Made in America: The Polarizing Effect of Trump's Rallies on American Consumption

Quoc-Anh Do* Joao Granja† Sara Moreira‡ Kieu-Trang Nguyen§

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Abstract

Do politicians intentionally and successfully shape voters' economic behaviors? This paper provides a positive empirical answer to this question in the context of Donald Trump's political rallies in 2015-2020, using scanner data from stores across the U.S. We find that Trump's rallies bring a significant advantage to products made in America in comparison with those made in foreign countries, especially from Mexico and China. Within a distance of 250km and up to 7 weeks after a rally, this post-rally effect on made-in-America sales amounts to 2%-4%. It varies greatly by the shares of Republican and Democrat voters, thus creates a polarizing effect across America. It is further strengthened when rally speeches target more specifically China and Mexico.

*Monash University and CEPR. Monash Business School, 900 Dandenong Road, Caulfield East, VIC 3145, Australia. Email: quoc-anh.do@monash.edu.

†University of Chicago. Booth School of Business, 5807 S Woodlawn Ave, Chicago, IL 60637, USA. Email: joao.granja@chicago.booth.

‡Northwestern University. Kellogg School of Management, 2211 Campus Drive, Evanston, IL 60208, USA. Email: sara.moreira@kellogg.northwestern.edu.

§Northwestern University. Kellogg School of Management, 2211 Campus Drive, Evanston, IL 60208, USA. Email: kieu-trang.nguyen@kellogg.northwestern.edu.

1 Introduction

Do politicians intentionally and successfully shape voters' economic behaviors, especially by the means of political campaigns and speeches? Research in political economy has mostly overlooked this question, as politics has been most often seen as the medium to channel individual preferences towards policies by reshaping political parties and politicians (Downs, 1957; Alesina, 1988; Lee et al., 2004; Dewan and Shepsle, 2011; Ashworth, 2012). Yet, the Downsian logic that electoral competition leads to a reduction in the policy platform gap fundamentally relies on the assumption that politicians do not and cannot shift voters' preferences. In case this assumption fails, politicians can be willing to pull voters towards their own platforms, hence extreme politicians can directly increase polarization by reshaping the political spectrum, resulting in further impacts on the economic landscape.

This paper provides a positive empirical answer to this question. We focus on Donald Trump's 498 political rallies from his first presidential campaign from 2015 until his second campaign's defeat in 2020, taking place in 45 states and more than 2,000 counties throughout the U.S. Throughout his campaigns, Trump has fueled and inflated the "Buy America" narrative to promote the consumption of goods made in the U.S. Those rallies represent a pinnacle of his political messages and have potentially deep direct and indirect effects on his audience (Grosjean et al., 2023). Their economic nationalism aims to strengthen the national identity among right-wing supporters and ultimately gain their votes (Colantone and Stanig, 2018, 2019).

We assemble a large dataset of consumption data per store by merging Nielsen's Retail Measurement Services (RMS)'s scanner data on product sales by barcode with Label Insights' data on product characteristics, including notably the country of origin if it can be clearly identified. Even after aggregating the data to the level of product groups, they result in a benchmark sample of 19 million observations from stores within 250km of Trump's rallies, counting from 7 weeks before to 7 weeks after.

We show evidence that Trump's rallies succeed in persuading an important share of Americans' to sway their consumption patterns towards more American made goods at the expense of foreign goods. In a difference-in-differences specification around the rallies, stores within up to 250km of rallies experience an increase of 2.1% of sales of products made in America, in comparison with products from foreign origins. The effects are larger when we focus on the comparison groups of

goods made in China (2.4%) and Mexico (3.9%), the major targets of Trump's incinerating speeches against foreign countries. Those sizable effects last for at least 7 weeks after the rally.

We find that the neighborhoods of Trump's rallies face polarizing effects. Areas with more republican votes in 2012 exhibit a stronger effect on American made goods, while in contrast, areas with more democratic votes in 2012 exhibit the opposite (negative) effect on American made good. The Republican gradient of the rally effect is particularly strong for the comparison between made in America and made in China products. This provides evidence that political speeches from a single source could stretch the distribution of economic preferences, potentially inducing additional polarization on both political and economic spectra.

The findings in this paper repositions the role of politicians in studies of democratic politics, as they show that influence not only goes from voters to politicians, but also in the opposite direction. This novel fact should enter the usually modeled political toolbox in theories of electoral politics, and will probably result in new, different strategies pursued by political agents. This extended toolbox in theory may lead to novel explanations of existing facts observed in politics, such as the finding that voters merely choose to elect certain politicians without affecting their political platforms (Lee et al., 2004), or the recent rise of political polarization in the U.S. and elsewhere (Alesina et al., 2020; Boxell et al., 2022).

In this direction, the paper contributes to the understanding of the sources of polarization (Canen et al., 2020) by showing evidence of an important determinant that is most often discussed in popular media but usually ignored in academic research: the politicians and their narratives. It thus follows a small and burgeoning literature on the potentially pervasive role of political and military leaders in shaping norms, values, and preferences to mobilize their followers (Cagé et al., 2023; Lenz, 2012; Dippel and Heblich, 2021).

The paper further contributes to a recent literature, including notably Bursztyn et al. (2020); Grosjean et al. (2023); Newman et al. (2021), that shows the effects of Trump's political emergence on social norms across the American society, especially when it comes to discrimination and xenophobia. Unlike those important prior findings that investigate on rather specific non-economic phenomena, this paper focuses on most basic consumption decisions by American households and uncovers Trump's fundamentally polarizing impacts on both the political spectrum and the economic landscape of America.

The rest of the paper is organized as follows. Section 2 describes our data sources and sample

construction. Section 3 explains our empirical strategy. Section 4 discusses our main findings, and Section 5 concludes.

2 Data and samples

2.1 Data sources

Trump rallies. We identify all rallies held by Donald Trump during his 2016 and 2020 presidential campaigns from Wikipedia and crosscheck our data with other sources (e.g., Grosjean et al., 2023). Altogether, our data cover 498 rallies, starting from July 11, 2015 to November 2, 2020, with 415 campaigns within our product data period between 2014 and 2019.[1] These 415 rallies were held in more than 2,000 different counties in 45 different states. In addition to rally locations, we also collect and analyze the speech content in each rally, together with information on rally attendance, venue capacity, and local weather on rally dates.

Product origins and sales. We combine data from Label Insights and Nielsen to compute local consumption of products from different countries of origins. First, Label Insights scans and digitizes all information on product packages, which often include the products' countries of origins, and provides these data at the Universal Product Code (UPC) level. Note that this information for an UPC is fixed as a product's UPC changes when the product changes its packaging. We then classify product origins into six categories: (i) made in the U.S.A., (ii) made in Mexico, (iii) made in China, (iv) made in the E.U., (v) made in another foreign country, and (vi) made in multiple countries. In this version, we focus on Label Insights' food and beverage product category, which is its largest in terms of product count with 450,000 UPCs.[2] Second, Nielsen's Retail Measurement Services (RMS)'s scanner data contains product sales (quantities and revenues) at the UPC $\times$ store $\times$ week level, which are generated by point-of-sale systems in retail stores.[3] Each UPC is classified into a product module under a product group within a product department.

[1] We are in the process of expanding our product data to the end of 2020, which will allow us to cover all rallies in both of Trump campaigns.

[2] We are also in the process of adding new product categories to our data.

[3] The RMS data come from 40,000 distinct stores from around 90 retails chains in 371 metropolitan statistical areas and 2,500 counties. Total sales in the RMS cover approximately $220 billion per year, which is 40% of the nationwide consumption in the consumer good industry. This volume of sales represents about 53% of all sales in grocery stores, 55% in drug stores, 32% in mass merchandisers, 2% in convenience stores, and 1% in liquor stores (Argente et al., Forthcoming).

We merge Label Insights' product origins with Nielsen's RMS's product sales using UPC,[4] then aggregate the data at the product group × product origin × location × week level. We pick product group as the level of aggregation as it is more granular then product department, and unlike product module, there is meaningful variation in products' countries of origin within the same product group. Examples of product groups include baking mixes, canned fruits, flour, oil and shortening, or sugar and sweeteners. Our location is at the county × three-digit zip code level, based on available store location information in Nielsen's RMS data.

Location characteristics. We compute the crow fly distance between a location and a rally using the coordinates of the location's population center from the Census Bureau based on the 2010 Census, and those of the rally based on Google Maps search. Vote data in the 2012 presidential election at county level come from Dave Leip's Atlas of U.S. Presidential Elections. In addition, we also collect information on a wide range of county characteristics, including population, average income and education, and demographic composition, from the 2015 American Community Survey.

2.2 Baseline samples

Our working data include observations at the product group × product origin × location × week × rally level that meet the following restrictions. First, the location considered is within 250km of the rally location, although in some specifications, we extend this to up to 500km. This baseline "exposure" cutoff of 250km is determined based on the results presented in Table 2 below, which also shows that our main results strengthen as we tighten this cutoff and vice versa. Second, the week considered is within 7 weeks of the rally date, with the 7 weeks prior being the pre-treatment period and the 7 weeks after the post-treatment period. To avoid contamination, we further drop pre-treatment weeks that are post-treatment with respect to another prior rally. (This happens when rallies are close to one another in both time and space.) Finally, we only consider product group × location × week's with at least 0.1% of total sales revenues coming from the foreign products of interest (i.e., Mexican products, Chinese products, or all foreign products). This restriction allows us to drop product groups in which those foreign products are irrelevant, as well as product groups with limited matches between Label Insights and Nielsen's RMS.

Our largest baseline sample that compares sales of U.S. products to those of all foreign products

[4] As our Label Insights data cover mostly food and beverage products, 70% of the matches fall into Nielsen's RMS's product department 1 "Dry Grocery."

(products made in Mexico, China, the E.U., or another foreign country) then include 17 million observations, covering 5.4 million product group × location × week's in 66 product groups, 3,010 locations, and 244 weeks. Two smaller baseline samples that compare sales of U.S. products with those of Mexican or Chinese products include 9 million and 8 million observations, covering 2.9 million and 2.1 million product group × location × week's respectively. The differences are mainly driven by fewer product groups (48 instead of 66) being included due to the aforementioned restriction regarding the revenue share of the foreign products considered.

3 Empirical strategy

Average effects of Trump rallies. We employ a stacked difference-in-differences design and estimate the following equation:

$$Y_{rltpc} = \beta MIA_c \times Post_{rt} + \theta_{rl} + \kappa_{lpc} + \gamma_{lpt} + \varepsilon_{rltpc} \tag{1}$$

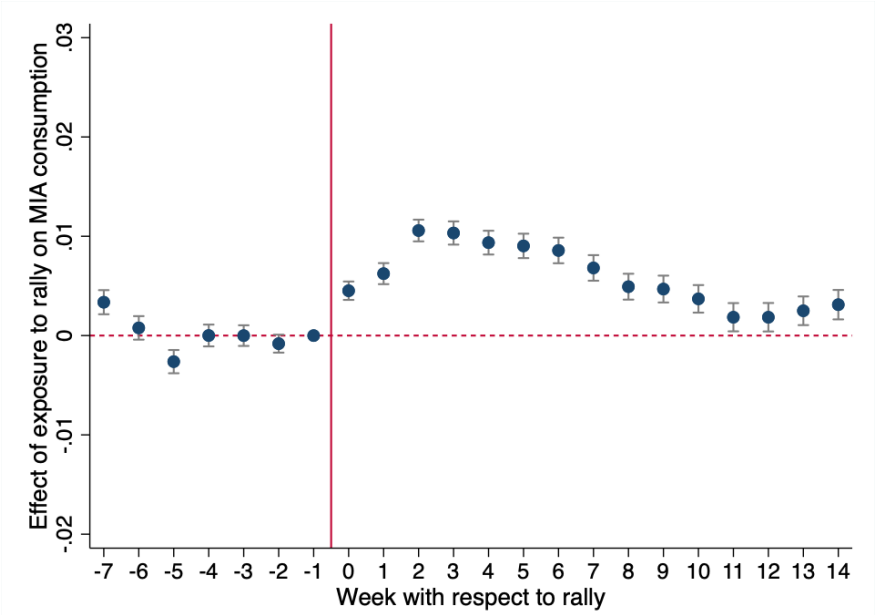
where (i) Y_{rltpc} is the natural logarithm of total sales revenues of products in product group p from origin c in location l in week t, (ii) MIA_c ("Made in America") an indicator variable equal to 1 if the product origin c is the U.S.A., (iii) $Post_{rt}$ an indicator variable equal to 1 if week t is rally r's week or after, (iv) θ_{rl} a set of rally × location fixed effects, (v) κ_{lpc} a set of location × product group × product origin fixed effects, and (vi) γ_{lpt} a set of location × product group × week fixed effects. Standard errors are clustered by location × product group × product origin.

We estimate equation (1) separately for U.S. products vs. all foreign products combined, U.S. products vs. Mexican products, and U.S. products vs. Chinese products. These estimations stack together multiple difference-in-differences at the rally × location level. In each difference-in-differences, the difference in sales of U.S. products at the respective location before and after the respective rally is compared to the analogous difference in sales of the foreign products considered. When a rally's pre-treatment period overlaps with another prior rally's post-treatment period, we drop the contaminated pre-treatment observation from the estimation sample (see 2.2 for details). In addition, we also control for the (i) baseline consumption of products in product group p from origin c in location l with location × product group × product origin fixed effects (e.g., locations with more immigrants may always purchase more foreign products in certain product groups), and (ii) baseline consumption of products in product group p in location l in week t with location × product group × week fixed effects (e.g., consumption of products in certain product groups may

differ between pre- and post-rally periods).[5]

The difference-in-differences identifying assumption requires that conditional on covariates, sales of U.S. and foreign products follow similar trends in the period before the rally. Figure 1 below shows that this is indeed the case for sales of U.S. products vs. all foreign products combined, and Figure A1 plots similar patterns for U.S. vs. Mexican and Chinese products. This then allows us to interpret β as capturing the causal effects of Trump rallies on the consumption of "Made in America" products.

Figure 1: Evolution of Effects of Trump Rallies on M.I.A. Consumption by Week



Notes: This figure plots the coefficients from estimating the following equation $Y_{rltpc} = \sum_{k=-7}^{14} \beta_k MIA_c \times \mathbb{1}_{T(r)-t=k} + \theta_{rl} + \kappa_{lpc} + \gamma_{lpt} + \varepsilon_{rltpc}$ (see Section 3 for details) that compares sales of U.S. products to those of all foreign products combined 7 weeks before to 14 weeks after a Trump rally in locations within 250km of the respective rally. Standard errors are clustered by location × product group × product origin. Estimates are shown with their 95% confidence intervals.

Polarized effects of Trump rallies. In addition to equation (1), we also estimate the heterogeneous effects of Trump rallies using the following equation:

$$Y_{rltpc} = \beta MIA_c \times Post_{rt} \times X_{rl} + \theta_{rl} + \kappa_{lpc} + \gamma_{lpt} + \varepsilon_{rltpc} \tag{2}$$

[5] All our main results are robust to including more stringent rally × location × product group × product origin fixed effects and rally × location × product group × week fixed effects, which then absorb the set of rally × location fixed effects.

where X_{rl} is a location or rally characteristic of interest. We are particularly interested in studying the polarized effects of Trump rallies, i.e., how their effects on consumption vary by the location's political leaning (Table 3). In addition, we also investigate how these effects vary by location-rally distance (Table 1) or rally speech content (Table 4).

4 Results

4.1 Effects of Trump rallies on consumption

Table 1 presents our paper's first main set of results on the effects of Trump rallies on the consumption of "Made in America" products. Column (1) estimates equation (1) for U.S. products v.s. all foreign products combined, including those made in Mexico, China, the E.U., or another foreign country. The estimation sample contains two observations, one for U.S. products and one for all foreign products combined, for each rally × location × week × product group such that (i) the location is within 250km of the rally, (ii) the week is within 7 weeks of the rally date and not contaminated by another prior rally, and (iii) the revenue share of all foreign products is at least 0.1%, as described in details in subsection 2.2. The reported coefficient indicates that sales of U.S. products increase by around 2 percentage points relative to those of all foreign products following Trump rallies. Note that this effect cannot be explained by shifts in product group composition before and after rally events, given the inclusion of location × product group × week fixed effects. Columns (2) and (3) replicate column (1) for U.S. products v.s. Mexican products (column 2) and U.S. products v.s. Chinese products (column 3), which yield similar results of comparable magnitude. All three coefficients are precisely estimated with statistical significance at at least 1% level.

Columns (1) to (3)'s results are robust to alternative treatments of contamination, including (i) not dropping contaminated pre-treatment observations or (ii) further dropping contaminated post-treatment observations (post-treatment weeks with respect to the focal rally that are also post-treatment with respect to another prior rally), and (iii) aggregating post-treatment status across rallies. (i) and (ii) expectedly generate smaller coefficients, while (iii)'s are of similar magnitude to the baseline reported in columns (1) to (3). These effects are also robust to employing more stringent rally × location × product group × product origin fixed effects and rally × location × product group × week fixed effects. These robustness checks are reported in Table A1.

We expand the samples geographically in columns (4) to (6) to include locations up to 500km

Table 1: Effects of Trump Rallies on Consumption of U.S. vs. Foreign Products

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	**ln(Sales)**					
Distance sample:	Within 250km			Within 500km		
Product sample: U.S. vs.	All others	Mexican	Chinese	All others	Mexican	Chinese
M.I.A. × Post-rally	0.021***	0.039***	0.024***	0.042***	0.061***	0.037***
	(0.001)	(0.001)	(0.002)	(0.003)	(0.004)	(0.005)
M.I.A. × Post-rally × ln(Distance)				-0.005***	-0.007***	-0.003***
				(0.001)	(0.001)	(0.001)
Exclude pre-treatment contamination	X	X	X	X	X	X
Rally × Location FEs	X	X	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X	X	X
Location × Product group × Date FEs	X	X	X	X	X	X
Observations	18,867,498	9,995,431	8,728,172	66,980,459	35,000,857	28,100,228

Notes: This table reports the effects of Trump rallies on consumption of U.S. vs. foreign products using equation (1) (columns 1 to 3) and (equation 2) (columns 4 to 6). Each observation is a rally × location (county × three-digit zip code) × week × product group × product origin such that (i) the location is within 250km (columns 1 to 3) or 500km (columns 4 to 6) of the rally, (ii) the week is within 7 weeks of the rally date, excluding pre-treatment weeks that are also post-treatment with respect to another prior rally, and (iii) the revenue share of the foreign products considered is at least 0.1%. The outcome variable is the natural logarithm of total sales revenues of the respective location × location × week × product group × product origin. M.I.A is an indicator variable equal to 1 if the product origin is the U.S.A.; Post-rally is an indicator variable equal to 1 if the week is the rally week or after. Columns (1) and (4) compare U.S. products with all foreign products combined; columns (2) and (5) U.S. products with Mexican products; columns (3) and (6) U.S. products with Chinese products. Columns (4) to (6) further interact M.I.A. × Post-rally with the natural logarithm of the distance between the location and the rally. Standard errors are clustered by location × product group × product origin.
*** denotes statistical significance at 1% level, ** 5% level, * 10% level.

away from the respective rallies and estimate equation (2) with the natural logarithm of this location-rally distance as the additional interaction term. This allows us to compare the strength of Trump rally effects on nearby locations to that on locations that are farther away, which is akin to a triple difference-to-differences design. Consistent with common intuition, the effects of Trump rallies decrease with the distance between the location and the rally, as indicated by the negative and statistically significant triple interaction coefficients across the three columns. However, these coefficients also imply that while the effects do weaken, they do not completely disappear even for very large distance, suggesting considerable geographically spillovers. Indeed, Table 2 shows that the effects persist even among locations between 350km and 500km away from rallies (column 5), and they are about half of the effects among locations between 150km and 250km away (column 3). The effects are also not the largest among closest locations between 0km and 75km away, possibly because rallies are often held in densely populated areas with relatively higher share of non-Trump supporters and to which Trump supporters have to travel some distance. Finally, as the effects drop considerably after 250km in distance, we focus on 250km as our baseline "exposure" cutoff.

Table 2: Effects of Trump Rallies on Consumption by Distance

Panel A. U.S. products vs. all foreign products combined

	(1)	(2)	(3)	(4)	(5)
Dependent variable:			**ln(Sales)**		
Distance sample:	(0, 75km)	(75,150km)	(150,250km)	(250,350km)	(350,500km)
M.I.A. × Post-rally	0.017***	0.022***	0.020***	0.012***	0.008***
	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Exclude pre-treatment contamination	X	X	X	X	X
Rally × Location FEs	X	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X	X
Location × Product group × Date FEs	X	X	X	X	X
Observations	2,141,596	4,543,110	10,354,396	14,788,673	28,999,546

Panel B. U.S. products vs. Mexican products

	(1)	(2)	(3)	(4)	(5)
Dependent variable:			**ln(Sales)**		
Distance sample:	(0, 75km)	(75,150km)	(150,250km)	(250,350km)	(350,500km)
M.I.A. × Post-rally	0.033***	0.043***	0.038***	0.023***	0.021***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)
Exclude pre-treatment contamination	X	X	X	X	X
Rally × Location FEs	X	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X	X
Location × Product group × Date FEs	X	X	X	X	X
Observations	1,218,366	2,427,473	5,504,575	7,843,054	15,183,644

Panel C. U.S. products vs. Chinese products

	(1)	(2)	(3)	(4)	(5)
Dependent variable:			**ln(Sales)**		
Distance sample:	(0, 75km)	(75,150km)	(150,250km)	(250,350km)	(350,500km)
M.I.A. × Post-rally	0.019***	0.022***	0.023***	0.018***	0.018***
	(0.003)	(0.003)	(0.002)	(0.001)	(0.001)
Exclude pre-treatment contamination	X	X	X	X	X
Rally × Location FEs	X	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X	X
Location × Product group × Date FEs	X	X	X	X	X
Observations	1,238,248	2,396,870	5,039,087	6,714,007	12,489,393

Notes: This table reports how the effects of Trump rallies on consumption of U.S. vs. foreign products vary by location-rally distance using equation (1). Each observation is a rally × location (county × three-digit zip code) × week × product group × product origin such that (i) the week is within 7 weeks of the rally date, excluding pre-treatment weeks that are also post-treatment with respect to another prior rally, and (ii) the revenue share of the foreign products considered is at least 0.1%. The outcome variable is the natural logarithm of total sales revenues of the respective location × location × week × product group × product origin. M.I.A is an indicator variable equal to 1 if the product origin is the U.S.A.; Post-rally is an indicator variable equal to 1 if the week is the rally week or after. Panel A compares U.S. products with all foreign products combined; Panel B U.S. products with Mexican products; Panel C U.S. products with Chinese products. In each panel, column (1) considers locations within 75km of the rally; column (2) locations between 75km and 150km from the rally; column (3) locations between 150km and 250km from the rally; column (4) locations between 250km and 350km from the rally; and column (5) locations between 350km and 500km from the rally. Standard errors are clustered by location × product group × product origin.

*** denotes statistical significance at 1% level, ** 5% level, * 10% level.

4.2 Polarized effects of Trump rallies

Next, Table 3 presents the polarizing effects of Trump rallies among Republicans versus Democrats. This table is built on the specification in equation (2) using the same baseline samples as those in columns (1) to (3) of Table 1. More specifically, columns (1) and (4) use the sample of U.S.products and all foreign products combined; columns (2) and (5) U.S. products and Mexican products; and columns (3) and (6) U.S. products and Chinese products. Equation (2)'s third interaction term used in columns (1) to (3) is the corresponding county's vote share for Romney in the 2012 presidential election, which measures the political leaning of the county's population. In addition, we also control for the triple interaction with the natural logarithm of the county's population to account for the varying effects of Trump rallies by county's size.

Columns (1) to (3) highlight that the effect of Trump rallies on the consumption of American made products is markedly strengthened in more Republican areas. An increase of 10 percentage points of the Republican vote share in 2012 (similar to shifting from North Carolina to Alabama) would imply a difference in the rally effect by 0.4 percentage points (out of the main effect of 2.1 percentage points shown in Table 1). Facing specific products from Mexico and China, the same change in Republican leaning would respectively result in a difference of 0.3 percentage points (main effect of 3.9 percentage points) and 0.6 percentage points (main effect of 2.4 percentage points). Those results underline the complementarity between the rally's effect on consumption and voters' Republican leaning, especially in case of Chinese products.

Going further than the Republican base, columns (4) to (6) investigate the differences between voters of two parties in each county by using the interaction with the natural logarithm of the county's vote counts for Romney and that for Obama in the 2012 presidential election. The results show a strong polarizing effect between the two parties' bases. They confirm that counties with more Republican votes tend to experience a stronger rally effect. Furthermore, those with more Democrat votes are also less likely to experience an effect from Trump's rallies, controlling for the number of Republican votes in the same county. The two opposite effects are of comparable magnitudes in the main estimate in column (4) as well as in the comparison with Mexican products in column (5) (even though the interaction with Republican votes there is not statistically significant); however, Republican voters are much more prone to the rally effect when it comes to the consideration of made in China versus made in America products, as shown in column (6). The findings from columns (4) to (6) highlight that Trump's rallies exert a polarizing force on local populations: They

suggest that, in comparison with independent voters, while Republican voters tend to be swayed towards products made in America more easily, Democrat voters tend to hold the ground or even shift away from made in America products.

Table 3: Polarized Effects of Trump Rallies on Consumption

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	ln(Sales)					
Product sample: U.S. vs.	All others	Mexican	Chinese	All others	Mexican	Chinese
M.I.A. × Post-rally × REP vote share	0.038***	0.028**	0.058***			
	(0.009)	(0.012)	(0.014)			
M.I.A. × Post-rally × ln(REP vote count)				0.008***	0.004	0.019***
				(0.002)	(0.003)	(0.003)
M.I.A. × Post-rally × ln(DEM vote count)				-0.006***	-0.006**	-0.005*
				(0.002)	(0.002)	(0.003)
Exclude pre-treatment contamination	X	X	X	X	X	X
Rally × Location FEs	X	X	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X	X	X
Location × Product group × Week FEs	X	X	X	X	X	X
Observations	17,139,058	9,073,336	7,992,821	17,139,058	9,073,336	7,992,821

Notes: This table reports the polarized effects of Trump rallies on consumption of U.S. vs. foreign products using equation (2). Each observation is a rally × location (county × three-digit zip code) × week × product group × product origin such that (i) the location is within 250km of the rally, (ii) the week is within 7 weeks of the rally date, excluding pre-treatment weeks that are also post-treatment with respect to another prior rally, and (iii) the revenue share of the foreign products considered is at least 0.1%. The outcome variable is the natural logarithm of total sales revenues of the respective location × location × week × product group × product origin. M.I.A is an indicator variable equal to 1 if the product origin is the U.S.A.; Post-rally is an indicator variable equal to 1 if the week is the rally week or after. Columns (1) and (4) compare U.S. products with all foreign products combined; columns (2) and (5) U.S. products with Mexican products; columns (3) and (6) U.S. products with Chinese products. Columns (1) to (3) interact M.I.A. × Post-rally with the county's vote share for Romney in the 2012 presidential election, controlling for its interaction with the natural logarithm of the county's population. Columns (4) to (6) interact M.I.A × Post-rally with the natural logarithm of the county's vote count for Romney and that for Obama in the 2012 presidential election. Standard errors are clustered by location × product group × product origin.
*** denotes statistical significance at 1% level, ** 5% level, * 10% level.

4.3 Effects and rally speech content

We explore how the effects of Trump rallies on consumption vary by rally speech content in Table 4. To do this, we collect all available rally transcripts from various sources, and transcribe the rallies ourselves when existing transcripts could not be found. For each rally, we count the number of "trigger" words that appear in the rally speech to compute two different measures: an extensive margin measure that indicates whether the trigger words appear at all in the speech (columns 1 and 3), and an intensive margin measure that captures the share of the trigger words (columns 2 and 4). For the comparison between U.S. products and Mexican products, we consider the trigger words "Mexico" and "Mexican," and for the comparison between U.S. products and Chinese products, we

consider the trigger words "China" and "Chinese."

Table 4: Trump Rally Effect by Rally Speech Content

Dependent variable:	(1)	(2)	(3)	(4)
	ln(Sales)			
Product sample: U.S. vs.	Mexican		Chinese	
M.I.A. × Post-rally × Has trigger words	0.023***		0.013*	
	(0.004)		(0.007)	
M.I.A. × Post-rally × Trigger word share		-0.003*		0.010***
		(0.001)		(0.002)
Exclude pre-treatment contamination	X	X	X	X
Exclude post-treatment contamination	X	X	X	X
Rally × Location FEs	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X
Location × Product group × Week FEs	X	X	X	X
Observations	3,022,276	3,022,176	3,177,187	3,177,187

Notes: This table reports the effects of Trump rallies on consumption of U.S. vs. foreign products using equation (2). Each observation is a rally × location (county × three-digit zip code) × week × product group × product origin such that (i) the location is within 250km, (ii) the week is within 7 weeks of the rally date, excluding all weeks that are also post-treatment with respect to another prior rally, and (iii) the revenue share of the foreign products considered is at least 0.1%. The outcome variable is the natural logarithm of total sales revenues of the respective location × location × week × product group × product origin. M.I.A is an indicator variable equal to 1 if the product origin is the U.S.A.; Post-rally is an indicator variable equal to 1 if the week is the rally week or after. Columns (1) and (2) compare U.S. products with Mexican products and consider "Mexico" and "Mexican" as trigger words. Columns (3) and (4) compare U.S. products with Chinese products and consider "China" and "Chinese" as trigger words. Columns (1) and (3) interact M.I.A. × Post-rally with an indicator variable equal to 1 if the rally speech contains the respective trigger words. Columns (2) and (4) interact M.I.A. × Post-rally with the percentage share of the respective trigger words in the rally speech. Standard errors are clustered by location × product group × product origin.
*** denotes statistical significance at 1% level, ** 5% level, * 10% level.

We estimate equation (2) using the measures described above as the interaction terms. In addition, we further exclude contaminated post-treatment observations (post-treatment weeks with respect to the focal rally that are also post-treatment with respect to another prior rally) from the estimation samples, as we are now interested in how the effects depend on individual rally characteristics. The results reported in Table 4 suggest that in most cases, Trump rally effects on consumption strengthen when trigger words are mentioned, and when they are mentioned more frequently in the rally speech. Yet this should be taken with a grain of salt given the robustness of these results. In ongoing work, we are employing more sophisticated natural language processing (NLP) methods to fully exploit the richness of rally speech content.

5 Conclusion

This paper thus shows that, in case of Trump's political rallies from 2015 to 2020, a politician can and do shape voters' patterns of consumption across America. Using scanner data from stores across the U.S., enhanced with information on each product's label's country of origin, we find that Trump's rallies raise the sales of products made in America in comparison with those made in foreign countries, especially from Mexico and China. Within a distance of 250km and up to 7 weeks after a rally, this post-rally effect on made-in-America sales amounts to 2%-4%. Furthermore, it exerts a polarizing effect across America as its strength is highest among Republican bastions and lowest in Democratic areas. It is further strengthened when rally speeches target more specifically China and Mexico.

The findings in this paper repositions the role of politicians in studies of democratic politics, by showing that influence not only goes from voters to politicians, but also in the opposite direction. This novel fact could potentially change the way electoral politics is modeled, and will likely result in new, different strategies pursued by political agents. Consequently, it may lead to novel explanations of existing facts observed in politics, notably the recent rise of political polarization in the U.S. and elsewhere (Boxell et al., 2022).

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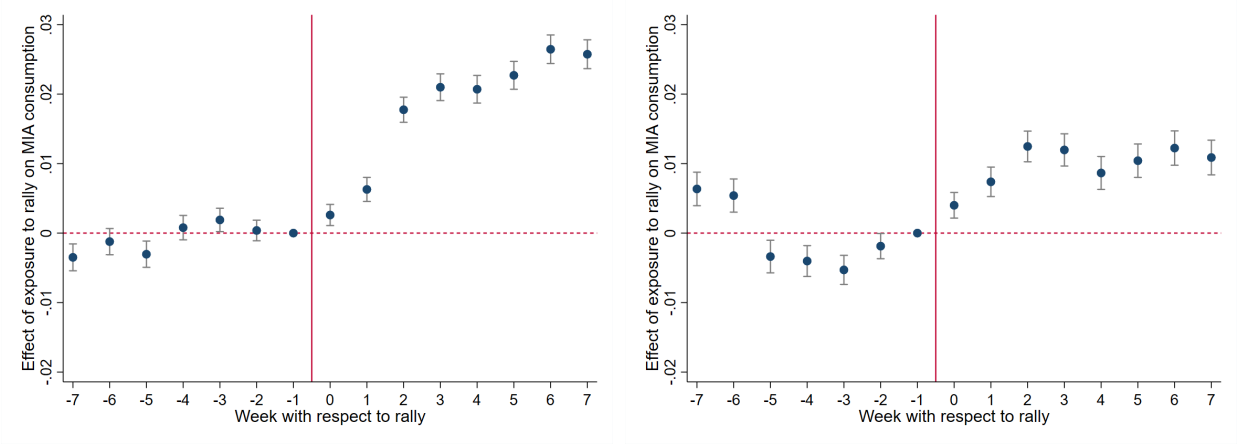
Figure A1: Evolution of Effects of Trump Rallies on M.I.A. Consumption by Week



A. U.S. vs. Mexican products

B. U.S. vs. Chinese products

Notes: Notes: This figure plots the coefficients from estimating the following equation $Y_{rltpc} = \sum_{k=-7}^{7} \beta_k MIA_c \times \mathbb{1}_{T(r)-t=k} + \theta_{rl} + \kappa_{lpc} + \gamma_{lpt} + \varepsilon_{rltpc}$ (see Section 3 for details) that compares sales of U.S. products to those of Mexican products (subfigure A) or Chinese products (subfigure B) 7 weeks before to 7 weeks after a Trump rally in locations within 250km of the respective rally. Standard errors are clustered by location × product group × product origin. Estimates are shown with their 95% confidence intervals.

Table A1: Effects of Trump Rallies on Consumption of U.S. vs. Foreign Products

Panel A.

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	ln(Sales)					
Product sample: U.S. vs.	All others		Mexican		Chinese	
M.I.A. × Post-rally	0.008***	0.019***	0.018***	0.030***	0.010***	0.011***
	(0.000)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
Exclude pre-treatment contamination		X		X		X
Exclude post-treatment contamination		X		X		X
Rally × Location FEs	X	X	X	X	X	X
Location × Product group × Origin FEs	X	X	X	X	X	X
Location × Product group × Date FEs	X	X	X	X	X	X
Observations	29,206,460	6,023,032	15,365,396	3,341,346	12,742,137	3,473,586

Panel B.

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	ln(Sales)					
Product sample: U.S. vs.	All others		Mexican		Chinese	
M.I.A. × Post-rally	0.018***	0.015***	0.034***	0.021***	0.024***	0.022***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Aggregate post-rally indicator	X		X		X	
Exclude pre-treatment contamination		X		X		X
Rally × Location FEs	X		X		X	
Location × Product group × Origin FEs	X			X	X	
Location × Product group × Date FEs	X			X	X	
Rally × Loc. × Prod. grp. × Ori. FEs		X		X		X
Rally × Loc. × Prod. grp. × Dat. FEs		X		X		X
Observations	29,206,460	16,714,362	15,365,396	9,048,291	12,742,137	8,629,976

Notes: his table reports the robustness checks for the effects of Trump rallies on consumption of U.S. vs. foreign products using equation (1). Each observation is a rally × location (county × three-digit zip code) × week × product group × product origin such that (i) the location is within 250km of the rally, (ii) the week is within 7 weeks of the rally date, and (iii) the revenue share of the foreign products considered is at least 0.1%. The outcome variable is the natural logarithm of total sales revenues of the respective location × location × week × product group × product origin. M.I.A is an indicator variable equal to 1 if the product origin is the U.S.A.; Post-rally is an indicator variable equal to 1 if the week is the rally week or after. In each panel, columns (1) and (2) compare U.S. products with all foreign products combined; columns (3) and (4) U.S. products with Mexican products; columns (5) and (6) U.S. products with Chinese products. Columns (1), (3), and (5) of Panel A do not exclude contaminated pre-treatment observations. Columns (2), (4), and (6) exclude both contaminated pre-treatment and post-treatment observations. Columns (1), (3), and (5) of Panel B do not exclude contaminated pre-treatment observations but aggregate post-treatment status across rallies. Columns (2), (4), and (6) employ more stringent rally × location × product group × product fixed effects and rally × location × product group × date fixed effects. Standard errors are clustered by location × product group × product origin.
*** denotes statistical significance at 1% level, ** 5% level, * 10% level.