Ethnocentrism Reduces Foreign Direct Investment

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Abstract
The tension between global economic integration and ethnocentrism is a growing political force across industrialized countries. Whereas extent research emphasizes ethnocentrism’s influence on individual attitudes, we show that ethnocentrism directly contributes to economic decline by reducing greenfield foreign direct investment (FDI). We exploit greenfield FDI’s popularity to isolate ethnocentrism’s effects on economic activity. Our analysis of US state greenfield FDI flows during 2004-2012 holds constant country-level factors that correlate with both ethnocentrism and propensity to receive FDI. A one standard deviation increase in state-level ethnocentrism corresponds to nearly $229 million less greenfield FDI and 180 fewer jobs per state-year on average. Findings are robust to controls for state economic conditions, transactions costs, existing FDI stock, size of foreign-born population, and state partisanship. These findings demonstrate the economic cost of ethnocentrism-based political strategies and that mass political sentiment can directly undermine economic integration.
Brexit, the election of Donald Trump, and the ascendance of far right political movements lay bare a sharp and rising tension between global economic integration and ethnocentrism. Ethnocentrism is the psychological tendency to parse the world into virtuous in-groups and nefarious out-groups. Public opinion research correlates ethnocentrism with opposition to immigration, trade, and foreign outsourcing.¹ These findings suggest that ethnocentrism’s effects are indirect, manifesting in mass political behavior that in turn may shape policy (Kinder and Kam 2009).

By contrast, we argue that ethnocentrism directly undermines economic integration. Ethnocentrism erodes the trust necessary to form and sustain cross-border contractual relationships, creates an aversion to the consumption of foreign products, and weakens the information exchange necessary for efficient markets (Verleigh and Steenkamp 2009, Guiso et al 2009, Fernández 2011). The challenge to establishing ethnocentrism’s direct costs is that it correlates with other country characteristics that influence the depth of integration. A further challenge is parsing ethnocentrism from concerns about integration’s economic costs.

We demonstrate ethnocentrism’s direct cost by exploiting the popularity of greenfield foreign direct investment (FDI), foreign firms’ investments to establish new production facilities. Even the most ethnocentric politicians and voters covet greenfield FDI as a source of new jobs and economic activity. In a recent Pew survey, 75 percent of US respondents favored greenfield FDI whereas only 28 percent supported foreign acquisitions of existing US firms (Pew Research Center 2014, 14.) Greenfield FDI is the entry of new firms so it does not directly cost jobs, add fiscal burdens, or present other standard economic reasons for opposing global integration. US

¹ For example, Mansfield and Mutz 2009, 2013; Hainmueller and Hiscox 2010.
voters reward state politicians who court greenfield FDI, even when those efforts are unsuccessful (Jensen et al. 2014, 2015). The US imposes minimal policy barriers to greenfield FDI. Greenfield investors are also more flexible in their subnational location decisions than investors acquiring existing firms, and thus have greater latitude to consider local conditions like political sentiments. From the investors’ perspective, anti-foreigner attitudes undermine productivity. Specific channels include increased turnover of foreign managers and potential bias in local supplier relationships.

Our analysis of annual US state inflows of greenfield FDI during 2004-2012 shows that states with stronger ethnocentrism receive less of these investments. A one standard deviation increase in ethnocentrism corresponds to nearly $229 million less annual greenfield FDI and 180 forgone jobs per state-year on average. In analyzing greenfield FDI flows across US states, we hold constant country-level drivers of FDI, including those that correlate with ethnocentrism. Subnational location decisions do not reflect broad cultural and institutional differences between countries because we observe firms that have already decided to invest in the US. Ethnocentrism, measured as anti-immigration sentiment, fluctuates across states and over time. Our findings are robust to controls for state economic characteristics that independently influence ethnocentrism and attractiveness to foreign investors. Additional robustness tests consider transactions costs, existing FDI, the size of the foreign-born population, alternate measures of ethnocentrism, and state politics. We find no correlation between ethnocentrism and foreign acquisitions.

Our findings indicate that ethnocentrism creates tangible economic costs, and that its effects are above and beyond any indirect influence on policy outcomes. To the extent that

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2 Most US FDI regulation pertains to the foreign acquisition of US-owned firms.

3 See online appendix for detailed discussion of theoretical mechanisms.
ethnocentrism hinders cross-border economic exchange, it is a binding constraint on formal economic integration. This insight helps explain the underperformance of international economic agreements in producing deeper economic integration (Mansfield and Milner 2012).

Additionally, we demonstrate that FDI flows are sensitive to mass political sentiments. Although political institutions occupy a central role in FDI research, the role of mass political sentiment in driving FDI has been overlooked. We show that holding institutions constant, ethnocentrism shapes foreign firms’ location decisions; even when public support for greenfield FDI itself is very high. Ethnocentrism represents a new and growing source of political risk in advanced economies that have traditionally embraced FDI.

**Empirical Analysis**

We model US state-year greenfield FDI during 2004-2012. Depending on the year, firms from 80-120 countries invest in at least one US state. These data are from the *Financial Times*’ *fdiIntelligence* database, the leading sources for greenfield FDI data. Annual state greenfield FDI inflows is the sum of newly announced capital investment by firms headquartered outside of the US. \( \log(Greenfield) \) is the inflation-adjusted log dollar value of all greenfield FDI into US state \( j \) in year \( t \). Our data has many zeros, reflecting state-years with no investment. We estimate tobit

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4 See Pandya 2016 for a review.


6 Sample excludes 2011 due to insufficient polling data. Otherwise greenfield FDI data availability dictated the sample period.

7 Logs attenuate outliers. We add one to all observations to preserve observations equal to zero.
models, which are appropriate for censored dependent variables.\textsuperscript{8} All models include state fixed effects and we report robust standard errors clustered by state.\textsuperscript{9}

We measure ethnocentrism using the universe of national Gallup polls during the sample period that include at least one question on immigration attitudes.\textsuperscript{10} At least four times per year polls asked either “Do you favor increasing the [country’s] level of immigration?” or “Do you favor liberalizing [US] immigration policy?” Additional relevant questions address undocumented migrants’ access to public services and government spending on border security. We construct Ethnocentrism by standardizing survey responses such that “1” reflects pro-immigration sentiment and “0” reflects anti-immigration sentiment. We use kernel-weighted local polynomial smoothing to aggregate the anti-immigrant sentiment for each state-year. This technique attenuates measurement error arising from different sample sizes across states and combining responses across different questions. We expect more ethnocentrism corresponds to less greenfield FDI.

We control for several state characteristics that influence foreign firms’ location decisions.\textsuperscript{11} Agglomeration – the geographic clustering of FDI – can be relevant to location choice (Head et al 1995, 1999; Bobonis and Shatz 2007). We include a one year lag of greenfield

\textsuperscript{8} We also estimate OLS models and obtain consistent results (see online appendix).

\textsuperscript{9} Findings are also robust to inclusion of year fixed effect (see online appendix).

\textsuperscript{10} All data from Roper Center iPoll database. See online appendix for a detailed discussion of this measure.

\textsuperscript{11} See online appendix for data sources and all summary statistics.
investment and the number of foreign acquisitions of existing US firms. Both variables also control for unobserved and time-varying aspects of states’ attractiveness to foreign firms.

A variety of state economic traits are salient to foreign firms’ location decisions. We control for general economic characteristics with the log of annual gross state product per capita. Dependence on natural resources, minerals as a percent of gross state product, controls for a state’s propensity to receive natural resource sector FDI. This sector lacks location flexibility so foreign investors have less scope to consider ethnocentrism. Transactions costs, measured by the number of free trade zones in the state and the volume of international air passenger traffic in each state’s airports, may also factor into firms’ decisions.

State labor market characteristics drive firms’ calculations of production costs. We control for states’ annual unemployment rate and the average hourly wage. Inclusion of the state poverty rate accounts for economic drivers of ethnocentrism. We also control for the share of college graduates as a percent of state population because firms locate in states with high human capital and more highly educated populations exhibit less ethnocentrism (Hainmueller and Hopkins 2014). Additionally, we control for the share of a state’s population that is foreign

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12 We measure number of acquisitions because valuation data are not consistently available. Greenfield FDI and foreign acquisitions are rarely substitutes (Nocke and Yeaple 2007).

13 Data on states’ investment incentives are unavailable but incentives rarely drive firms’ location decisions (Head et al 1999, Jensen et al 2014, 2015).

14 Results robust to controls for unionization (online appendix). Labor laws are fixed during the sample.

15 We are agnostic as to the sign of these coefficients. Firms want minimize costs but higher wages typically correspond to greater productivity.
born as the existing concentration of immigrants within a state could drive immigrant sentiment. This variable also controls for unobserved, time-varying state characteristics that influence a state’s appeal to foreigners.

Table 1 reports our empirical results. In our baseline model (Model 1) ethnocentrism has a negative and statistically significant coefficient. Holding all variables at their means, a state receives on average $889 million in annual greenfield FDI. A one standard deviation rise in ethnocentrism – from Washington State (mean) to Maine (one standard deviation above) levels – corresponds to $229 million less annual greenfield FDI on average. Based on fdiIntelligence data on jobs created via greenfield FDI, we estimate a one standard deviation rise in ethnocentrism costs 180 jobs per state-year on average.16

Ethnocentrism’s effect is robust to the inclusion of a variety of state-level characteristics discussed above that could determine FDI flows or sentiment towards immigrants. We estimate an expanded model (Table 1, Model 2) to further flesh out these results. State immigration laws can also be a strong signal of ethnocentrism. States’ legal authority on immigration is limited to undocumented migrants so state immigration laws do not otherwise affect foreign firms. We operationalize laws as the number of anti-immigrant laws passed in the preceding legislative session. We classify anti-immigration laws that restrict undocumented migrants access to public services and/or benefits including documentation requirements for driver’s licenses and employment eligibility. Inclusion of this variable does not change our core finding. Related, the partisan composition of state government points to likelihood of elite cuing of ethnocentrism. We

16 We estimate our same baseline model but with number of jobs as the outcome. See online appendix for model estimates.
include measures of the share of state house and senate seats held by the Democratic Party. We find that the percent of Democrat-held state house seats correlates with more greenfield FDI but ethnocentrism continues to have a strong and negative effect on greenfield FDI into US states.

Finally, we consider ethnocentrism’s effects on foreign acquisitions as a placebo test to verify that unobserved characteristics of FDI do not drive our finding. We use our baseline model specification to estimate the number of foreign acquisitions per state-year, and find ethnocentrism does not correlate with this other form of FDI.\(^{17}\)

**Conclusion**

While analyses of opinion surveys explain individual-level sentiments towards the global economy, we show that ethnocentrism directly undermines economic integration. By linking anti-immigrant sentiment to reduced flows of greenfield FDI, an exceptionally popular form of global economic integration, we show that ethnocentrism deters foreign investors. Thus, national identity does more than shape policy preferences about economic integration, it directly influences the depth of markets. Political economy researchers should further explore the direct effects of national identity on economic integration through analysis of behavioral outcomes linked to national identity including their decisions to purchase imported goods, allocate financial portfolios, and visit foreign countries.

Of topical relevance, our findings establish the economic costs of electoral strategies that stoke anti-immigrant sentiment. Across industrialized countries politicians are running on platforms that link migrants to a variety of social and economic ills. Politicians who vilify migrants may exacerbate poor economic conditions by deterring foreign investors who create new jobs and boost overall economic performance.

\(^{17}\) See online appendix for results.
References


<table>
<thead>
<tr>
<th><strong>Table 1: Tobit Models of Greenfield Investment</strong></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnocentrism&lt;sub&gt;j,t&lt;/sub&gt;</td>
<td>-2.017***</td>
<td>-1.836**</td>
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<td></td>
<td>(0.718)</td>
<td>(0.727)</td>
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<tr>
<td>Log(Greenfield)&lt;sub&gt;j,t-1&lt;/sub&gt;</td>
<td>-0.163**</td>
<td>-0.142*</td>
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<tr>
<td></td>
<td>(0.0792)</td>
<td>(0.0840)</td>
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<tr>
<td>Number of Foreign Acquisitions&lt;sub&gt;j,t&lt;/sub&gt;</td>
<td>0.00914*</td>
<td>0.00455</td>
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<td></td>
<td>(0.00532)</td>
<td>(0.00430)</td>
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<td>Log(Gross State Product Per Capita)&lt;sub&gt;j,t&lt;/sub&gt;</td>
<td>-3.830</td>
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<tr>
<td></td>
<td>(2.664)</td>
<td>(2.556)</td>
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<td>College Educated/State Population&lt;sub&gt;j,t&lt;/sub&gt;</td>
<td>-3.942</td>
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<td>Unemployment Rate&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td>Number Free Trade Zones&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td>Minerals/Gross State Product&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td>Average Hourly Wage&lt;sub&gt;j,t&lt;/sub&gt;</td>
<td>5.872**</td>
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<td>Foreign Born/State Population&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td>Number Foreign Air Passengers&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td># Anti-Immigrant Bills Enacted&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td>(0.149)</td>
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<td>Percent Democratic State House Seats&lt;sub&gt;j,t&lt;/sub&gt;</td>
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<td>Percent Democratic State Senate Seats&lt;sub&gt;j,t&lt;/sub&gt;</td>
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Cell entries are tobit coefficients estimated via maximum likelihood with robust standard errors clustered by state. The dependent variable is log(greenfield) into state j at time t. State fixed effects are included but their coefficients are not reported.

***<i>p</i>&lt;0.01, **<i>p</i>&lt;0.05, *<i>p</i>&lt;0.10