Migration, Social Ties, and Political Preferences[*]

William Marble[†]   Junghyun Lim[‡]

September 2023

Abstract

Why have economically declining regions turned toward right-wing parties? To explain this puzzling phenomenon, we develop a theory linking internal migration, localized social institutions (e.g., family and friend networks), and voters' preferences for social insurance. We start with the observation that social ties provide insurance against adverse life events, such as job loss, and highlight two implications. First, those with strong social networks prefer lower spending on social insurance, because they have access to informal insurance that acts as a substitute for public programs. Second, social ties discourage people from moving, even when better economic opportunities are available in other regions. Combining these mechanisms, we argue that the effect of economic shocks on a region's politics depends on the strength of social ties. Regions with dense social ties have muted migratory responses to negative shocks relative to regions with weaker ties. Further, those who remain in declining regions are more conservative than those who migrate — resulting in an electorate with lower demand for social insurance. Macro-level analysis of American election results, import shocks, and migration data provide empirical support for the theory's predictions. An original survey corroborates the micro-level mechanisms. The results have important implications for understanding right-wing populist support in economically declining regions in the U.S. and other post-industrial countries.

[†]Director of Data Science, Program for Opinion Research and Election Studies, University of Pennsylvania. Email: marblew@upenn.edu.

[‡]Assistant Professor, Department of Political Science, University of North Carolina at Chapel Hill Email: junglim@unc.edu.

Economic changes induced by trade and automation have led to a reshuffling of the economic geography in advanced industrial economies. Formerly industrial areas that relied on manufacturing have lost factories, jobs, and entire industries, while urban "knowledge economy" industries have thrived (Autor, Dorn and Hanson, 2013). At the same time, these declining areas, largely exurban and rural, have become reliable supporters of the Republican Party in the United States and of right-wing parties in Western Europe (Rodden, 2019; Colantone and Stanig, 2018; Ballard-Rosa, Scheve and Jensen, 2021; Autor et al., 2020). Why have right-wing parties found support in economically declining regions?

From a traditional political economy perspective, this pattern is puzzling. If economic decline reduces the income of people in a region relative to the country as a whole, we would expect people in that region to vote for more redistribution (Meltzer and Richard, 1981). Yet, the places hardest hit by negative economic shocks have become increasingly supportive of right-wing parties.

We propose that patterns of selective migration contribute to the rightward shift in declining regions. Economic decline has led to population losses in many places, but the migratory response to economic shocks is surprisingly muted (Autor, Dorn and Hanson, 2013; Joan Monras, 2020). Instead of "moving to opportunity," many people stay behind in economically stagnant regions. A key reason is that moving often requires sacrificing one's social network. People are tied to family, friends, and community groups near them, and moving means being torn away from these social ties. Migrating to a more prosperous region might open up new economic opportunity, but the cost of losing social ties is often high enough to keep people in place (Koşar, Ransom and van der Klaauw, 2021; Diamond, 2016).

We develop a political economy theory that links these social ties to migration decisions and political preferences. We begin with the observation that people rely heavily on their social networks — family, friends, and community — to help them when they fall on hard times. There are two implications that combine to explain the rightward swing in economically declining regions. First, people with stronger social ties tend to be more economically

conservative than otherwise similar people with weaker social ties, due to a substitution effect between formal and informal social insurance. Second, people with strong social ties to a region are less likely to migrate in response to economic decline than people with weaker ties. These two empirically grounded facts, together, indirectly generate selective migration along political lines. The people who move away from declining areas, on average, are more economically liberal than those with similar incomes who stay behind — consistent with the observed macro-level correlation between economic decline and right-wing voting.

We build this intuition into a formal model of preferences for social insurance. The model features government social insurance in the form of transfers to the unemployed, along with heterogeneous levels of informal social insurance provided by one's family. Agents decide what region to live in and their preferred level of redistributive spending. Their policy preferences depend, in part, on the amount of social support they can expect should they become unemployed. The model formalizes the predictions discussed above. The informal safety net acts as a substitute for government social insurance. People who can expect more generous informal social insurance prefer lower taxes and thus a less generous welfare state. Further, people in declining regions migrate to a more prosperous region only when their informal social insurance is sufficiently low. Conversely, the people who stay behind have stronger social networks — and thus more conservative political preferences.

We test the theory using aggregate-level panel data from the U.S. on elections, migration, and economic shocks. To investigate micro-level mechanisms, we supplement the macro-level analyses with data from an original survey.

In our aggregate analyses, we bring together data on voting in U.S. presidential elections, migration patterns, and exposure to import competition from China. We proxy for the density of social ties with the proportion of people living in a region who were born in the same state.[1] Using this measure, we document a number of patterns consistent with the theory. First, cross-sectionally, we find that regions with high levels of social ties are more

---

[1] We validate this measure in a subset of the data by comparing it to theoretically grounded measures of social ties that are available over short time spans.

Republican than places with lower levels of social ties. Second, we find that the effect of economic shocks on voting outcomes varies across regions according to the density of local social ties. High-tie regions hit by the China shock increased their support for Republicans, while low-tie regions show either no change in voting patterns or an increase in Democratic support, depending on the specification. Third, we find that economic shocks result in relatively muted migratory responses in high-tie places — consistent with selective migration according to the strength of social ties.

To corroborate the key individual-level mechanisms in the theory, we field an original survey that contains measures of social insurance preference, social ties, and migration intentions. We find that survey respondents who have stronger local ties are more conservative than people with weaker local ties — consistent with a substitution effect between formal and informal social insurance. Additionally, those with stronger local ties are less likely to consider moving to a new area.

This paper contributes to a growing literature on the support of right-wing populists in economically stagnant regions in the United States and Europe. A prominent explanation for this pattern focuses on cultural issues, such as race, immigration, and norms about gender and sexuality (Sides, Tesler and Vavreck, 2019; Schaffner, MacWilliams and Nteta, 2018; Mutz, 2018; Baccini and Weymouth, 2021; Ballard-Rosa et al., 2017; Ballard-Rosa, Scheve and Jensen, 2021). By this cultural account, economic hardship may increase the salience of status concerns among majority group members, causing them to vote for culturally conservative politicians (Shayo, 2009).

What is less clear in this account is why the populist backlash to economic decline has been associated with right-wing economic policy. One possibility is that historical path dependency has led parties to bundle traditional cultural values with small-government economic ideology (Rodden, 2019; Hacker and Pierson, 2020). As a result of this issue bundling, increased cultural conservatism can generate decreased support for parties that seek to expand the safety net.

Our theory provides a complementary political economy account that explains why appeals for redistribution and safety net spending might fall flat. Rather than focusing on broad social groups, our explanation focuses on the important risk-sharing function of small-scale social networks. Economically declining regions end up with social arrangements that facilitate informal social insurance, which makes the universalist safety net policies advanced by left-wing parties relatively less attractive. This dynamic is reflected in a growing communitarian undercurrent in Western conservatism that privileges traditional social institutions — such as family and religion — over government in promotion of the commonweal (Deneen, 2019). Commentators and politicians in this movement argue that the welfare state undermines traditional family structures and prefer that state resources instead go to policies explicitly aimed at strengthening these social arrangements.

The remainder of the paper is structured as follows. First, we review prior research that motivates our theory. In Section 2, we present the formal model and discuss empirical implications. In Section 3, we discuss the data we use to test the theoretical predictions. Sections 4 and 5 respectively present aggregate- and individual-level evidence on the relationship between political preferences, economic shocks, social ties, and migration. Finally, in Section 6 we discuss our results and conclude.

1 Theoretical and Empirical Motivation

We propose a stylized theory that brings together three phenomena: informal social networks, internal migration, and political preferences. Our starting point is the observation that people's residential choices and their political preferences are informed by the social arrangements in their life. The core of our argument is that people who migrate away from regions in economic decline are systematically different from people who stay behind, due to a preference for living near friends and family. This selective migration, which is based on social concerns, indirectly generates selective migration along political lines. The reason is

that strong social networks can substitute for government social insurance: those who stay behind, due to their local social network strength, are more conservative than those who move away. In this section, we motivate this theory by discussing prior research linking local social ties to political preferences and to migration decisions.

1.1 Social Ties and Political Preferences

What relevance do social ties have for economic policy preferences? Social networks provide an important buffer for people against negative economic shocks. People often turn to family, friends, and community when they experience an adverse life event such as job loss or illness. This informal, private social insurance may lead people to demand less social insurance from the state.

There is both theoretical and empirical support for this hypothesis. Americans tend to rely more on social networks, rather than government support, when they fall on hard times. A 2013 public opinion poll found that 50% of Americans say it is better for families who fall on hard times to rely on "friends, family, their church or other charitable organizations," compared to just 35% who say it is better to rely on "government programs such as food stamps and welfare."[2] Similarly, in a survey fielded during the Great Recession, Hacker, Rehm and Schlesinger (2013) find that more than a quarter of people, across the socioeconomic ladder, have spent a significant sum of money helping extended family members weather hard times. The norm of reliance on social networks for private social insurance is thus widely held.

These social expectations and arrangements matter for political preferences. In the same survey, Hacker, Rehm and Schlesinger (2013) find that individuals with more robust private safety nets exhibit lower support for public social insurance, even after accounting for personal worries about economic shocks, income, and expectations about macroeconomic conditions.

---

[2]Fox News Poll. 2013. Question 9: USASFOX.080713.R24. Cornell University, Ithaca, NY: Roper Center for Public Opinion Research. https://doi.org/10.25940/ROPER-31113262.

Theoretical and empirical work in economics also suggests a substitution effect between private and public insurance. For example, Di Tella and MacCulloch (2002) present a model in which state spending on social insurance crowds out family-based informal social insurance. Lin, Liu and Meng (2014) report evidence from a laboratory experiment consistent with this crowding out mechanism. This work focuses on the effect of policy on social arrangements, but the underlying logic suggests that social arrangements reciprocally influence policy preferences.

Another strand of literature documents the role of churches and religion in the formation of preferences for social insurance. Generally, more-religious people tend to be better integrated into their communities — that is, have stronger social ties — than less-religious people (Putnam and Campbell, 2010). Additionally, prior research documents a negative correlation between religiosity and preferences for social insurance and redistribution. There are several explanations for this observation.

The first explanation centers on the role of religious institutions as a provider of private social insurance for their members. Historical church-state competition over welfare provision may push religious individuals toward conservative economic policy (Stegmueller, 2013). Similarly, the social structure of churches opens the door to group-based social insurance that may crowd out demand for state provision of social insurance (Huber and Stanig, 2011). Many churches provide social services such as childcare, soup kitchens, and housing support to their members and to the broader community.[3] Empirical support for the negative relationship between religiosity and social insurance preferences is found using survey data from Western Europe (Huber and Stanig, 2011; Stegmueller, 2013)

A second mechanism for the negative correlation between religiosity and support for the welfare state is psychological. Scheve and Stasavage (2006) suggest that religion provides psychic benefits that enable people to cope with adverse life events more effectively. Equivalent decreases in income result in less subjective utility loss among the religious, who may

---

[3]Just as in the case of intrafamily social insurance discussed above, there is well-identified evidence that public social insurance crowds out the charity activities of churches (Hungerman, 2005).

therefore prefer higher levels of social insurance from the state. This logic should extend to other social networks as well. Social connection enables people to weather negative shocks, potentially reducing demand for government assistance.

In sum, there are both material and psychological benefits that accrue to those with strong social ties. These benefits may help insure people against adverse life events, and thus act as a substitute for government provision of social insurance. Those with strong social ties, therefore, may be more economically conservative than those with weaker social ties.

1.2   Social Ties and Economic Geography

Research on economic geography has long emphasized the role of migration. The workhouse models of urban and regional economics consider how workers choose where to live, based on the wages, rents, and amenities accessible in different regions (Rosen, 1979; Roback, 1982). The core insight of this literature is that when people are able to obtain higher wages in some regions than others — either due to exogenous advantages such as natural resource endowments or endogenous reasons related to agglomeration effects — workers will choose to migrate. The increased labor supply pushes wages down and housing prices up in the "receiving" region, while having the opposite effects in the "sending" region. This migration process continues until real income is equalized across regions.[4]

In reality, there are persistent differences across regions in economic well-being — both due to persistence in economic shocks and how people can respond to them (Amior and Manning, 2018). Recent economics research has focused on the role that local attachments play in muting migration. About half of people nationwide cite proximity to family and friends as an important reason not to move. In a survey experiment, Koşar, Ransom and van der Klaauw (2021) find that people are willing to forego large increases in earnings so they can live near family. Similarly, using observational data, Diamond (2016) finds that

---

[4]For accessible introductions to this literature, see Glaeser and Gottlieb (2009) and Kline and Moretti (2014).

people have a strong preference to live in their home state. College-educated workers are more than three times more likely to live in a metro area in their home state (relative metro areas outside their home state), while non-college-educated workers are over 4 times as likely to live in their home state.

This micro-level preference for living near one's family and friends has important macro-level consequences when it comes to how a region responds to economic shocks. Zabek (2019) finds that places with high levels of social ties — as proxied by the share of the population born in-state — have muted migratory responses to economic shocks. The migration response to economic shocks is about four times higher in places with low levels of social ties.[5]

These patterns suggest that non-economic considerations substantially affect American economic geography and help explain persistent decline.[6] They also suggest interesting heterogeneity in terms of who decides to remain in economically stagnant places, and as a result the composition of ascendant places. The people who are most likely to remain in a place, despite dwindling economic opportunity, are those who have non-economic reasons to stay there. Often, they grew up in the area and have social ties — family, friends, and community — that they are unwilling to break to "move to opportunity." On the other hand, transplants who move to a new area to pursue a career are likely to have weaker ties to the region.

2   Theory

We formalize the arguments discussed above in a stylized model of social insurance and mobility. The model describes how migration choices depend on both formal and informal social insurance. A key mechanism in the model is the substitutability between government and informal social insurance. When informal social insurance is high, it both decreases the

---

[5]We replicate this result in Section 4.

[6]Comparative research also finds that social networks have important effects on migration. For example, Munshi and Rosenzweig (2009) argue that mobility in India is low because migration entails sacrificing access to caste-based informal social insurance.

incentive to move and depresses people's demand for government safety net.

The model has two regions: one "rich" region and one "poor" region, which are differentiated by the wages earned by people living in each region.[7] People in the model decide which region to live in when they are young, taking into account the wages they can earn and the possibility that they become unemployed. If they become unemployed, they receive a government transfer funded by taxes on the employed. Additionally, if they live in the region where they were born, their family can provide some additional support, partially offsetting the utility loss from being unemployed.

This setup provides the key tension: people born into the poor region would like to move to access better job opportunities. But in order to access this increased earnings potential, they must sacrifice the informal safety net that comes from living near family. For people who expect low levels of social support — perhaps because they have a weak social network — moving is worth it. However, for people with high levels of social support, the insurance value of living near family means that they are better off staying in the poor region — even though their market wage is lower. This dynamic indirectly generates selective migration according to political preferences, since social ties substitute for safety net spending. The people who move away from declining regions are those who prefer the highest levels of safety net spending, while those who remain prefer a smaller government.

2.1 The Economic Environment

There are two generations in society, young and old, each with unit mass. Each person is born into either region A or region B. We assume that one region is relatively rich and the other is relatively poor, due to unequal economic opportunities. Region A is the rich region; employed workers there earn wage y_A. Region B is the "poor" region; employed workers there

---

[7]To highlight our mechanisms of interest, we treat the prevailing wages in each region as exogenous. This is in contrast to models in economics, which treat wages as equilibrium outcomes of the migration process. However, as noted previously, equilibrium adjustments are slow processes, generating persistent differences in economic opportunity across regions (Amior and Manning, 2018). We might thus interpret our model as investigating political dynamics before the economy fully adjusts.

earn y_B, which is less than y_A. Each young worker has exogenous probability $\alpha \in [0, 1]$ of being employed, where α is common across regions. With complementary probability $1 - \alpha$, they are unemployed. For simplicity, we assume that every member of the older generation is always employed and therefore earns either y_A or y_B depending on where they live.

In addition to differences in economic opportunity, the two regions also differ in population. Denote the share of young people who live in Region A by σ^k, with complementary share living in Region B. The analogous share of the older population is denoted by σ^o. The spatial distribution of population is important because it determines the overall output of the economy — the "size of the pie" that could be redistributed.[8] Total income in society, denoted Y, is a weighted sum of incomes in regions A and B, where the weights depend on the population shares and employment probability. Total income is

$$Y := \alpha \big[\sigma^k y_A + (1 - \sigma^k) y_B \big] + \sigma^o y_A + (1 - \sigma^o) y_B.$$

The government collects a proportional tax $\tau \in [0, 1]$ and redistributes the sum to unemployed people. Total tax revenue is τY, which is distributed equally among unemployed people. Every young person has probability $1 - \alpha$ of becoming unemployed, so each unemployed person receives a transfer of $G(\tau, Y) = \frac{\tau Y}{1-\alpha}$.

2.2   Agents, Actions, and Preferences

Each agent lives for two periods. When people are young, they decide which region to settle in, and then they work. If they are employed — which occurs with probability α — they receive the prevailing wage in the region where they live. If they are unemployed, they receive the government transfer G and potentially a transfer from their family (which we will specify shortly). They then consume all of their income.

In the second period, when people are old, they remain in the same region and work, receiving the prevailing wage in their region with no risk of unemployment. Additionally,

---

[8]This feature of the model is consistent with results in the economic geography literature. An important finding is that the spatial distribution of workers has consequences for the size of the macro economy. For example, Hsieh and Moretti (2019) find that spatial misallocation due to limited housing supply has significantly reduced GDP over the past half-century.

they have a child, who themselves chooses where to live. If the child remains in their home region (where the parent lives) and become unemployed, the parent gives a share of their income to support the child. The amount of the parent's income that they will give to an unemployed child is governed by their generosity, which we denote $\beta \in [0, 1]$. We can interpret β as one's views on how much of a safety net families ought to provide. A low β might correspond to the view that kids must learn to make it on their own, while a high β might correspond to the view that families have an obligation to take care of each other.[9] Children know their parent's level of generosity when making location decisions.

The only strategic actors in the model are kids. They must choose where to live: either at home in the same region as they were born (and where their parent lives), or in the other region. They make this decision based on: (1) the economic opportunities available in each region, which depend on incomes y_A and y_B, along with the odds of finding a job α; (2) the generosity of government unemployment insurance G, which is a function of the tax rate τ; (3) their parents' generosity β.

We assume that people consume their entire per-period income and that their utility is given by the log of their consumption. Thus, we can write down the expected utility for young people living in their h̲ome and the a̲way regions as follows:

$$V^h = \alpha \log((1 - \tau)y_h) + (1 - \alpha) \log(G + \beta(1 - \tau)y_h)$$

$$V^a = \alpha \log((1 - \tau)y_a) + (1 - \alpha) \log(G).$$

(1)

These expressions are interpreted as follows. With probability α, an agent earns income y_h or y_a (depending on whether they choose to live in the home or away region), which is taxed at rate τ. With probability $1 - \alpha$, they become unemployed and consume the government transfer G. Additionally, if they live in the home region, they also consume the parental subsidy, which is a share β of their parent's post-tax income.

---

[9]Less formally, we might also think of it as encompassing heterogeneous limits on the ability of a parent to support their child in hard times — e.g., due to different resource endowments or other life circumstances.

Table 1: Summary of Model Parameters

Paramter	Interpretation
y_A, y_B	Income in the rich and poor region (resp.)
σ^k, σ^o	Share of young and old (resp.) in the rich region A
α	Probability of employment when young
Y	Total income in society
τ	Tax rate
G	Government transfer to unemployed
β	Parental generosity

When they are young, agents choose to live in the region that maximizes their expected utility, taking into account the the tax rate, their parent's generosity, and the economic opportunities afforded by each region. Additionally, we assume that agents are myopic when making their location decision. This is a two-part bounded-rationality assumption:

Assumption 1 (Myopia) *(a) People choose their location taking into account only their expected consumption when they are young. (b) People choose their location taking the population of the two regions as a given.*

Part (a) simplifies analysis by allowing us to ignore the next-period effects of residential choice. That is, we can ignore the effect the kid's choice has on their own future kid's residential choice. Part (b) implies that individuals do not think about migration decisions of other young people. This assumption simplifies analysis of government tax preferences and is consistent with behavioral research finding that people often fail to take equilibrium effects into account when making decisions (Dal Bó, Dal Bó and Eyster, 2017).

2.3 Model Discussion

The model's parameters and interpretation are summarized in Table 1. Before turning to the model's results, we briefly summarize the model setup and comment on several features of the model.

The role of government in the model is solely to insure people against negative income

shocks (i.e. unemployment). This has a redistributive effect in that it transfers resources away from those making an income and toward those without an income, but there are no transfers between people who receive a market income. This limited government is meant to isolate the social insurance mechanism of public policy, in the spirit of other political economy work on social insurance (e.g., Moene and Wallerstein, 2001; Scheve and Stasavage, 2006; Rehm, 2016).

The core feature of the model is the fact that people decide whether to "move to opportunity" early in life. This decision is governed by the economic opportunity afforded in the other region, weighed against the risk of experiencing unemployment.

A key assumption is that moving entails sacrificing a safety net afforded by one's parents. In the model, this is an all-or-nothing tradeoff, but it corresponds more generally to the idea that parents can provide support to their kids more effectively when they are geographically close by. For example, parents could provide housing if their child becomes unemployed and loses their housing, but only if the child is physically nearby. Of course, in the real world, the child could move back home, but this too entails substantial costs that effectively reduces people's consumption when they live far from their family.

Additionally, while we model parental support as a monetary transfer, it could correspond to nonmonetary support such as childcare, housing, and so on.[10] And while we assume that one's parent is providing support, the fact that parents are not strategic in the model enables a looser interpretation of the informal safety net. Rather than thinking of the informal social insurance solely as support from one's parents, we could think of it more generally as income replacement that would be provided by members of one's home community.

---

[10]The assumption of monetary transfers could be microfounded by assuming parents have a constrained time budget which they can devote to either working or providing support to their family — which would generate a direct trade-off between parents' personal consumption and support for their child.

2.4   Model Results

We now characterize our main results. First, we derive young people's ex ante preferred tax rate — that is, the tax rate that maximizes their expected utility, before making residential location choices or finding out whether they will become unemployed. Then, we characterize how people make their residential location decisions, taking as a given the model parameters. We will show that people in the poor region move away only if their parent's generosity is sufficiently low. Together, these

2.4.1   Redistributive Preferences

Our first result concerns agent's preferences over government tax policy. The question is: Given knowledge of the economic environment and the generosity of one's parents, what tax policy would generate the highest level of expected utility? We briefly state the formal results, then provide interpretation.

We consider two cases. First, we assume that the informal safety net plays no role in one's preferences; equivalently, we consider the case in which everyone has decided to move. This corresponds to the case $\beta = 0$, so we refer to this solution as τ_0. It is given by $\tau_0 = (1 - \alpha)$.

Next, we consider preferences when there is some expected level of parental support β. This corresponds to a scenario in which people settle in their home region. We refer to this solution as τ_β and it it is given by:

$$\tau_\beta = (1 - \alpha)(1 - \alpha)\left[\frac{Y - \beta y_h}{Y - (1 - \alpha)\beta y_h}\right]. \tag{2}$$

Finally, to find the ex ante most preferred tax rate, taking into account migration decisions, we compare the expected utility under the two scenario: moving to the other region under policy τ_0 or remaining in one's home region under policy τ_β. This most preferred tax rate is the tax rate that would maximize agents' ex ante expected utility among those two choices, and we refer to it as τ^*. The value of τ^* is our first result.

Result 1 (Policy Preferences) *For individuals born into the prosperous region A, the ex ante preferred tax is $\tau^* = (1-\alpha)\left[\frac{Y-\beta y_h}{Y-(1-\alpha)\beta y_h}\right]$. For individuals born into the less-prosperous region B, their ex ante preferred tax rate is $\tau^* = 1-\alpha$ if their parents' generosity is sufficiently low, namely when $\beta < \frac{Y(y_A - y_B)}{(1-\alpha)y_B}$, and is $\tau^* = (1-\alpha)\left[\frac{Y-\beta y_h}{Y-(1-\alpha)\beta y_h}\right]$ otherwise.*

The intuition for this result is as follows. Agents born in the rich Region A are always better off staying in their home region, so their preferred tax rate is given by τ_β. Similarly for kids born in Region B with sufficiently altruistic parents. If they could set tax policy, they would be better off setting a relatively low rate rate, staying near home, and relying more heavily on their informal social insurance should they become unemployed. Kids born in Region B with relatively lower levels of informal social insurance, on the other hand, would fare better by setting a higher tax rate, τ_0, and moving to the more prosperous region.

Social Insurance Substitution. People who settle in the region they were born in have access to informal social insurance. This informal social insurance leads them to prefer a lower tax rate, as it acts as a substitute for government provision of social services. Examination of Equation 2 reveals that τ_β is equal to τ_0 multiplied by the factor $\frac{Y-\beta y_h}{Y-(1-\alpha)\beta y_h}$. For those in the poor region, this factor is always less than or equal to 1, meaning they prefer a lower tax rate than they would if β were equal to 0.

2.4.2 Residential Choices

Our next result considers the choice of whether to stay in one's home region or migrate to the away region. People choose to locate in the region that maximizes their expected utility. One's decision is governed by their parent's generosity.

Result 2 *Agents choose to live in their home region when their parent is sufficiently generous. If their parent's generosity is greater than a cutoff, they remain in the home region; otherwise, they migrate to the other region. Specifically, they remain in the home region if*

and only if $\beta > \beta^*$, where β^* is given by the expression

$$\beta^* = \frac{G}{(1-\tau)y_h}\left[\left(\frac{y_a}{y_h}\right)^{\alpha/1-\alpha} - 1\right]. \tag{3}$$

The expression for β^* is derived by finding the value of β that makes people indifferent between migrating and staying in their home region. People born into the rich Region A never have an incentive to move, so we focus our discussion on those born into the poor Region B. Examination of the equation in Result 2 provides some important insights.

Selective Outmigration. Most obviously, this result implies that the people who move away are those whose parents are the least generous (having $\beta < \beta^*$). The only people who find it worth it to remain in an economically depressed region are those who have strong social ties there. As we saw previously, these stayers have more conservative economic preferences than the movers would have, had they stayed. Thus, there is selective political outmigration away from poor regions.

More Generous Welfare Induces Migration. Finally, we can consider how location decisions related to government policy, parameterized in the model through the tax rate τ. An increase in tax rates has two opposing effects. Holding all else fixed, a higher tax rate reduces post-tax income when people are employed — a "wage effect." The wage effect shrinks the difference in utility between the two regions when one is employed, thus mitigating the incentive to migrate.[11] On the other hand, an increase in the tax rate also increases the size of the transfer G to unemployed people — an "insurance effect." Increased government transfers mean that ending up unemployed is a less severe event. The informal social insurance thus becomes less important, relative to the government transfer, which increases the incentive to move. The overall effect on government effect on migration depends on the relative sizes of these two effects.

---

[11]To see this, note the difference in utility when employed is $\log\left((1-\tau)y_A\right) - \log\left((1-\tau)y_B\right) = \log\left((1-\tau)\frac{y_A}{y_B}\right)$, which is decreasing in τ.

It turns out that the insurance effect of increasing τ outweighs the wage effect. It can be shown that β^* is an increasing function of τ, meaning that more people will migrate as government social insurance benefits increase.[12]

2.5 Discussion and Empirical Implications

Our two results thus far link the strength of one's informal safety net with their policy preferences and migration decisions, respectively. Informal safety nets crowd out demand for government social insurance and they dampen migration.

Putting these two results together implies interesting results about the ways that different places will respond to changes in the local economy. As the economy declines in the region in which people were born, incentives to move away increase. However, Result 2 implies that the marginal mover will have weaker social ties, and Result 1 implies that such people would have preferred more generous social insurance, even if they had stayed. Moreover, those who move to the new region will prefer higher tax rates there. We should expect, therefore, that when economic circumstances in a region change, the aggregate political response should depend on the strength of local ties in the region. In places with higher levels of social ties, there should be a muted increase in demand for social insurance, since the most "liberal" people will have moved away.

In the remainder of the paper, we investigate whether these empirical implications are borne out in the data. First, we consider whether places with higher levels of social ties are more conservative. At the aggregate level, we expect that places where more people are "rooted" in their communities will vote more conservatively than places with less "rooted" populations. We test this prediction by analyzing the relationship between presidential voting and local ties. At the individual level, we expect that people with the strong informal

---

[12]This result depends on the myopia assumption, in that agents assume that changes in the tax rate does not affect the total size of the economy Y. In reality, changes in the tax rate induce migration decisions that affect Y. We conjecture that this result will not change even when this assumption is relaxed. The reasoning is that under myopia, increases in the tax rate lead to increases in migration. But this increased migration will *increase* the total output of the economy, which means that the government benefits will be even more generous than agents assume. As a result, even more people will have an incentive to migrate.

social networks will be prefer lower levels of social insurance.

Next, we consider whether there are heterogeneous responses to economic shocks. The implication of the model is that places with lower levels of social ties should move further leftward in response to economic shocks than places with higher levels of social ties. We test this by examining responses to the "China shock" (Autor, Dorn and Hanson, 2013).

Third, we expect that places with higher levels of social ties will exhibit lower levels of out-migration cross-sectionally, and weaker migration responses to economic shocks, than places with lower levels of social ties. We test this prediction in aggregate by examining the correlation between population changes and social ties, again leveraging the China shock to examine heterogeneous responses.

Finally, we investigate these predictions at the individual level. Using the original survey data, we examine the relationship between individuals' level of social ties and their policy preferences as well as willingness to move.

3   Data

Our analysis proceeds in several steps, with the goal of triangulating evidence from different sources and at various levels of aggregation. Our primary analysis uses aggregate-level data on election outcomes, local ties, migration, and economic shocks. We then present a second analysis that uses individual-level survey data.

3.1   Aggregate-Level Data

Our aggregate analysis draws on several data sources. Our primary unit of analysis is the commuting zone, which are collections of counties that belong to the same broader labor market. These geographic units are commonly used in research on economic geography because they better capture regional economic dynamics such as local labor market than smaller levels of geography such as counties.

Measuring Political Preferences. Our primary political outcome is Democratic vote share in presidential elections from 2000 through 2020 (MIT Election Data and Science Lab, 2021). We take this to be a proxy for the redistribution policy preferences of citizens within a geographic area. While non-economic issues have been important in generating recent electoral coalitions (Hacker and Pierson, 2020; Sides, Tesler and Vavreck, 2019; Mutz, 2018), the Democratic Party remains substantially to the left of the Republican Party on issues of redistribution and social insurance. Moreover, voters routinely cite economic issues as important determinants of their vote choice. So while Republican voting does not solely reflect economic policy preferences, it is correlated with them and is available over a long timespan.

Measuring Local Ties. Next, we need a measure of local ties. The theoretical construct of interest is the extent to which people can rely on their informal social networks in hard times. Unfortunately, such a measure is, to our knowledge, unavailable going back in time and covering fine levels of geographical units.

Instead, we use a readily available proxy: the proportion of people who are born in the same state that they currently live in This proxy has been used in previous work on local ties (Zabek, 2019) and can be obtained at small levels of geography using Census data. The rationale behind this measure is that people who live closer to their hometown likely to live closer to family and friends, and be more connected to their local communities.

To obtain our primary measure of local ties, we use 2000 Census microdata to compute the share of a residents in a commuting zone who were born in the same state that they currently live in.[13] In computing this measure, we restrict the sample to working-age adults (22-64) not living in group quarters (such as dormitories and prisons). These sample restrictions ensure we are focusing on those who plausibly could relocate to pursue economic opportunity.

Figure 1 maps this local ties variable for the contiguous U.S. states. Local ties are

---

[13]We use data from 2000 because it is measured just before China's accession to the World Trade Organization in 2001 — which we use to measure local economic decline.

Figure 1: Local Ties in 2000, by Commuting Zone
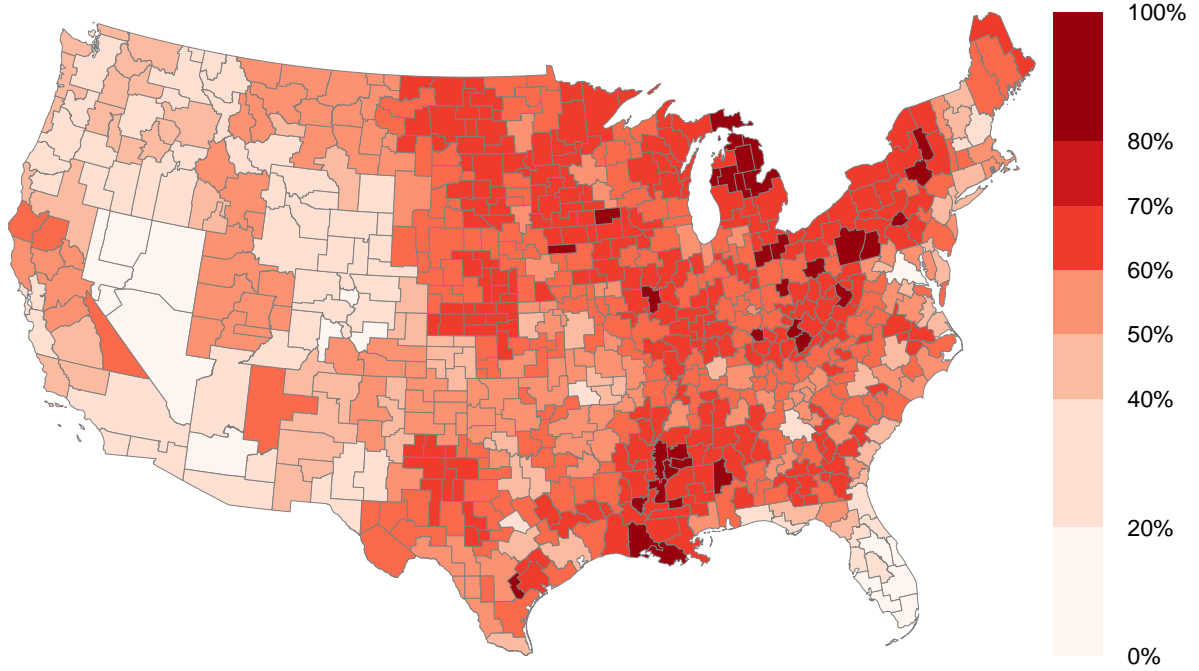
particularly high in the Midwest and the Deep South, along with rural areas in the Northeast. This measure tends to be lower in more urban areas, Pacific and Mountain States, and in Sunbelt metro regions such as Phoenix, Las Vegas, and Miami.

Our proxy measure is a step removed from the theoretical construct of interest — the extent of localized informal social insurance networks. Nevertheless, we expect that people who live closer to where they grew up are likely to live closer to family, to have more extensive localized social networks, and to be more embedded in their communities. We take several steps to validate this measure and ensure our results are not driven by this particular proxy. Details are are reported in Appendix C, but we briefly outline them here.

First, using individual-level survey data, we find that respondents who live in the same area that they grew up in score significantly higher on an index of local social ties. Second, we find that areas that score higher on our measure of local ties also tend to have more

institutions that could provide informal social insurance (Rupasingha, Goetz and Freshwater, 2006). For example, places with high levels of local ties have more religious organizations per capita. Third, we show that our measure of local ties is positively correlated with an alternative measure of local social network density derived from Facebook data (Chetty et al., 2022). This alternative measure estimates how likely two friends of a given person, living in the same area, are to be friends with each other. While this alternative measure is more closely related to our theory, it is only available in 2018 — later than most of the data we examine. Finally, we replicate a subset of our results using this alternative measure of local ties.

Measuring Migration.   To measure migration patterns, we use county-level data from the Census and the American Community Survey (ACS). These data provide estimates on population, inflows and outflows, and county-to-county migration. We aggregate these county-level data to the commuting zone level to investigate the relationship between local ties and migration patterns at the commuting zone level.

Measuring Economic Shocks.   Finally, to operationalize negative economic shocks, we use the "China shock" measure developed by Autor, Dorn and Hanson (2013), which is widely used to capture local economic shocks (i.e. Ballard-Rosa, Scheve and Jensen, 2021; Colantone and Stanig, 2018). This measure uses spatial variation in industry employment shares to measure regional exposure to Chinese import competition following China's accession to the WTO in 2001. This measure computes a commuting zone-level shock as a weighted average of national-level changes in employment across industries, where the weights are given by the initial employment shares across industries within the commuting zone. In other words, this measure captures the level of import competition from China per worker at the local

level. Formally, it is given by

$$\Delta \hat{L}_{j,t} = \sum_{i \in I} \left(\frac{-\Delta M_{i,t}}{L_{i,t-1}} \right) \frac{L_{i,j,t-1}}{L_{i,t-1}}, \tag{4}$$

where $\Delta M_{i,t}$ captures the national-level change in employment in industry i at time t and $L_{i,j}$ captures the initial employment share in industry i in region j. Following Autor, Dorn and Hanson (2013), we measure the import shock as the change in import competition between 1999 and 2007 or 1999 and 2011, depending on the specification.

In some of our following analyses, we instrument the national level change in Chinese imports into the United States ($\Delta M_{i,t} L_{i,t-1}$) with Chinese imports into other similar countries, following previous studies (Autor, Dorn and Hanson, 2013). This instrumental variable strategy addresses concerns regarding potential endogeneity by exploiting that China's economic globalization and variation in Chinese imports are primarily driven by Chinese domestic political economy, rather than U.S.-specific domestic factors.

3.2 Survey Data

We supplement our aggregate analysis with data from an original survey that enables us to examine the individual-level correlation between local ties, political preferences, and migration. We collected an online convenience sample of 2,235 respondents in fall 2022.[14] We defer discussion of the questions until we present the results. More details of the survey are given in Appendix B.

4 Aggregate-Level Results

We now turn to our main empirical analysis. To recall, we test three main predictions. First, we expect places with higher levels of local ties to be more conservative, on average,

---

[14]Because the survey did not collect any sensitive information, the Institutional Review Board at the University of Pennsylvania determined that this research was exempt from IRB review.

than places with lower levels of local ties. Second, we expect places with strong local ties to respond to economic shocks differently than places with weaker ties. In particular, we expect to observe an increase in right-wing voting in strong-tie areas that are negatively affected by economic shocks, relative to weak-tie areas affected by a comparable shock. Finally, we expect that places with strong levels of local ties exhibit muted migration relative to places with weaker local ties. We test each of these predictions in turn.

4.1   Places With Stronger Local Ties Are More Conservative

We first consider whether places with higher levels of local ties are more conservative than places with lower levels of local ties. For each presidential election between 2000 and 2020, we compare the Democratic vote share — at the county and commuting zone level — with the level of local ties, proxied by the proportion of people in the area who were born in the same state.

Figure 2 presents graphical evidence that places with stronger local ties are more conservative. In every presidential election from 2000 to 2020, there is a negative correlation between Democratic vote share and the level of social ties within a commuting zone. This relationship was relatively weak in the beginning of the century, but has strengthened considerably in more recent elections. This descriptive pattern is consistent with the prediction of the model, that social ties can act as a substitute for government social insurance — depressing support for Democrats.

Table 2 further probes this relationship. It presents a series of regressions modeling Democratic vote share within each commuting zone as a function of local ties in 2000. The first five columns shows the regression for a different election, from 2004 to 2020, while the rightmost column shows the results when all elections are pooled together along with year fixed effects. Additionally, each regression controls for Democratic vote share in 2000, to account for the fact that places with differing levels of social ties in 2000 may have had systematically different politics. They also control for two contemporaneous economic

Figure 2: Relationship Between Presidential Election Results and Strength of Local Ties in 2000
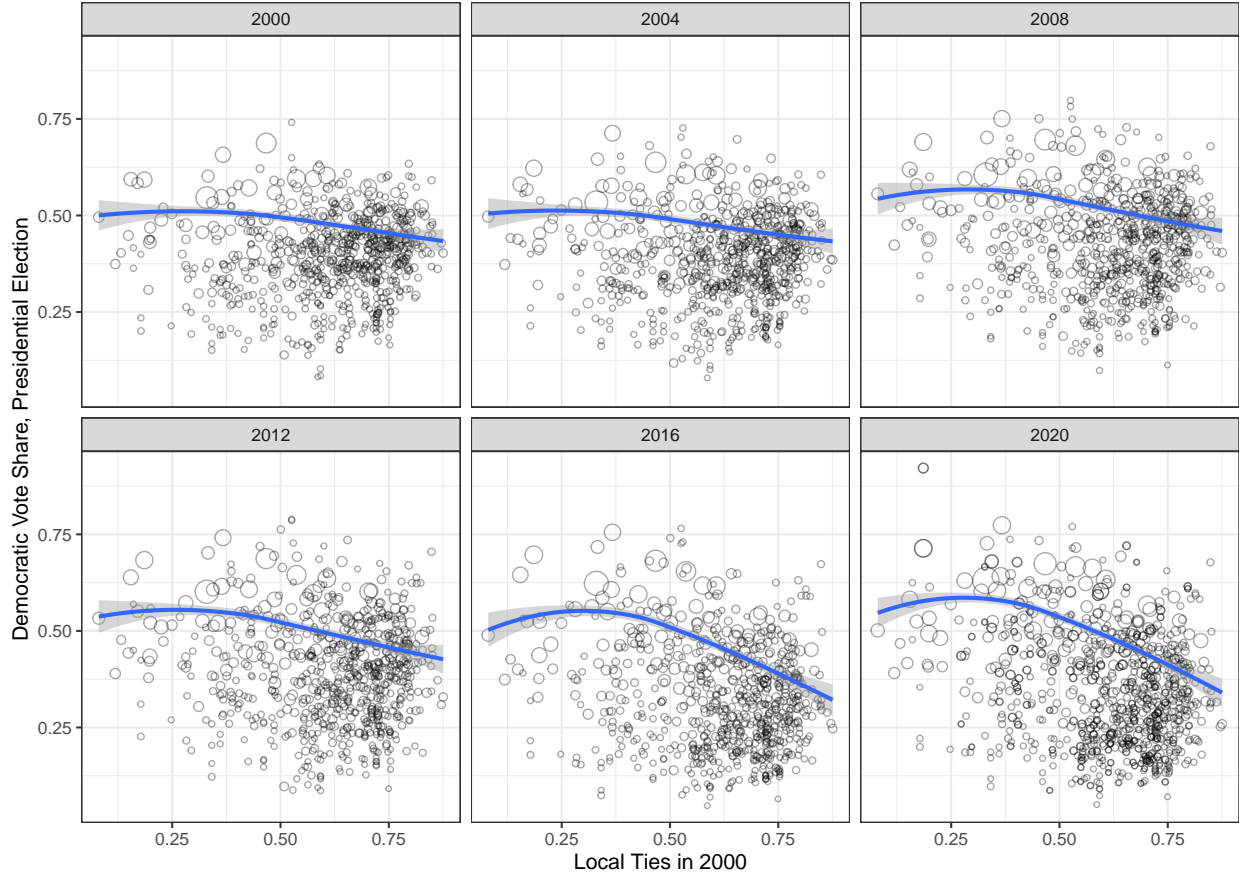
Notes: Each observation is a commuting zone. Local ties are operationalized as the proportion of people within a commuting zone who grew up in the same state in which they currently live. Local ties are measured using the 2000 Census. Points are sized according to the number of votes cast in each commuting zone. Loess lines, weighted by the number of votes, are shown in blue.

measures: median income in the commuting zone and the unemployment rate. For the pooled model, the coefficients on these control variables are allowed to vary by the party of the incumbent, to account for retrospective voting.

The results are consistent with the graphical evidence presented in Figure 2. In all presidential elections, there is a significant negative correlation between the strength of local ties and Democratic vote share, even after controlling for prior vote share and economic variables. This relationship has strengthened over time. A one percentage point increase in the share of people born in the same state was associated with a 0.02 percentage point decrease in vote share for John Kerry, the Democrat running in 2004. By 2020, the coefficient

Table 2: Social Ties and Commuting Zone-Level Presidential Election Results, 2004-2020

	Democratic Presidential Vote Share					
	2004	2008	2012	2016	2020	Pooled
Local Ties (2000)	−0.02**	−0.05***	−0.06***	−0.17***	−0.17***	−0.10***
	(0.01)	(0.02)	(0.02)	(0.03)	(0.04)	(0.01)
Dem. Vote Share (2000)	0.97***	0.84***	0.95***	0.96***	0.79***	0.88***
	(0.05)	(0.04)	(0.05)	(0.06)	(0.06)	(0.02)
Median Income	0.002***	0.01***	0.005***	0.01***	0.01***	0.01***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
Unemployment Rate	−0.14	0.88***	0.60***	0.62**	0.63**	0.49***
	(0.18)	(0.28)	(0.18)	(0.25)	(0.27)	(0.18)
Median Income × Dem. Inc						−0.001
						(0.001)
Unemployment Rate × Dem. Inc.						0.35
						(0.23)
Constant	−0.02	−0.04	−0.07**	−0.09*	−0.05	−0.06***
	(0.02)	(0.03)	(0.03)	(0.05)	(0.05)	(0.02)
Year FE						✓
Observations	721	721	721	720	927	3,810
R^2	0.93	0.85	0.85	0.81	0.76	0.81

Notes: The outcome variable is Democratic vote share within a commuting zone, measured from 0 to 1. Local ties, which is measured in 2000, is operationalized as the proportion of people within a county who grew up in the same state and is also measured from 0 to 1. Each column is a regression on a separate year except the rightmost column, which pools all years and includes year fixed effects. The pooled model allows for interactions between economic variables and Democratic incumbency in each election, to account for retrospective voting. All models are weighted by the total number of votes cast in the commuting zone. Robust standard errors shown in parentheses. $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.001$

was nearly an order of magnitude larger. A one percentage point increase in local ties was associated with a 0.17 percentage point decrease in vote share for Joe Biden, the Democrat running in 2020. Pooling across all elections from 2004-2020, we obtain a coefficient of −0.1.

Overall, these results show that places where there are more people rooted in a community tend to be more conservative politically. While there are undoubtedly many factors influencing the relationship documented here, the pattern of results is consistent with a core prediction of the model: that community-based social networks may give rise to conservative politics.

Figure 3: Presidential Election Results and Economic Shocks
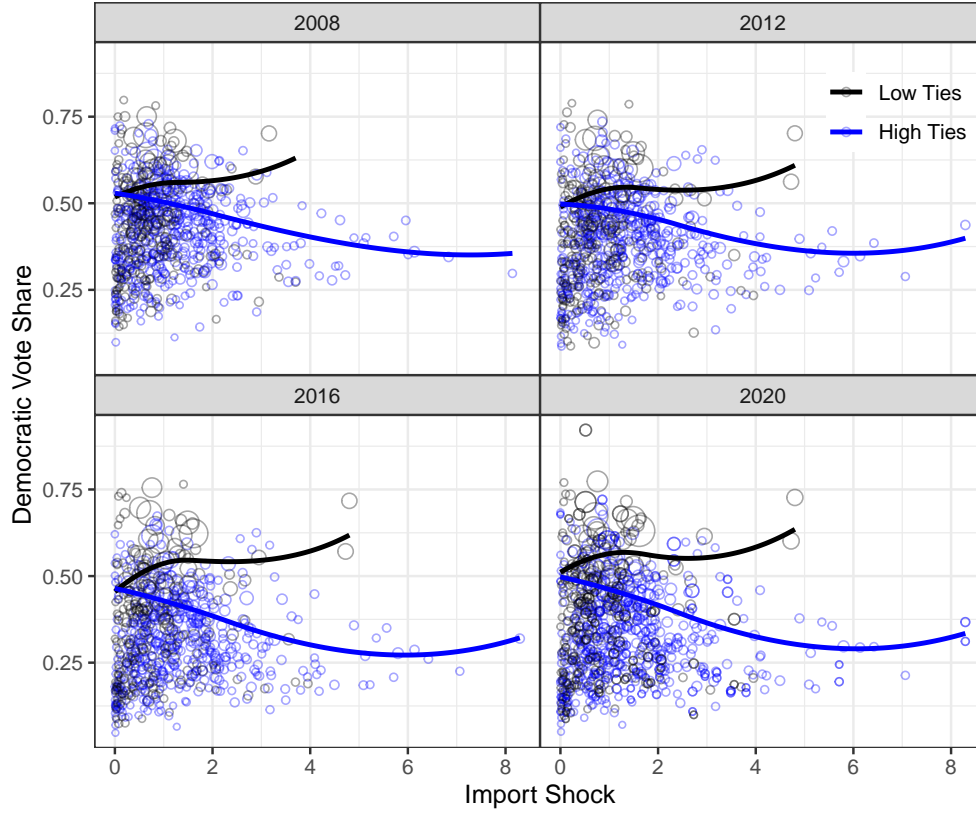
Notes: Each observation is a commuting zone. The import shock measure is taken from Autor, Dorn and Hanson (2013). For the 2008 election, the import shock is measured as the change in import competition from 1999 to 2007; for the later elections, it is measured from 1999 to 2011. Points are colored according to whether more or less that 60% of the population in 2000 lived in the same state in which they were born. Loess lines, weighted by the number of votes, are shown in blue.

4.2   Heterogeneous Political Responses to Economic Shocks

Next, we investigate whether there are heterogeneous responses to economic shocks according to the strength of local ties in an area. We operationalize economic shocks as the China shock measure developed by Autor, Dorn and Hanson (2013). Prior research has shown that exposure to import competition from China led to a rightward political turn, in both the United States and Western Europe (Autor et al., 2020; Colantone and Stanig, 2018).

As before, we begin with graphical evidence. Figure 3 plots the Democratic vote share at the commuting zone level against the area's exposure to import competition, for elections

from 2008 to 2020.[15] For the 2008 election, we measure import shocks as changes from 1999 to 2007; for the other elections, we use changes from 1999 to 2011. The points are colored according to whether the commuting zone had a low or high level of local ties in 2000 — defined as being in the bottom tercile or one of the top two terciles.[16]

The plot shows that there is a positive relationship between economic shocks and Democratic vote share in places with low levels of local ties (shown in black). This result is broadly consistent with the traditional political economy account, which predicts that increasing risk of unemployment and lower wages should lead people to prefer higher levels of social insurance (Meltzer and Richard, 1981; Rehm, 2016).

However, this pattern is reversed in places characterized by high levels of social ties (shown in blue). In those places, there is a negative relationship between the magnitude of economic shocks and voting in presidential elections. This result is consistent with the idea that people's local social networks can insure them against negative economic shocks, substituting for state provision of social insurance.

We probe these patterns more formally in Table 3. Using the pooled dataset covering the 2008-2020 elections, we regress Democratic vote share at the commuting zone level against the import shock measure, the strength of local ties (measured in 2000), and their interactions.[17] Columns 1, 2, and 4 show OLS regressions, while Columns 3 and 5 instrument for import shocks (and their interaction with local ties) using the Autor, Dorn and Hanson (2013) instrument. All regressions also control for Democratic vote share in 2000 as well as year fixed effects and weight by the number of votes.

Column 1 shows an OLS regression without any interaction. Once again, we see that

---

[15] The 2000 and 2004 elections are excluded from this analysis due to the temporal coverage of the China shock. China's integration into the global economic market occurred in the early 2000s, which allows us to leverage it as a measure of local economic shocks only after mid 2000s.

[16] This cutpoint is about 58%. While any cutpoint is somewhat arbitrary, the local ties distribution has a long left tail, meaning that the values in the top two-thirds of the distribution are much more similar than the values in the bottom third. In the regressions below, we use both a continuous and binary measure of local ties.

[17] The 2000 and 2004 elections are excluded from this analysis due to the temporal coverage of the China shock. China's integration into the global economic market occurred in the early 2000s, which allows us to leverage it as a measure of local economic shocks only after mid 2000s.

Table 3: Presidential Election Results as a Function of Import Shocks and Local Ties

	Democratic Presidential Vote Share				
	(1)	(2)	(3)	(4)	(5)
Import Shock	0.001	0.056***	0.022*	0.013***	−0.004
	(0.003)	(0.008)	(0.013)	(0.004)	(0.006)
Import Shock × Local Ties (continuous)		−0.099***	−0.068***		
		(0.013)	(0.021)		
Import Shock × High Ties (binary)				−0.028***	−0.022***
				(0.005)	(0.007)
Local Ties (continuous)	−0.153***	−0.055***	−0.072***		
	(0.014)	(0.020)	(0.023)		
High Ties (binary)				−0.020***	−0.023**
				(0.007)	(0.009)
Dem. Vote Share (2000)	1.033***	1.015***	1.012***	1.028***	1.021***
	(0.026)	(0.026)	(0.026)	(0.028)	(0.028)
Model Type	OLS	OLS	2SLS	OLS	2SLS
Year FE	✓	✓	✓	✓	✓
Observations	3,089	3,089	3,089	3,089	3,089
R^2	0.753	0.764	0.753	0.757	0.748

Notes: The outcome variable is Democratic vote share within a commuting zone, measured from 0 to 1, in 2008-2020. Local ties (continuous), which is measured in 2000, is operationalized as the proportion of people within a county who grew up in the same state. High ties (binary) is an indicator for whether the local ties measure is in the top two-thirds of the distribution (about 58%). Columns 1, 2, and 4 are OLS regressions, while columns 3 and 5 are 2SLS regression that instrument for import shocks. All models are weighted by the total number of votes cast in the commuting zone. Robust standard errors shown in parentheses. $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.001$

local ties are negatively correlated with Democratic voting. Interestingly, we see essentially no aggregate relationship between import shocks and Democratic voting. However, the null aggregate relationship hides significant heterogeneity. Column 2 shows evidence of divergent political responses to import competition. In places with relatively low levels of local ties, there is a positive relationship between economic shocks and Democratic vote share. But there is a negative interaction term with local ties, suggesting that regions with higher levels of social ties respond differently to import shocks. Places with low levels of local ties move toward the Democrats in response economic shocks, while places with high levels of local ties

move toward Republicans. Column 3 shows the 2SLS results, which are similar, although with somewhat lower magnitudes.

Columns 4 and 5 show the same basic patterns, but use a binary measure of local ties to aid interpretability. As in Figure 3, we dichotomize the local ties measure at the 33rd percentile and allow the effect of import shocks on presidential voting to vary between low-tie and high-tie commuting zones. We find that in high-tie places — where most people were born in the area — there is a negative relationship between economic shocks and Democratic voting. Reading from the 2SLS estimates in Column 5, a one-unit increase in the import shock measure is associated with a 2.6 percentage point decrease in Democratic vote share.[18] In contrast, in low-tie places, there is a much smaller and statistically insignificant effect of import shocks on presidential vote share.

These patterns are consistent with our theoretical expectations. Places with high levels of local ties respond differently to economic shocks than places with lower levels of local ties — even after accounting for voting patterns in prior elections. Whether economic decline induces a leftward political shift depends on the extent to which people living are rooted in the area.

4.3   Migration Responses to Economic Shocks

So far, we have seen how the strength of local ties in a region may affect political outcomes. Our theory suggests that selective migration may help to explain this relationship. We expect that people with stronger social ties to their local community are less likely to migrate in pursuit of economic opportunities than those with weaker ties.

We again begin with visual evidence. Figure 4 plots the change in log population from 2000 to 2010, at the commuting zone level, against our measure of social ties in 2000. The points are colored by the severity of the import shock at the commuting zone level. The plot shows that places with higher levels of social ties grow at a slower rate than those with

---

[18]For reference, the standard deviation across commuting zones in the 1999-2011 import shock measure is about 1.1.

Figure 4: Relationship Between Population Change and Strength of Local Ties
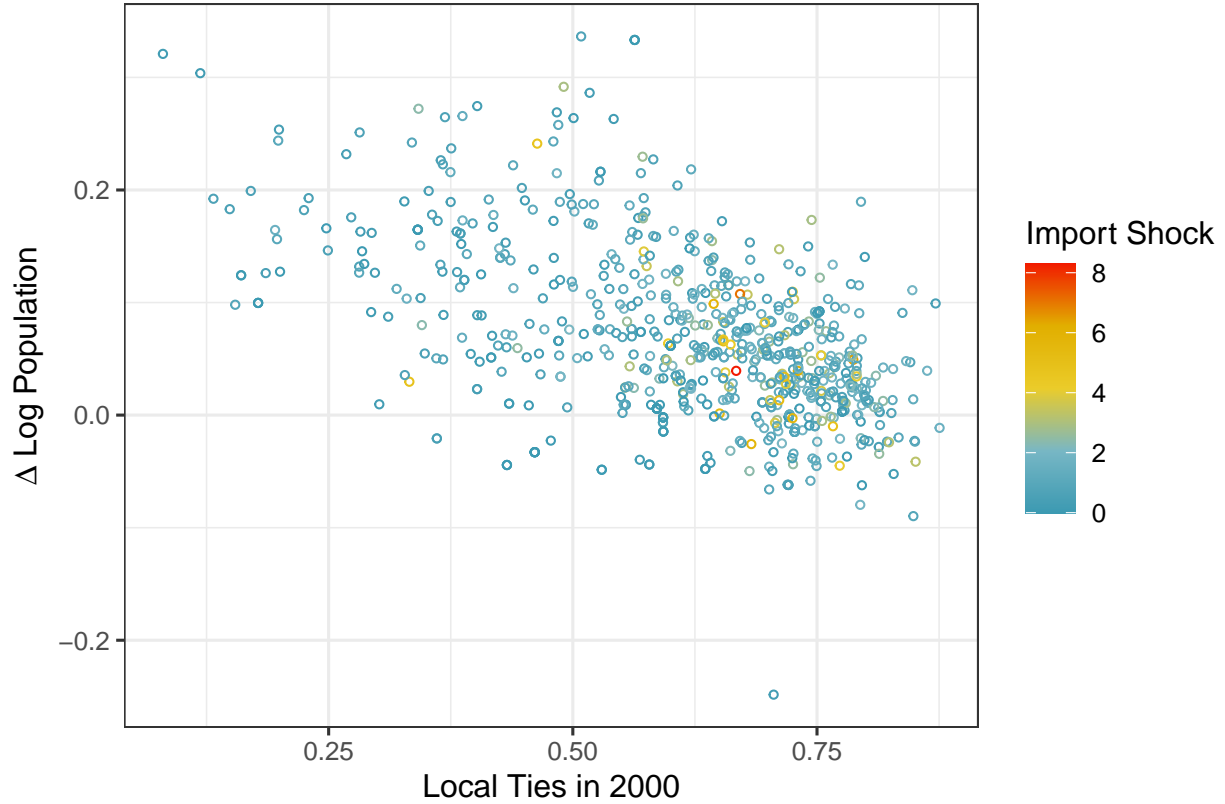
Notes: The *y*-axis shows the change in log population from 2000 to 2010 at the commuting zone level. The *x*-axis shows the strength of local ties measured in 2000, operationalized as the share of people within the commuting zone who were born in the same state in which they currently live. Points are shaded according to the commuting zone's exposure to import competition, measured as the change from 1999 to 2011.

lower levels of social ties. Moreover, examination of the coloring reveals that places with higher levels of social ties in 2000 were more exposed to import competition from China. The correlation is fairly intuitive, as the places that attract migrants will, almost mechanically, have a higher share of people who were born out of state and also will grow faster. But it is notable that few regions experience population *decline*, even those hit hard by import competition.

In Table 4, we explore the relationship between migration responses, import shocks, and local ties more formally. The first two columns use total population change as the outcome, while the latter two use migratory outflows as the outcome.

Table 4: Local Ties, Import Shocks, and Population Changes

	Δ Log Population (10-Year)		Log Outflow (1-Year)	
	(1)	(2)	(3)	(4)
Import Shock	−0.0002	−0.024**	−0.046***	−0.061
	(0.008)	(0.010)	(0.018)	(0.045)
Import Shock × High Ties (binary)		0.026**		−0.023
		(0.011)		(0.051)
Local Ties (continuous)	−0.232***		−0.806***	
	(0.033)		(0.069)	
High Ties (binary)		−0.097***		−0.228***
		(0.015)		(0.055)
Model Type	OLS	2SLS	OLS	2SLS
Covariates	✓	✓	✓	✓
Time Period FE	✓	✓		
Observations	1,444	1,444	722	722
R^2	0.287	0.239	0.984	0.982

Notes: The outcome variable in the first two columns is the change in log population between 1990 to 2000 and from 2000 to 2010. The outcome variable in the next two columns is the log counts of people who moved away from a commuting zone within the previous year, measured in the 2006-2010 5-year ACS. Local ties are measured at the beginning of each period for the first two columns, and in 2000 for the latter two columns. Import shocks are measured as the change in employment induced by the China shock, instrumented by predicted changes from non-American markets (Autor, Dorn and Hanson, 2013). High ties (binary) is an indicator for the share of people being born in the same state being in the top two-thirds of the distribution. Covariates include baseline population, unemployment, and labor force participation rate. All regressions weight by initial population. Robust standard errors are presented in parentheses. $*p < 0.1$, $**p < 0.05$, $***p < 0.001$

In the first two columns, we regress the changes in log population on the level of social ties and the Chinese import shock measure. The change in log population is computed for two time periods: 1990-2000 and 2000-2010. Controls include the unemployment rate and labor force participation rates at the commuting zone level. Local ties are measured at the

beginning of the period, and the import shock is measured as the change in employment from 1991-1999 for the first time period and from 1999-2011 for the second period.[19] In the second and fourth columns, we estimate instrumental variables models.

The results suggest that there is less migratory response to economic shocks in places with high local ties. Column 1 shows that places with high local ties experience less population change overall. It also shows that overall there is only a small change in population induced by economic shocks in aggregate. Column 2 allows this population response to vary by the level of local ties within a commuting zone. It shows that when places with low levels of ties are hit by economic shocks, there is a subsequent decrease in population. However, in places with high levels of social ties, there is no significant change in population. These results are consistent with our main argument that local ties mute migration responses.

In columns 3 and 4, we use migration flows data to focus on *outflows* rather than net changes in population. In these models, we regress the log number of yearly outflows on the level of social ties and the Chinese import shock. Outflows are measured using the 2006-2010 ACS.[20] The ACS asks people whether they lived in the same residence a year ago. If not, the county in which they lived a year ago is recorded. The Census Bureau then collates these responses to create a file listing county-to-county migration estimates. We aggregate these to the commuting zone level, to measure the share of people who moved away from a commuting zone within the past year. The import shock is measured from 1999-2007, and local ties is measured in 2000. Controls include the initial log population, unemployment, and labor force participation rates.

These models show short-run migration patterns. We find that places with high levels of social ties experience much lower outflows than places with higher social ties in aggregate. Column 3 shows that a one percentage point increase in local ties is associated with approximately 0.8% decrease in outflows of people. This is consistent with the idea that people who

---

[19]As before, we discretize high and low ties at the 33rd percentile of the local ties distribution, computed at the beginning of each period. Results are robust to other cutoffs.

[20]Due to data limitations, this outcome is only measured in the latter period.

are more rooted in their community are less likely to move away. We also find that economic shocks are associated with lower outflows overall.[21] Column 4 allows us to examine if this migratory responses vary by the level of local ties. While it is not statistically significant, the interaction coefficient between economic shocks and local ties suggests that places with high levels of local ties may experience less outflows in response to the economic shock. These results are more tentative, due to the imprecise estimates, but the point estimates are directionally consistent with our hypotheses.

Overall, these results provide support for our argument: places characterized by high levels of social ties have muted migratory responses to economic shocks. Despite the widely documented disruption to local economies induced by the China shock, there has not been a large change in population among places where most people are rooted in the region.

5   Individual-Level Mechanisms

The aggregate data is useful for testing the broad implications of our argument, but leaves the micro-level mechanisms untested. To supplement this analysis, we use survey data that enables us to investigate the correlations between local ties, migration, and political preferences at the individual level. We fielded an online survey designed to measure several key features of our theory. In this section, we first present the questions we used to measure social insurance preferences, local ties, and migration preferences.[22] We then document patterns consistent with the underlying mechanisms in our theory.

---

[21]The decrease in outflows after economic shocks has been documented in other research as well using several different measures of economic shocks (Joan Monras, 2020; Zabek, 2019). In general, population adjustments in response to economic shocks appear to happen primarily through changes in in-migration in short term.

[22]Complete question wording and details about construction of the scales are available in Appendix B.

5.1 Survey Questions

We asked respondents two questions to measure their preferences for social insurance: first, whether they supported increasing government funding for programs aimed at helping the poor and unemployed (3-point scale); and second, whether they thought the government ought to ensure that every person has a job and a good standard of living (7-point scale). We combine responses to these questions into a scale measuring respondents' support for the safety safety net. The scale has mean 0 and unit variance, and is oriented so higher values reflect more conservative views.

Next, we use five survey items to construct an index measuring respondents' access to informal social insurance and ties to their local community. First, we asked respondents: "Suppose that you lost your job or you got seriously sick. Who, if anyone, could you rely on to help you get back on your feet?" We coded three binary variables from this question — indicators for respondents saying they could rely on friends or family in their area; family or friends in another region; and/or churches or charitable organizations in their community. Second, we asked respondents how much they agree or disagree with the statement "I live near people who I can rely on if I fall on hard times." Responses were on a 1 to 5 Likert scale. Third, we asked respondents how often in the past year they visited with relatives. Responses were coded from 1 (never) to 7 (more than once a week, on average). Finally, we asked respondents whether there was anyone in their community they could borrow $500 from and generate an indicator variable for the response. We combine these five variables using principal components analysis to generate a local ties index.

To measure migration propensity we ask respondents whether they plan to move in the next 5 years, and if so whether they plan to move to a place within their current metro area or outside their current metro area. This measure stated propensity to move, which is not ideal if respondents over- or underestimate the probability they will move. However, most panel surveys — which would enable direct observation of migration — do not include good measures of social networks and social insurance preferences. Our survey solves the

problem of measuring social insurance preferences and social networks, at the expense of only capturing respondents at a single point in time. We thus rely on self-reported migration intentions, rather than actual migration. Self-reported measures of mobility are likely to be correlated with future mobility and have been commonly used in research on migration (e.g., Mummolo and Nall, 2017; Koşar, Ransom and van der Klaauw, 2021).

Full question wording and details of scale construction are given in Appendix B. Additionally, we use our survey to validate the aggregate measure of local ties used in the previous section. These details are presented in Appendix C.

5.2   Survey Results

We argue that those who have stronger informal social networks are less supportive of social insurance, on average, than those with weaker social networks. Additionally, our theory suggests that strong informal social networks also inhibit migration.

We begin with the first claim, examining the correlation between social insurance preferences and strength of local ties. We regress our index of social insurance preferences on local ties variables individually and on the local ties index constructed from these variables. Figure 5 plots the coefficients on these variables, both with and without control variables.[23] Positive coefficients indicate correlations with conservative attitudes on social insurance.

The results show that there is a positive correlation between the ability of respondents to rely on their social network in hard times and conservatism. This correlation holds whether or not control variables are included. The top row of the figure shows the coefficient on the local ties index. We estimate that a one standard deviation increase in local ties is associated with about an increase in conservatism of about 6 to 13 percent of a standard deviation (depending on inclusion of controls). The correlation for the index is mirrored in the individual items as well. Respondents who say they could borrow $500 from someone in their community are 8% of a standard deviation more conservative (after controls); those

---

[23]The controls include age, race, gender, education, family income, and party ID.

Figure 5: Relationship Between Social Insurance Preferences and Local Ties
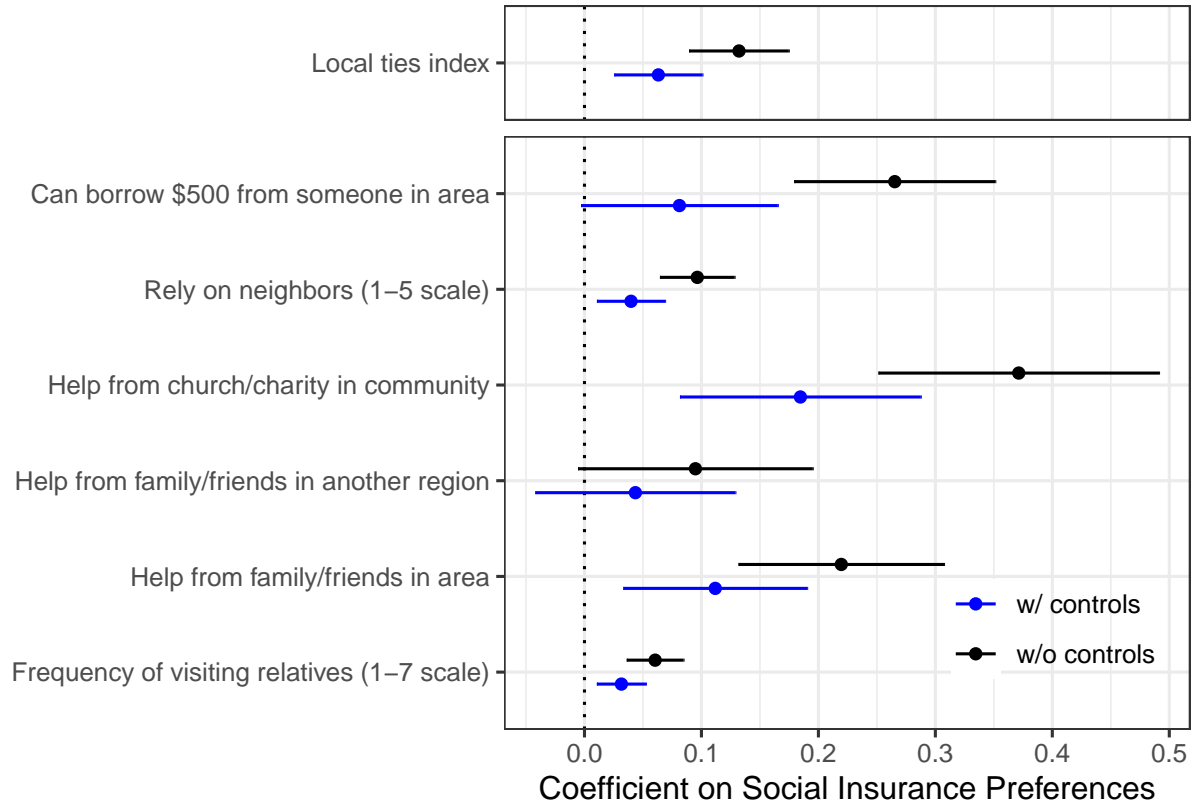
Notes: Points show coefficient estimates from regressions of an index of social insurance preferences on variables measuring respondents' social networks and informal safety nets. Coefficients are obtained from separate regressions. Black dots show coefficients from bivariate regressions, while blue dots show coefficients from regressions that control for sociodemographic variables and party ID. Horizontal bars show robust 95% confidence intervals.

who say they can rely on a church or other charitable organization in their community are 18% more conservative; those who can rely on friends or family in their local area are 11% more conservative.

Notably, there is a smaller correlation between social insurance preferences and being able to rely on family or friends outside of one's region. While there is considerable uncertainty in this estimate and we do not want to attribute too much to the difference in magnitudes, this pattern provides suggestive evidence for the importance of place in provision of informal social insurance.

While the magnitude of these correlations is relatively low, they are directionally in line

Table 5: Relationship Between Moving Propensity and Local Ties

	Move in Next 5 Years		Move Far in Next 5 Years	
	(1)	(2)	(3)	(4)
Social Network Index	-0.07***	-0.05***	-0.04***	-0.04***
	(0.01)	(0.01)	(0.01)	(0.01)
Controls		✓		✓
State FE		✓		✓
Observations	2,185	1,993	1,661	1,511
R^2	0.02	0.18	0.01	0.13

Notes: The outcome variable in the first two columns is an indicator for respondents saying they are likely to move anywhere in the next five years. The outcome variable in the latter two columns is an indicator for respondents saying they are likely to move outside their metro area in the next five years. Control variables include age, race, gender, education, family income, party ID, and state fixed effects. Robust standard errors shown in parentheses. *$p < 0.1$, **$p < 0.05$, ***$p < 0.001$

with our theory and withstand the inclusion of control variables including party identification. These results suggest that the aggregate-level correlations we observed in the previous section have a micro-level basis.

The second part of our theory argues that these social networks discourage migration. We test this claim by examining the correlation between self-assessed moving propensity and our social network index. We include two outcome variables: an indicator for respondents saying they would move at all in the next five years, and an indicator for they saying they would move to a place outside their current metro area. The results are presented in Table 5.

Consistent with the theory, we find that respondents with stronger social networks are less willing to move. The first two columns show the correlation between a respondent indicating that they would move at all in the next five years and their current social network. A one-standard-deviation increase in respondents' social network index is associated with a 5 to 7 percentage point decrease in moving intentions. The latter two columns show that this result holds when looking specifically at whether respondents plan to move out of their metro area in the next five years. A one-standard-deviation increase in social network is associated with a 4 percentage point decrease in the probability of saying they will move far.

In Appendix E, we provide an additional micro-level test of our theory. Using CCES panel data from 2010-2014, we show that people who are economically liberal move between commuting zones at a higher rate than conservatives, even after accounting for demographics. This analysis provides additional evidence of selective migration along political lines.

Overall, we find that respondents with stronger local social ties are more conservative on questions of social insurance and less likely to migrate. Despite the inherent limitations of observational data, this analysis provides individual-level evidence of the key mechanisms in our theory.

6   Discussion and Conclusion

An important question in political economy is why places that are declining economically have not responded by supporting left-wing parties, but rather have moved rightward (Autor et al., 2020; Colantone and Stanig, 2018; Ballard-Rosa et al., 2017; Ballard-Rosa, Scheve and Jensen, 2021). As service-oriented and "knowledge economy" jobs have become dominant in the modern economy, many regions that formerly specialized in manufacturing have become economically depressed. The impact of such economic shocks persists for many years, leading to long-term regional divergence in economic opportunity. But rather than responding to these changes by supporting broad redistributive policies that insure people against adverse events, these declining regions have increased their support of right-wing parties.

We propose a theory focusing on the role that informal social networks play in structuring political preferences, migration, and responses to economic shocks. The key insight is that people stay in declining places not because of the economic opportunities available there, but because of family, friends, and community groups that they rely on. This motivation generates political differences between "stayers" and "leavers." Social networks help mitigate the severity of adverse life events through material and psychological support. As a result, people with stronger social networks may support lower levels of social insurance from the

state. The stayers, therefore, tend to be more conservative than the leavers.[24]

Our point is not that the rightward turn among stagnant places is *solely* explained by this mechanism. Indeed, there are important cultural drivers of support for right-wing parties, rooted in exclusionary attitudes toward outgroups (Sides, Tesler and Vavreck, 2019; Baccini and Weymouth, 2021; Mutz, 2018; Shayo, 2009). Rather, we suggest a complementary mechanism that focuses on material conditions rather than cultural status. Our argument provides a rationale for the bundling of culturally and economically conservative policies in response to economic disruptions. We do not attempt to disentangle what share of the turn toward right-wing populism is due to cultural attitudes versus economic attitudes. Our results rely on aggregate- and individual-level correlations between social ties and political behavior. Our measure of local ties is likely correlated with the exclusionary attitudes that cultural accounts emphasize, in addition to the economic attitudes that we document.

That said, we provide precise predictions about heterogeneity in political outcomes and migration in response to economic shocks that are borne out by the data. If our social ties measure were primarily picking up cultural concerns, it is not clear why we should see this precise pattern of responses to economic shocks.

Our paper points to the role of migration in explaining patterns of political geography. Despite playing a central role in theories of economic geography, internal migration has not received much attention in the literature on American politics.[25] Debates about migration have primarily focused on the extent to which people select into like-minded communities (Bishop, 2008; Mummolo and Nall, 2017; Martin and Webster, 2018). Our framework suggests that leavers and stayers may have systematically different political preferences, not due to strongly held ideological beliefs, but because of the material and social circumstances created by their residential choices. Attention to migration patterns is therefore paramount for understanding political responses to changes in economic geography.

---

[24]Our paper contributes to a growing literature on the consequences of emigration on the politics of "left behind" places (Lim, 2023; Lueders, 2023; Sellars, 2019).

[25]Though a growing literature in historical political economy documents how historical migration waves have long-run political consequences (e.g., Charnysh, 2022; Sahn, 2019; Scheve and Serlin, 2023).

References

Amior, Michael and Alan Manning. 2018. "The Persistence of Local Joblessness." *American Economic Review* 108(7):1942–1970.

Autor, David, David Dorn and Gordon H Hanson. 2021. On the persistence of the china shock. Technical report National Bureau of Economic Research.

Autor, David, David Dorn, Gordon Hanson and Kaveh Majlesi. 2020. "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure." *American Economic Review* 110(10):3139–3183.

Autor, David H., David Dorn and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Impacts of Import Competition in the United States." *American Economic Review* 103(6):2121–2168.

Baccini, Leonardo and Stephen Weymouth. 2021. "Gone for Good: Deindustrialization, White Voter Backlash, and US Presidential Voting." *American Political Science Review* 115(2):550–567.

Ballard-Rosa, Cameron, Kenneth Scheve and Amalie Jensen. 2021. "Economic Decline, Social Identity, and Authoritarian Values in the United States." *International Studies Quarterly* .

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.".

Bishop, Bill. 2008. *The Big Sort*. Houghton Mifflin Harcourt.

Charnysh, Volha. 2022. Historical Political Economy of Migration. In *The Oxford Handbook of Historical Political Economy*. Oxford University Press.
URL: *https://doi.org/10.1093/oxfordhb/9780197618608.013.40*

Chetty, Raj, Matthew O Jackson, Theresa Kuchler, Johannes Stroebel, Nathaniel Hendren, Robert B Fluegge, Sara Gong, Federico Gonzalez, Armelle Grondin, Matthew Jacob et al. 2022. "Social capital I: measurement and associations with economic mobility." *Nature* 608(7921):108–121.

Colantone, Italo and Piero Stanig. 2018. "Global Competition and Brexit." *American Political Science Review* (Forthcoming).

Dal Bó, Ernesto, Pedro Dal Bó and Erik Eyster. 2017. "The Demand for Bad Policy when Voters Underappreciate Equilibrium Effects." *Review of Economic Studies* pp. 1–54.
URL: *https://academic.oup.com/restud/article-lookup/doi/10.1093/restud/rdx031*

Deneen, Patrick J. 2019. *Why Liberalism Failed.* New Haven, Connecticut: Yale University Press.

Di Tella, Rafael and Robert MacCulloch. 2002. "Informal Family Insurance and the Design of the Welfare State." *The Economic Journal* 112(481):481–503.

Diamond, Rebecca. 2016. "The Determinants and Welfare Implications of U.S. Workers' Diverging Location Choices by Skill: 1980-2000." *American Economic Review* 106(3):479–524.

Glaeser, Edward L. and Joshua D. Gottlieb. 2009. "The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States." *Journal of Economic Literature* 47(4):983–1028.

Hacker, Jacob S. and Paul Pierson. 2020. *Let Them Eat Tweets: How the Right Rules in an Age of Extreme Inequality.* Liveright.

Hacker, Jacob S., Philipp Rehm and Mark Schlesinger. 2013. "The Insecure American: Economic Experiences, Financial Worries, and Policy Attitudes." *Perspectives on Politics* 11(1):23–49.

Hsieh, Chang Tai and Enrico Moretti. 2019. "Housing Constraints and Spatial Misallocation." *American Economic Journal: Macroeconomics* 11(2):1–39.

Huber, John D. and Piero Stanig. 2011. "Church-state Separation and Redistribution." *Journal of Public Economics* 95(7-8):828–836.

Hungerman, Daniel M. 2005. "Are Church and State Substitutes? Evidence from the 1996 Welfare Reform." *Journal of Public Economics* 89(11-12):2245–2267.

Joan Monras. 2020. "Economic Shocks and Internal Migration.".
   URL: *https://crei.cat/wp-content/uploads/2020/06/3-ECO-SHOCKS.pdf*

Kline, Patrick and Enrico Moretti. 2014. "People, Places, and Public Policy: Some Simple Welfare Economics of Local Economic Development Programs." *Annual Review of Economics* 6:629–662.
   URL: *http://www.annualreviews.org/doi/10.1146/annurev-economics-080213-041024*

Koşar, Gizem, Tyler Ransom and Wilbert van der Klaauw. 2021. "Understanding Migration Aversion Using Elicited Counterfactual Choice Probabilities." *Journal of Econometrics* .
   URL: *https://www.sciencedirect.com/science/article/pii/S0304407621000415*

Lim, Junghyun. 2023. "The Electoral Consequences of International Migration in Sending Countries: Evidence from Central and Eastern Europe." *Comparative Political Studies* 56(1):36–64.

Lin, Wanchuan, Yiming Liu and Juanjuan Meng. 2014. "The Crowding-out Effect of Formal Insurance on Informal Risk Sharing: An Experimental Study." *Games and Economic Behavior* 86:184–211.

Lueders, Hans. 2023. "Rooted at Home: How Domestic Migration Separates Voters into National and Local Electorates.".
   URL: *https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3891174*

Martin, Gregory J. and Steven W. Webster. 2018. "Does Residential Sorting Explain Geographic Polarization?" *Political Science Research and Methods* pp. 1–17.

Meltzer, Allan H. and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89(5):914–927.

MIT Election Data and Science Lab. 2021. "County Presidential Election Returns 2000-2020.".
URL: *https://doi.org/10.7910/DVN/VOQCHQ*

Moene, Karl and Michael Wallerstein. 2001. "Inequality, Social Insurance, and Redistribution." *American Political Science Review* 95(4):859–874.
URL: *http://wcfia.harvard.edu/files/wcfia/files/667_wallerstein1.pdf*

Mummolo, Jonathan and Clayton Nall. 2017. "Why Partisans Do Not Sort: The Constraints on Political Segregation." *Journal of Politics* 79(1):45–59.

Munshi, Kaivan and Mark Rosenzweig. 2009. "Why is Mobility in India So Low? Social Insurance, Inequality, and Growth.".
URL: *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1372954*

Mutz, Diana C. 2018. "Status Threat, Not Economic Hardship, Explains the 2016 Presidential Vote." *Proceedings of the National Academy of Sciences* p. 201718155.

Putnam, Robert D. and David E. Campbell. 2010. *American Grace: How Religion Divides and Unites Us.* New York: Simon & Schuster.

Rehm, Philipp. 2016. *Risk Inequality and Welfare States: Social Policy Preferences, Development, and Dynamics.* New York: Cambridge University Press.

Roback, Jennifer. 1982. "Wages, Rents, and the Quality of Life." *Journal of Political Economy* 90(6):1257–1278.

Rodden, Jonathan. 2019. *Why Cities Lose: The Deep Roots of the Urban-Rural Political Divide.* New York: Basic Books.

Rosen, Sherwin. 1979. Wage-Based Indexes of Urban Quality of Life. In *Current Issues in Urban Economics*, ed. Peter N. Miezkowski and Mahlon R. Straszheim. Baltimore, Maryland: Johns Hopkins University Press pp. 74–104.

Rupasingha, Anil, Stephan J Goetz and David Freshwater. 2006. "The production of social capital in US counties." *The journal of socio-economics* 35(1):83–101.

Sahn, Alexander. 2019. "Why is Housing Unaffordable? The Great Migration's Effect on Exclusionary Zoning.".

Schaffner, Brian F., Matthew MacWilliams and Tatishe Nteta. 2018. "Understanding White Polarization in the 2016 Vote for President: The Sobering Role of Racism and Sexism." *Political Science Quarterly* 133(1):9–34.

Scheve, Kenneth and David Stasavage. 2006. "Religion and Preferences for Social Insurance." *Quarterly Journal of Political Science* 1(3):255–286.
  URL: *http://www.nowpublishers.com/article/Details/QJPS-5052*

Scheve, Kenneth and Theo Serlin. 2023. "Trains, Trade, and Transformation: A Spatial Rogowski Theory of America's 19th Century Protectionism." *American Journal of Political* (Forthcoming).
  URL: *https://theo-serlin.github.io/papers/spatialrog_revision_2022_11_website.pdf*

Sellars, Emily A. 2019. "Emigration and Collective Action." *Journal of Politics* (Forthcoming).

Shayo, Moses. 2009. "A Model of Social Identity with an Application to Political Economy: Nation, Class, and Redistribution." *American Political Science Review* 103(2):147–174.

Sides, John, Michael Tesler and Lynn Vavreck. 2019. *Identity Crisis: The 2016 Presidential Campaign and the Battle for the Meaning of America.* Princeton, N.J.: Princeton University Press.

Stegmueller, Daniel. 2013. "Religion and Redistributive Voting in Western Europe." *Journal of Politics* 75(4):1064–1076.

Zabek, Mike. 2019. "Local Ties in Spatial Equilibrium.".

URL: *https://doi.org/10.17016/FEDS.2019.080*

Appendix

Table of Contents

A County-Level Results

In this section, we replicate our commuting zone-level results at the county level. Figure A1 plots the local ties measure in 2000 at the county level. Figure A2 plots Democratic vote share at the county level against county-level social ties in 2000. Table A1 regresses county-level Democratic vote share on local ties in 2000, and controls for 2000 Democratic vote share and contemporaneous economic variables. The results are consistent in both sign and magnitude as those presented in the main text Table 2.

Figure A1: Local Ties in 2000, by County

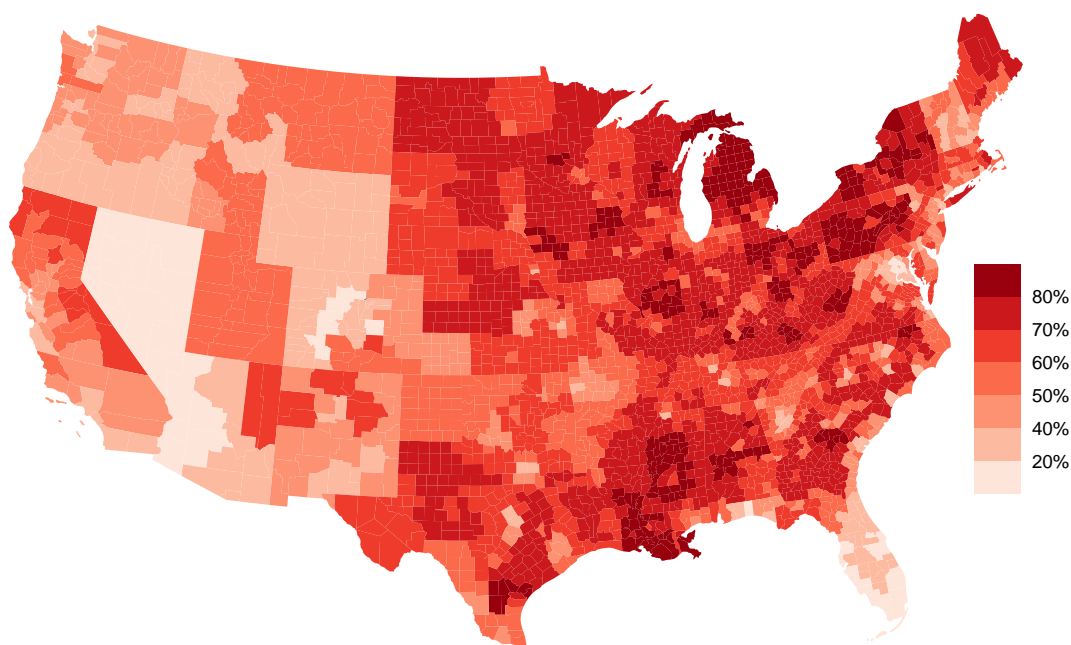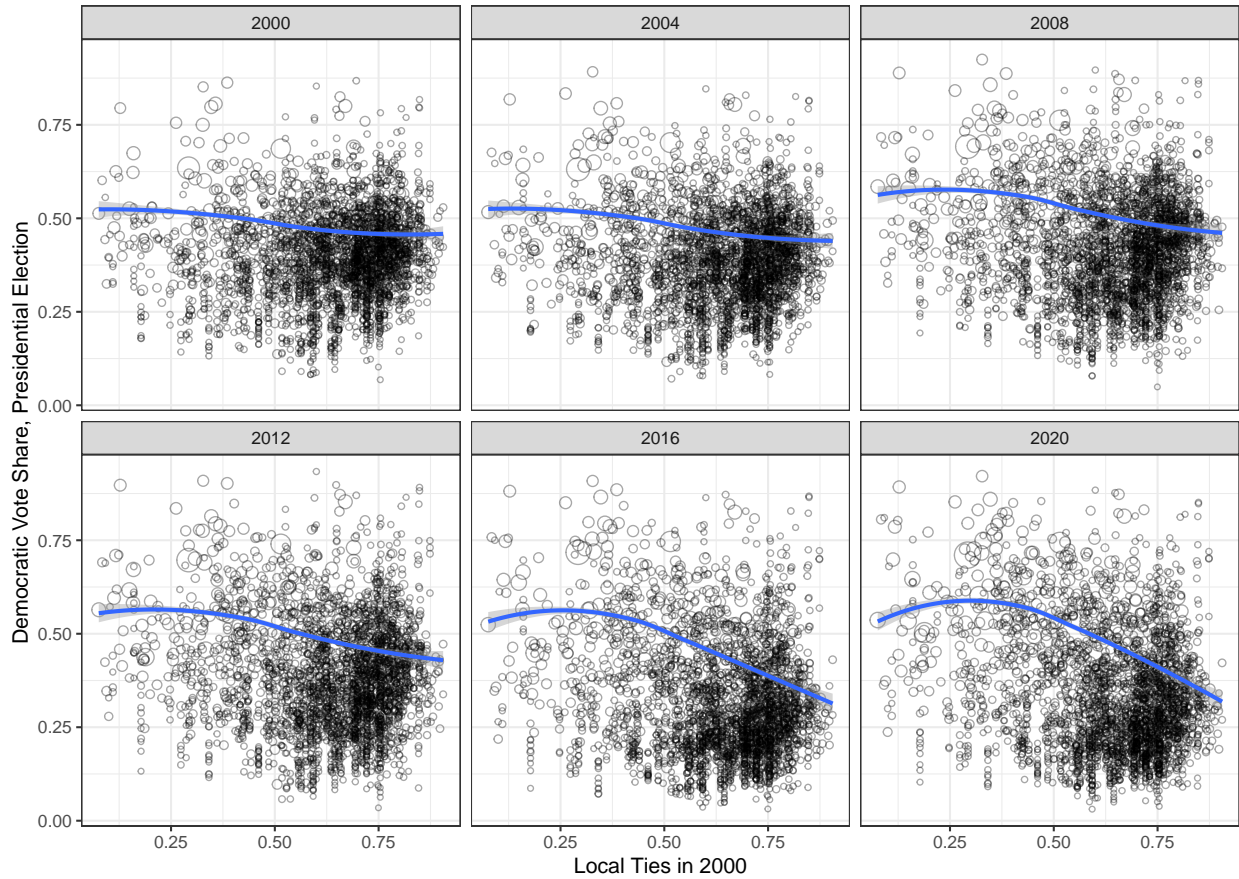Share Born in Same State, by County (2000)

Figure A2: Local Ties and Presidential Election Results, County Level

Notes: Each observation is a county. Local ties are operationalized as the proportion of people within a county who grew up in the same state. Points are sized according to the number of votes cast in each county. Loess lines, weighted by the number of votes, are shown in blue.

Table A1: Local Ties and County-Level Presidential Election Results, 2004-2020

| | Democratic Presidential Vote Share | | | | | |
	2004	2008	2012	2016	2020	Pooled
Local Ties (2000)	−0.03***	−0.06***	−0.08***	−0.19***	−0.20***	−0.12***
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)
Dem. Vote Share (2000)	1.03***	0.96***	1.05***	1.05***	0.89***	0.98***
	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.01)
Median Income	0.001***	0.005***	0.003***	0.005***	0.01***	0.005***
	(0.0004)	(0.001)	(0.0004)	(0.001)	(0.001)	(0.0004)
Unemployment Rate	−0.25**	0.56***	0.31***	0.29*	0.94***	0.36***
	(0.12)	(0.16)	(0.10)	(0.17)	(0.33)	(0.12)
Median Income × Dem. Inc						−0.0005
						(0.0005)
Unemployment Rate × Dem. Inc.						0.17
						(0.14)
Constant	−0.01	−0.02	−0.03*	−0.05*	−0.04	−0.04***
	(0.01)	(0.02)	(0.02)	(0.03)	(0.03)	(0.01)
Year FE						✓
Observations	3,108	3,108	3,106	3,105	3,106	15,533
R^2	0.93	0.86	0.86	0.80	0.75	0.81

Notes: The outcome variable is county-level Democratic vote share, measured from 0 to 1. Local ties, which is measured in 2000, is operationalized as the proportion of people within a county who grew up in the same state. Each column is a regression on a separate year, with the exception of the rightmost column which pools all years and includes year fixed effects. The pooled model allows for interactions between economic variables and Democratic incumbency in each election, to account for retrospective voting. $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.001$

B Survey Details

The survey was fielded via the survey firm SurveyMonkey between October 17 and October 24, 2022 and was sponsored by the Penn Program on Opinion Research and Election Studies. We collected 2,235 responses from an online convenience sample. The text of the questions we analyze here are listed below.

1. Suppose that you lost your job or you got seriously sick. Who, if anyone, could you rely on to help you get back on your feet? Select all that apply.

   - Family or friends who live in my area
   - Family or friends who live in another region
   - A church or charitable organization in my community
   - Government assistance programs such as unemployment insurance
   - I don't know who I would rely on

2. Over the past 12 months, how often have you visited relatives in person or had them visit you?

   - Never (1)
   - Once (2)
   - A few times (3)
   - About once a month on average (4)
   - About twice a month on average (5)
   - About once a week on average (6)
   - More than once a week on average (7)

3. To what extent do you agree with or disagree with the statement? "I live near people who I can rely on if I fall on hard times."

   - Strongly disagree (1)
   - Somewhat disagree (2)
   - Neither agree nor disagree (3)
   - Somewhat agree (4)
   - Strongly agree (5)

4. Is there anyone in your local area who you could ask to borrow $500 from?

   - No
   - Yes

5. Do you support an increase in the funding of government programs for helping the poor and the unemployed with education, training, employment, and social services, even if this would raise your taxes?

Table B2: Correlation Between Social Ties Index Variables

	Fam/Friends Far	Fam/Friends Near	Church/Charity	Visit Relatives	Rely on Neighbords	Borrow $500	social.network.index
Fam/Friends Far	1.00						
Fam/Friends Near	-0.02	1.00					
Church/Charity	0.20	0.14	1.00				
Visit Relatives	-0.06	0.32	0.07	1.00			
Rely on Neighbords	0.07	0.54	0.14	0.39	1.00		
Borrow $500	0.12	0.40	0.08	0.27	0.52	1.00	
social.network.index	-0.02	0.47	0.11	0.94	0.67	0.42	1.00

- Support (-1)
- Neutral (0)
- Oppose (1)

6. Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on his/their own. Where would you place yourself on this scale? [1-7 scale with the following anchors]

   - 1 - Government should ensure job and good standard of living
   - ...
   - 7 - Government should let each person get ahead on his own

7. If you had to guess, will you move in the next five years?

   - No, I will not move in the next 5 years
   - Yes, in the same city/town
   - Yes, to a different town in my metro area
   - Yes, to a different metro area
   - Yes, to a place not in a metro area
   - Yes, to a different country

We generate the local ties index by combining together items derived from questions 1-4. From question 1, we create indicator variables for the respondent selecting "family or friends who live in my area", "family or friends who live in another region," and "a church or charitable organization in my community." Then, we combine these binary variables with the numeric responses to questions 2-4 using principal components analysis.

Table B2 shows the correlations between each of these variables. Figure B3 shows the variance of each principal component. We take the first principal component as our social ties index measure.

We generate our social insurance preference index by combining responses to questions 5 and 6. We first calculate the z-score for each question, then add them together. Finally, we standardize the combined scale to have mean 0 and standard deviation 1.

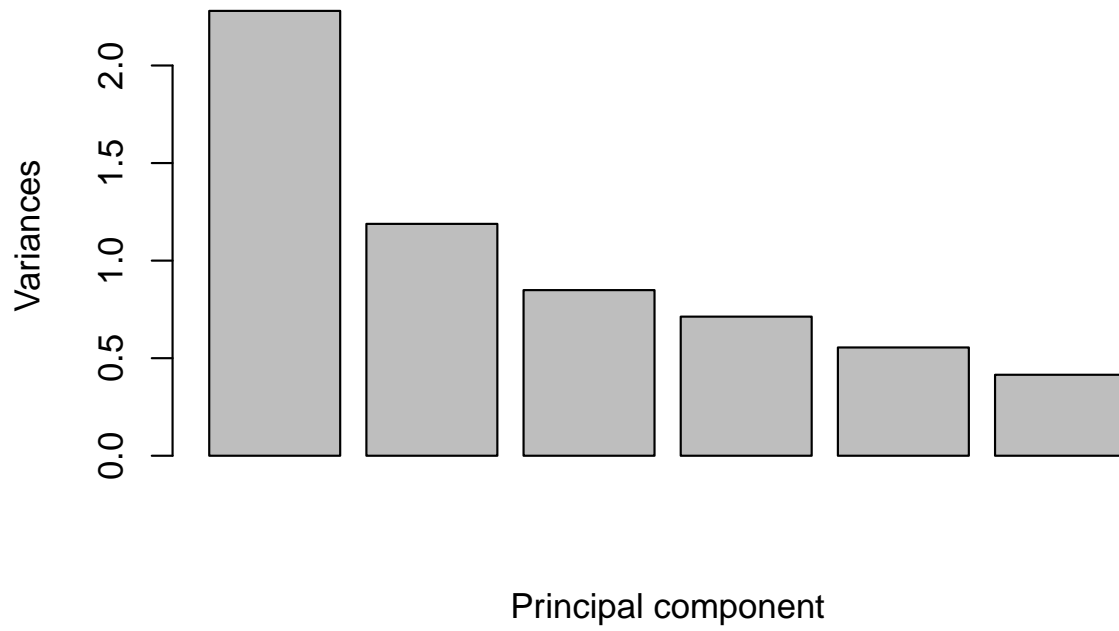**Figure B3:** Scree Plot for Social Ties Index

Table C3: Strength of Local Ties and State of Residence

	Help from Family/Friends in Area		Local Ties Index	
	Model 1	Model 2	Model 3	Model 4
Live in Same State as 16	0.06***	0.07***	0.29***	0.38***
	(0.02)	(0.02)	(0.04)	(0.05)
Controls		✓		✓
State FE		✓		✓
Observations	2,099	1,915	2,076	1,897
R^2	0.00	0.10	0.02	0.12

Notes: The outcome variable in the first two columns is an indicator for a respondent saying they could rely on friends or family in the area. The outcome variable in the latter two columns is an index measuring the extent to which people can rely on their social network. Models 2 and 4 include control variables for age, race, gender, education, family income, party ID, and fixed effects for state. Robust standard errors shown in parentheses. $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.001$

C Validation of Local Ties Measure

In the aggregate analysis, we use a relatively crude proxy to measure local ties in a region: the share of people living in the same state as they were born in. In this appendix, we validate this measure in several ways.

First, we use our individual-level survey data to compare the strength of local ties among people who do and don't live in the same state in which they grew up. We consider two outcome measures. The first is an indicator for respondents saying they could turn to family or friends who live in their area if they were to fall on hard times. The second is a composite index of the strength of respondents' local social network, generated via principal components analysis on 5 survey questions.[26] We regress these outcome variables on an indicator for respondents indicating that they live in the same state now as when they were 16. Finally, we control for sociodemographic variables, party ID, and fixed effects for respondents' current state of residence.

Table C3 shows the results. Models 1 and 2 show that respondents who live in the same state as when they were 16 are about 6-7 percentage points more likely to say they can rely on family/friends nearby than respondents who live in a different state than when they were 16. Models 3 and 4 show that same-state respondents score about a third of a standard deviation higher on the local ties index. These results provide individual-level evidence that living in the same state as one grew up in is associated with stronger localized social networks.

Second, we compare our measure of local ties to a measure of social network density derived from Facebook data (Chetty et al., 2022). Using Facebook data, Chetty et al. (2022)

---

[26]These questions are: indicators for being able to rely on (1) family/friends in one's area, (2) family/friends in another region, and/or (3) a church or charitable organization in one's community; (4) an indicator for agreement that the respondent lives near people they can rely on if they fall on hard times (measured 1-5); and (5) a numeric variable indicating how often respondents visited with relatives in the past 12 months (1-7). The first principal component explains 38% of the cumulative variance.

estimate how likely two friends of a given person, living in the same area, are to be friends with each other. This measure of cohesiveness is very closely related to our theory: we expect that informal social insurance will be easier to provide when social network are more cohesive. While this alternative measure is more closely connected with our theory, this measure is available only in 2018. Nonetheless, we find that our primary measure of local tie is closely correlated with the Facebook-derived measure of social cohesion (Figure C4), providing some additional reassurance that our measure captures local ties.

Figure C4: Different Measures of Social Ties
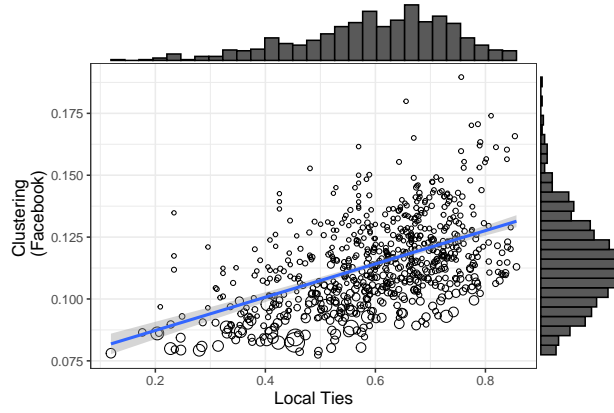
Finally, we compare our measure of local ties to several other measures of social capital that are most relevant to our theory, such as the number of religious organizations, labor union, civic organizations, and census response rates, using the data sourced from Rupasingha, Goetz and Freshwater (2006). Figure C5 shows that our measure of local ties are positively correlated with the number of religious organization per capita at the commuting zone level. Table C4 shows that our measure is positively correlated with a number of other measures of social capital from the same source.

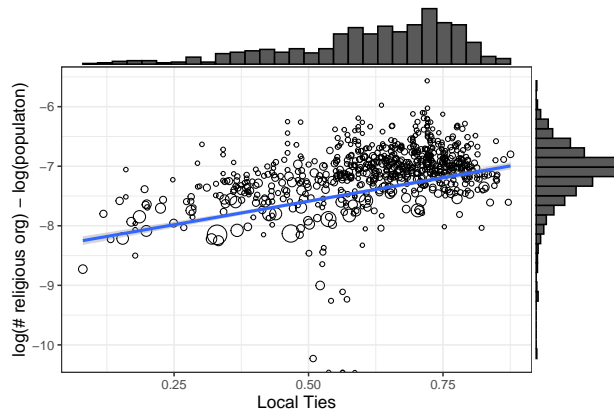**Figure C5:** Local Ties and the Religious Organizations

Table C4: Local Ties and Other Measures of Social Capital

	Local Ties (continuous)				
	(1)	(2)	(3)	(4)	(5)
Religious Orgs	0.16***				
	(0.01)				
Labor Union		0.05***			
		(0.01)			
Sports Club			0.02**		
			(0.01)		
Civic Orgs				−0.01	
				(0.01)	
Census Response					0.52***
					(0.09)
Constant	2.47***	2.68***	2.17***	1.65***	1.83***
	(0.30)	(0.35)	(0.37)	(0.37)	(0.32)
Controls	✓	✓	✓	✓	✓
Observations	722	722	722	722	722
R^2	0.23	0.08	0.04	0.04	0.08

Notes: The outcome variable is our measure of local ties at the commuting zone level. The number of religious organization, labor union, local sports or recreational club are log transformed and obtained from Rupasingha, Goetz and Freshwater (2006). The number of the local organizations are measured in 2006. Controls include median income, population, and unemployment rates. Standard errors shown in parentheses. $^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.001$

Table D5: Local Ties, Import Shock and Out-migration Flows (2018)

	(1)	(2)	(3)	(4)
Local Ties (continuous)	−0.284***		−7.508***	
	(0.024)		(0.665)	
Import Shock	0.001***		0.007	
	(0.0003)		(0.008)	
High Ties (Binary)		−0.007***		−0.015
		(0.001)		(0.015)
Import Shock × High Ties		0.001**		0.006
		(0.0005)		(0.005)
Import Shock × Low Ties		−0.00003		0.002
		(0.001)		(0.005)
Model Types	*OLS*	*2SLS*	*OLS*	*2SLS*
Observations	718	718	718	718
Adjusted R^2	0.281	0.289	0.972	0.984

Notes: The outcome variable of is change in logged population between 2010 and 2018 (model 1-2) and logged outflow of people in 2018 (models 3-4). To measure the outflow of people in 2018, we use conty-level migration data sourced from IRS. We use alternate measure of social ties obtained from Chetty et al. (2022). For detailed explanation for the measure, see section C.

D   Alternate Measure of Local Ties and Migratory Responses

In Table D5, we replicate the migration analysis using the alternative, Facebook-based measure of local ties from Chetty et al. (2022). As described in section C, Facebook-based measure is only available in 2018, which is later than most of the political data we examine. Thus, we focus on replicating its impact on migratory responsese.

We find that the Facebook-derived measure of social ties produces consistent results with the main text. Regions with high social ties experience less change in population size (Model 1) and less out-migration (Model 3), while the impact of social ties on import shock is not statistically significant (Model 4). It is challenging to examine the conditional impact of social ties on import shock using the Facebook measure since the highest intensity of the import shock from China occurred in the early 2010s (Autor, Dorn and Hanson, 2021), whereas the Facebook measure is only available for 2018. Nevertheless, these findings confirm our primary result that social ties are strongly correlated with latent mobility. This variation in latent mobility can potentially result in stronger or weaker migratory responses to regional economic shocks.

E Characterizing Migrants in CCES Panel Surveys

As an additional micro-level test of our argument, we examine the characteristics of individuals who migrate compared to those who stay both in terms of their attitudes toward redistribution policies and their level of local ties. To identify the attributes of people who migrate, we use individual-level panel survey data. The Cooperative Congressional Election Study (CCES) provides six waves of panel survey data from 2010 to 2014.

CCES allows us to identify individuals who moved during the panel period and their characteristics. CCES asks respondents about their current location of residence each wave. If an individual moves out of their commuting zone after the first wave, we indicate them as movers (1); otherwise, they are stayers.

To measure individuals' attitudes toward welfare expansion and redistribution policies, we use the following question that was asked in the first wave of the survey: "If the Congress were to balance the budget, it would have to consider cutting defense spending, cutting domestic spending (such as Medicare or Social Security), or raising taxes to cover the deficit. What would you most prefer that Congress do — cut defense spending (1), cut domestic spending (2), or raise taxes (3)?" We use the preference to "cut domestic spending (such as Medicare or Social Security)" as a proxy for conservative attitudes on resdistribution and social insurance.

The other key variable is whether respondents grew up in the area. The idea is similar to the measure of local ties at the aggregate level analyses. If people are born and raised in the area, they are more likely to live closer to family, have more extensive localized social networks, and be more embedded in their communities. To measure this, we use the following question from the first wave: "How long have you lived in your current city of residence?" Combined this question with respondents' reported age, we identify whether respondents grew up in the area they resided in during the first wave — which we define as living there since at least age 10.

Table E6 shows that people who are opposed to welfare expansion ("Cut Domestic Spending") are significantly less likely to move out of their commuting zone later in the panel. People with conservative social insurance attitudes at baseline are about 1 percentage point less likely to move between commuting zones during the panel. For reference, in the full sample, about 7% of people move between commuting zones. Those opposed to welfare expansion are about 1 percentage point less likely to move out of the area during the study period than those who do not oppose welfare expansion. This finding aligns with our theory that individuals who stay behind are less likely to support redistributive policies. In the same vein, we find that people who grew up in the area are less likely to move out of the commuting zone.

Table E6: Selective Migration: CCES Panel Data

	Move to Different Commuting Zone			
	(1)	(2)	(3)	(4)
Cut Domestic Spending	-0.01^{***}	-0.01^{**}	-0.01^{**}	-0.01^{**}
	(0.01)	(0.01)	(0.01)	(0.01)
Grew Up in Area	-0.05^{***}	-0.04^{***}	-0.05^{***}	-0.05^{***}
	(0.01)	(0.01)	(0.01)	(0.01)
State FE		✓		✓
Covariates			✓	✓
DV mean	0.069	0.069	0.069	0.069
Observations	9,276	9,276	9,275	9,275
R^2	0.005	0.01	0.02	0.03

Notes: Outcome variable is an indicator for moving between commuting zones during the panel. "Cut domestic spending" is an indicator for preferring to cut domestic spending as a way to balance the budget, measured at baseline. "Grew up in area" is an indicator for living in the same city since at least age 10 at baseline. Covariates include age group, gender, race, education, family income, employment status, and partisanship. Robust standard errors shown in parentheses. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.001$