Anti-Globalization Sentiment: Shocking the Insecure^{*}

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Abstract

Individual expressions of anti-globalization sentiment require both a predisposition and activation in order to be expressed. Exposure to trade shocks activate such attitudes in those that perceive insecurity as to their future job prospects. We offer a novel definition of job insecurity, based on the distance both in task and geographical space between occupations, and hence the predisposition to anti-outsider attitudes. Exposure to import-competing industryspcific globalization-sourced shocks activate those sentiments, and isolationist and nationalist attitudes emerge. We find strong evidence that US survey respondents in occupations that experience high degrees of risk or vulnerability are more likely to express anti-globalization sentiment, and these sentiments are magnified when those individuals are also exposed to a globalization shock to their industry of employment.

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1 Introduction

Is there an anti-globalization backlash? At the individual level, survey-based evidence linking exposure to trade flows and anti-outsider attitudes has remained elusive. We offer a simple explanation: Exposure to international trade and its attendant shocks is not sufficient to generate anti-globalization sentiment, but instead shocks matter to those individuals predisposed to labor market risk. Occupational characteristics together with the availability of similar jobs in nearby locations determine perceived labor market risk, and hence the predisposition to anti-outsider attitudes. Exposure to globalization-sourced shocks, especially to one's industry of employment, activate those sentiments, and isolationist and nationalist attitudes emerge. The shock makes anti-globalization sentiment salient – more so in those with a preexisting perception of a precarious professional condition.

The logic of labor market risk when interacted with a trade shock to one's industry of employment activating anti-outsider sentiments, has at its core both a material and identitybased mechanism (Hays, Lim and Spoon 2019). While no actual job loss need be experienced, the mere exposure to local industry effects of globalization heighten an existing perception of a threat either to an individual's material wellbeing or to the individual's status as a member of a group relative to other out-groups.

We find strong evidence that US survey respondents in occupations that experience high degrees of risk or vulnerability are more likely to express anti-globalization sentiment, and these sentiments are magnified significantly when those individuals are also exposed, at least indirectly, to a globalization shock from abroad. The key to this finding is a novel definition of job insecurity, based on the distance both in task and geographical space between occupations which is an expression of the perceived difficulty any individual might have should they search for a new job with similar characteristics to their current one. We argue that job insecurity offers only a *predisposition* to anti-globalization sentiment. These attitudes are *activated* when an individual is faced with a shock to their industry of employment from abroad.

The new measure of job insecurity combines two dimensions: the first is a measure of occupational task specificity – how similar is an individual's occupation to occupations held by others in the economy. The second dimension accounts for the relative prevalence/availability of an individual's occupation by state. When combined, we have a measure of how frequently jobs with similar task profiles are available in the same the state for any individual.

There is some evidence that exposure to trade is related to electoral shifts in both the US (Autor et al. 2016*a*, Jensen, Quinn and Weymouth 2017, Margalit 2011) and Europe (Colantone and Stanig 2018*b*, Dippel, Gold and Heblich 2015, Rommel and Walter 2018), and cross-nationally (Milner 2021), the increase in support for political parties engaging in populist rhetoric (Baccini and Sattler 2020) with stronger anti-globalization platforms (Milner 2018), and the expression of authoritarian values (Ballard-Rosa et al. 2017).

Survey-based evidence that individual level isolationist or nationalist sentiment is specifically linked to individuals' experience with globalization has however, been hard to find. Like Hays, Lim and Spoon (2019), we argue the of the level of analysis matters. They replicate Colantone and Stanig (2018*a*) and show that survey respondents living in economically susceptible regions are more likely to harbor anti-immigrant sentiment, and argue that this effect is mediated through xenophobic beliefs. Similarly, Cerrato, Ferrara and Ruggieri (2018) suggest that Chinese import shocks drive negative attitudes towards immigrants and minorities. When it comes to attitudes about international trade, trade agreements, or international organizations, most studies have failed to find an association with exposure to trade or trade shocks. Generally the findings are similar to those of Guisinger (2017) and Rho and Tomz (2015): trade policy is a low-salience issue or its consequences are misunderstood for most voters.¹

Our approach emphasizes a material interpretation. Standard approaches begin with an individual's economic position: An individual's education or human (or other types of) capital or assets, their industry of employment, the characteristics of the firms in which they work, the type of job they have and even its task composition or consumption patterns, in the face of potential foreign competition (or automation), are the bases for claims about patterns of expressed political views over which parties and policies gain support (Baker 2005, Dancygier and Walter 2015, Guisinger 2009, Mansfield and Mutz 2009, Osgood 2016, Rodrik 1995, Scheve and Slaughter 2001, Stolper and Samuelson 1941). Expressed political sentiment is consequent to the economic conditions – if an individual is a member of a group (defined by a set of common economic conditions) that loses from globalization, members of that group are likely to express anti-globalization sentiment.

These take an individual's current economic conditions as the relevant set of primitives. More sophisticated intertemporal approaches consider that an individual's current political sentiment or attitudes are influenced by expectations about future economic prospects or risks (Rommel and Walter 2018, Walter 2017). Individual rationality in the face of uncertainty, especially under conditions of risk aversion, predicts that individuals perceiving job insecurity will be more likely to support increased social safety nets, protection from foreign competition, and any threat to wages, perhaps from immigrants (Ehrlich and Maestas 2010*a*). Individual occupational risk is often proxied by current unemployment rates in their industry (Kitschelt and Rehm 2014) or "offshoreability" and/or "routineness" of an occupation (Owen and Johnston 2017*a*).

Personal experience of economic "shocks", say the loss of a job or a decline in the earned wage (which may be due to a variety of sources), also matters for political attitides. The widely used "China shock" instrument for example, captures the reduction of manufacturing jobs in districts with more workers in industries producing goods similar to those imported from China; in turn this labor market impact has affected observed electoral outcomes in identifiable ways (Autor, Dorn and Hanson 2013b).

We argue that an individual's perception of their occupational or labor market risk provides a foundation or a predisposition towards anti-globalization sentiment. That predisposition however is somewhat low powered, and may not win out against other potential

¹See in contrast Alkon (2017), Bisbee (2018), Owen and Quinn (2016).

identities (such as race or religion, or partial point or ideology) which may have higher valence and determine political sentiment. Instead, a predisposition, captured by perceptions of occupational risk, requires activation to be come politically salient. We suggest that predisposed individuals are activated to express anti-trade and immigrant opinions after exposure to a specific trade shock.

Our headline finding is that while an individual exposed to shocks to their industry of employment reduces individuals' support for NAFTA (a proxy for attitudes towards international trade) by about a modest 3%, this response is much stronger among those with greater occupational risk, rising to about a 10 percentage point shift. We find similar effects for attitudes towards immigrants, and views about isolationism.

By focusing on labor market *risk* instead of labor market *outcomes*, we emphasize the crucial role played by globalization's losers who have not yet lost. In this way, our findings compliment a growing literature that focuses on the *threat* of loss instead of its realization. Uncertainty begets anxiety, which can activate preexisting latent attitudes. (Mansfield and Mutz 2009, 2013, Owen and Johnston 2017*a*, Walter 2017).

2 Attitudes: Shocks, Risk and Activation

The rise of populist sentiments has been attributed to globalization (which includes its trade, offfshoring and immigration forms) and "cultural" explanations, the essence of which is a persistent strand of racism, isolationism and xenophobia in the US which may have been activated by elite cues in the recent period (Malhotra, Margalit and Mo 2013, Margalit 2019, Mutz 2018, Sides, Tesler and Vavreck 2018). These two approaches are not mutually exclusive, and debate persists as to whether economic dislocation drives cultural anxiety. While we focus here on perceptions of labor market risk, we suggest that anti-outsider sentiments are activated by a fear of economic dislocation.²

We draw a distinction between sentiment or attitudes expressed by individuals, and aggregate measures such as election outcomes, or vote shares. There is a rich and emerging literature that economic shocks to a region or a district have induced electoral shifts. Much of the literature explores the effect of the rise of Chinese imports into the US, or filings for TAA adjustment assistance (Bisbee 2018, Ritchie and You 2020) on the shift towards or away from more extreme candidates in local elections (Autor et al. 2016*b*, Feigenbaum and Hall 2015), and on local and national election outcomes (Jensen, Quinn and Weymouth 2017). These presume that individual level attitudes are responsive to these shocks, but there is weak or no evidence at the individual level.

²It is presumably possible that the variation in individuals' underlying tendencies towards of xenophobia or racism is correlated with labor market risk, in which case, it is both the cultural and the risk elements that produce the antiglobalization sentiment when activated by a the economic shock.

2.1 Economic Interests

The work on the economic bases of political attitudes has relied largely on assessing the respondent's current economic condition. Individuals in export sectors in skill-abundant countries prefer freer trade (Rogowski 1987), following the logic of Stolper and Samuelson (1941). Even within an industry those with lower *skills* express more support for protection or insulation from foreign competition while the more productive workers are in favor of trade (reminisicent of the firm-level approach of the new new trade theory) (Dancygier and Walter 2015, Rommel and Walter 2018, Walter 2017). Baker (2005) emphasizes the individual's role as *consumer* in the economy, and suggests that when preferences are non-homothetic, richer individuals prefer to consume more skill-intensive goods, and may in fact oppose freer trade in skill abundant countries. Many view their occupation as integral to their sense of wellbeing (Bó et al. 2020); perceptions of wellbeing improve among those that are employed in sectors that expand with commercial integration (Margalit 2011). Educated individuals, reflecting a *cosmopoltian* identity are seen to express pro-globalization attitudes more frequently (Mansfield and Mutz 2013) as are owners of homes and other assets, especially in districts positively affected by trade (Scheve and Slaughter 2001). Importantly, the logic that links the class, sector, assets or endowments of an individual to their attitudes operates directly through the effect of trade on the values of, or the returns to those assets; there is little role played by uncertainty in this analytical approach.

Openness, by its very nature, introduces exogenous shocks, and attendant economic risks, to individuals at home. The premise of "embedded-liberalism" (Ruggie 1982) was that support for the post-war freer trade regime was exchanged for insurance against the downside risk of openness. Cameron (1978) and Rodrik (1998) recognized that more accountable governments were likely to have bigger social safety nets. Opposition to free trade policies is therefore a function of individual's perception of the downside risks of globalization, but also on the availability of social protection (Baccini and Sattler 2020, Foster and Frieden 2017). How then to measure an individual's exposure to the downside risks of exposure to international trade?

2.2 Risk

Uncertainty over future income flows from the labor market may, from the point of view of the individual, originate on the supply or the demand side. On the supply side, there is risk of injury or illness, or an inability to work, or even a change in preferences over career and industry. Instead we emphasize here the uncertainty that has at its origins, unanticipated or potential shocks to the demand side of the labor market. Should my current employer experience a need to reduce its demand for labor (for any reason, including foreign competition, technological change, change in preferences in the goods markets etc.), what other jobs are available? Will they be close by? And at at wage? When an individual surveying the distribution of their labor market prospects finds that they must heavily weight responses that resemble "few, far away and at a lower wage," suggests that individual faces a higher degree of labor market risk.

Labor market risk has been shown to matter for political preferences, usually in the context of support for redistribution or social safety nets (Rehm 2009). Measures of occupational risk have largely been based on unemployment rates faced by individuals in an industry or an occupation (Rehm 2009) while the broader economic security index of Hacker et al. (2014) incorporates household resources as well industry and occupation unemployment rates as factors for economic risk. Owen and Johnston (2017*a*) characterize the economic vulnerability of any individual as a function of their occupation, and this matters for their attitudes to trade policy.

Occupations can be described as a combination of tasks, with different jobs defined by different intensities across a task profile (Acemoglu and Autor 2011, Autor 2013).³ Globalization more often takes the form of trade in disaggregated tasks – where elements of production take place along an extended value chain – and hence individuals with expertise in tasks that are more easily done abroad or by machines are more at risk. Owen and Johnston (2017a)combine task routineness with the degree the good being produced by the individual is tradable, or how likely it can be produced abroad. Routineness is often found in occupations with repetitive actions, such as customer service, sorting, filing etc, and is often, but not exclusively, associated with low skill jobs. Offshoreability combines the location specificity of the job with the necessary proximity to the customer. Individuals in occupations with high task routineness producing offshoreable goods are more vulnerable or at risk from trade related dislocation, and accordingly exhibit attitudes less tolerant of international trade. Owen (2020) expands this approach to include an occupation's susceptibility to automation, and adopts the "routine task intensity" index (RTI) approach from Goos (2014) for each occupation, and together with a measure of "automation potential," explores the effects of these on protectionist sentiment. Individuals in those occupations with high values of these measures are more likely to exhibit protectionist sentiment and more support of right-wing parties.

Task routineness and offshoreability are also the focus of Kaihovaara and Im (2020), but are reconceptualized as measures of an individual's "economic vulnerability." With a very similar empirical specification to Owen and Johnston (2017*a*) they find that RTI and offshoreability matter for attitudes towards immigration. More vulnerability, they argue, leads to perceptions of welfare competition or labor market competition, as well as being a ripe audience for populist appeals from right wing political entrepreneurs.

More recently, Baccini and Sattler (2020) measure an individual's "vulnerability" (at the district level) as the share of workers in manufacturing and the share of unskilled workers in a district. At the individual level, they use the education of the respondent. They find that where government austerity policies impact the most vulnerable, political parties exhibit greater tendencies to use populist rhetoric, or individuals are more likely to support populist

³We make use of the occupation task intensity vectors drawn from the United States Occupational Information Network database (available at https://www.onetcenter.org/overview.html).

parties.

In what follows we make use of the tasks approach of Acemoglu and Autor (2011), but we do not restrict attention to any particular subset of task dimensions. We use the information that the entire task profile offers. Moreover, our measure of occupational risk more closely captures both the susceptibility of shocks from abroad, and the difficulty of finding a new job with a similar task profile in a proximate geographic areas.⁴

2.3 Activation

Within similar individuals, different sentimets can be activated, inducing the expression of differing attitudes to globalization. Naoi and Kume (2015) show in an experimental setting that when an individuals' consumer identity is activated among a random selection of Japanese respondents, attitudes to trade are less oppositional, relative to when their identity as a producer is activated. Alternatively, the characteristics of the individual's occupation may activate sentiment towards trade and globalization. Occupations characterized by both "task-routineness" and "off-shorability" activate perceptions of insecurity and exposure to risk (Owen and Johnston 2017*a*). An individual's social or economic condition does not necessarily imply the expression of attitudes consistent with those conditions. Guisinger (2009) for instance demonstrates that trade issues are often not salient even for those that are most susceptible to dislocations from imports.

Heightened risk (as opposed to current economic conditions) can activate previously latent attitudes about "others," defined in terms of race, gender or class (Guisinger 2017). Enterprising political elites play a role in individuals' attribution of blame, and heightened risk perceptions could lead to backlash against international trade and trade agreements, foreigners and immigrants, Wall Street bankers and financial elites who profit off foreclosures (Guisinger and Saunders 2017).

Individual perceptions of risk or threat to well-being generates anxiety (Ehrlich and Maestas 2010b, Tajfel and Turner 1986). As an individual's perceived risk intensifies, she becomes more likely to adopt and express attitudes antagonistic to the perceived sources of these shocks⁵. Surges in imports, or even job loss and plant closures in one's industry, can be synthesized as a threat from outsiders (Sides, Tesler and Vavreck 2018), and previously low salient issue dimensions become dominant.

Our view is that the underlying, perceived labor market risk predisposes an individual to hold anti-globalization sentiments. The salience of these concerns may be low or high – globalization may be a source of this anxiety, but potentially many other targets can be blamed. For instance, automation, government policy, changing consumer preferences, even

⁴We do not explicitly interact the task measures with measures of "routineness" or "offshoreability" (Owen 2020, Thewissen and Rueda 2019, Walter 2017). As we will see below, our notion of risk while based solely on the task vectors, will still capture these concerns.

⁵Resource unpredictability especially has been a source of mistrust of outsiders and a precipitant cause of war (Ember and Ember 1992)

poor firm and industry management are potential sources of anxiety associated with labor market risk (Guisinger and Brutger 2021).

We conjecture that, in the presence of adverse economic shocks to an individual's industry of employment, individuals in that industry with low occupational mobility are more likely to express increased hostility toward globalization, immigration, and international organizations. The salience of globalization-related issues for those with personal labor market risk rises when activated by shocks to their industry.⁶

3 Building a Measure of Job Insecurity

We theorize two dimensions that combine to produce the activation of anti-globalization sentiment at the individual level. We begin with an individual's occupation, and in particular, how similar an individual's occupation is to others in the economy. Two occupations that are similar to each other in terms of the tasks they require are relatively easy to move between, while those that are dissimilar pose greater barriers to transition.

The dimension accounts for the supply of similar occupations within the individual's geographic proximity. We weight the occupational specificity with the relative prevalence of that occupation among all occupations in the respondent's state. There may be other jobs close in task space but they may be all in a different state – that individual may experience more anxiety about job risk than an individual with many similar jobs in their state. These two elements provide a measure of perceived occupational risk, or alternatively a measure of an individual's predisposition to anti-globalization sentiment.

Predisposition alone is insufficient to generate anti-globalization views. Activation of the predisposition requires exposure to an external shock. We adopt a modified version of the "China Shock" (Autor, Dorn and Hanson 2013b) approach relying on exposure to an import shock as the precipitant event.⁷ Note that we do not require the individual to lose their job, because of, say, increased imports from China.⁸ All we require is that the individual currently works in an industry that has been affected – and perhaps they see the effects of imports on their co-workers, local firms, and their communities. We have the industry of employment of the respondent, and we calculate a measure of import penetration for each individual in our sample.

The interaction of these three factors – occupational specificity, job availability and exposure to a globalization shock – provide a strong basis for the expression of opinions opposed to trade and immigration. When an individual's occupational status is perceived as at risk,

 $^{^{6}}$ We do not argue that anti-"other" views are the result only of economic shocks. Indeed, these attitudes may exist as distinct from individual material conditions; Margalit (2012) suggests that anti-cosmopolitan views, or a fear of social and cultural openness, help explain hostility toward economic openness. Also see Owen and Walter (2017).

⁷We examine a shock to the import-competing industry of employment of the respondent, in contrast to "local sociotropic" approaches where the shock is to the local districts according to their share of manufacturing workers in import-affected industries (Alkon 2017, Bisbee 2018)

⁸However, we do expect that the direct experience of job loss is the strongest "dose" of the activation.

a set of opinions and attitudes are activated by exposure to a trade shock.

3.1 Job Specificity

Each occupation is characterized by a 12-dimensional vector of standardized tasks⁹; standard network techniques allow us to graph the links between occupations and to measure the uniqueness or the specificity of any job. In a sense an individual in a job for which there isn't another close by in task-space may be more "at-risk" than an individual in an occupation for which there are many others with similar task profiles. This is the first stage in measuring an individual's "predisposition" to a particular sentiment.

Every occupation can be decomposed into a set of tasks, or more precisely, for every occupation j, we can write a task-intensity vector $(t_1^j, t_2^j, ..., t_d^j)$, where d is the number of task dimensions. Occupation task intensity vectors are drawn from the United States Occupational Information Network database which contains expert assessments of every occupational category used in the U.S. Census (Autor, Levy and Murnane 2003). These experts assign numerical values for the intensity with which different skills, abilities, tasks, and contexts are used in each occupation, ranging from 1 (the least intensively used) to 5 (the most intensively used). We use these measures calculated in 2000 to avoid endogeneity between task intensities and Chinese imports.¹⁰

The similarity between any two occupations j and k can be written in terms of Euclidean distance $d_{jk} = \left(\frac{1}{2}\sum_{\gamma=1}^{d} \left(t_{\gamma}^{j} - t_{\gamma}^{k}\right)^{2}\right)^{\frac{1}{2}}$. Two jobs involve similar tasks if their d_{jk} is relatively close to 0, whereas jobs that are very different could have a score closer to 9.8. If the task profile of an individual's job is not that distant (in Euclidean terms) from other jobs, there are lower barriers to finding a new job in the event of economic dislocation, and we view this individual as less at-risk along the occupational dimension. Conversely, an individual in a job with a task profile that is very distant from other jobs finds herself with skills and experiences that are less in-demand, which we interpret as greater occupational risk.

To develop a running example, Jill is a fence erector (SOC 47-4031) working and living in Jim Thorpe, PA. Her primary duties involve erecting and repairing metal and wooden fences and fence gates around highways, industrial establishments, residences, or farms using hand and power tools. To take a small selection of examples from Jill's current occupation as a fence erector, this role requires little in the way of writing skills (1.94) but much in the way of equipment maintenance (3.69). This occupation doesn't require strong memorization abilities (1.63) but does rely on visualization abilities (3.25). Jill's typical activities don't include a lot of documenting information (1.83) but she does perform a lot of general physical activities (4.26).

⁹We do not restrict attention to a subset of the tasks that might constitute any occupation (such as routineness), but instead make use of the entire task profile vector as in Owen and Johnston (2017b).

¹⁰Owen and Johnston (2017*b*) use one dimension of these task vectors, *routineness*, and interacts this with the offshorability of the occupation to determine attitudes to trade protection across 22 developed economies in 2003 (and 20 in 2013). Their data is borrowed from Acemoglu and Autor (2011).

Her current occupation is relatively intensive in manual skills, making the transition into an occupation as a structural iron and steel worker (SOC 47-2221) relatively straightforward – she has those skills and experience. The difficulty associated with transitioning into the terrazzo workers and finishers occupation (SOC 47-2053) are slightly higher as she will need to learn about the appropriate mixtures of cement, sand, pigment, and marble chips to create floors, stairways, and cabinet fixtures. The costs associated with transitioning into a job as a computer software engineer for applications (SOC 15-1031) are much higher still, requiring multiple years learning programming languages.

If the only new jobs are for computer software engineers, Jill is much more at-risk than if there is labor market demand for iron and steel workers. Importantly for our story, Jill needn't be laid off to perceive these risks. Even if she is not actively looking for a new job, we assume that she has a general sense of her prospects.

3.2 Job Availability

When Jill considers her labor market prospects, what is her reference? We assume that geography plays an important role in determining the sense of occupational risk felt by Jill. Put simply, if there is labor market demand for iron and steel workers a thousand miles away from Jill, it is less reassuring than if the same jobs are demanded in Jill's state. The underlying intuition is that the costs to relocating 1,000 miles away are higher than those associated with staying in the same state, forcing Jill to confront a trade-off between moving to keep working in a similar field, or investing in new skills to stay in the same area.

Here we rely on the job-to-job (J2J) database obtained from the Census. The publicly available version of these data measure the annual number of workers who transition from one job to another by state. For example, we can calculate the total number of workers who left jobs in Pennsylvania and went to find new employment in New Jersey, as given in the example of Figure 1. Conversely, we can do the same for workers in Alabama, Minnesota, and Arizona, revealing two important components of relocation. First, there is clear evidence of a gravity bias in which the preponderance of job movers stay within the same state or move to a nearby state. Second, there is also evidence of population (or more likely, economic) gravity, wherein workers who do move further away are much more likely to relocate to more economically active states like California, Florida, or Texas; and not to states like those in northern New England, West Virginia, or Mississippi.

We can also make use of the J2J dataset and examine the flows from one industry to another by state. As illustrated in Figure 2, the majority of job-to-job flows occur along the diagonal, meaning that most transitions occur within an industry, not across them. Nevertheless, we do note some consistent patterns in the job flows across industries. For example, workers leaving jobs in the manufacturing sector consistently shift to jobs in the administration, support, and waste management sector. Relatedly, there is clear evidence of cross-industry flows between the retail, accommodation, and administration sectors.



Figure 1: J2J Flows by State. Total job leavers who find new employment in either their initial state (red outline) or a new state. States shaded by the total number of workers who move, divided into quantiles plus the 95th plus the max (in all cases the vast majority of movers do not relocate to a different state).

3.3 Combining Specificity with Availability: Job Insecurity

In the event of job loss, where do you go? The preceding discussion highlights the important barriers to finding new employment. First and most importantly, there are the barriers associated with the gap between an individual's skill set and those required by a new job. Second, there are the barriers associated with relocating geographically for a new job. And third, there are barriers to moving from one industry to another for a new job.

We construct a novel measure of job insecurity (or labor market risk) that incorporates these factors. To define terms, let *i* index the individual (a respondent in our survey), $j, k \in \mathcal{J}$ represent occupations/jobs where *j* is *i*'s current job. Similarly, let $s, q \in \mathcal{S}$ represent US states, where *s* is *i*'s current state of residence. Finally, let $n, m \in \mathcal{N}$ represent industries, where *n* is *i*'s current industry of employment. Our objective is to build a measure of occupational risk for individual *i* with job *j* in industry *n* living in state *s*, R_{ins}^i .

Our primary component of risk combines the euclidean distance between any two occupations j (the respondent *i*'s current or most recent occupation) and k (a potential new occupation), with the share of occupation k in the respondent's current state or industry. For example, for occupation j in state s, we take the weighted average distance between j and all other occupations k where the weights are given by k's share of total employment in the



Figure 2: J2J Flows by industry. Rows indicate the industry from which workers depart and columns indicate the industry to which they transition. Cells are sorted such that the industries that employ the most workers in a state are in the top-left of each panel. Cells are sized to reflect the (logged) ratio of jobs relative to the most transitions. The diagonals display within-industry transitions.

respondent's current state s. Formally:

$$R_{js} = \sum_{k \in \mathcal{J}} \left(d_{jk} * \frac{L_{ks}}{L_s} \right)$$

where L_{ks} is the total jobs in occupation k in state s, and L_s is the total jobs in state s. This yields a risk measure R_{js} which is larger for when an individual is employed in an occupation j that uses very different skills from other occupations in the same state.

An analogous measure can be constructed on the basis of industry, wherein individual i's risk is defined as the euclidean distance between her current occupation j and some other occupation k, weighted by the share of all jobs in her industry n that are of occupation k.

$$R_{jn} = \sum_{k \in \mathcal{J}} \left(d_{jk} * \frac{L_{kn}}{L_n} \right)$$

These two measures represent the difficulty an individual i may face in finding a new job in the same state or industry that the respondent is currently employed in. (Unfortunately, data availability means that we cannot calculate the three-way share of occupation k in industry n in state s.) If we only relied on these measures, it would be tantamount to assuming that labor is completely immobile between states or across industries.

To relax this assumption, we augment the above measures with the job-to-job data. These data allow us to calculate the above metrics for any state q and any industry m by weighting these choices based on the empirically observed job flows. Denote a job flow from i's home state s to q by $L_{s\to q}$ (and analogously from i's industry n to m by $L_{n\to m}$). Denote the sum of labor outflows from i's state s to all other states as $\sum_{q\neq s} L_{s\to q}$, and from i's industry n to all other industries by $\sum_{m\neq n} L_{n\to m}$.

Similarly to R_{jq} above, we add the further weights – the share of total J2J flows from state s that go to q^{11} Formally:

$$R_{jsq} = \sum_{k} \left(d_{jk} * \frac{L_{kq}}{L_q} * \frac{L_{s \to q}}{\sum_{q \neq s} L_{s \to q}} \right)$$

Analogously, for occupation j in industry n, we take the weighted average distance between j and all other occupations k in a different industry m, where the weights are given by the share of total J2J flows that go from $n \to m$. Formally:

$$R_{jnm} = \sum_{k} \left(d_{jk} * \frac{L_{kn}}{L_n} * \frac{L_{n \to m}}{\sum_{m \neq n} L_{n \to m}} \right)$$

Each of these risk components R_{js} , R_{jsq} , R_{jn} , and R_{jnm} correspond to different barriers to transitioning between a job in occupation j in industry n in state s and a new job. R_{js} captures the difficulty in finding new work in the same state. R_{jsq} captures the difficulty in finding new work in a different state. R_{jn} captures the difficulty in finding new work in the same industry. And R_{inm} captures the difficulty in finding new work in a different industry.

Given that the weights are already embedded in these measures, calculating a summary measure, summing across all potential states of occupational risk for an individual working

 $^{^{11}}$ We collapse annual job-to-job flows to the decade between 2000 and 2010 to account for data sparsity in certain years.

in occupation j in state s is simply:

$$R_{js}^{S} = \sum_{q} R_{jsq}$$
$$= \sum_{q} \sum_{k} \left(d_{jk} * \frac{L_{kq}}{L_{q}} * \frac{L_{s \to q}}{\sum_{q \neq s} L_{s \to q}} \right)$$

The analogous sum provides us a measure of industry-based occupational risk, summing across all industries:

$$R_{jn}^{\mathcal{N}} = \sum_{m} R_{jm}$$
$$= \sum_{m} \sum_{k} \left(d_{jk} * \frac{L_{kn}}{L_n} * \frac{L_{n \to m}}{\sum_{m \neq n} L_{n \to m}} \right)$$

Without job data that is binned by occupation, state, and industry together, we calculate our final measure of occupational risk as simply the mean of these two measures.

$$R_{jns}^{i} = \frac{1}{2} \left(R_{js}^{\mathcal{S}} + R_{jn}^{\mathcal{N}} \right) \tag{1}$$

We expect the greatest risk for any individual i holding job j to accrue from the challenges in finding new work in the same state s and/or industry n. If an individual's set of occupationspecific skills is very different from those skills required by other occupations in her state or industry, we would expect her to face higher occupational risk. These measures allow us to test this theory in a series of regressions.

3.4 Individual Level Trade Shocks

Our empirical context is the United States, where we obtain geocoded survey data from the General Social Survey (GSS) that includes the respondent's most recent occupation and industry of employment, covering the period from 1993 to 2018. During this period, the United States experienced what is commonly referred to as the "China Shock" (Autor, Dorn and Hanson 2013b). In 2001, China joined the WTO and obtained permanent normal trading relations with the United States and other member countries. The US experienced an import boom from China, especially in manufacturing sectors, and while some exporters in the US saw their profits rise, local firms that competed with Chinese imports experienced market contractions.

Existing research in both economics and political science has relied on geographic labor markets to assign exposure, where having more workers employed in an import competing industry means that the location has greater exposure. The benefit of our data is that we needn't rely on aggregate measures of labor markets to calculate our survey respondents' exposure to the China Shock. Specifically, we observe their industry of employment directly, allowing us to connect them directly to the change in competing goods imported from China. Formally, for respondent i working in industry n, we assign the degree of import competition experienced by an industry to the individual employed in that industry:

$$\Delta I E_{nt}^i = \Delta M_{nt}$$

where ΔM_{nt} is the change in Chinese imports competing with goods produced in industry n between 1989 and the year the respondent was surveyed, and $\Delta I E_{nt}^i$ is individual *i*'s exposure to imports in their industry of employment n as of their survey response date t.¹²

4 Dependent Variables: Attitudes

We obtained geocoded data from the General Social Survey (GSS) by special request. These data cover the period from 1993 to 2018 for the United States. Topics include questions about free trade agreements, questions about globalization, and questions about immigration. In addition, we examine several questions about the individual's perception of her labor market position to confirm that the interaction of import exposure and our measures of occupation risk indeed predict greater anxiety and dissatisfaction.

We start our analysis by combining multiple questions on international trade, immigration, and international organizations that were asked over the period of our analysis. We do this by identifying consistently worded questions on NAFTA's benefits for the US (trade), accepting new immigrants (xenophobia), and three questions about the power of international companies and organizations. Our main findings focus on indices derived from these disaggregated questions, constructed by re-coding each question such that pro-global views are negative, anti-global views are positive, and indifference / uncertainty is zero. The combined indices are then calculated as the net across each of these questions. In each case, positive values reflect more protectionist views, more anti-immigrant views, and more anti-IO views. The full description of these variables is included in the appendix.

We emphasize this is not panel data in the sense that our roughly 37,000 respondents surveyed over the period between 1993 and 2018 only appear once in the data. As such, we are unable to estimate within-respondent changes in beliefs that would allow us to more convincingly causally attribute to the changes they experience in their exposure to import competition and their occupational risk. As we discuss in more detail below, we subject our results to a battery of sensitivity analyses and placebo tests to bolster our causal interpretation of the correlations we observe. We argue that our careful and novel construction of occupational risk represents a meaningful contribution to the literature, and present our results as suggestive evidence of the important role of vulnerability in understanding the antiglobalist wave that future research might test in experimental settings with superior internal

 $^{^{12}}$ In our Supporting Information, we replace this individual-level measure of the China Shock with the more well-known measure developed by Autor, Dorn and Hanson (2013*a*). Their measure situates individuals in local labor markets (defined by commuting zones) to capture the indirect negative consequences of import competition that are experienced at the local level (Alkon 2017).

validity than we offer here.

5 Estimation

We use a variety of methods to estimate the relationship between import exposure and political beliefs. Our workhorse regression specification controls for individual-level covariates (including gender, race, marital status, educational attainment, age, foreign born status, foreign born status of the respondent's parents, and number of children born) and state-level covariates (including the male and female unemployment rate; the share of the labor force employed in manufacturing; proportions black, Hispanic, foreign born, and with a college education, and the proportion employed in routine-intensive occupations). With this specification, we predict variation in political beliefs as a function of the change in import exposure, formally specified as:

$$y_{inst} = \alpha_s + \delta_t + \beta_1 \Delta I E_{nt}^i + \beta_2 \mathbf{X}_i + \beta_3 \mathbf{S}_{s,t_{pre}} + \epsilon_{inst}$$
(2)

where α_s and δ_t are fixed effects for state and year, respectively; \mathbf{X}_i is the vector of pretreatment individual-level covariates described above; and $\mathbf{S}_{s,t_{pre}}$ is the vector of state-level pre-treatment measures, also described above.¹³ Since the individual-level trade shock is estimated based on respondents' industry of employment, we cannot control for industrylevel confounders via an additional fixed effects term. However, we confirm that our findings are robust to using a multilevel model in which respondents are nested in industries, states, and years in the Supporting Information.

These measures predict variation in political beliefs as a function of exposure to import competition. We are also interested in determining whether the strength of this relationship is moderated by the occupational risk of an individual's job. In theory, we expect individuals working in higher risk occupations to be more sensitive to import competition. Effectively, this requires the potentially heroic assumption that occupational risk is pre-treatment, allowing us to use it as a moderator in interacted regressions. Clearly, this is not the case given that part of our measure incorporates the availability of similar occupations in a given state. If import competition changes local labor markets in a regional manner, or if it influences the composition of skills and tasks required by an occupation, the pre-treatment assumption is invalidated. To account for this possibility, we construct the measure using O*NET data and geographic occupation data from 2000, prior to China's accession to the WTO. The interaction specification can be written:

$$y_{inst} = \alpha_s + \delta_t + \beta_1 \Delta I E^i_{nt} + \beta_2 R^i_{jns} + \beta_3 \Delta I E^i_{nt} \times R^i_{jns} + \beta_4 \mathbf{X}_i + \beta_5 \mathbf{S}_{s,t_{pre}} + \epsilon_{inst}$$
(3)

¹³All state-level predictors are measured in the census year prior to the survey wave, meaning that respondents surveyed in 2001 through 2010 are assigned to the state-level controls measured in the 2000 census, indicated by the t_{pre} subscript in Equation 2.

where R_{jns}^i is the occupational risk measure defined in equation (1) above for individual i (who holds job j in industry n living in state s). Of course each individual i with job j is surveyed at time t.

5.1 Assumptions Required for Causality

We argue that the change in Chinese imports between 1993 and 2018 is an exogenous shock from the perspective of an individual survey respondent, conditional on the individual and commuting zone-level covariates we control for, along with state and year fixed effects. This claim might be incorrect for the following reasons.

First and least plausibly, there is the question of reverse causality. For this to be true, it would have to be that increasingly anti-globalist views among the more at-risk and importexposed American workers would cause an increase in Chinese productivity in goods that compete with these workers. Second, there may be additional omitted measures that predict both an individual's bundle of anti-globalist opinions and their exposure to Chinese import competition that we have not accounted for. In our Supporting Information, we conduct sensitivity analysis to characterize how strong such an omitted variable would have to be to overturn our results. Third, and most concerningly, there may be selection effects in which those who continue to work in import-competing industries are inherently more anti-globalist for reasons other than the effect of import competition.

We believe the selection concern is a genuine threat to our identification strategy, particularly based on work by Notowidigdo (2011) who shows that those most exposed to free trade's negative consequences are also those least able to find new jobs – they are older, with families, and less educated. To sketch a simplified example, consider a group of workers of varying ages, education, and attitudes toward free trade who work in the same industry in 1993. Over the ensuing decades, this industry struggles under increasing import competition. The younger, better educated, and more globalist workers exit to find work elsewhere, leaving behind an older, less educated, and anti-globalist core of immobile workers. A regression of the form described above would find a positive correlation between import competition and anti-globalist attitudes, but interpreting the changes in individual attitudes to be caused by import competition would be incorrect. Instead of an individual's position on free trade changing over time, the coefficient would capture a shifting composition of workers driven by selection.

We address this selection concern in the following ways. First, using county-to-county migration data from the IRS, we find no correlation between import exposure at the county level and migration patterns (see SI). Second, insofar as these attitudes are correlated with other individual-level characteristics such as age and educational attainment, we soak up part of the selection concern with these controls. Third, even if the selection concern holds and the correlations we document do not reflect changes in an individual's opinion over time, we argue that our results are nevertheless important to our understanding of how shifting macroeconomic conditions can reshape the terrain of politics. In other words, even if all we document is the differential ability of more or less globalist workers to find new work in the face of import competition, this still produces a change in an electorally important coalition whose opinions on free trade, immigration, and international organizations are increasingly correlated with their position in the global economy.

6 Results

6.1 Job Insecurity and Views on Labor Market Conditions

We begin by predicting opinions as a function of exposure to import competition from China in the GSS data, focusing first on the questions about labor market conditions. Table 1 displays the coefficients on the individual-level import exposure (ΔIE) and the occupational risk measure described above, controlling for year and state fixed effects as well as state-level measures of the labor market in the prior census survey, and individual-level covariates. Standard errors are clustered at the state-year-industry of occupation. We find strong evidence that our measure of import exposure is related to negative assessments of the labor market, with those exposed to Chinese imports being about 10 percentage points less likely to think finding a job is easy, 13 percentage points more likely to think that finding a related job is hard, and about 4 percentage points more likely to think they will be laid off in the following year, compared to those who were not exposed to Chinese import competition. Similar patterns obtain for the occupational risk measure, although these are more noisily estimated and an order of magnitude smaller.

	Hard to find a new job2	Hard to find related job	Likely to be laid off in next year
	(1)	(2)	(3)
Δ IE	0.288^{***}	0.269***	0.135^{***}
	(0.026)	(0.041)	(0.029)
Occupational Risk	0.038***	0.034^{*}	-0.005
-	(0.009)	(0.014)	(0.009)
Stab FE	Y	Y	Y
Year FE	Y	Y	Y
State Ctrls	Y	Y	Y
Indiv Ctrls	Y	Y	Y
Mean Y	0.15	0.18	-1.37
SD Y	0.79	0.77	1.07
Observations	12,559	$5,\!643$	12,601
\mathbb{R}^2	0.087	0.074	0.047

Table 1: Job Market Evaluations and Import Exposure

Notes: Labor market anxiety predicted by exposure to import competition. Additional controls not shown. All specifications include year and state fixed effects with standard errors clustered at the year-state-industry level. $\dagger p \leq .1 * p \leq .05$, $** p \leq .01$, $*** p \leq .001$.

6.2 Job Insecurity and Aggregated Views on Trade, Migration and IOs

Next, we replace our outcome with three aggregated measures of the respondents' opinions on free trade, immigration, and international organizations. Previous research has used similar specifications with different data to identify a significant backlash against free trade as a function of exposure Bisbee (2018). In Table 2, we find substantively similar results although the only significant coefficients are for protectionist views (column 1). These findings suggest that individuals exposed to import competition are more protectionist on our combined index by roughly 0.15 standard deviations.

	Combined Protectionism	Combined Xenophobia	Combined Anti-Globalization
	(1)	(2)	(3)
Δ IE	$\begin{array}{c} 0.145^{**} \\ (0.056) \end{array}$	$0.035 \\ (0.023)$	$0.128^{\dagger} \ (0.072)$
Occupational Risk	$0.016 \\ (0.019)$	$0.006 \\ (0.008)$	$0.006 \\ (0.021)$
Stab FE	Y	Y	Y
Year FE	Y	Y	Y
State Ctrls	Y	Y	Υ
Indiv Ctrls	Y	Y	Υ
Mean Y	-0.24	1.62	0.82
SD Y	1.37	6.11	1.87
Observations	2,768	15,063	2,288
\mathbb{R}^2	0.101	0.199	0.095

Table 2: Aggregate Anti-Globalism and Import Exposure

Notes: Anti-globalist views predicted by exposure to import competition. Additional controls not shown. All specifications include year and state fixed effects with standard errors clustered at the year-state-industry level. $p \leq .1 * p \leq .05$, $p \leq .01$, $p \leq .01$, $p \leq .001$.

The other two indices are not significant at standard thresholds, although both are positive. The combined xenophobia index, which aggregates over 14 individual questions about immigrants, suggests that trade-exposed respondents are only 0.035 standard deviations more opposed to immigration compared to those insulated respondents. As we illustrate below, this is due to the richer support of questions pertaining to immigration, some of which are unrelated to trade shocks. Finally, there is weak evidence of a positive association between exposure to Chinese imports and our combined index of anti-globalization, which aggregates across three questions about the role of IOs. Importantly, there is no evidence of a significant correlation between the respondent's occupational risk measure and each of these bundles of views. In the next section, we investigate whether these predictors interact to predict variation in the anti-globalist bundle of views.

6.3 Insecurity and Import Exposure: Perceptions of Labor Market Risk

How do these components of labor market position – import exposure on the one hand, and occupational risk on the other – interact? Before turning to our exploration of the determinants of anti-globalist beliefs, we validate that our measure of occupational risk does indeed predict variation in the respondent's subjective evaluation of their labor market position. Specifically, we regress a battery of outcomes on the respondent's exposure to Chinese import competition, which we dichotomize to be 1 if the respondent works in an industry whose output competes with Chinese imports (i.e., a $\Delta IE_{nt} > 0$), and 0 otherwise.¹⁴ Approximately 1/5th of our respondents are defined as "exposed" according to this definition. We interact this trade exposure dummy with the individual's occupational risk measure, R_{jns}^i as defined in equation (1) above.

While no one question asks specifically about occupational risk, several questions are relevant to our validation exercise. Specifically, we focus on three types of questions – those pertaining to the individual's job, those pertaining to the individual's income, and those pertaining to the individual's overall satisfaction with her job, finances, and life in general.

We re-code each of these questions such that positive values corresponds to agreement with the panel titles displayed in Figure 3. Figure 3 presents the marginal effects plots (left panels) and un-interacted direct effects ("Comb. Est." in the right panel) of the relationship between individual-level exposure to Chinese import competition (y-axes) across varying levels of occupational risk (x-axes). Histograms denote the distribution logged occupational risk across respondents who answered each question. We shade the binned marginal coefficients by whether the interaction estimate is significant at the 95% confidence level. As illustrated, there is consistent evidence of the primary quantity of interest – individuals employed in import-competing industries are more pessimistic about their economic situation when their occupation is also more at risk.

These patterns reflect the validity of the economic measures we apply to the data, revealing consistent relationships between the attributes of the respondents' labor market conditions and their subjective views on the same. Importantly, it is only through the marginal effects that we can observe the important role played the interaction of these two predictors in several cases. The combined estimated relationship is a tightly estimated null for the questions on stress, income, the respondent's standard of living relative to her parents, and the two questions on overall satisfaction with her job and her finances. Yet for those most vulnerable to job loss, the marginal effects are as large as 4 times the magnitude of the combined estimate.

But what about the beliefs that are more abstract? Specifically what about those beliefs that carry more powerful political consequences?

¹⁴Results are substantively similar when using the continuous version of the individual-level import exposure. However, the distribution is dramatically skewed as the majority of respondents do not work in industries that compete with Chinese imports. Please see the SI for a more thorough discussion of this choice.



Combined Occupational Risk

Figure 3: Marginal effects (y-axes) of exposure to Chinese imports across standardized measures of occupational risk (x-axes) for a range of questions pertaining to the individual's subjective experience in the labor market.

6.4 Insecurity and Import Exposure: Anti-Globalization Views

We start with the summary outcome measures described above, aggregating over several different questions asked over the period of our analysis. We predict variation in these outcomes as a function of individual covariates, local factors, and the interaction between the respondent's exposure to Chinese imports (also dichotomized) and her occupational risk measure. Figure 4 plots the marginal relationships between anti-globalist views and import competition across the support of occupational risk.



Combined Occupational Risk

Figure 4: Marginal effects of individual import penetration exposure (y-axes) on a combined globalist opinions (panels) across levels of occupational risk (x-axes), R_{jns}^i . Black points indicate statistically significant interaction coefficients.

There is significant evidence that exposure to Chinese import competition prompts antiglobalist views on international trade and immigrants among individuals working in occupations at higher risk. The exception to these results is found in the aggregated index for anti-international organization views (right panel). While the combined effect of import competition is, as above, positive and marginally significant at the 90% confidence level, the marginal effects exhibit a null negative slope, indicating that occupational risk does not meaningfully influence negative views on international organizations among the import exposed respondents in our sample.

These results capture an anti-globalist sentiment that manifests not among those who have already lost due to globalization, but among those who are most threatened by it.¹⁵

6.5 Unpacking the Anti-Globalist Wave

The preceding results suggest that import exposure alone is insufficient to generate the antiglobalist wave currently seen sweeping advanced industrial democracies. The threat of import competition must be paired with labor market insecurity, which we measure using novel calculations of occupational risk.

However, the main results treat this anti-globalist wave in aggregate, looking only at summary indices of protectionism, xenophobia, and distrust of international organizations. Our data allow us to test more nuanced claims than these. Specifically, is xenophobia couched primarily in economic or cultural anxieties? Is disdain for NAFTA due primarily to skepticism

¹⁵We disaggregate the combined risk measure to its industry-based and location-based components in the Supporting Information, finding that neither is independently driving the dynamics of our results.

over free trade's benefits? Or does it better correspond to a more general resentment against participation in an international system that impugns US sovereignty?

To answer these questions, we disaggregate the summary variables back to their constituent questions. In all cases, we predict variation in these responses as a function of individual Chinese import exposure interacted with the full occupational risk measure that combines the state and industry dimensions. By looking at the responses to carefully-worded survey questions, we can explore the motivations and justifications for the increase in antiglobalist views we summarize above, starting with questions about immigration.

6.5.1 Views on Trade

We start with views on free trade, and compare respondents' views on free trade's benefits to their views on how trade agreements infringe on American sovereignty. As illustrated in Figure 5, skepticism over free trade's broad economic consequences (i.e., the net effect on jobs and its supply of better products) is stronger among those who are exposed to Chinese import competition. However, these opinions do not vary meaningfully across the support of the occupational risk measure (left-hand column). Conversely, there is much stronger evidence of occupational risk playing an important role in moderating the relationship between import exposure and beliefs about the qualities of the jobs that *are* lost and gained. Specifically, respondents with greater occupational risk are more likely to indicate that the jobs gained from free trade are worse than their current job, and those that are lost due to free trade are better.¹⁶

There is also some evidence that occupational risks exaggerates skepticism over free trade agreements, specifically NAFTA. Respondents exposed to import competition are much more skeptical of NAFTA's benefits to the United States when they are at greater occupational risk. The interactive result is similar but more noisily estimated when framed in terms of sovereignty, with trade-exposed respondents being more likely to indicate that America should not follow NAFTA decisions when they experience little occupational risk. Taken together, these results indicate that the interaction between occupational risk and import competition is connected with broad statements about the quality of jobs and the benefits (or lack thereof) of NAFTA. However, occupational risk does not meaningfully predict variation in skepticism over trade exposed respondents' assessments of the broad macroeconomic consequences of free trade.

6.5.2 Views on Immigrants

Next, we turn to views on immigrants, and examine whether the xenophobia documented above in the synthetic outcome is due primarily to economic or cultural concerns. As illustrated in Figure 6, we see strong evidence of xenophobia stemming from the former. Specifically, occupational risk is significantly (black) predictive of greater skepticism about the

¹⁶Both questions specify that these "better" or "worse" qualities are in terms of higher pay and better benefits.



Combined Occupational Risk

Figure 5: Marginal effects of individual-level trade exposure (y-axes) on beliefs about the economic consequences of free trade in the United States (top row) and the benefits of NAFTA (bottom row) across varying levels of occupational risk (x-axes). Black points indicate statistically significant interaction effects.

economic benefits of immigration. The one exception to these statistically significant results (gray) obtains for the belief that increased immigration leads to higher unemployment. While trade-exposed individuals are more likely to believe that immigrants take jobs away from Americans, they do not believe that these lost jobs translate to greater unemployment writ large.

Striking evidence of the economic concerns with immigrants may not be particularly surprising, given the predictors of occupational risk interacted with import competition. While free trade's losers do not have immigrants specifically to blame, their economic distress is attributable to foreign workers who either produce goods more cheaply or are the destination for offshored jobs. For individuals suffering from globalization's consequences in this manner, immigrants may be a particularly salient example of a foreign worker and are thus – unfairly – blamed for the economic problems created by a different set of foreign workers. We emphasize that these results are consistent with a misguided but instrumental motivation for the xenophobic dimension of the anti-globalist wave.

But there are other dimensions along which individuals may hold anti-globalist sentiments with respect to immigrants. One well-documented theory from the psychology literature holds



Figure 6: Marginal effects of individual-level trade exposure (y-axes) on beliefs about the economic consequences of immigration to the United States (top row), how public goods should be made accessible to immigrants (second row), the impact of immigrants on society (third row), and the impact of immigrants on American culture and identity (bottom row) across varying levels of occupational risk (x-axes). Black points indicate statistically significant interaction effects.

that out-group resentment is amplified under conditions of scarcity, as individuals compete over resources (Bianchi, Hall and Lee 2018, Krosch and Amodio 2014, Tajfel and Turner 1986, Tajfel et al. 1971). If this channel is active, we might expect to see increased xenophobia expressed in terms of competition over public goods, articulated in resentments against perceived claims on public goods. The second row of Figure 6 summarizes the marginal effects as above, this time focusing on a subset of survey questions interrogating xenophobia through the lens of unfair beneficiaries of government resources. As illustrated, there is consistent evidence of this dimension of xenophobia, with trade exposed individuals being significantly more likely to express resentment against the perceived special treatment of immigrants in the United States. This is consistent with psychological theories of out-group antipathy motivated by competition over scarce resources.

The bottom two rows of Figure 6 summarize the results for skepticism over the contributions made by immigrants to American society (third row) and identity-based views on how immigrants threaten American culture and identity (bottom row). Here we find weaker evidence of a systematic relationship between occupational risk, import competition, and beliefs. While there are some patterns, they are too few to draw generalizable conclusions from.

6.5.3 Views on International Organizations

These varying dimensions of xenophobia get at the underlying nativist component of free trade's losers in the United States. Unfortunately, there are far fewer detailed questions on the topic of international organizations, precluding our ability to dig into the constituent parts of these beliefs to the same level of detail. We look at three topics in Figure 7, none of which suggest a systematic interaction between individual-level trade shocks, occupational risk, and views of the organizations and corporations participating in globalization writ large. There is suggestive evidence that at-risk respondents that compete with Chinese imports are more likely to believe that international organizations take away too much power, even weaker evidence that multinational corporations damage local US business. However, the respondents' occupational risk measure is an insignificant moderator of these relationships.

7 Discussion

The relationship between exposure to free trade's negative consequences and political beliefs about free trade are moderated by an individual's occupational risk. We show that individuals in industries facing a high degree of import penetration exhibit more negative opinions about free trade agreements. But importantly, we show that these reactions are stronger among those who face greater occupational insecurity.

We calculate job insecurity or vulnerability as a combination of job specificity and job availability. When disaggregated, these dimensions of occupational risk somewhat predict



Combined Occupational Risk

Figure 7: Marginal effects of individual-level trade exposure (y-axes) on beliefs about international organizations (panels) across varying levels of occupational risk (x-axes). Black points indicate statistically significant interaction effects.

heterogeneity in the relationship between opinions and trade exposure. But the strongest moderating effects come when the dimensions are combined.

These results highlight the importance of expanding our understanding of who wins and loses under free trade. Exposure to trade's negative consequences can influence the policy preferences that define the microfoundations of trade's political economy. But this exposure interacts with an individual's occupational risk profile in important ways. This understanding augments the conventional wisdom about the political economy of trade by redefining both who reacts to trade's effects, and how strongly they react.

Our findings also reveal more precisely the degree to which the backlash against globalism is entwined with baser beliefs about identity, citizenship, and culture. We document striking patterns between the threat of economic dislocation due to import competition and beliefs that are adjacent to, but extend beyond, the economic concerns with free trade, international organizations, and immigrants. Put bluntly, those who are hurt by globalization hold more nativist views, ranging from the qualities that define an American citizen to the anxiety that foreign cultures erode our own.

We argue that the patterns we document are causal in the sense that our respondents confront unforeseen labor market threats. Yet we emphasize that, even in the absence of causal claims, these descriptive patterns are striking. In our data, free trade's potential (and not necessarily actual) losers adhere to a worldview of eroding American power, the decline of American culture, and the powerlessness of American sovereignty. While our empirical results remain circumscribed to the United States at the turn of the 21st century, we argue that they capture a common pattern across advanced industrial democracies. We believe our picture of how economic dislocation leads to rising nativism presents a serious challenge to the liberal world order.

References

- Acemoglu, Daron and David Autor. 2011. Skills, Tasks and Technologies: Implications for Employment and Earnings. In *Handbook of Labor Economics*, ed. Orley Ashenfelter and David card. Vol. 4B San Diego, CA: Elsevier pp. 1043–171.
- Alkon, Meir. 2017. Local Sociotropism: How Community Variation in Trade Exposure Affects Voter Demands. Technical report Princeton University Working Paper. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3103852
- Autor, David. 2013. "The "task approach" to labor markets: an overview." Journal for Labour Market Research 46(3):185–199.
- Autor, David, David Dorn and Gordon H Hanson. 2013a. "The China syndrome: Local labor market effects of import competition in the United States." The American Economic Review 103(6):2121–2168.
- Autor, David, David Dorn, Gordon Hanson and Kaveh Majlesi. 2016a. "Importing Political Polarization? The Electoral Consequences Of Rising Trade Exposure." NBER Working Papers (22637).
- Autor, David, David Dorn, Gordon Hanson and Kaveh Majlesi. 2016b. Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. Working Paper 22637 National Bureau of Economic Research.
 URL: http://www.nber.org/papers/w22637
- Autor, David H., David Dorn and Gordon H. Hanson. 2013b. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." American Economic Review 103(6):2121–2168.
- Autor, David H, Frank Levy and Richard J Murnane. 2003. "The skill content of recent technological change: An empirical exploration." The Quarterly journal of economics 118(4):1279–1333.
- Baccini, Leonardo and Thomas Sattler. 2020. "Austerity, Economic Vulnerability, and Populism.".
- Baker, Andy. 2005. "Who wants to globalize? Consumer tastes and labor markets in a theory of trade policy beliefs." *American Journal of Political Science* 49(4):924–938.
- Ballard-Rosa, Cameron, Mashail Malik, Stephanie Rickard and Kenneth Scheve. 2017. The economic origins of authoritarian values: evidence from local trade shocks in the United Kingdom. In Annual Meeting of the International Political Economy Society, Nov. pp. 17– 18.

- Bianchi, Emily C, Erika V Hall and Sarah Lee. 2018. "Reexamining the link between economic downturns and racial antipathy: Evidence that prejudice against blacks rises during recessions." *Psychological science* 29(10):1584–1597.
- Bisbee, James. 2018. What is out your back door: How policy preferences respond to local trade shocks. Technical report.URL: jamesbisbee.com
- Bó, Ernesto Dal, Frederico Finan, Olle Folke, Torsten Persson and Johanna Rickne. 2020."Economic and Social Outsiders but Political Insiders: Sweden's Radical Right.".
- Cameron, David R. 1978. "The Expansion of the Public Economy: A Comparative Analysis." The American Political Science Review 72:1243–1261.
- Cerrato, Andrea, Federico Maria Ferrara and Francesco Ruggieri. 2018. "Why does import competition favor republicans.".
- Colantone, Italo and Piero Stanig. 2018a. "The Economic Determinants of the 'Cultural Backlash': Globalization and Attitudes in Western Europe." BAFFI CAREFIN Center Research paper (2018-91).
- Colantone, Italo and Piero Stanig. 2018b. "The trade origins of economic nationalism: Import competition and voting behavior in Western Europe." American Journal of Political Science 62(4):936–953.
- Dancygier, Rafaela M. and Stefanie Walter. 2015. Globalization, Labor Market Risks, and Class Cleavages. In *The Politics of Advanced Capitalism*, ed. Pablo Baramendi, Silja Häusermann, Herbert Kitschelt and Hanspeter Kriesi. Cambridge University Press pp. 133– 56.
- Dippel, Christian, Robert Gold and Stephan Heblich. 2015. "Globalization And Its (Dis-)Content: Trade Shocks And Voting Behavior." NBER Working Papers (21812).
- Ehrlich, Sean and Cherie Maestas. 2010a. "Risk orientation, risk exposure, and policy opinions: The case of free trade." *Political Psychology* 31(5):657–684.
- Ehrlich, Sean and Cherie Maestas. 2010b. "Risk Orientation, Risk Exposure, and Policy Opinions: The Case of Free Trade." *Political Psychology* 31(5):657–684.
 URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9221.2010.00774.x
- Ember, Carol R. and Melvin Ember. 1992. "Resource Unpredictability, Mistrust, and War: A Cross-Cultural Study." Journal of Conflict Resolution 36(2):242–262.
 URL: https://doi.org/10.1177/0022002792036002002

- Feigenbaum, James J. and Andrew B. Hall. 2015. "How Legislators Respond to Localized Economic Shocks: Evidence from Chinese Import Competition." The Journal of Politics 77(4):1012–1030.
- Foster, Chase and Jeffry Frieden. 2017. "Crisis Of Trust: Socio-Economic Determinants Of Europeans' Confidence In Government." European Union Politics https://doi.org/10.1177/1465116517723499.
- Goos, Maarten, Alan Manning Anna Salomons. 2014. "Explaining job polarization: Routine biased technological change and offshoring." *American Economic Review* 104(8):Goos, Maarten, Alan Manning, and Anna Salomons (2014). Explaining job polarization: Routinebiased 2509–26.
- Guisinger, Alexandra. 2009. "Determining trade policy: Do voters hold politicians accountable?" International Organization 63(03):533–557.
- Guisinger, Alexandra. 2017. American Opinion on Trade: Preferences without Politics. Oxford University Press.
 URL: DOI:10.1093/acprof:oso/9780190651824.001.0001
- Guisinger, Alexandra and Elizabeth N. Saunders. 2017. "Mapping the Boundaries of Elite Cues: How Elites Shape Mass Opinion across International Issues." International Studies Quarterly 61(2):425–441.
 URL: https://doi.org/10.1093/isq/sqx022
- Guisinger, Alexandra and Ryan Brutger. 2021. "Framing Layoffs: Media Coverage, Blame Attribution, and Trade-Related Policy Responses." *GRIPE Webinar*.
- Hacker, Jacob S., Gregory A. Huber, Austin Nichols, Philipp Rehm, Mark Schlesinger, Rob Valletta and Stuart Craig. 2014. "The Economic Security Index: A New Measure for Research and Policy Analysis." *Review of Income and Wealth* 60(S1):S5–S32. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/roiw.12053
- Hays, Jude, Junghyun Lim and Jae-Jae Spoon. 2019. "The path from trade to right-wing populism in Europe." *Electoral Studies* 60:102038.
 URL: http://www.sciencedirect.com/science/article/pii/S0261379418303779
- Jensen, J Bradford, Dennis P Quinn and Stephen Weymouth. 2017. "Winners and Losers in International Trade: The Effects on US Presidential Voting." *International Organization* pp. 1–35.
- Kaihovaara, Antti and Zhen Jie Im. 2020. "Jobs at risk? Task routineness, offshorability, and attitudes toward immigration." European Political Science Review 12(3):327–345. URL: https://doi.org/10.1017/s1755773920000144

- Kitschelt, Herbert and Philipp Rehm. 2014. "Occupations as a Site of Political Preference Formation." Comparative Political Studies 47(12):1670–1706.
 URL: https://doi.org/10.1177/0010414013516066
- Krosch, Amy R and David M Amodio. 2014. "Economic scarcity alters the perception of race." *Proceedings of the National Academy of Sciences* 111(25):9079–9084.
- Malhotra, Neil, Yotam Margalit and Cecilia Hyunjung Mo. 2013. "Economic explanations for opposition to immigration: Distinguishing between prevalence and conditional impact." *American Journal of Political Science* 57(2):391–410.
- Mansfield, Edward D. and Diana C. Mutz. 2009. "Support for free trade: Self-interest, sociotropic politics, and out-group anxiety." *International Organization* 63(03):425–457.
- Mansfield, Edward D. and Diana C. Mutz. 2013. "US versus them: Mass attitudes toward offshore outsourcing." *World Politics* 65(04):571–608.
- Margalit, Yotam. 2011. "Costly jobs: Trade-related layoffs, government compensation, and voting in US elections." American Political Science Review 105(01):166–188.
- Margalit, Yotam. 2012. "Lost in Globalization: International Economic Integration and the Sources of Popular Discontent1." International Studies Quarterly 56(3):484–500.
 URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2478.2012.00747.x
- Margalit, Yotam. 2019. "Economic Insecurity and the Causes of Populism, Reconsidered." Journal of Economic Perspectives 33(4):152–70.
 URL: https://www.aeaweb.org/articles?id=10.1257/jep.33.4.152
- Milner, Helen V. 2018. Globalization and its Political Consequences: The Effects on Party Politics in the West. American Political Science Association Annual Meetings.
- Milner, Helen V. 2021. Voting for populism in Europe: globalization, technological change, and the extreme right. In Conference on Frontiers in Comparative and Political Economy, London School of Economics and Political Science, London, UK.
- Mutz, Diana C. 2018. "Status threat, not economic hardship, explains the 2016 presidential vote." Proceedings of the National Academy of Sciences 115(19):E4330-E4339.
 URL: https://www.pnas.org/content/115/19/E4330
- Naoi, Megumi and Ikuo Kume. 2015. "Workers or Consumers? A Survey Experiment on the Duality of Citizens' Interests in the Politics of Trade." *Comparative Political Studies* 48(10):1293–1317.
- Notowidigdo, Matthew J. 2011. The incidence of local labor demand shocks. Technical report National Bureau of Economic Research.

- Osgood, Iain. 2016. "Differentiated Products, Divided Industries: Firm Preferences Over Trade Liberalization." *Economics & Politics* 28(2):161–180.
- Owen, Erica. 2020. "Firms vs. Workers? The Politics of Openness in an Era of Global Production and Automation." *GRIPE Webinar*.
- Owen, Erica and Dennis P. Quinn. 2016. "Does Economic Globalization Influence the US Policy Mood?: A Study of US Public Sentiment, 1956–2011." British Journal of Political Science 46(01):95–125.
- Owen, Erica and Noel P Johnston. 2017a. "Occupation and the political economy of trade: Job routineness, offshorability, and protectionist sentiment." *International Organization* 71(4):665–699.
- Owen, Erica and Noel P. Johnston. 2017b. "Occupation and the Political Economy of Trade: Job Routineness, Offshorability, and Protectionist Sentiment." *International Organization* 71(4):665–699.
- Owen, Erica and Stefanie Walter. 2017. "Open economy politics and Brexit: insights, puzzles, and ways forward." *Review of International Political Economy* 24(2):179–202. URL: https://doi.org/10.1080/09692290.2017.1307245
- Rehm, Philipp. 2009. "Risks and Redistribution: An Individual-Level Analysis." Comparative Political Studies 42(7):855–881.
 URL: https://doi.org/10.1177/0010414008330595
- Rho, Sungmin and Michael Tomz. 2015. Why Don't Trade Preferences Reflect Economic Self–Interest?'. Technical report Working Paper, Stanford University.
- Ritchie, Melinda N. and Hye Young You. 2020. "Trump and Trade: Protectionist Politics and Redistributive Policy." The Journal of Politics . URL: https://doi.org/10.1086/710322
- Rodrik, Dani. 1995. "Political economy of trade policy." *Handbook of international economics* 3(3):1457–1494.
- Rodrik, Dani. 1998. "Why do More Open Economies Have Bigger Governments?" Journal of Political Economy 106(5):997–1032.
- Rogowski, Ronald. 1987. "Political Cleavages and Changing Exposure to Trade." The American Political Science Review 81(4):1121–1137. URL: http://www.jstor.org/stable/1962581
- Rommel, Tobias and Stefanie Walter. 2018. "The Electoral Consequences of Offshoring: How the Globalization of Production Shapes Party Preferences." *Comparative Political Studies*

- Ruggie, John Gerard. 1982. "International Regimes, Transactions and Change: Embedded Liberlism in the Postwar Economic Order." International Organization 36(2):379–415.
- Scheve, Kenneth F. and Matthew J. Slaughter. 2001. "What determines individual tradepolicy preferences?" Journal of International Economics 54(2):267–292.
- Sides, John, Michael Tesler and Lynn Vavreck. 2018. *Identity crisis: The 2016 presidential campaign and the battle for the meaning of America*. Princeton University Press.
- Stolper, Wolfgang and Paul A. Samuelson. 1941. "Protection and Real Wages." Review of Economic Studies 9(58-73).
- Tajfel, Henri and John C. Turner. 1986. The Social Identity Theory of Intergroup Behavior. Chicago: Hall pp. 7–24.
- Tajfel, Henri, Michael G Billig, Robert P Bundy and Claude Flament. 1971. "Social categorization and intergroup behaviour." *European journal of social psychology* 1(2):149–178.
- Thewissen, Stefan and David Rueda. 2019. "Automation and the Welfare State: Technological Change as a Determinant of Redistribution Preferences." *Comparative Political Studies* 52(2):171–208.

URL: https://doi.org/10.1177/0010414017740600

Walter, Stefanie. 2017. "Globalization and the demand-side of politics: How globalization shapes labor market risk perceptions and policy preferences." *Political Science Research* and Methods 5(1):55–80.