

The effect of free-trade agreements on
local employment and politics:
Evidence from NAFTA

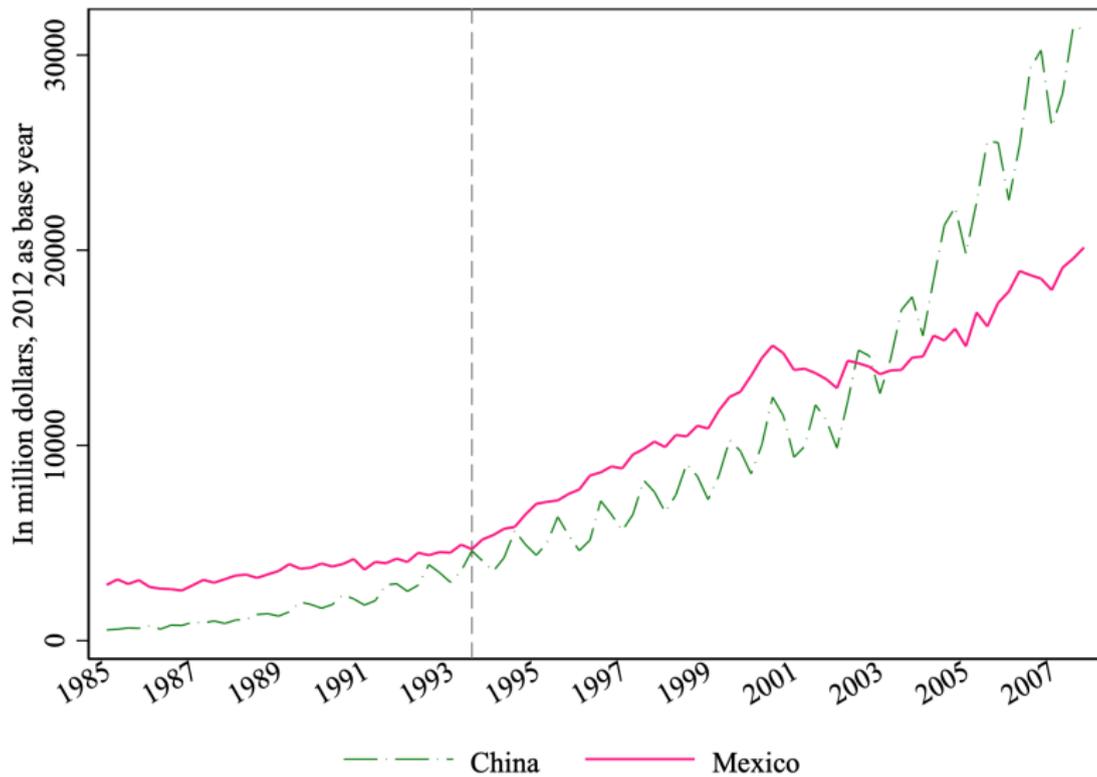
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Revisiting NAFTA

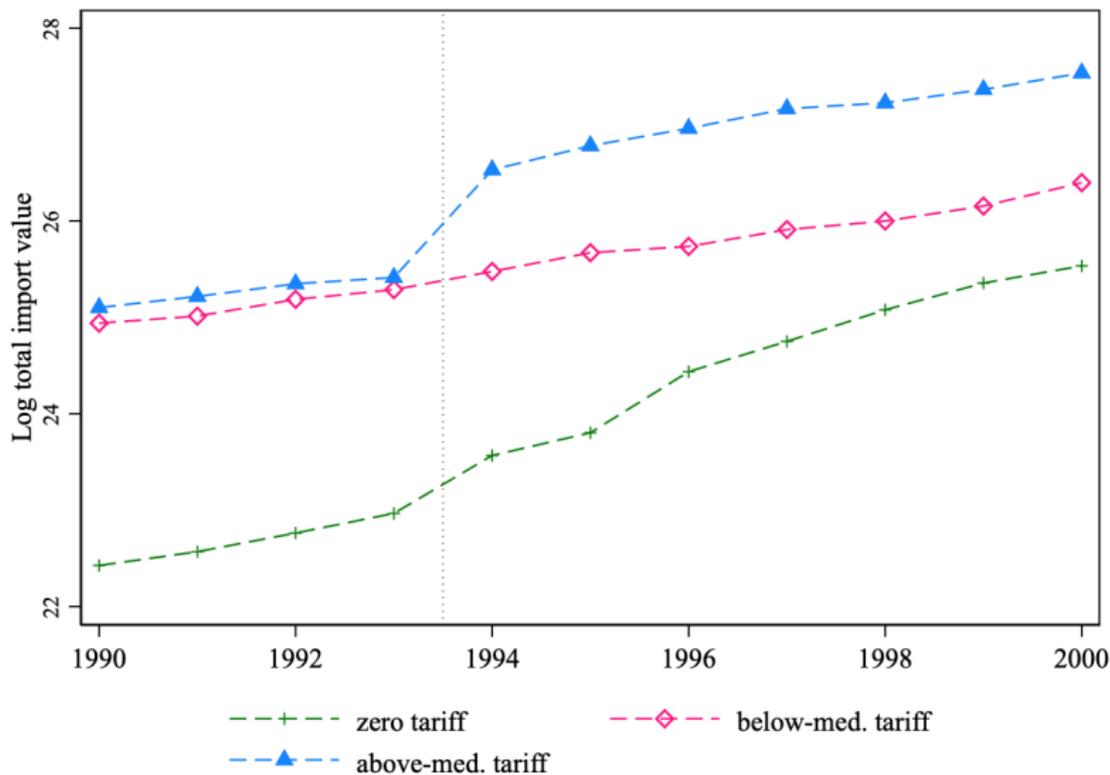
- Autor Dorn Hanson 2013 (ADH) put the 2001 China Shock on economists' radar, and since then others have examined political effects as well.
- In this project, we argue that trade-induced economic and political change started earlier, with NAFTA in 1994.
- Economists at time dismissive of large effects from NAFTA in the US:
 - Over 300 economists signed pro-NAFTA letter: “assertions that NAFTA will spur an exodus of U.S. jobs to Mexico are without basis,” argued Mexico too small and tariff reduction too gradual.

US imports from China and Mexico



China only surpasses Mexico in import value in 2003.

Rise in Mexican imports by pre-NAFTA tariff status



Our approach

- Compared to “China shock,” less work on NAFTA. Almost none using reduced-form labor-economics approach.
- We take a very visual, event-study approach.
 - Following past work, we proxy county “vulnerability” to NAFTA, based on share of pre-NAFTA employment in industries that (a) enjoyed tariff protection pre-NAFTA (b) Mexico is a global export leader.
 - We then plot how vulnerability predicts local outcomes from the 1980s onward and assess if any break occurs in 1994.

Preview of local economic results

- From late 1980s until 1993, relationship of county employment and NAFTA vulnerability is flat, but turns downward in 1994. By 2000, counties in the most vulnerable quartile have lost 5-8 log points of total employment relative to counties in the least vulnerable quartile.
- Our preferred specification includes $State \times Year$ FE, and results robust to adding many pre-period county characteristics $\times Year$ FE.
- Robust to adding ADH China-shock measure $\times Year$ FE.
 - Geographic correlation between NAFTA vulnerability and China shock is $\rho = 0.322$.

Preview of local economic results, cont'd

- We find no migration response to NAFTA.
- Deepens puzzle as to why U.S. workers and households are not leaving places hit with negative employment shocks.
- Disability applications increase in NAFTA-vulnerable counties after 1994. By 2000, NAFTA-induced DI applications from counties in the top quartile of vulnerability are about ten log points higher than counties in bottom quartile.

Preview of political results: Aggregate data

- First, we continue with the ecological-regression approach, but instead of county-level economic variables as the outcome in event-study analysis, we examine Republican vote shares in House elections.
- Note that a *Democratic* administration pushed NAFTA through Congress in 1993, despite traditional Democratic base (unions, working-class) being anti-trade.
- From 1994 onward, county vulnerability predicts rising Republican share of votes in House elections, robust to our usual checks.
- But most of our political analysis uses individual microdata.

Political results from repeated cross-sections of microdata

- Using Gallup and other data from 1994 to 2015, we show that (a) majority of respondents still oppose NAFTA and (b) opposition concentrated in NAFTA-affected states.
- Using ANES data from 1986 to 2012, we show in an event-study analysis that protectionist sentiment predicts *Democratic* party ID from 1986-1992, but the relationship disappears/reverses sometime between 1992-1996, consistent with NAFTA as a key event shifting protectionist voters rightward.
- The event-study results are largest for white men without a college degree, and residents of the South.

Political results from individual-level panel data

- Finally, we zero in on the NAFTA period with individual-level *panel* data from 1992-1994.
 - We show that respondents' protectionist sentiment in 1992 predicts shifts in the *Republican* direction between 1992 and 1994.
 - Result robust to controlling for “hot button issues” of the day: gays in the military, health reform, Contract for America items, as well as standard policy-preference questions.

Review of the literature

Local economic effects of China shock

Impact of China Shock on US Local Labor Market Outcomes

- Autor et al. (2013, 2016) employ 1990 and 2007 CZ data and model employment impacts as a function of Chinese imports and find the shock can account for one-quarter of decline in manufacturing.
- Bloom et al. (2019) find that employment shifted from manufacturing to services and from heartland to coasts through 2007.

Review of the literature

Economic effects of trade policy

- Impact of NAFTA on US
 - *Much less* work than on China shock.
 - To our knowledge, no papers take an event-study approach as we do.
 - Caliendo and Parro (2015) and Romalis (2007) take more structural approaches and find positive impacts on *aggregate* welfare. Hakobyan and McLaren (2016) take a more structural approach in modeling local effects.
- Impact of Trade on Local Labor Markets, Other Contexts
 - Topalova (2010) on India; Dix-Carneiro and Kovak (2016) on Brazil.

Review of the literature

Political effects of trade policy

Impact of China Shock on US Political Outcomes

- Autor et al. (2017, 2020): Using a variety of outcomes (Fox news, donations, House winners and Presidential elections) finds that China shock leads to a rightward shift as well as increased polarization.
- Che et al. (2017) uses a longer time frame, counties, different identification strategy, finds House vote share shifts to the left

Impact of Trade Shocks on European Politics

- Regional trade shocks generally move voters rightward and/or toward populism (e.g., Colantone and Stanig (2018a) in Western Europe, Dippel et al. (2015, 2018) in Germany, Malgouyres (2017) in France, Caselli et al. (2018) and Barone, Kreuter (2019) in Italy and Colantone, Stanig (2018b) on the UK and Brexit.)

Review of the literature

Politics

Trade and Politics as Correlates in the US

- Presidential incumbents more vulnerable in areas with more low-skilled manufacturing employees, 1992-2012 (Jensen et al. 2017) and with trade-related layoffs, 2000-4 (Margalit 2011)

Outline

Background on NAFTA

Measuring vulnerability to NAFTA

Employment effects

Other local economic effects: Migration and DI Applications

Political effects

The lead-up to NAFTA

- A North-American Free-Trade Zone was a *bi-partisan* goal since 1970s. By 1990, three countries close to a deal.
- Perot makes NAFTA a flashpoint in the 1992 election.
- Bill Clinton wins (with only 43% of the vote), but Perot wins 19% of the vote, the most successful third-party campaign since Teddy Roosevelt in 1912.
- Clinton makes pushing NAFTA through Congress an early goal and one of the *big stories* of his first term.
 - The Gore-Perot CNN debate on NAFTA (set a CNN viewership record that would stand for two decades).
 - SNL has at least two skits on the NAFTA debate.
- November 1993, NAFTA passed in close, bi-partisan votes
 - 234–200 in the House; 61–38 in the Senate.

What did NAFTA do?

- US-Canada trade already largely tariff-free, so largest effects for the US were via Mexico.
- With implementation in January 1994, immediate elimination of one-half of the tariffs on Mexican exports to the US, with the rest put on a phase-out schedule.
- Key U.S. industries that lost protection from Mexican exports: Apparel, Footwear, Textile mills, Structural clay.

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Constructing county-level NAFTA vulnerability

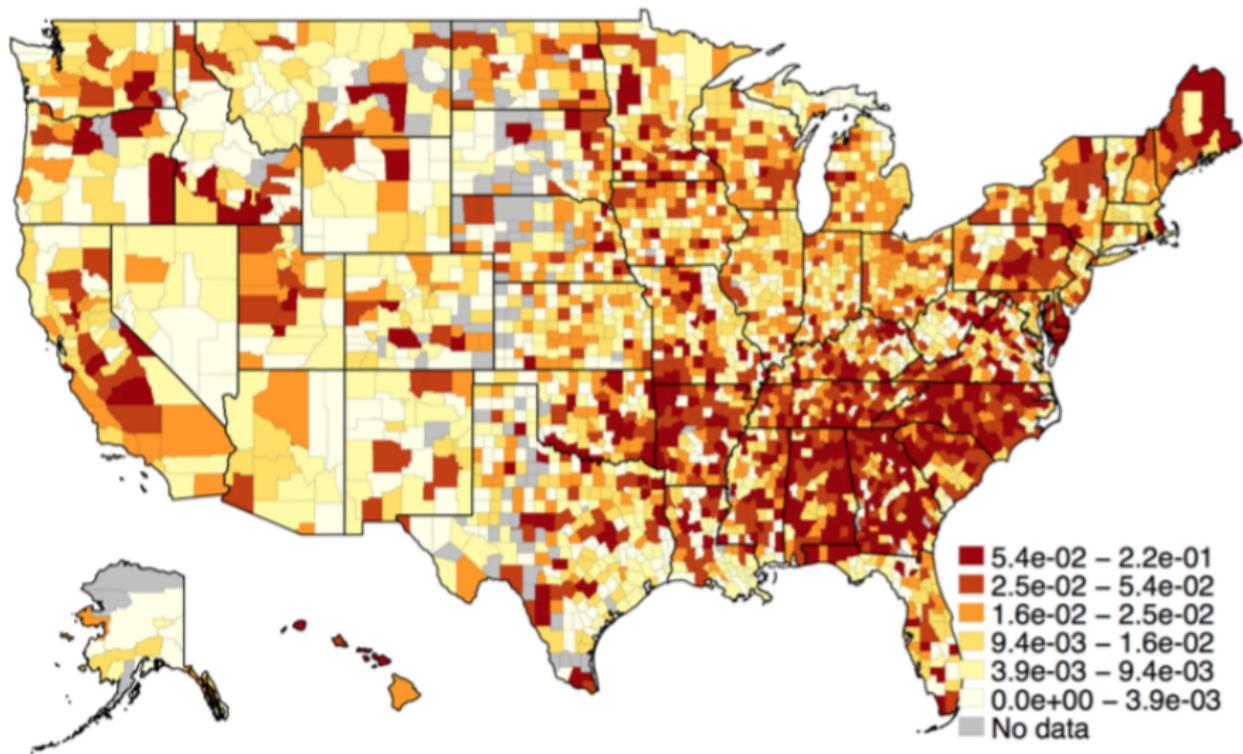
- We focus on counties, as they have more political meaning than CZs, but show results at various levels of aggregation.
- We follow Hakobyan and McLaren (2016) in constructing local NAFTA vulnerability.
- First, classify for each industry j Mexico's revealed comparative advantage.

$$\text{RCA}^j = \frac{\left(x_{j,1990}^{\text{MEX}} / x_{j,1990}^{\text{ROW}}\right)}{\left(\sum_i x_{i,1990}^{\text{MEX}} / \sum_i x_{i,1990}^{\text{ROW}}\right)}$$

- Then, weight this measure by (a) how protected industry j was in the US in 1990, and (b) how dependent county c 's employment was on this industry.

$$\text{Vulnerability}_c = \frac{\sum_{j=1}^J L_{1990}^{cj} \text{RCA}^j \tau_{1990}^j}{\sum_{j=1}^J L_{1990}^{cj} \text{RCA}^j}$$

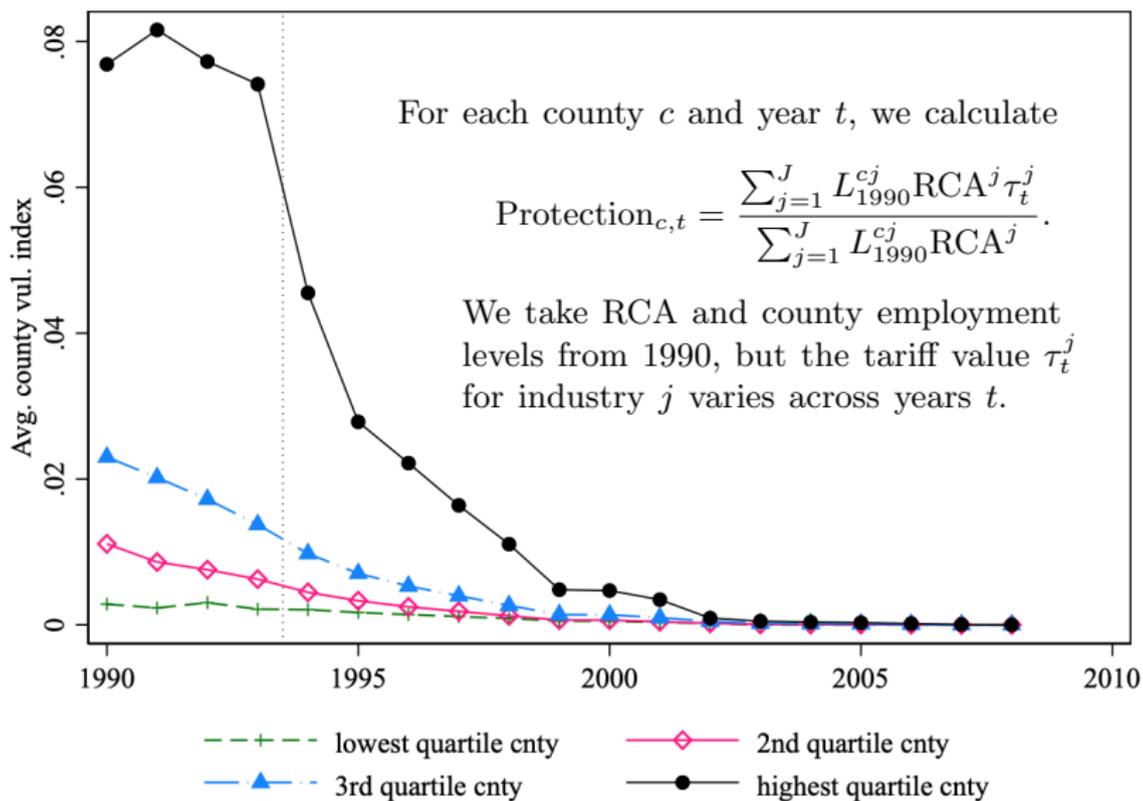
Areas with greatest vulnerability



Pre-period characteristics of counties, by vulnerability

Quartile (lower quartile : less vulnerable)	1	2	3	4
<i>Demographics</i>				
Population (in thousands)	35.388	139.239	103.993	48.041
Household income (in thousands)	23.439	26.261	24.591	22.121
Share of white	0.907	0.905	0.904	0.845
Share of manufac. employment	0.085	0.132	0.135	0.175
Share of college grad.	0.132	0.158	0.139	0.113
<i>pre-NAFTA political preference</i>				
Republican house vote share (1980-1988)	0.464	0.478	0.481	0.383
Number of counties	757	756	755	755

How did tariff-based protection change over time?



A few observations

- Vulnerability is very concentrated—the bottom three quartiles are all pretty close to zero.
- Despite what economists claimed in their pro-NAFTA letter about *gradual* tariff reduction, transition quite short.
 - More than half of tariffs set to zero by 1995, rest put on phase-out schedule.
- Pre-NAFTA, vulnerable counties are less educated, less white, and more reliant on manufacturing than other counties. Two implications:
 - Important to control for differential trends by pre-period characteristics.
 - Any deleterious effects of NAFTA would increase spatial inequality, hitting places already worse-off than average.

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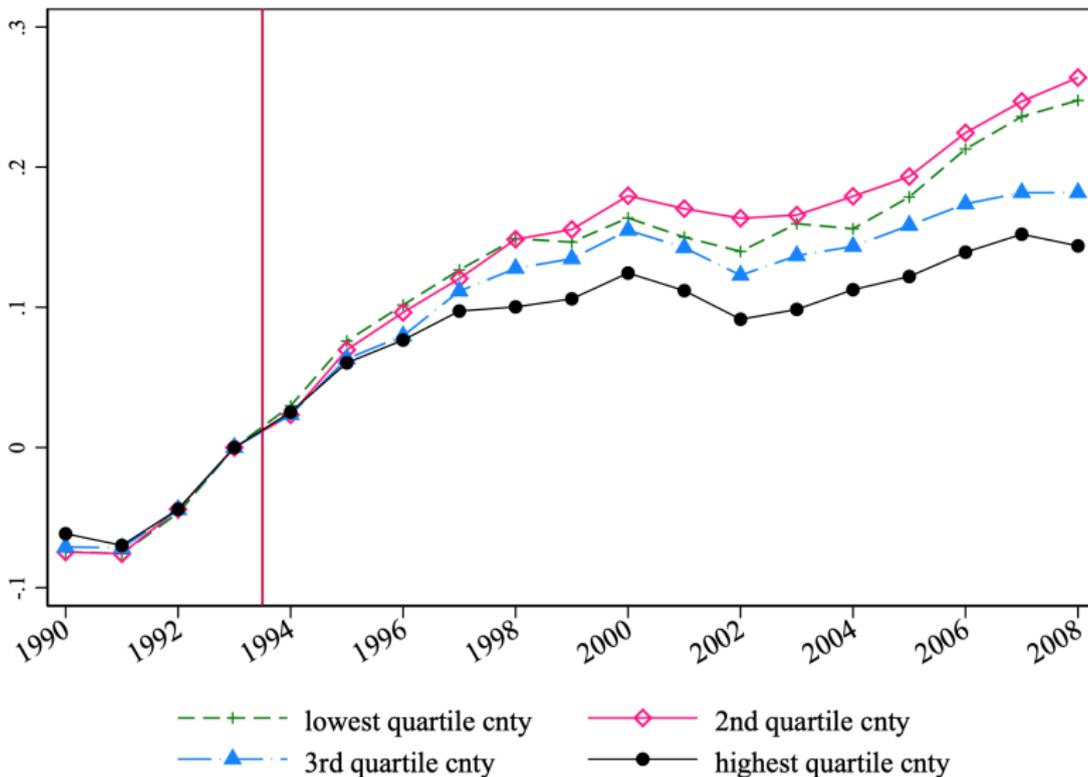
Data

- Key source of data in this section is County Business Patterns Data (CBPD), which gives us county-year employment data.

Empirical approach, raw trends

- For all of the county-year-level results in the paper, we take a very visual approach.
- We first show trends after dividing counties into (unweighted) quartiles based on county-level vulnerability.
- These are raw data (not even population weighted) except for normalizing to 1993 to facilitate visual comparisons.

Trends in log employment, by vulnerability quartile



Empirical approach, event-study analysis

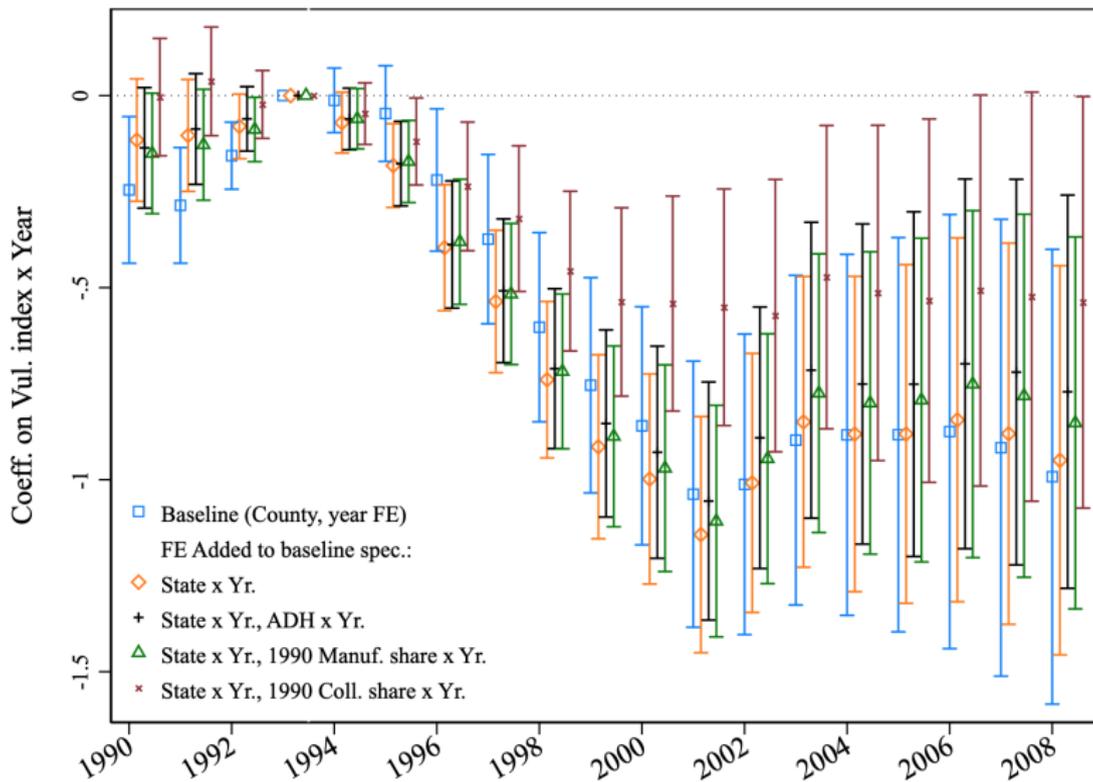
- We then show event-study results, estimating:

$$Y_{ct} = \alpha_c + \gamma_t + \sum_{\tilde{t} \neq 1993} \beta_{\tilde{t}} (\text{Vulnerability}_c) \times \mathbb{1}(t = \tilde{t}) + \lambda \mathbb{X}_{ct} + \epsilon_{ct},$$

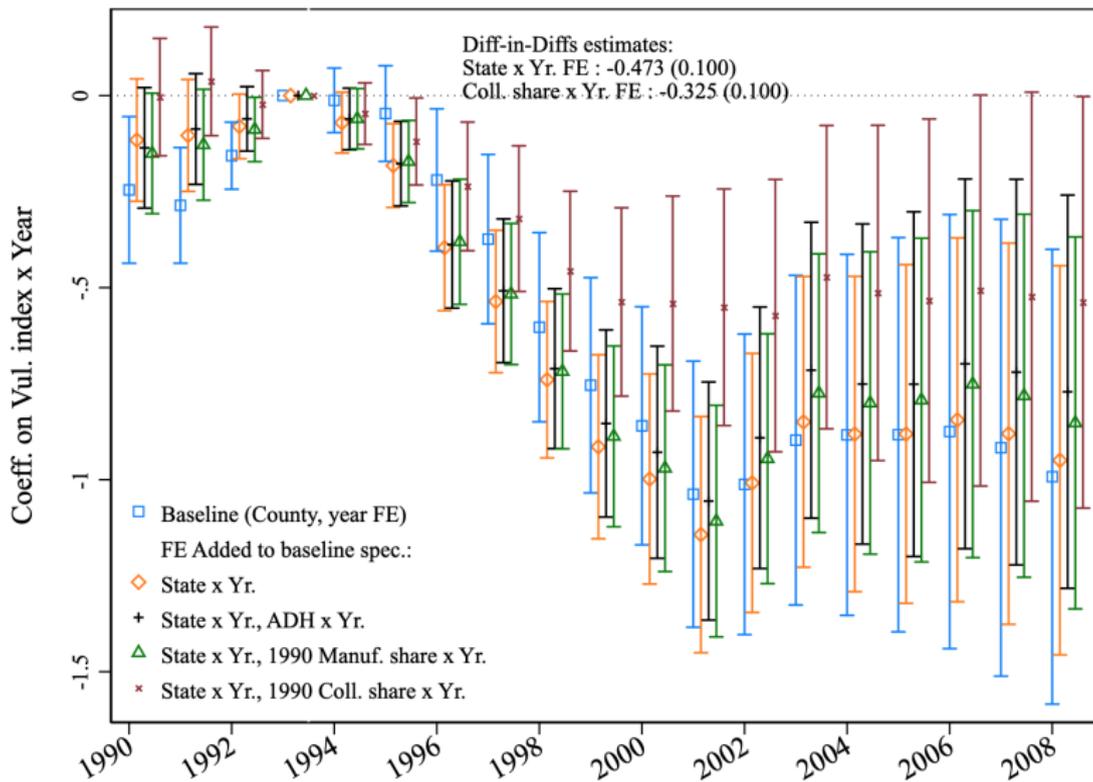
where α_c is county fixed effects, γ_t are year fixed effects, Vulnerability_c is county c 's vulnerability (as calculated with 1990 tariff levels), and \mathbb{X}_{ct} are controls.

- We weight observations by 1990 county population.
- We use this specification *a lot* throughout the talk.

Log of employment, event study



Log of employment, event study



Discussion of Magnitudes

- By 2000, the range of coefficients on the vulnerability measure is -1 to -0.6.
- Recall that places in the top quartile have a vulnerability measure around 0.08 and at the bottom about zero.
- So, relative to 1993, counties in the top quartile have by 2000 lost between 4.8 and 8 log points of total employment, relative to those in the bottom quartile.

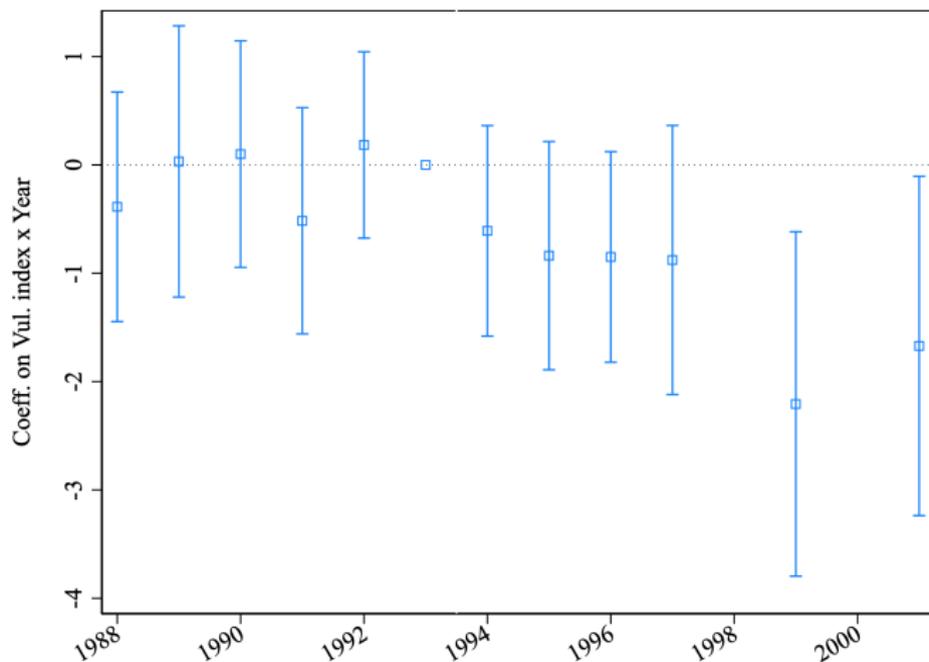
Different levels of aggregation

- We have estimated our baseline effects at the CZ level.

▶ Total log employment (CZ event-study)

- More novel, we have also used the PSID to look at *individual*-level vulnerability to NAFTA.
 - Instead of county vulnerability, we define your *individual* NAFTA vulnerability based on your 1988 industry j 's value of $RCA_j * \tau_j$.

Were you in paid work last week? (PSID)



An individual working, in 1988, in the average NAFTA-exposed industry has 3.4-percentage-point (4.3 percent) decline in employment probability by 2000.

Other checks, alternative stories

- Our outcome so far is *log total employment*. As we would expect, we find almost all of the total effect driven by manufacturing employment, at least through 1997 (industry codes change in 1998, making it harder to compare).
- Are effects driven by NAFTA or by Peso crisis?
 - Mexican government devalues the Peso against USD in December 1994.
 - Peso devaluation should make all goods more competitive, not just goods on which NAFTA reduced tariffs.
 - To test if Peso devaluation confounds results, we re-run our event-study specification including as a control $RCA_j * \tau_j$ times local employment weights times year FE.
 - Results don't change, so the tariffs *per se* are essential to the local effects. ▶ log employment event study with the RCA x Yr. FE

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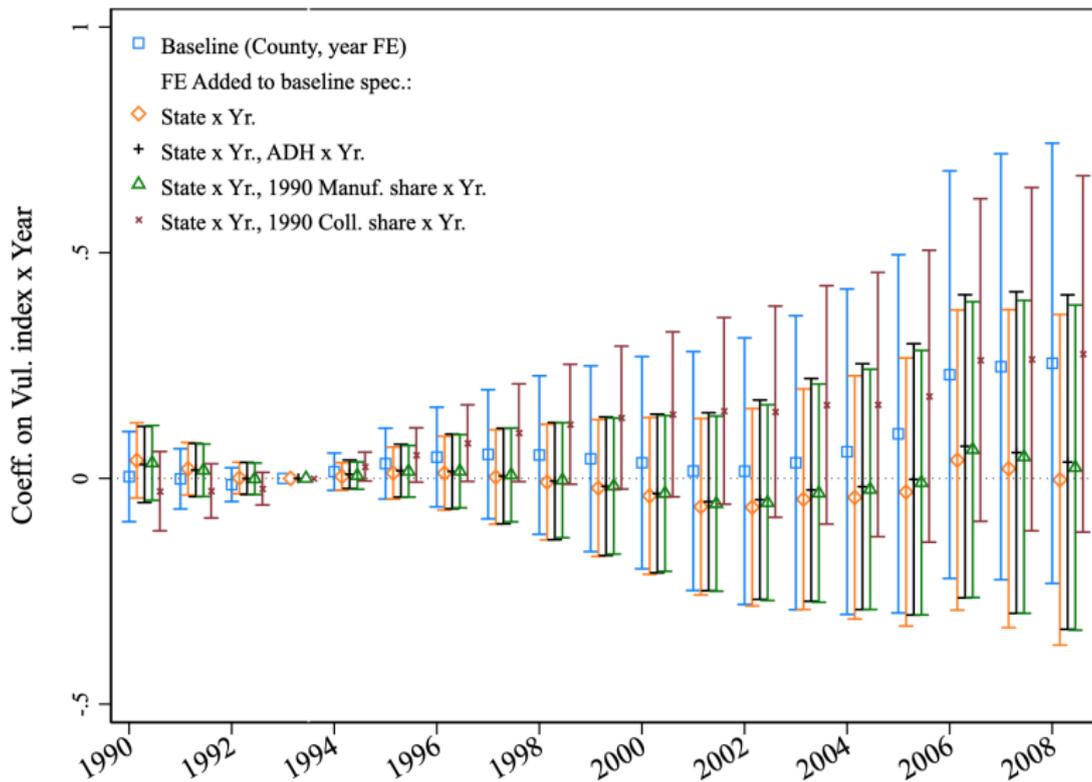
Other local economic effects: Migration and DI Applications

Political effects

How do residents respond to local employment shocks?

- Blanchard and Katz (1992) found migration responses to economic shocks in 1970s and 1980s data, but papers using more recent data find limited migration responses.
- We use Census intercensal county population estimates.
 - They adjust decadal interpolations via vital stats births and deaths data as well as data from the IRS on county-to-county flows.
- We use the same specifications as in the employment regressions.

Log of county population, event study



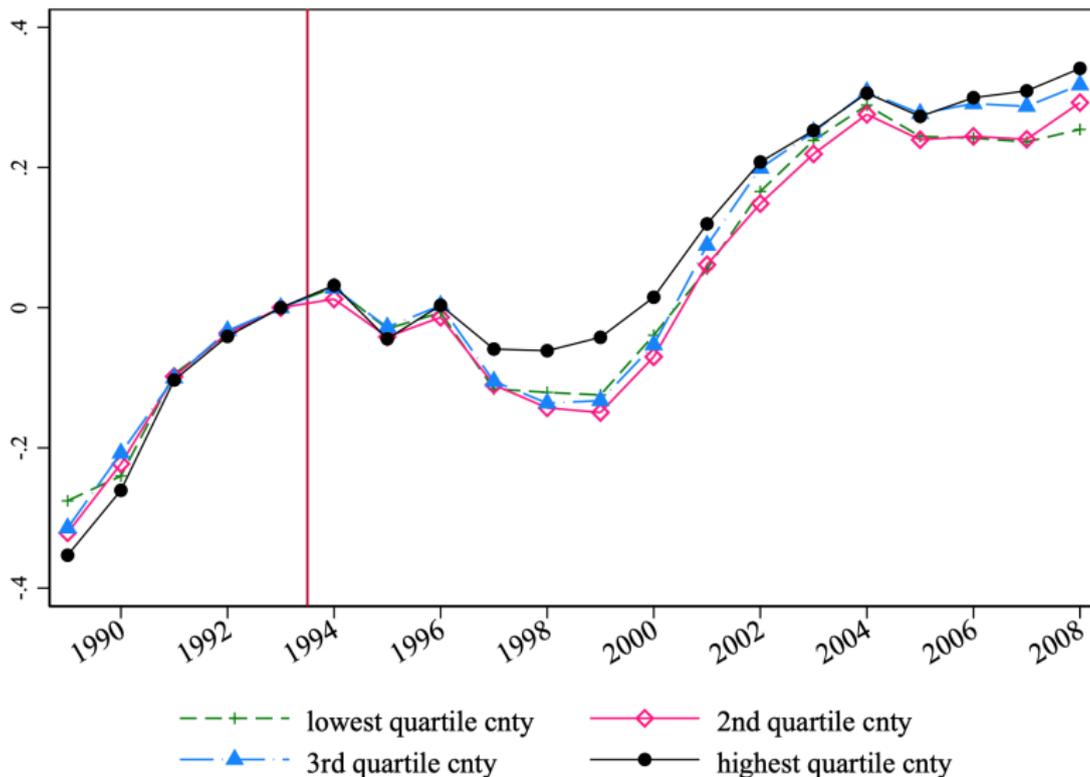
No detectable migration response

- We find somewhat precise zeroes. In the state-year FE specification, the 95% confidence interval for 2000 suggests any NAFTA-induced difference between the most- and least-vulnerable quartile of counties is about ± 1.6 log points of population.
- This result echoes historians' depiction of post-NAFTA decline in textile towns:
 - “Workers’ attachments to their jobs and communities—which had been so important as they endured the hardships of mill life—now made it harder for them to find opportunities. These workers failed to fulfill economists’ predictions of a new, mobile workforce who would rationally relocate to find new jobs.” (Minchin, *Empty Mills*, 2012)

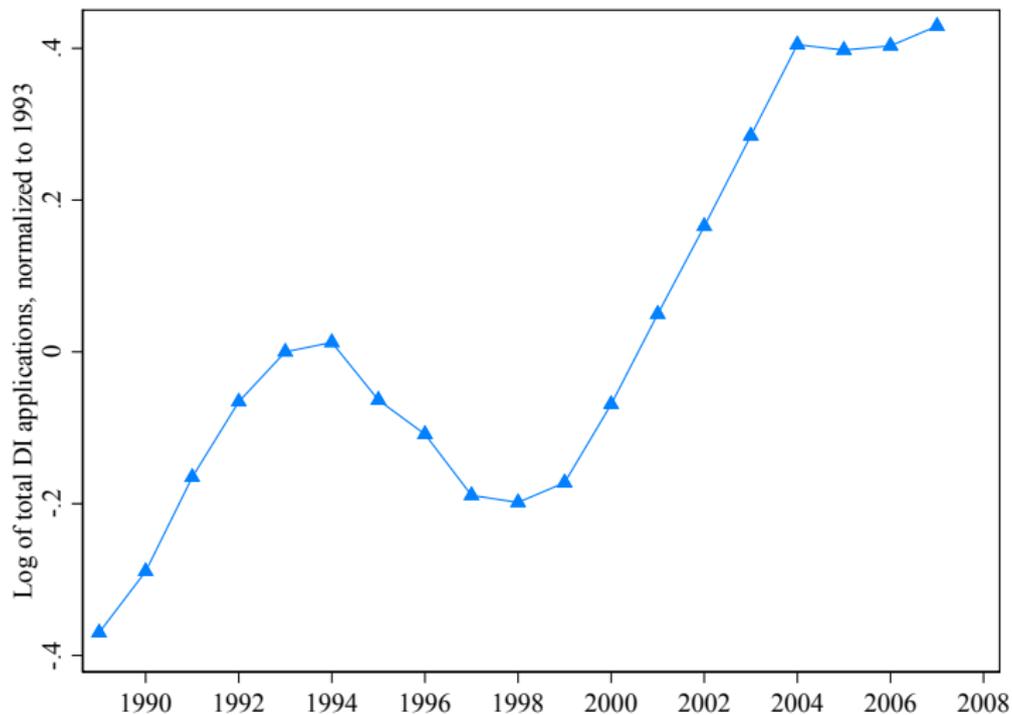
Another margin of response: Disability Insurance

- Autor and Duggan (2003) and many papers since document rise of DI and its responsiveness to economic downturns.
- A natural question to ask is whether residents in NAFTA-affected counties applied to DI after 1994.
- We have data from the SSA by DI office (*very* generously facilitated by Manasi Deshpande), which we can match to a set of 775 counties that accounts for 75% of U.S. population.
 - Importantly, the employment effects are very similar in these counties.
- Again, we run the same specifications as for employment and population.

Log of DI applications by vulnerability quartile (normalized)

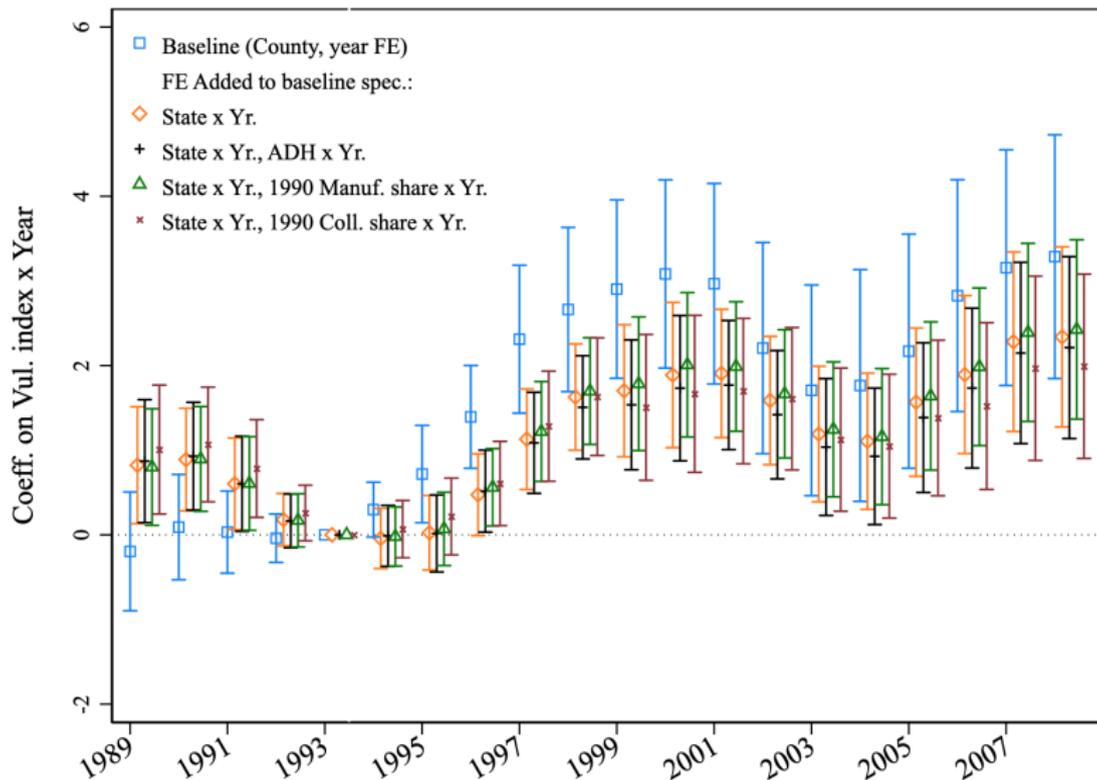


Shape very similar to aggregate applications



Source: SSA Annual Statistical Supplement, 2018, Table 6.C7.

Log of DI applications, event study



By 2000, DI applications are \approx ten log points higher in top- versus bottom-quartile counties, relative to 1993.

Other outcomes on our to-do list

- Local crime as measured by FBI UCR statistics.
- County-year SNAP recipients, from FDA.
- Local property-tax revenue (though data quality poor until 1995).
- We have begun to look at mortality. Suicides perhaps increase in NAFTA-vulnerable counties. Deaths of despair harder to tease out because opiate deaths not common until late 1990s.

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Political effects

- Results from county-level data

- Results from repeated cross-sectional microdata

- Results from individual panel data

U.S. parties' positions on trade since 1900

- In early 20th C, Democrats (concentrated in South and West) wanted to replace tariffs with income taxes as the key source of federal revenue, and Republicans (concentrated in Northeast) wanted to retain tariffs, avoid income taxes (Weisman, *The Great Tax Wars*, 2004).
- During the Cold War, a rough bipartisan consensus held that offering countries favorable trade terms could deter spread of Communism (Stein, *Pivotal Decade*, 2010).
- By 1980s, greater foreign competition, and unions and other key Democratic constituents push for import limits.

Parties' positions, a more recent history

- Despite a base suspicious of free trade, in 1994, a *Democratic* administration pushes for NAFTA.
 - NAFTA originally negotiated by H.W. Bush administration, but Clinton and Gore take the most visible role pushing it through Congress in 1993, and claim it as a key victory.
- Strong anti-trade elements of the GOP emerge around this time, even if party establishment remains free-trade.
 - Pat Buchanan surprises in the 1992, 1996 primaries.
 - Trump pulls off the ultimate shocker in 2016 primary and general.

Existing work on political effects of NAFTA

- Mostly from history and political science, and mostly narrative. It argues Clinton betrayed the party's traditional base and helped split the Democratic party by pushing for NAFTA.
 - “In a hotly contested and emotional vote, the critics of globalization, led by organized labor and environmental groups, were overcome by NAFTA's supporters, principally corporate lobbyists *and the Clinton administration* [emph. added].” Minchin, *Empty Mills*, 2012.
 - “When it came to measures that the base of his party wanted, Clinton faltered... Clinton had made the NAFTA a priority...and this allowed the Republican opposition to mushroom” (Stein, 2010).

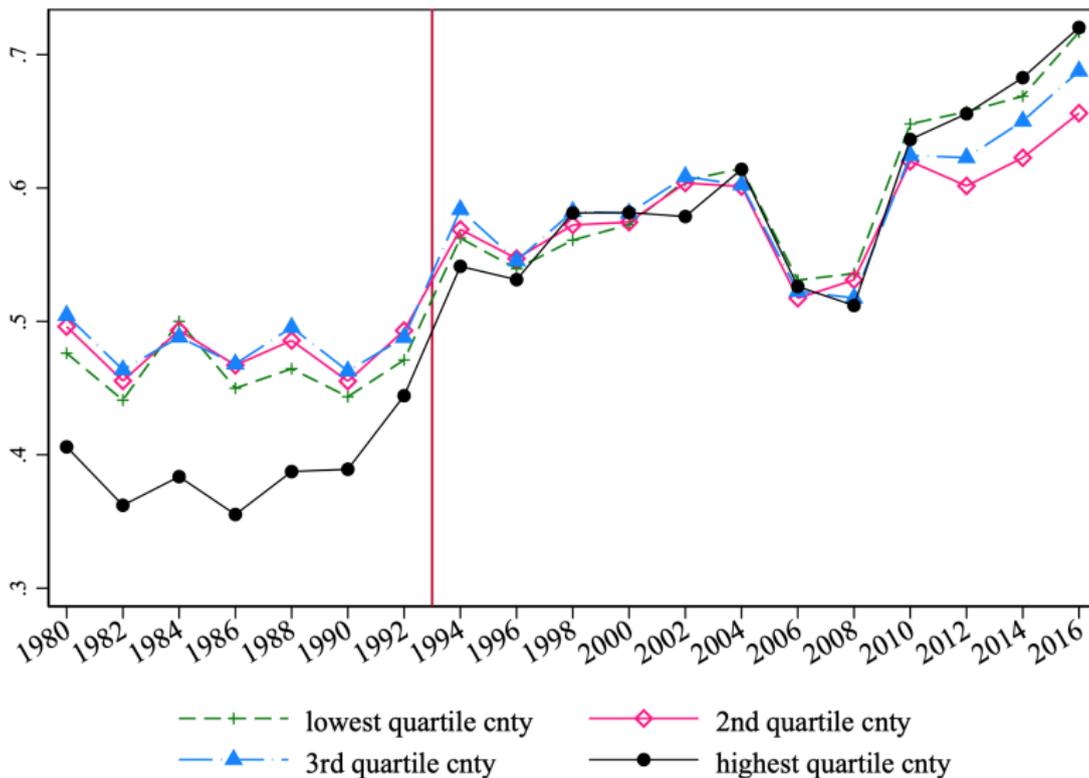
Existing work on political effects, cont'd

- “In aggressively pursuing passage of the agreement, the Clinton administration put itself in conflict with organized labor. By attacking one of the Democratic party’s most important constituencies, the administration succeeded in further weakening the Democratic coalition and exacerbating the party’s organizational decline.” (Klinkner, 1996).
- Minchin (2012) argues that many of these voters felt more at home culturally in the GOP (on race, religion, abortion, etc.), so easier to leave the Democrats after their switch on free trade.
 - We examine this idea with our panel data.

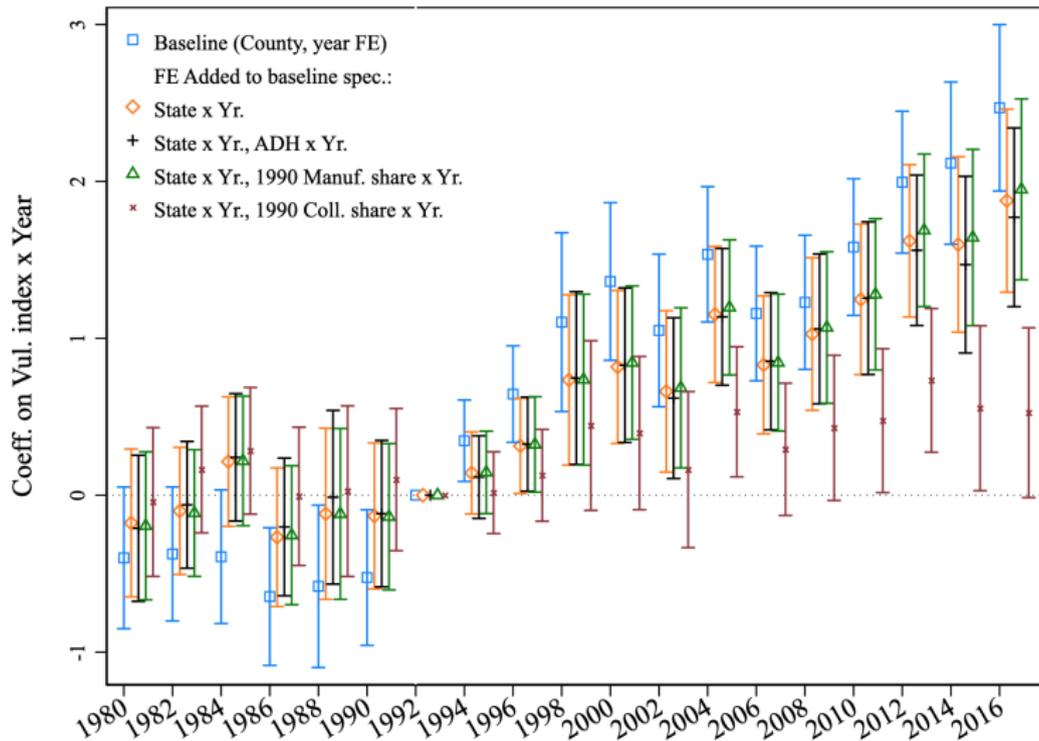
County-level results from House elections

- We start with our usual county-year level specifications.
- The only difference is data is every other year, so 1992 normalized to zero.

Two-party Republican vote share in House elections, by vulnerability quartile



Two-party Republican vote share, event study



Relative to 1992, by 2000, GOP vote-share has risen by 4–8 percentage points (or 8–17 percent, given a pre-period base of 45 percent) in top- versus bottom-quartile counties.

First result from micro-data: Is NAFTA less popular in places it created import competition?

- We gather all survey data sets that ask opinion about NAFTA *and* state of residence (county almost never available). Data are from 1993 to 2015.
- We limit to those that ask generic sentiment question.

Examples:

- “Would you say NAFTA has been a success or a failure?”
“Overall, do you think NAFTA has been good or bad for most Americans?” “Has NAFTA been good or bad for the United States?”
- We do *not* include questions that include Mexico (“good for the US and Mexico”) or specify the “US *economy*.”
- The least demanding test we perform, but it would undermine our interpretation of the House event studies if folks in NAFTA-affected states don’t oppose NAFTA!

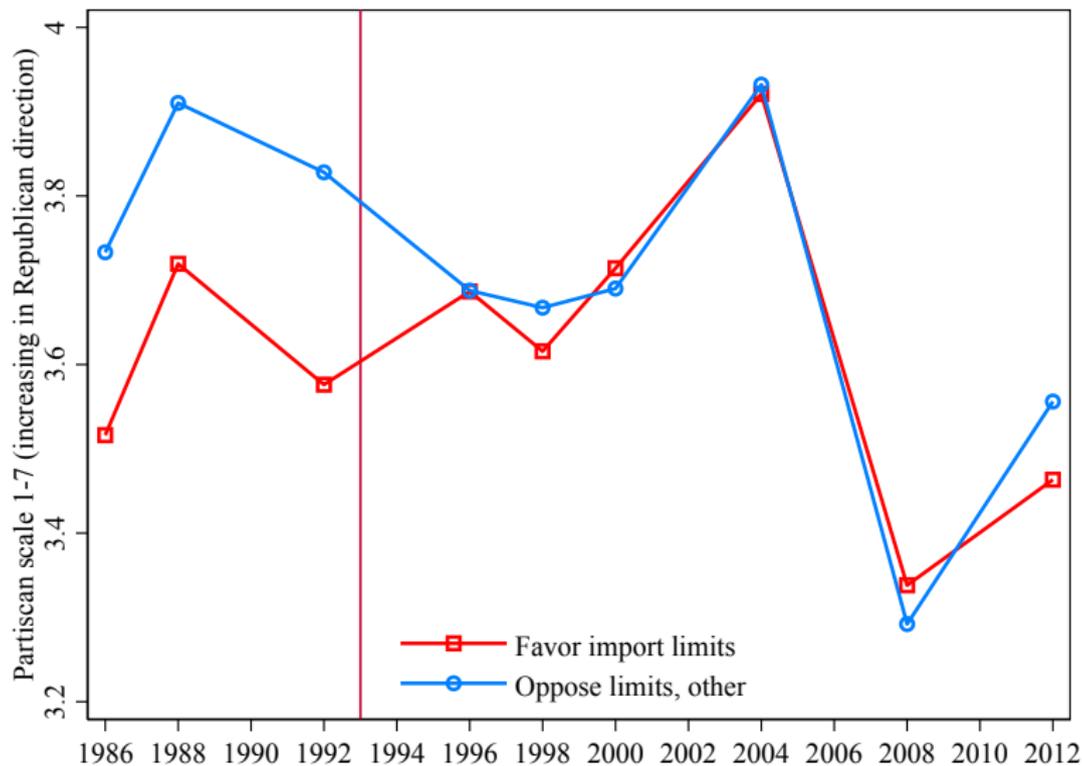
	Dept. var: Supports NAFTA				
	(1)	(2)	(3)	(4)	(5)
NAFTA vulnerability (state)			-1.300**	-1.552***	-2.771***
			[0.508]	[0.502]	[0.687]
No college degree	-0.0300*	0.000912	-0.0306*	-0.0293*	-0.00719
	[0.0164]	[0.0179]	[0.0165]	[0.0158]	[0.0186]
White	-0.00157	-0.00289	-0.00323	-0.000666	-0.00895
	[0.0132]	[0.0174]	[0.0132]	[0.0125]	[0.0164]
White x No degree	-0.0600***	-0.0648***	-0.0585***	-0.0565***	-0.0706***
	[0.0162]	[0.0198]	[0.0162]	[0.0158]	[0.0202]
Male	0.0305***	0.0160**	0.0298***	0.0296***	-0.0340***
	[0.00661]	[0.00786]	[0.00661]	[0.00668]	[0.00806]
Union household		-0.0658***			
		[0.0129]			
HH inc gt 100K		0.0753***			
		[0.0110]			
Dept. var. mean	0.390	0.417	0.390	0.390	0.510
Division FE	No	No	No	Yes	Yes
Drop don't know	No	No	No	No	Yes
Observations	20928	15485	20890	20890	15949

Notes: Survey (and thus year) FE in all regs. Standard errors clustered by state. * $p = 0.1$, ** $p = 0.05$, *** $p = 0.01$.

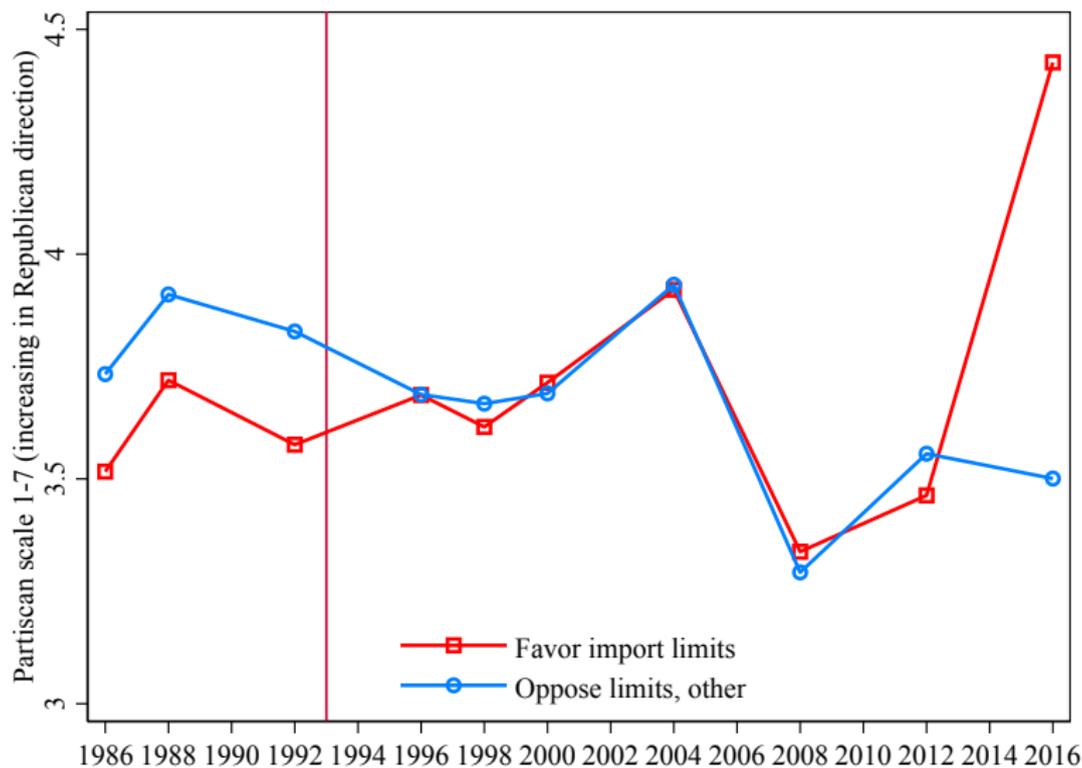
Second result from micro-data: Changing relationship between protectionist views and party ID

- An obvious limitation to questions about NAFTA *per se* is they do not exist in the pre-period, as NAFTA *as such* did not exist.
- We now turn to the ANES, which asks about *protectionist sentiment* most years since 1986.
 - Consistent with its “non-issue status”, trade questions in the ANES from the 1970s and earlier are largely about whether to trade with Communist countries or not.
- Did the relationship between respondents’ protectionist views and Republican party ID increase around the time of NAFTA?

Partisanship by views on import limits, raw data



Partisanship by views on import limits, including 2016

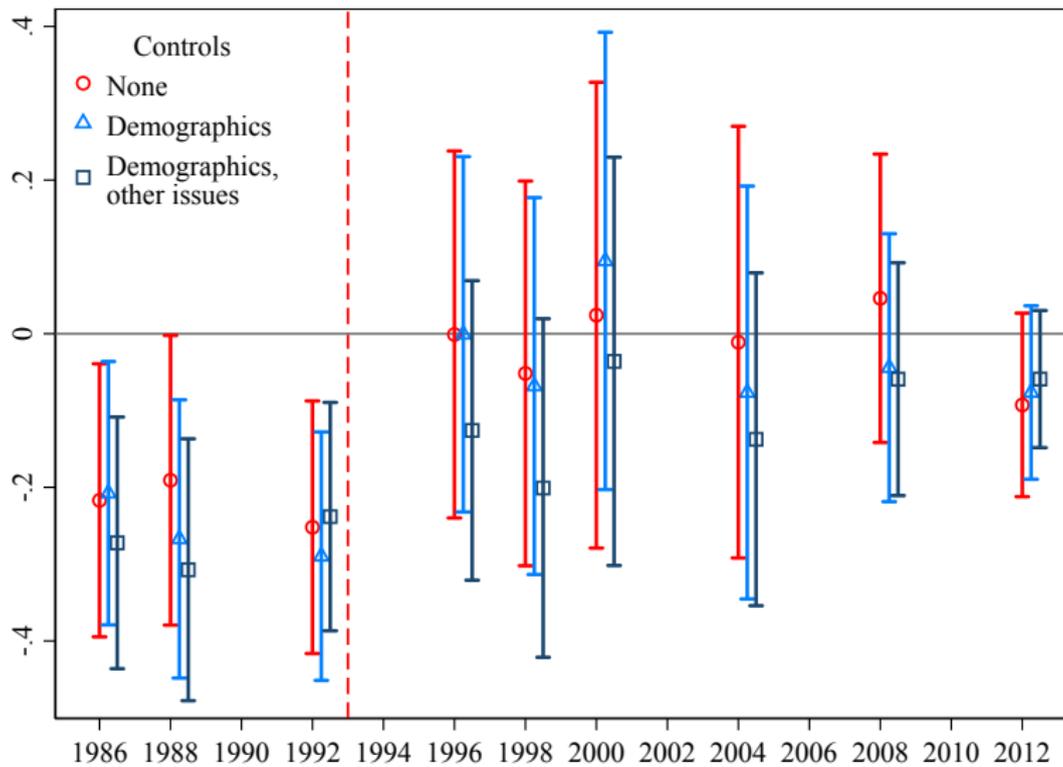


Event-study specifications

- We estimate, separately by year, partisanship on protectionist views, with varying controls:

$$Party\ ID_i = \beta Favor\ import\ limits_i + \gamma X_i + e_i.$$

- So, each control can have a different effect in each year.
- We include all relevant controls that are available all years.
 - Standard demographics.
 - “Black thermometer,” support for abortion rights, ideology scale.



	Dept. var.: Party ID (1-7, incr in Republican dir)				
	(1)	(2)	(3)	(4)	(5)
Favor import limits x Aft 1992	0.182** [0.0719]	0.190** [0.0718]	0.215*** [0.0701]	0.229*** [0.0591]	0.221*** [0.0613]
Favor import limits	-0.222*** [0.0706]	-0.227*** [0.0709]	-0.264*** [0.0723]	-0.277*** [0.0614]	-0.270*** [0.0631]
Dept. var. mean	3.619	3.619	3.620	3.620	3.620
State FE	No	Yes	No	No	No
Controls					
-Demographic	No	No	Yes	Yes	Yes
-Issues	No	No	No	Yes	Yes
-Demogr. x Aft	No	No	No	No	Yes
-Issues x Aft	No	No	No	No	Yes
R-squared	0.00680	0.0279	0.120	0.332	0.336
Observations	18770	18770	18497	18497	18497

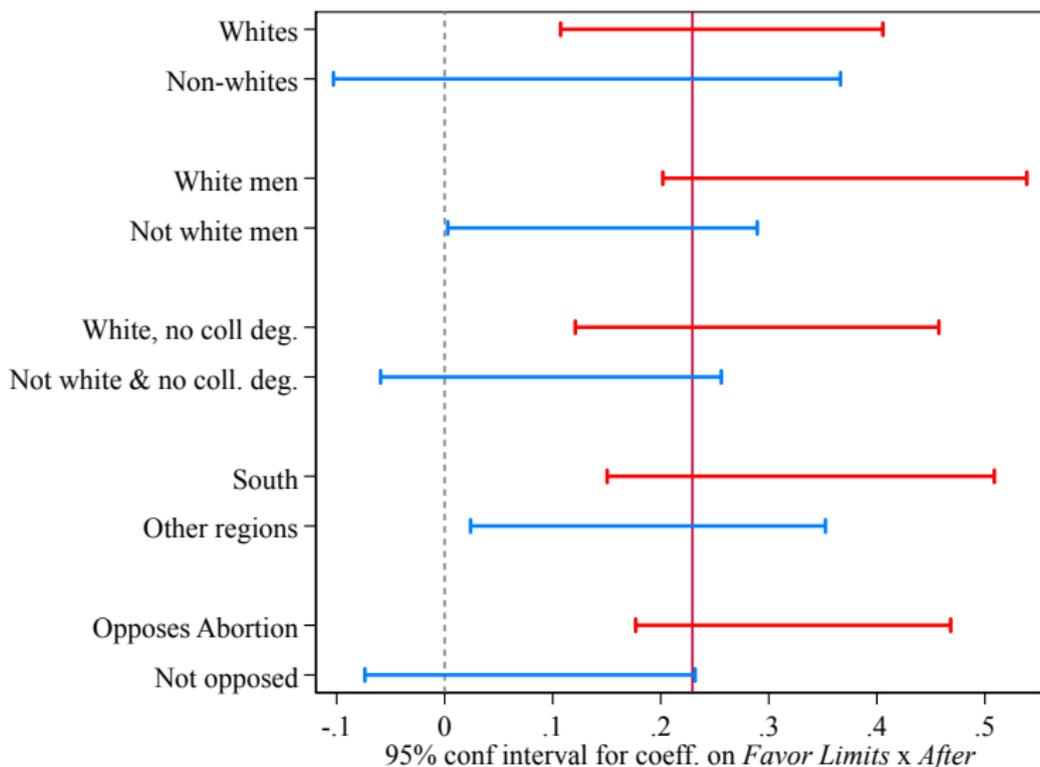
Notes: All regressions include year fixed effects. Standard errors clustered by state. * $p = 0.1$, ** $p = 0.05$, *** $p = 0.01$.

To help gauge size of coefficient on interaction term, the Party ID gap between men and women is 0.35 (so, about half to two-thirds the male-female gap).

Are effects larger for certain subgroups?

- We take the col. (4) specification and estimate it on *subsamples* of the data, to see which groups are especially responsive.
- We also want to test the idea that, among those with protectionist sentiment, those who were aligned with the GOP on cultural issues would be the most prone to move right because of NAFTA (we use abortion views as a proxy).
- The next slide shows the confidence intervals on the interaction term *Favor import limits* \times *After*, for these various subsamples.

Coefficient on *Favor import limits* × *After*, subsamples



Note that vertical red line is estimate from full sample

Conclusions from ANES repeated cross-sections

- Up to 1992, protectionist sentiment predicts a voter will be Democrat.
- Between 1992 and 1996, that effect disappears, driven by white men, whites without a college degree, abortion opponents.
- It's especially pronounced in a region once a Democratic stronghold: the South.

Panel data analysis

- ANES interviews $\approx 1,000$ subjects in 1992, with ≈ 750 re-interviewed in 1994 (subset thereof interviewed in 1993).
- They ask party ID in every wave, and in 1992 the same protectionism question we use in the repeated cross-section analysis.
- Our baseline analysis is thus:

$$\text{Moved Right}_{i,94-92} = \beta \text{Favor Import Limits}_{i,92} + \gamma \mathbb{X}_{i,92} + e_i.$$

- We can add very rich controls in \mathbb{X} because we only need to observe them in 1992 (not from 1986-2012 as in repeated cross-section).
- In the fall 1993 subsample, ANES also asks about NAFTA itself, but high share of “don’t knows” and by then it is already a Democratic issue.

Are protectionist views in 1992 associated with move toward GOP from 1992 to 1994?

	Move in Repub dir dummy x 100				
	(1)	(2)	(3)	(4)	(5)
Favor import limits	8.304** [3.325]		9.530** [4.108]		8.422** [3.719]
Oppose NAFTA		7.777 [5.095]		11.09* [5.853]	
Dept. var. mean	26.52	25.93	26.76	25.69	26.52
Ex. Don't Know	No	No	Yes	Yes	No
State FE	No	No	No	No	Yes
Observations	739	621	553	288	739

Notes: Standard errors clustered by state. Imports question asked in 1992, NAFTA question in 1993. * $p = 0.1$, ** $p = 0.05$, *** $p = 0.01$.

Controlling for other issues

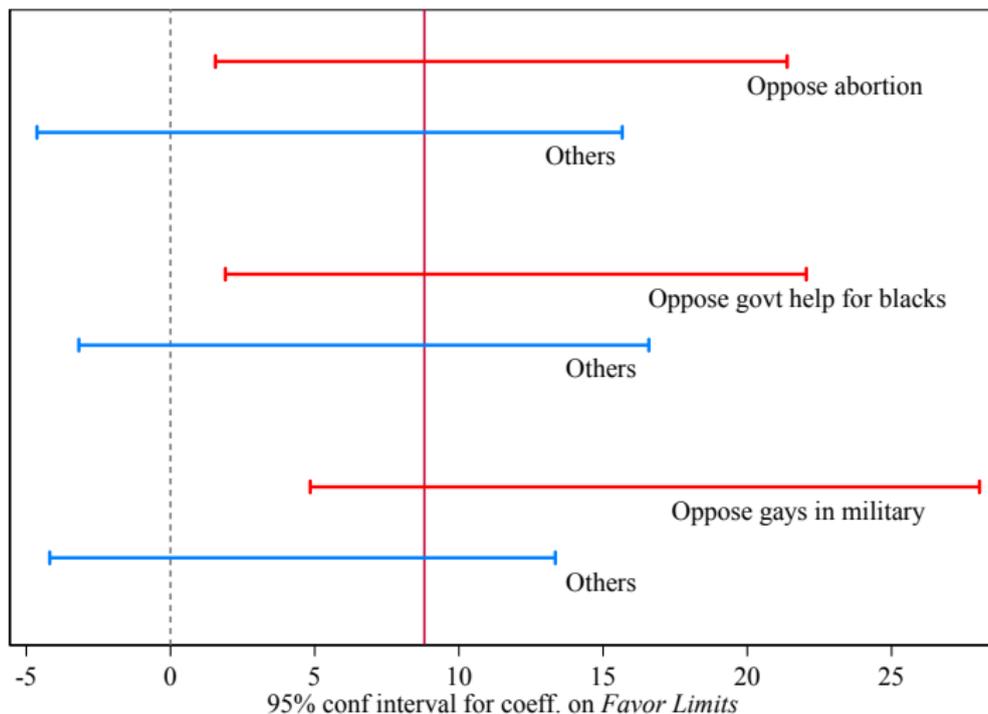
- We can control for all standard demographics (gender, race, age, education, urbanity, and family income).
- We can also control for “classic” policy views that split on partisan lines.
 - Does respondent want an active government or should people fend for themselves, do they think the federal government should help black Americans more, do they support legal abortion, do they attend church at least weekly.
- We can also control for issues of the day.
 - Respondents’ views on government health care, gays in the military, term limits for federal offices (a key element of the “Contract with America”).

	Move in Repub direction dummy x 100			
	(1)	(2)	(3)	(4)
Favor import limits	8.304** [3.325]	8.301** [3.443]	8.066** [3.576]	8.805** [3.727]
Minorities sd help self			1.387 [1.058]	1.484 [1.035]
Wants active gov't			-0.922 [1.127]	-0.914 [1.272]
Support abortion			-1.771 [1.878]	-1.098 [2.152]
Attend church weekly			7.757** [3.719]	8.376** [3.897]
Oppose gays in military				3.356 [7.250]
Oppose gov't health care				-0.515 [0.772]
Favor term limits				-5.913 [3.607]
Dept. var. mean	26.52	26.49	26.49	26.54
Demog. covars	No	Yes	Yes	Yes
R-squared	0.00887	0.0388	0.0607	0.0657
Observations	739	736	736	731

Heterogeneity

- We find the same patterns as with the repeated cross-section (larger effects for whites, white males, etc.).
- Here, we can check heterogeneity on *other* 1992 political beliefs. Are those with protectionist views *who were already aligned with GOP on other issues* (abortion, gay rights, federal aid to African Americans) more likely to move right after NAFTA?

Coefficient on *Favor import limits*, subsamples



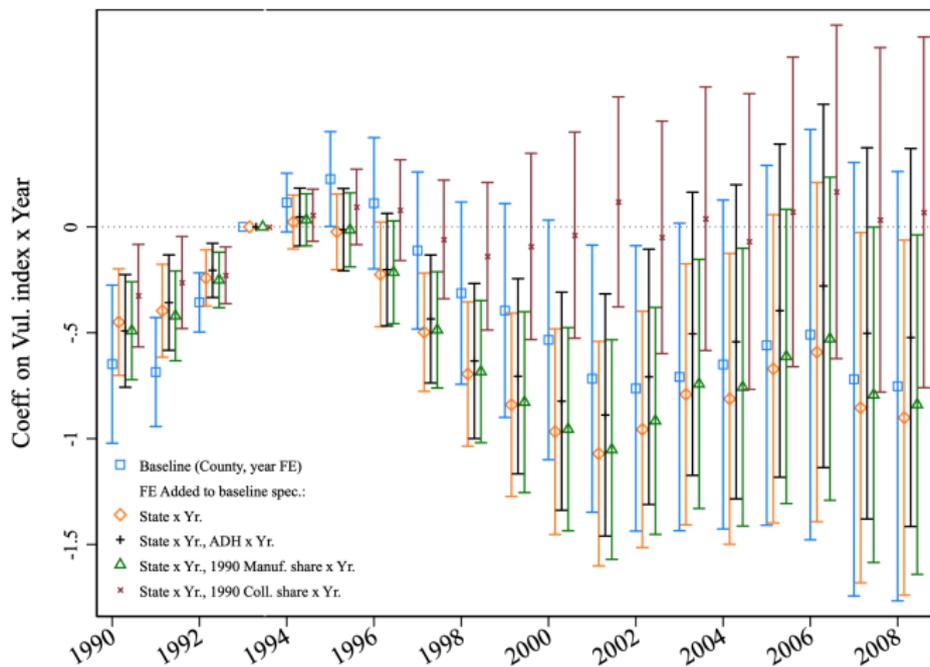
Note: The vertical red line is the estimate from the full sample.

Conclusion

- NAFTA significantly weakened local economic conditions in counties vulnerable to Mexican import competition.
 - Employment declines, Disability Insurance applications rise.
- NAFTA facilitated a major political realignment.
 - NAFTA was and remains unpopular today in places it created import competition.
 - NAFTA ended anti-trade voters' allegiance with the Democratic Party, contributing to a white working-class constituency's move toward the GOP.

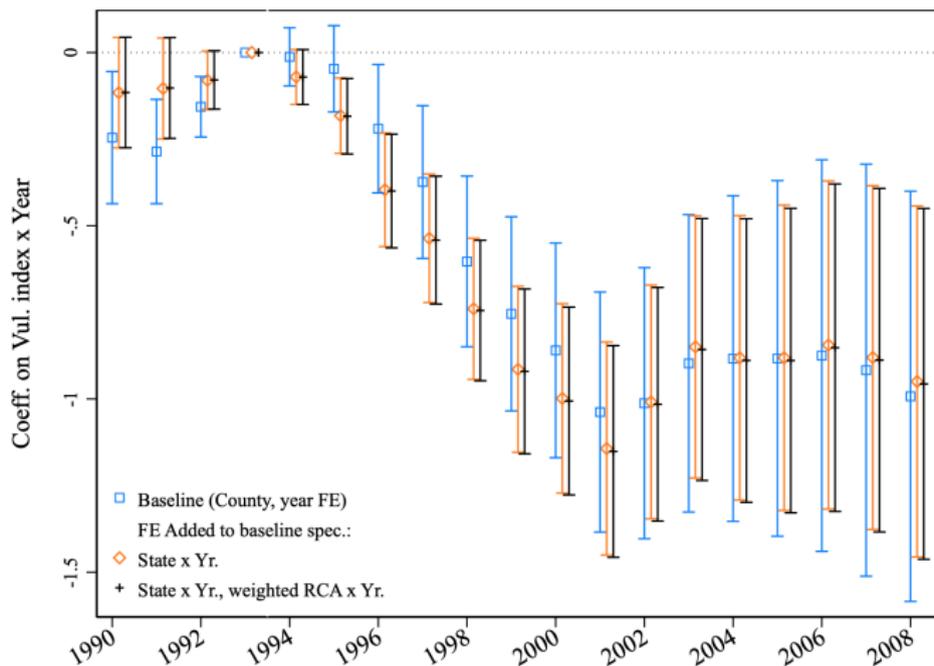
Appendix Slides

Total log employment (CZ event-study)

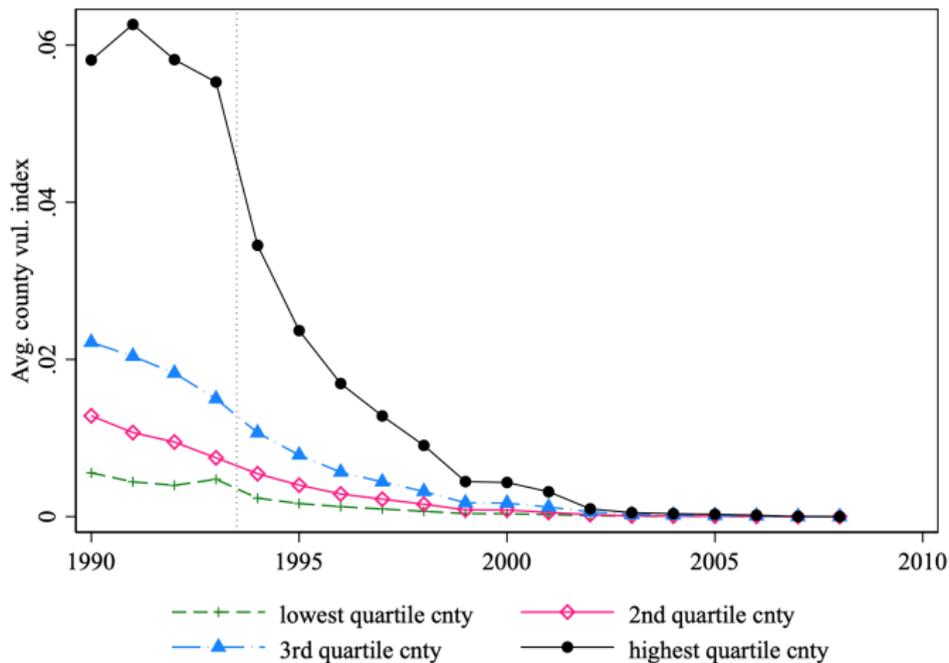


◀ Employment results in different aggregation

Total log employment event study, with the RCA x Yr. fixed effect



Vulnerability over time for the SSA sample counties



Pre-period characteristics of SSA sample counties, by vulnerability quartile

Quartile (lower quartile : less vulnerable)	1	2	3	4
<i>Demographics</i>				
Population (in thousands)	176.437	360.696	298.636	133.330
Household income (in thousands)	27.392	29.861	27.878	24.819
Share of white	0.877	0.871	0.873	0.847
Share of manufac. employment	0.142	0.215	0.213	0.248
Share of college grad.	0.186	0.199	0.180	0.144
<i>pre-NAFTA political preference</i>				
Republican house vote share (1980-1988)	0.445	0.459	0.469	0.448
Number of counties	195	194	193	193