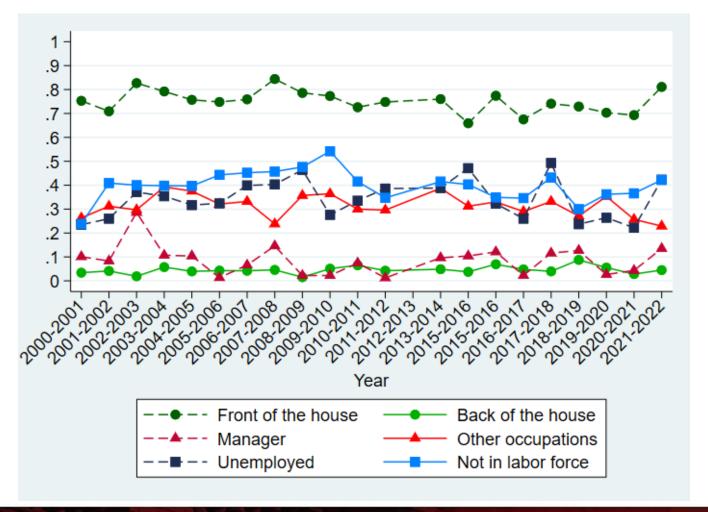


#### From back of the house:

**US-born** have better 2022 recovery of being in the back of the house

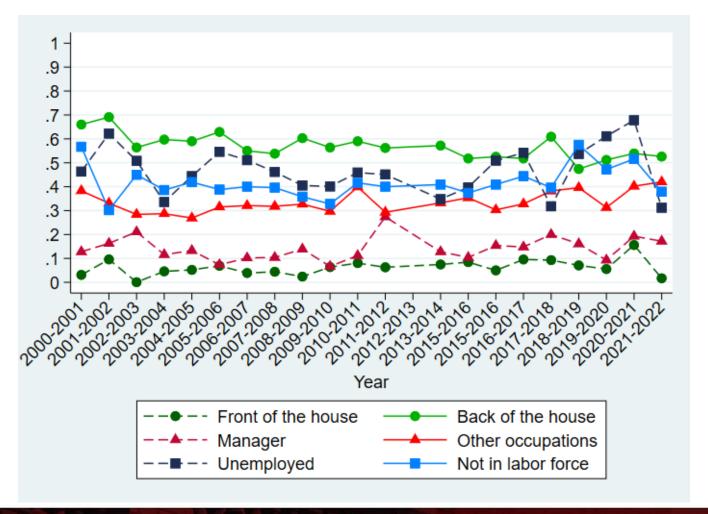


## To front of the house: US-born come from unemployment, not in labor force





## To back of the house: US-born come from unemployment, not in labor force





### 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	48	148	235		
	17.32%	53.13%	73.85%	63.52%	51.42%		
Franchise	78	9	6	49	142		
	61.42%	28.13%	9.23%	21.03%	31.07%		
Corporate owned	27	6	11	36	80		
	21.26%	18.75%	16.92%	15.45%	17.51%		
Total	127	32	65	233	457		
	100.00%	100.00%	100.00%	100.00%	100.00%		



#### **OLS:** Changes # US-born workers

	Front of the house			Back of the house			
Independent variables	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	-2.8043***	3.2511***	0.4468	-1.2425***	1.8255***	0.5830*	
Franchise	-2.8732***	2.1338***	-0.7394	-2.2254***	0.9930**	-1.2324**	
Corporate	-3.7375***	2.9125***	-0.8250	-2.1000***	1.6375**	-0.4625	
Type of service							
Fast food	-1.5748***	1.1575**	-0.4173	-1.4803***	0.4567	-1.0236**	
Upscale fine dining	-3.5313***	3.0938**	-0.4375	1.2500	3.0938***	1.8438*	
Casual fine dining	-4.5538***	5.3538***	0.8000	-2.7231***	3.7692***	1.0462	
Moderately priced style	-3.2489***	3.0300***	-0.2188	-1.5923***	1.2832***	-0.3090	

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

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Type of restaurant							
Independently owned	-0.5660***	0.6766***	0.1106	-0.6681**	1.1277***	0.4596*	
Franchise	-0.5704**	0.6761**	0.1056	-1.0352***	0.9507***	-0.0845	
Corporate	-1.1500***	1.8000***	0.6500*	0.0250	0.9125**	0.9375**	
Type of service							
Fast food	-0.2283	0.6220**	0.3937	-0.1417	0.7716**	0.6299*	
Upscale fine dining	-0.5938	0.5938	-2.7200	-1.3438*	1.1875*	-0.1563	
Casual fine dining	-0.9846*	2.2154***	1.2308**	-1.0000**	1.8923***	0.8923*	
Moderately priced style	-0.8326***	0.6738***	-0.1588	-0.7554*	0.9185***	0.1631	

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

#### 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

