

Is the Culture War Exacerbating Brain Drain? State Economic Development, Federalism, and Interstate Migration Decisions

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June 3, 2023

In their “laboratories of democracy,” state legislators, governors, and judges experiment with citizens’ fundamental rights. Access to abortion, guns, voting, and religious freedom varies across state lines. Traditionally, federalism has been advocated as an institution that preserves liberty: faced with a restrictive rights regime, people can move to a state with more generous rights protections (Buchanan 1995). However, states also use economic policies to lure migrants; citizens consider economic conditions, weather, and amenities when deciding when (or if) to relocate (Young, Varner, Lurie & Prisinzano 2016). Whether people factor the rollback of rights into their migration decisions (and how rights protections are weighed against economic policies and other factors) is largely unknown. To compound the problem, the ability to relocate in response to restrictions on rights is unequal: the same citizens whose rights are most likely to be restricted are likely to be those who lack the means to relocate. In this way, federalism might exacerbate rights inequalities.

Scope and Significance

Whether federalism protects or undermines fundamental liberties depends in large measure on the degree to which people vote with their feet and move to freedom-expanding states, thereby punishing regimes for their rights violations, given that out-migration of talented individuals will compromise economic performance over the long-term. Do people vote with their feet by moving to a different state when their or others’ rights are abridged? Unfortunately, at this point all we have are the statements of decidedly biased politicians and policy advocates. We lack systematic evidence regarding the degree to which states’ rights regimes affect their ability to attract and retain the types of highly educated workers and entrepreneurs they desire.

Traditional accounts suggesting that citizens will move in response to restrictions on their rights make two Herculean (and largely untested) assumptions. First, it assumes that those whose rights are abridged can move to a new state when a state’s rights regime changes. For many, this level of mobility isn’t feasible. And, given that economic resources in the U.S. are highly correlated with race, gender, sexuality, and social class, it is likely that the same citizens whose rights are most often targeted for restriction with the fewest resources to move, compounding the consequences of federalism.

Second, this account assumes that rights regimes are a prominent factor in migration decisions. Obviously, when people are deciding where to live, they might consider rights regimes, but they do not only consider rights regimes. They also factor in amenities, economic conditions,

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and economic policies (Partridge 2010, Young et al. 2016). While states are polarizing on rights protections, they are also diverging on economic policies thought to be attractive to affluent taxpayers. Like international migrants, interstate migrants within the U.S. might emphasize economic considerations over other factors (Breunig, Cao & Luedtke 2012, Scott 2010). Republican states (like Texas) have been more likely to pursue economic and fiscal policies that are attractive to the desirable affluent, like tax cuts for high earners, while Democratic states have been more likely to raise taxes on the wealthy, which these individuals find unattractive (Franko & Witko 2018). This raises the question of whether states may be able to “buy off” concerns about constitutional rights among migrants they desire with favorable economic policies and conditions.

If citizens do not (or cannot) use their exit option to leave rights-restricting jurisdictions, federalism is a system in which the civil rights and liberties residents enjoy are increasingly tied to their place of residence. Rather than protecting liberty, federalism may promote inequality and the restriction of rights, especially for minorities. This issue takes on added urgency as widespread partisan polarization and partisan control of state governments has led to a growing divergence of state rights-related policies among Democratic and Republican states (Epperly, Witko, Strickler & White 2020, Grumbach 2018). Aided by a conservative U.S. Supreme Court and gridlock in the elected branches in D.C., Republican states have restricted abortion rights, voting rights, free speech rights and other rights, while Democratic states have generally expanded various rights (with the notable exception to this pattern being the right to bear arms, restrictions of which have been limited by the Supreme Court).

Experimental Design

We use a conjoint survey experiment to investigate the effect of rights restrictions on Americans’ decisions about where to live and work. The experiment was fielded with YouGov on a nationally representative sample of 1200 respondents aged 18+ in November 2022. YouGov interviewed 1223 respondents who were then matched down to a sample of 1200 to produce the final dataset. The respondents were matched to a sampling frame on gender, age, race, and education. The frame was constructed by stratified sampling from the full 2019 American Community Survey (ACS) 1-year sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file). The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was estimated for inclusion in the frame. The propensity score function included age, gender, race/ethnicity, years of education, and region. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles. The weights were then post-stratified on 2016 and 2020 Presidential vote choice, and a four-way stratification of gender, age (4 categories), race (4 categories), and education (4 categories), to produce the final weight.

We present respondents with pairs of side-by-side job offers randomizing state economic and rights policy attributes as well as job attributes and state amenities and other conditions. We ask subjects to rate the attractiveness of each job and how willing they would be to take each job. This experimental approach follows many existing studies in the field of human resource management that examine why some jobs are more attractive than others, and which focus on how different attributes of hypothetical or actual jobs are viewed by those in the labor market or in college about to enter the labor market (Becker, Connolly & Slaughter 2010, Cable & Judge 1994, Carless 2005). These experiments show that pay and benefits are very important to job seekers (Cable

Table 1: Conjoint Attributes and Realizations

Job Opportunity Attribute	Potential Realization
<i>Company Culture</i>	<ul style="list-style-type: none"> • You will have the ability to work on a variety of tasks and develop your skills in many areas • The company seeks to provide employees with constructive feedback to foster their career growth • Employees are given many opportunities for advancement within the organization • You will have many opportunities to collaborate with talented people
<i>Salary</i>	\$40,000; \$70,000; \$100,000; \$130,000
<i>Typical Home Price</i>	\$170,000; \$340,000; \$410,000; \$680,000
<i>Presidential Election Returns</i>	<ul style="list-style-type: none"> • In a state that voted heavily for Joe Biden • In a state that Joe Biden barely won • In a state that Donald Trump barely won • In a state that voted heavily for Donald Trump
<i>Location</i>	Small college town; Rural area; Mid-size city; Major metropolitan area
<i>Company Size</i>	10 employees; 500 employees; 5,000 employees; Over 50,000 employees
<i>Average January Temperature</i>	20 degrees Fahrenheit, 30 degrees Fahrenheit, 50 degrees Fahrenheit, 65 degrees Fahrenheit
<i>Economic Policies</i>	<ul style="list-style-type: none"> • Forming a commission to study ways to strengthen economic growth • Decreasing K-12 per pupil spending from \$12,000 to \$6,000 • Increasing K-12 per pupil spending from \$12,000 to \$18,000 • Eliminating the state income tax • Increasing the income tax on millionaires • Expanding Medicaid coverage to 140% of the poverty level • Keeping Medicaid coverage at 100% of the poverty level rather than expanding it to 140% of the poverty level • Keeping the minimum wage at \$7.25 per hour rather than raising it to \$15 per hour • Raising the minimum wage from \$7.25 to \$15 per hour
<i>Recent State Social Policy</i>	<ul style="list-style-type: none"> • Forming a commission to increase public understanding of the state's history and culture • Affirming the ability of same-sex couples to adopt children • Prohibiting same-sex couples from adopting children • Banning the concealed carry of firearms • Permitting the concealed carry of firearms • Limiting abortion to the first 6 weeks of pregnancy with no exception for rape, incest, or health of the mother • Banning the teaching of certain ideas related to race and racial issues in the U.S. in high school history courses • Requiring the teaching of race and racial issues in the U.S. in high school history courses • Reaffirming the right to abortion in the first trimester (and later if the health of the mother is in jeopardy) • Allowing transgender student athletes to play on sports teams that match their gender identity, rather than the sex they were assigned at birth • Requiring transgender student athletes to play on sports teams that match the sex they were assigned at birth, even if it does not match their gender identity

& Judge 1994), a result we have also found (Nelson & Witko 2022), but amenities also enter into job-related relocation decisions (Turban, Campion & Eyring 1995). Conjoint experiments are also increasingly common in the study of politics and public policy (Carlson 2015, Franchino & Zucchini 2015, Kirkland & Coppock 2017, Teele, Kalla & Rosenbluth 2018).

This design enables us to estimate how rights and economic policies affect evaluations of job opportunities in the context of something approximating the actual decisions people making an interstate move face, while not highlighting which attributes we are interested in to avoid expressive responses. The treatments will allow us to understand the causal impact of these factors on micro-level decisions about interstate migration by estimating the average marginal component effect (Hainmueller, Hopkins & Yamamoto 2014). The non-policy attributes that we include enable us to estimate how sensitive respondents are to rights abridgment because the experimental design induces trade-offs between non-rights-based considerations (like salary) and rights-based policies (Nelson & Witko 2022). Our design also enables us to examine how important policies are compared to other attributes of states (such as climate) that are known to affect migration (Partridge 2010). While this conjoint has a large number of attributes, we were mindful that the number of attributes we included was not so large where satisficing would affect the results to any substantial degree (Bansak, Hainmueller, Hopkins & Yamamoto 2018). To further limit respondent fatigue, we randomized the order of attributes across respondents, but kept that order constant across pairs of job offers for each respondent.

Table 1 gives the attributes and their realizations. When selecting values for each attribute, we used realistic ranges to maximize external validity (De la Cuesta, Egami & Imai 2021). For example, the housing prices range from the actual lowest to highest state median price (Alabama and California); the January temperatures are reflective of actual high and low state values. The Company Culture attributes were drawn from example job advertisement statements from those used in a field experiment by Schmidt, Chapman & Jones (2015). Similarly, the variation in policy realizations that we are interested in is realistic. The tax on millionaires reflects California's actual policy, while several states have no income tax, for example. The values for minimum wage and education spending were also based on actual state policy variation. And the "rights" policies were taken from recent legislation enacted in the states.

Respondents were presented with ten pairs of hypothetical job offers, each with nine randomly assigned traits. After reading each pair of job offers, respondents answered three questions: First, we asked respondents to rate the attractiveness of each job offer on a 4-point scale ranging from "Very attractive" to "Not at all attractive." Respondents also selected the job they were more likely to accept. These two types of ratings are our two outcome variables of interest.

We analyze the experiment by estimating the average marginal component effect (AMCE) of each of the attributes of the job offer (Hainmueller, Hangartner & Yamamoto 2015). The AMCE provides the marginal effect of each attribute over the joint distribution of the other included attributes, similar to estimating a regression with a suite of categorical variables. Estimated AMCEs are identical to the coefficients estimated from a multivariate linear regression (Hainmueller, Hangartner & Yamamoto 2015), and must be interpreted relative to an omitted baseline category. We cluster our standard errors at the respondent level to account for the fact that each respondent rated multiple pairs of profiles.

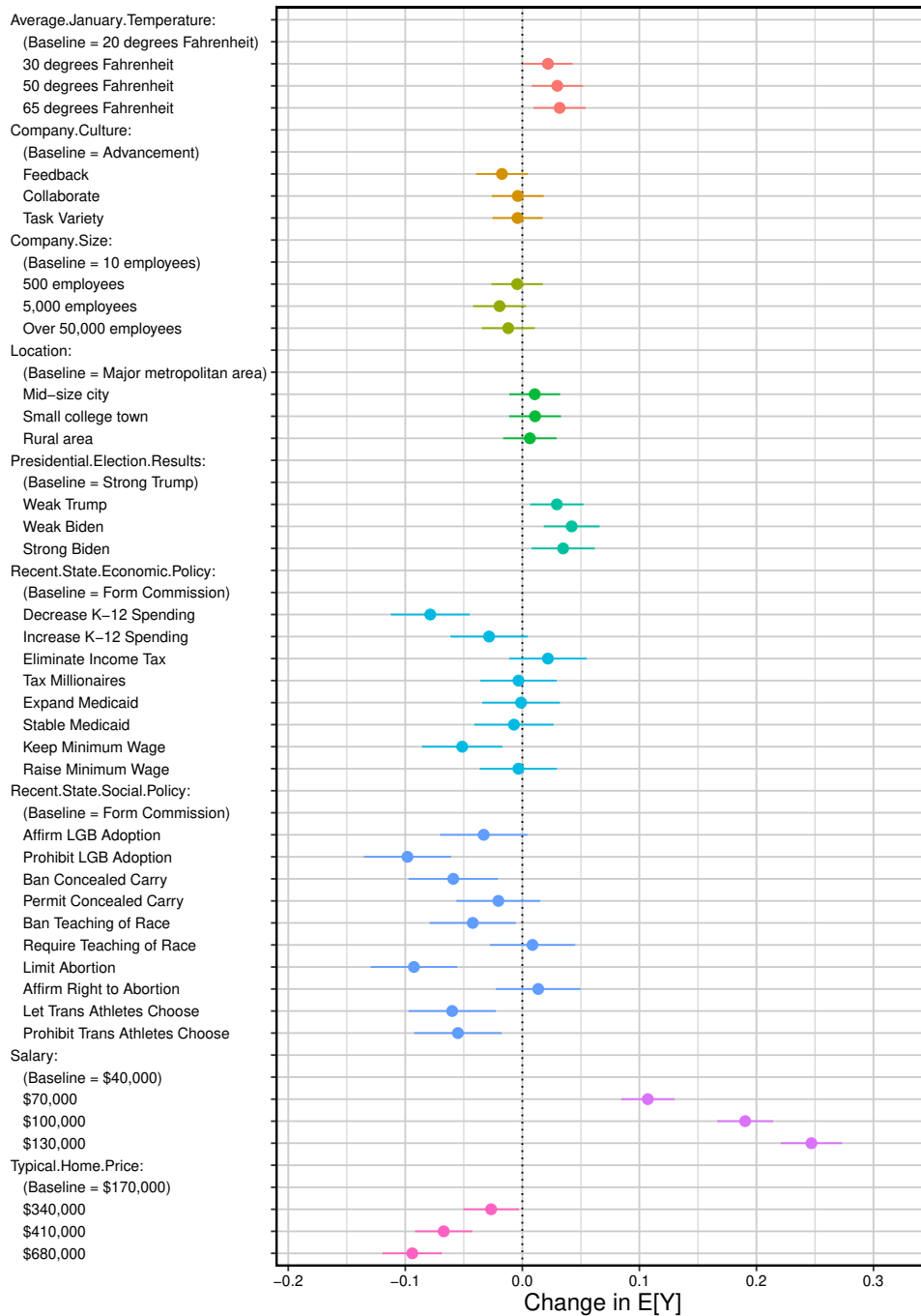


Figure 1: AMCE Results, Job Selection Outcome, YouGov (November 2022). The dots plot the Average Marginal Component Effect, and the whiskers provide 95% confidence intervals. Positive values of the outcome variable indicate that the respondent was more likely to select a job with that feature, compared to the baseline..

Results

Do rights restrictions and expansions affect evaluations of job opportunities? The answer is clearly yes. In Figure 1 we present the change in the probability of selecting a job given the presence of a particular attribute relative to the baseline attribute.

For economic policy, compared to the baseline of forming a commission to examine ways to spur economic growth, a large decrease in K-12 spending in a state is associated with about an 8% reduction in choosing a particular job. Keeping the minimum wage at \$7.50 rather than raising it to \$15 is also associated with a 5% reduction in the probability of selecting a job offer, all else equal. Notably, neither eliminating the income tax nor expanding Medicaid has a significant effect on the probability a respondent selects the job opportunity.

Moving to the rights politics, we see that the effects of these social policies are generally greater than the effects of the economic policies. Restricting the rights of same-sex couples to adopt and restricting abortion right reduce the probability a job would be selected by around 10%. Gun rights and limiting the teaching of race in schools have smaller, but still important, effects. Compared to the state forming a commission to increase understanding of the state's history, banning concealed carry and banning the teaching of race in schools are associated with declines (about 4-6%) in job acceptance. Notably, the more liberal policies in our dataset have no effect relative to the baseline (rather than increasing the probability one would select the job offer): neither affirming the rights of LGB couples to adopt, nor requiring the teaching of race, nor banning concealed carry, nor affirming the right to abortion is associated with any change in the probability that a respondent selects that job offer.

One way of understanding the difference in the liberal and conservative policies is that individuals are loss averse when it comes to rights (and perhaps to some extent economic policy). Loss aversion refers to the fact that people tend to be more leery of changes or choices when outcomes are framed in terms of loss rather than potential gains (Kahneman & Tversky 1979). Here, we see that *taking away a right is more repellent to job seekers than affirming or giving a new right is*. For instance, prohibiting same-sex adoption or abortion has much larger absolute effect sizes than affirming either right. We arguably see something similar for some economic policies. For example, decreasing K-12 spending is punished more than an increase is rewarded, and keeping the minimum wage low is punished more than a state is rewarded for raising it to \$15, and similarly for Medicaid expansion.

Unsurprisingly, as in our past research, salary is the largest factor shaping job choice. Each \$30,000 increase in salary is associated with about a 0.10 increase in the probability that a job is selected. Yet, rights policies still have substantial effects compared to salary. For example, the effect of prohibiting same-sex adoption is around the size of the effect of moving salary from \$40,000 to \$70,000.

Housing prices have quite large effects on job selection outcomes. Going from the least expensive state (Alabama's median home price) to the most expensive state housing price (based on California's median) makes a respondent nearly 10% less likely to accept a job. These effects are considerably smaller than salary, but similar to policy. For example, the negative effects of an abortion ban are larger than the negative effects of moving from a \$170,000 housing price to a \$340,000 price, and about as large as moving to a \$680,000 home price state. This, along with the salary discussion above, shows that people are willing to sacrifice quite a bit economically to avoid living in a state that strips certain rights.

Conclusion

How the restriction of fundamental rights shapes interstate migration decisions raises critical questions regarding how the American constitutional order, and federalism specifically, affects the exercise of liberty in a time of polarization, federal gridlock, and an increasingly conservative Supreme Court. In Justice Brandeis’s famous phrasing, the U.S. states are “laboratories of democracy,” free to “try novel social and economic experiments without risk to the rest of the country” (*New State Ice Co. v. Liebmann* 285 U.S. 262 (1932)). The states haven’t taken up this mantle with gusto, experimenting on policies ranging from the adoption of state lotteries to tax rates to K-12 curricula (Shipan & Volden 2021). Beyond this benign policy experimentation lies something potentially insidious: innovation in legal policies—like restrictions on voting and political expression, limits on the availability of abortion, and curbs on transgender rights—that implicate citizens’ fundamental rights. Because such policies spread across states and affect federal policy (Mooney 2020), rights limitations in even some states present risks for the rest of the country.

In this report, we used a conjoint survey experiment to explore the relationship between state policy adoption and interstate migration decisions. In order to avoid expressive survey responses and have people evaluate how rights restrictions would affect their interstate migration in a more realistic, multidimensional decision context we conducted conjoint surveys that provided respondents with competing job offers to evaluate. We found that restricting rights is generally quite repellant to would-be interstate migrants, and economic policies cannot make up for these restrictions.

External validity is a threat to any experiment. Respondents may claim a political or policy factor is important to where they live, but it may not actually shape their behavior in the real world (Mummolo & Nall 2017). Compared to other types of experiments—which can only examine the causal effect of a small number of potentially-relevant factors—the use of conjoint experiments mitigates this problem to a considerable extent: the need to weigh several factors simultaneously minimizes purely expressive opinion. In fact, conjoint experiments have been shown to approximate real world decisions in a number of contexts (Hainmueller & Hopkins 2015).

Importantly, all of our analysis is preliminary. In this report, we present only the unconditional treatment effects from our experiment. An obvious next step in our analysis is to examine how these effects vary by respondents’ employment status, education, and political affiliation. Still, we think that these preliminary results provide interesting fodder for future research and have direct implications for the consequences of the many salient, rights-restricting policies states are adopting across the United States.

Experiments are less predictive of actual behavior when it is costly. We will mitigate these external validity concerns by conducting observational analyses of interstate migration which will rely on original measures of state rights protections and very large data sets. These analyses will help us gauge the size of treatment effects in the real world. For example, we plan to utilize American Community Survey (ACS) data, which will allow us to track interstate migration with questions about current state of residence and state of residence last year every since 2000, and which will provide approximately 40 million observations and hundreds of thousands of movers. The ACS is frequently used by scholars interested in interstate migration (Conway & Rork 2022, Johnson & Kleiner 2020, Yasenov, Lawrence, Mendoza & Hainmueller 2020). The ACS’s large samples, representative at the state level, make it the “conventional source for measuring migration” across the states (Conway & Rork 2022). Because the ACS data are representative at the state-level,

in the future we can eventually develop measures of total interstate rights-based migration using state-level population data.

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