Locally Controlled Minimum Wages Leapfrog Public Preferences

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Abstract

Does decentralizing policymaking authority to the local level lead to a closer match between public policies and citizen preferences? We study this question in the context of minimum wage laws, a salient and substantively important policy area with significant variation in the degree of local policymaking discretion. Using novel survey data and aggregation methods, we generate estimates of minimum wage preferences for all U.S. cities with at least 1,000 residents and compare these preferences to actual minimum wages. We show that prevailing minimum wages are generally lower than residents prefer, and this conservative bias is most pronounced in states with preemption laws. However, locally controlled minimum wages leapfrog public preferences and are higher than residents want, on average. Finally, we consider how various counterfactual policies might improve representation and compare the conditions under which a centralized minimum wage would reduce policy bias relative to a decentralized approach.

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Introduction

In 2014, Seattle passed a hotly debated minimum wage law that would raise the city’s minimum wage from \$9.47 to \$15 over several years. While Democrats in Congress have pushed for a federal minimum wage hike for years, these efforts have largely stalled amid an atmosphere of growing polarization and gridlock in D.C. Instead, minimum wage policies in the U.S. are increasingly set in a decentralized manner by states and sometimes even by city governments.

Can decentralizing policymaking authority on issues like the minimum wage improve how well mass preferences are represented by public policy? In the U.S., existing research demonstrates that policy outcomes tend to correlate with indirect measures of public preferences, such as ideology (Borcherding and Deacon, 1972; Bergstrom and Goodman, 1973; Stimson, MacKuen, and Erikson, 1995). This correlation is typically referred to as *policy responsiveness* and has been well-documented at the state level (e.g. Erikson, Wright, and McIver, 1993; Caughey, Xu, and Warshaw, 2017; Caughey and Warshaw, 2018).

However, research in this area tends to rely on proxies for public preferences measured on different scales than the policy outcomes themselves. As many scholars have pointed out, responsiveness does not necessarily indicate congruence, or spatial proximity between enacted policies and what constituents want (Romer and Rosenthal, 1979; Erikson, Wright, and McIver, 1993; Matsusaka, 2001; Gerber, 1996). In fact, several recent studies have uncovered substantial evidence of *policy bias*, or deviations between enacted policies and majority opinion at the state level (Matsusaka, 2010; Lax and Phillips, 2012; Simonovits, Guess, and Nagler, 2019). In other words, the literature on statehouse democracy conveys a mixed message. State legislation appears to respond to changes in mass opinion, but policies are often far removed from average preferences.

Political scientists and economists frequently assume that delegating policymaking authority to local governments will facilitate a better match between local tastes and policy outcomes (e.g. Oates et al., 1972; Tiebout, 1956; Brennan, Buchanan et al., 1980; Weingast, 1995). However, the focus of empirical research on the central tendency of state

preferences — but *not* their variation — has made it impossible to assess how much devolving policy decisions to the local level improves representation vis-a-vis more centralized policy-making. While some studies have explored the opinion-policy relationship below the level of states (e.g. Tausanovitch and Warshaw, 2014), existing work has not examined whether the degree of decentralization improves how well mass preferences are represented by policy.

We study this question in the context of local minimum wages laws in the U.S. Minimum wage policies have offered a fruitful testbed to evaluate theories of federal lawmaking (Clinton, 2012), party influence (Peterson, 2019), and elite position taking (Broockman and Butler, 2017). Minimum wages play an important role in determining earnings inequality (Autor, Manning, and Smith, 2016), and a majority of minimum wage workers are women and people of color (Huizar and Lathrop, 2019). In addition to being an important and salient topic over which average citizens have meaningful preferences Carmines and Stimson (1980), local minimum wages are an ideal case to study policy representation because we can quantify local preferences and policies on the same cardinal scale in order to meaningfully evaluate the degree of policy bias. While not the only way to measure representation, this distance-based notion of representation builds on both classic theoretical and recent empirical research (e.g. Achen, 1978; Dahl, 1973; Golder and Stramski, 2010) and provides an intuitive way to think about how well policies match aggregate preferences. Moreover, substantial variation exists in the degree to which minimum wage policy is decentralized. Some states allow local governments to adopt their own minimum wages, while others preempt this ability.

Existing theoretical work on federalism and decentralization typically argues that if tastes for a policy vary geographically or if local politicians have better knowledge of local conditions, then decentralized policies will come closer to matching mass preferences (De Montesquieu, 1989; Hayek, 1939; Oates, 1999). Recent research also demonstrates that (1) state minimum wage laws display a strong conservative bias and (2) substantial sub-state variation exists over minimum wage preferences (Simonovits, Guess, and Nagler, 2019). If city residents share more homogeneous political tastes due to geographic sorting, local governments might be more constrained by the tastes of the median voter (Gerber

and Lewis, 2004), and minimum wages adopted at the local level should more closely reflect public preferences.

However, other scholars have theorized that decentralization might not actually promote policy congruence. Gathering accurate information about constituent priorities is still costly at the local level, sometimes even more so than under a centralized regime (Breton, 1998). As John Stuart Mill argues, even if local officials enjoy a privileged lens into the tastes and conditions of their community, they might lack the general or comparative knowledge necessary to translate this information into effective public policy. In addition, interest groups often exert substantial influence at the local level (Anzia, 2019), and participation in local politics tends to skew towards older, whiter, wealthier, and home-owning residents (Hajnal and Trounstein, 2005; Oliver and Ha, 2007; Einstein, Palmer, and Glick, 2019).

If local policymakers face obstacles to learning about the preferences of their constituents or are beholden to a set of non-representative interests, then delegating policymaking authority will not necessarily improve representation. Cities also often struggle to pass policies that benefit low-income residents due to the economic pressures of Tiebout (1956) sorting (e.g. Peterson, 1981), and it is also unclear whether local units must necessarily adopt their own policies in order to reap the benefits of decentralization (Tanzi, 1996; Bardhan, 2002; Treisman, 2007). Higher level governments can also tailor policies to local preferences from above, which is the case in several states including Oregon and New York. Ultimately, whether decentralized policies come closer to matching resident preferences remains an open empirical question.

This study adds to our understanding of decentralization and policy representation by making several distinct contributions. In general, research on representation at the local level has lagged behind that at the state and national level in part due to methodological and data constraints (Trounstein, 2010). The existing literature on cities tends to focus on policy responsiveness by comparing indirect measures of resident preferences and policies (e.g. Palus, 2010; Choi et al., 2010; Tausanovitch and Warshaw, 2014; Einstein and Kogan, 2016; Warshaw, 2019; Sances, 2021). While recent work by Simonovits, Guess, and Nagler (2019) has documented the degree of minimum wage policy congruence across states,

this paper is the first that we know of to explicitly study congruence at the city level by comparing policies and preferences on the same scale.

We draw from several new estimation procedures to generate minimum wage estimates for every U.S. locality with a population over 1,000. We are then able to provide meaningful measures of the degree of policy bias at the local level by estimating the deviation in dollars between minimum wage preferences and prevailing minimum wages. Our estimates also allow us to test key predictions about representation and decentralization, and we examine how closely the prevailing minimum wage comes to reflecting these preferences when policymaking is more or less decentralized. We show that policy delegation does not correlate unambiguously with improved representation and offer suggestive evidence that centrally established minimum wages can sometimes lead to a closer match between policy and preferences.

Data and Methods

Minimum wages in the U.S.

In the U.S., the federal minimum wage has been \$7.25 since 2009. While this minimum rate applies nationwide to most employers, states are permitted to set higher mandatory minimum wages, and some local governments are also able to enact local ordinances to increase the minimum wage within their jurisdiction. As of 2020, twenty-nine states and over forty cities and counties maintained higher minimum wages than the federal benchmark. At the same time, twenty-five states have passed laws preempting the ability of local governments to set their own minimum wages, and twelve cities and counties have seen their laws invalidated (Huizar and Lathrop, 2019). Finally, New York and Oregon ban local governments from adopting their own minimum wages but require different minimum wages across regions (with the highest wages in places like New York City and the Portland metro area).

Given this variation in policy decentralization, we are able to descriptively examine how closely prevailing minimum wages reflect local resident preferences across the following conditions: (1) cities in states without preemption that have passed local minimum wage ordinances; (2) cities in states without preemption that adopt the state minimum wage;

Table 1: Summary of Minimum Wage Policy Conditions

Condition	Definition	Example
Preempted	Includes cities in 25 states that have passed explicit preemption laws. Cities are prohibited from setting local minimum wages and must adopt the state law.	All cities in the following states: ID, ND, WI, MI, RI, IA, IN, OH, PA, UT, CO, MO, KY, KS, AR, TN, NC, SC, OK, LA, MS, AL, GA, TX, FL
Tiered	Includes cities in Oregon and New York. Cities cannot adopt their own minimum wages but can have differential wages, as mandated by the state.	Most cities in New York State have their minimum wages set at \$11.80 per hour. However, cities in Long Island & Westchester County have minimum wages of \$13, and NYC has a minimum wage of \$15.
State	Includes cities in states that don't have preemption but that choose not to enact local minimum wages.	All cities in ME, NH, VT, MS, IL, MN, MN, WA, NV, WY, SD, NJ, CN, CA, NE, WV, VA, MD, DE, AZ, NM, AK, and HI that choose to follow the state minimum wage
Local	Includes all cities where there is a local minimum wage ordinance in place, set by either the city or county.	Includes cities like Berkeley, CA, Chicago, IL, and all cities in counties like Montgomery, MD

(3) cities in states with preemption that are unable to set their own minimum wages; (4) cities in New York and Oregon that have been forced to adopt different minimum wages via the state. Each of these conditions is summarized with specific examples in Table 1.

Data Collection

We gathered data via a series of large online surveys fielded in 2020 through the survey vendor Lucid ($n = 18,071$). Lucid is a large marketplace for online survey panels (Coppock and McClellan, 2018) that allows researchers to field surveys to a diverse population and offers quota sampling. We asked versions of the following question: *In your view, what should be the minimum hourly wage in the town or city you currently live in?* We required subjects to enter a numeric response to a box.¹ For each survey respondent we also obtained basic demographic data (age, gender, education, race, income) as well as

¹To mitigate issues resulting from respondents making typos, we “transformed” the responses of 43 survey-takers that entered a value greater than \$100 by imputing likely values (e.g. 2025 becomes \$20.25.)

their zip codes, which we used to merge respondents to their respective municipalities of residence.²

We assume that the difference between a respondent’s preference and a particular minimum wage policy can be treated as a ratio-level measure (Stevens, 1946). In making this assumption, we follow a long tradition of stated preference methods used by economists and psychologists to elicit respondent ideal points (Manski, 2000; Brown, 2003). While researchers have demonstrated that expressed preferences can be sensitive to question wording (Tversky and Kahneman, 1985; Slovic, 1995), we follow the best practices established by existing literature and ask an open-ended question that yields continuous responses rather than a categorical question about increasing the minimum wage or not, which has been shown to be more prone to partisan bias (Ansolabehere, Meredith, and Snowberg, 2013).

As Geer (1991) points out, survey research often relies on close-ended question simply because they are generally easier to code and analyze. However, fixed-format questions are also more prone to anchoring effects and acquiescence bias (yea-saying effects) (Frew, Whynes, and Wolstenholme, 2003), as well as framing effects. For example, one survey by the Employment Policies Institute of New York state residents in 2015 found that 57% of respondents supported raising the state minimum wage to \$15 per hour, but support dropped to 43% when respondents were primed to think about potential job loss among less-skilled employees.³ By asking an open-ended question with no anchoring language, we avoid these issues and are able to draw cardinal comparisons between preferences and existing policies in order to construct our measure of bias. We note that some random error in individual responses will not threaten the validity of our estimates at the city-level, which aggregate responses across individuals.

We use a comprehensive dataset of U.S. cities obtained from simplemaps, a commercial product that provides city-level demographic estimates—along with a host of other geographic data—on every U.S. locality with a population over 1,000.⁴ The source of these

²We obtained consent from participants by providing on the first screen of the survey a brief description of the research project and asking for their voluntary participation. Respondents were paid \$1 (the standard compensation offered by Lucid) for a 15 minute survey. Lucid, or their vendors, compensated the participants.

³<https://epionline.org/release/new-poll-finds-majority-of-new-yorkers-oppose-15-minimum-wage/>

⁴Note that we use the term “city” a bit loosely to refer to municipalities, towns, and census-designated places above the population threshold with local governments.

data is the most recent American Community Survey. We complement this dataset with county-level data on election returns from the 2016 presidential election.

We merge our city-level dataset with a compilation of state and local minimum wage laws. To obtain data on local minimum wages, we relied on the Inventory of U.S. City and County Minimum Wage Ordinances maintained by UC Berkeley’s Labor Center.⁵ Data on state-level minimum wages come from the Economic Policy Institute and National Conference of State Legislatures.⁶ Finally, we also collected data on state-level preemption laws that ban localities from implementing their own local minimum wage laws from the National League of Cities and the Economic Policy Institute.⁷ Based on these data, we were able to identify the effective minimum wage in each U.S. city in the year 2020 and determine whether this policy was established at the state or local level.

Estimating City-Level Minimum Wage Preferences

The key difficulty in estimating average city-level preferences over minimum wages is that we only have relatively small and non-representative samples of survey respondents for each city. For instance, our 18,000 respondents concentrate in 11,262 cities with only 6 cities contributing over 100 respondents and about 75% of cities contributing only 1 respondent. Existing research has typically mitigated this issue using a procedure called multilevel regression with poststratification (MRP) (Ghitza and Gelman, 2013; Lax and Phillips, 2012; Warshaw and Rodden, 2012), which uses data from national surveys and multilevel modeling to generate opinion estimates by demographic or geographic subgroups. These estimates can then be weighted by the percentage of each subgroup appearing in the population of the subnational unit of interest.⁸

A crucial—though somewhat counterintuitive—feature of MRP is that it can provide estimates of local preferences even for localities from which no survey data is collected as long as demographic data exist. The model estimates local preferences for places without

⁵UC Berkeley Labor Center: <https://laborcenter.berkeley.edu/inventory-of-us-city-and-county-minimum-wage-ordinances/>

⁶Economic Policy Institute: <https://www.epi.org/minimum-wage-tracker/> and National Conference on State Legislatures: <https://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>. Note that in Oregon and New York, the state mandates differential local minimum wages by county.

⁷Data from <https://www.nlc.org/wp-content/uploads/2017/02/NLC-SML-Preemption-Report-2017-pages.pdf> and <https://www.epi.org/preemption-map/>

⁸Note that this weighting procedure also addresses the issue of non-representativeness of the original sample.

any survey data collected based on their similarity to other localities in terms of their observed characteristics that predict the outcome of interest. For instance, if our model “learns” from the available data that, on average, liberal residents in California cities with high rental prices (like Mountain View or Menlo Park) have high minimum wage preferences, it can make a prediction for a city from which no survey data was collected but that resembles other cities in terms of observable traits for which we do have data (e.g. Palo Alto). Of course, the precision of these estimates hinges on the extent to which features observable for *all* cities predict local preferences.

However, one issue with using MRP in the context of cities is that the joint distributions of a sufficient number of demographic categories are generally not available at the municipal level due to census data privacy concerns. To overcome this limitation, we utilize a procedure called multilevel regression with synthetic poststratification (MrsP) introduced by Leemann and Wasserfallen (2017). The advantage of MrsP is that in contrast to standard aggregation techniques (e.g. Caughey and Warshaw, 2018), it does not require the joint distribution of demographic types in each unit we seek to make predictions for. Because the American Community Survey does not provide joint distributions of the necessary demographic variables at the city-level, we follow Leemann and Wasserfallen (2017) in estimating joint distribution as the product of marginal distributions (*synthetic joint distribution*). While this procedure may not lead to accurate predictions of joint distributions, the estimates of average sub-national preferences will be identical to those obtained by a linear response model (for technical details see Leemann and Wasserfallen (2017) and Ornstein (2017)).⁹

We first fit a multilevel model predicting survey responses with six demographic categories. Specifically, we use gender, five levels of educational attainment, three levels of race (black, white and other), Hispanic ethnicity, three age groups and four income categories. In addition, we model city random effects as a function of state random effects, city-level median income, city-level median rent and county level two-party Democratic vote share in the 2016 presidential election. We weight down respondents that show up

⁹Note that in this setting this procedure also corresponds to raking cell estimates (Caughey et al., 2020).

in our dataset multiple times due to probabilistic matching (i.e. because some zipcodes belong to multiple cities).

$$y_{i,city,county,state} = \alpha + \beta_{age[i]} + \beta_{sex[i]} + \beta_{edu[i]} + \beta_{race[i]} + \beta_{hispanic[i]} \\ + \beta_{income[i]} + \gamma_{vote[county]} + \gamma_{income[city]} + \gamma_{rent[city]}$$

Given our multilevel model, we generate posterior predictions using Bayesian simulation for each possible combination of geographic and demographic categories. Then, we generate city-level preference predictions as the weighted averages of the demographics by city types within each city, weighted by the proportion of individuals in a city that fall into each demographic category. Using these procedures, we were able to obtain point estimates and credible intervals for the average minimum wage preference for a total of 16,169 cities.¹⁰ To create the final dataset, we merged these estimated preferences with the city-level data on demographics, prevailing minimum wages, the source of the minimum wage law, and whether state preemption was in place. Individual and city-level summary statistics are available in the online appendix (Tables OA1 and OA3).

In the online appendix, we demonstrate that our main results also hold when using estimates generated with Bayesian Additive Regression Trees or BARP (Bisbee, 2019), a more flexible approach to modeling local preferences. This technique allows the predictive model to include interactions between demographic and geographic variables and uses a data driven approach to variable selection. In the main text, we utilize the more traditional multilevel model approach, which has already been demonstrated to work with synthetic post-stratification files. Our post-stratification file is also prohibitively large to compute predictions for all the cities in our sample using a non-parametric approach with multiple higher order interactions. However, we demonstrate that the results are very similar across the two approaches for cities with a population above 20,000 (the largest sample for which BARP was computationally feasible).

Note that focusing on the average minimum wage preference within a city is not the

¹⁰We construct these credible intervals as the 2.5th and 97.5th percentile of the simulated means across the simulated posterior.

only way we might conceptualize responsiveness and representation. From a theoretical perspective, it might also be interesting to consider the median preference, or the average preference of various subgroups. For example, if 80% of residents in a city wanted a \$15 minimum wage and 20% wanted no local minimum wage, the average wage preference would be \$12. It's not clear that a \$12 minimum wage in this city would be normatively more desirable than a \$15 minimum wage. At the same time, there are also rich theoretical and empirical traditions that provide a rationale for focusing on average preferences. Achen (1978) makes this point in his classic work on representation, and subsequent applied research typically relies on the notion of averaging preferences across voters (e.g. Lax and Phillips, 2009; Tausanovitch and Warshaw, 2014; Caughey and Warshaw, 2018)—although it's important to note that most of this work focuses on either dichotomous policies or responsiveness rather than congruence.

From a practical standpoint, obtaining estimates of mean preferences is simply the only computationally feasible approach at the city level, and MRP techniques were developed to estimate mean outcomes. For example, obtaining estimates of the median preference in a city would require an accurate characterization of the within-city distribution of preferences, which is simply not possible given the small and non-representative samples available for each city. Given that this paper represents the first attempt to generate city-level measures of minimum wage ideal points, we choose to focus on the more analytically tractable quantity of average preferences, but we hope that future work in this area might expand on our initial findings and consider different aggregation techniques to estimate city ideal points.

Results

Characterizing Local Preferences

We begin by inspecting the raw survey data before generating and validating our city-level estimates. Figure 1 shows the distribution of individual ideal points over local minimum wage policies. On average, respondents clearly prefer higher minimum wages than the current federal rate of \$7.25. A \$15 minimum wage is popular, as is a minimum wage of around \$9. These two spikes correspond roughly to the average preference of Democrats

and Republicans, and in Figure OA1 in the Appendix we show the distribution of wages broken down by party. Notably, around 10% of respondents claim that they want no minimum wage policy at the city level. These respondents also skew heavily Republican and likely represent the more libertarian wing of the party.

Figure 1: Distribution of Individual Preferences for Local Minimum Wages.

Note: The mean is marked by the solid line and the median by the dashed line

Although the distribution of individual ideal points over local minimum wage rates is roughly trimodal, we note that this does not imply that individual respondents do not have single-peaked preferences. In fact, existing research on public opinion shows that minimum wages are precisely the sort of policy over which voters display single-peaked preferences (Hansen, 1998; Farrar et al., 2010; List et al., 2013). In our sample, it also turns out that the mean preference is virtually identical to the median preference, which helps alleviate concerns about potential differences between these two quantities. While

we caution that the raw survey data are not drawn from a nationally representative sample, the distribution of our individual responses turns out to be very similar to recent polls that ask about whether voters favor keeping the federal minimum wage at its current level, raising it to \$11 per hour, or raising it to \$15 per hour.¹¹

One of the primary contributions of this paper is the introduction of a method that allows us to estimate average minimum wage preferences at the city level for a large number of municipalities on a cardinal scale. However, precisely because of the novelty of our approach, finding existing data to validate our estimates against presents a challenge. First, there are simply very few public opinion surveys about the minimum wage available at the local level.¹² Second, even when data on minimum wage preferences are available (for example, in the Cooperative Congressional Election Study) it is not measured on a scale that is directly comparable to our cardinal scale.

We approach these two issues in different ways. First, we exploit Proposition 2, a ballot initiative held in Florida during the 2020 election that asked voters if they supported or opposed raising the minimum wage to \$15 by 2026. Referendum results like this offer an attractive validation strategy because (1) they offer a finely disaggregated measure of local preferences, and (2) they do not rely on public opinion surveys that are typically not designed to be representative at the local level.¹³ To validate our measure of local minimum wage preferences, we first aggregate our estimates to the county-level (by taking the population-weighted average of city level preference estimates) and then compare our estimates to the proportion of votes in favor of the initiative.¹⁴ Figure 2 shows a strong mapping between our preference estimates and support for Proposition 2. In fact, our

¹¹<https://morningconsult.com/2021/03/03/coronavirus-stimulus-voter-support-bipartisan/>. See the online appendix Table OA2 for additional details and discussion.

¹²For instance, we searched for survey data on minimum wages at the city-level for each of the 30 largest cities in the U.S. drawing from sources such as the Public Policy Institute of California, the Siena College Research New York Poll, and the Texas Statewide Survey. We couldn't find any existing survey data against which to validate our estimates.

¹³For example, surveys like the CCES occasionally ask questions about the federal minimum wage, but those surveys are not representative at the local level. Because the sample of respondents from particular cities does not reflect the actual demographics of those cities, examining the raw data cannot help us validate our measures. But attempting to re-weight the data would mean we are essentially applying the same procedure that we used to generate our own estimates, which would also not be helpful for validation.

¹⁴Note that this step was necessary because the Florida election data are not available below the county level.

estimated preferences capture over 90% of the variation in the referenda outcomes (on the population weighted data).¹⁵

Figure 2: MRSP Estimates and Florida Election Data.

Note: Circles plot county level support for Proposition 2 in Florida against estimated city minimum wage preferences aggregated to the county level. Circles are proportional to the square-root of population sizes. Line shows best fitting regression estimated via WLS.

Note that comparing our survey-based measure of local preferences to referenda results is helpful in gauging whether our estimates capture meaningful variation across localities. It is also a strong test in the sense that in contrast to alternative approaches—such as using some weighting procedure on other survey data—it avoids the problem of aggregation. At the same time, because referenda results are not measured on a dollar scale, such validation cannot guarantee the validity of our estimates. In principle, we could try to use the data on referenda results to recover an estimate of average preferences in these counties, but it would rely on assumptions regarding (1) the shape of the preference distribution, (2) how voters value different minimum wage hikes taking place at different times, and (3) who votes in these elections.

As another check of the validity of our approach, we report our estimates of city-level

¹⁵In Figure OA3 in the online appendix, we replicate this validation exercise and report very similar results using four minimum wage ballot initiatives held in 2016 in Arizona, Colorado, Maine, and Washington.

minimum wage preferences compared to effective minimum wages for the 30 cities with populations over 600,000 in Figure 3. The figure demonstrates that residents in more stereotypically liberal cities with high costs of living—like San Francisco, Boston, and Los Angeles—prefer the highest local minimum wages. City residents in the south and in regions with lower costs of living favor lower minimum wages. These initial results provide some face validity for our estimates of local minimum wage preferences and suggest that we are capturing meaningful variation over these preferences across cities. Importantly, the distribution of these preferences falls well within the range of enacted policies, suggesting that these preferences are realistic and would be feasible in terms of implementation.

Figure 3: Estimates of Minimum Wage Preferences

Note: Solid dots denote our city-level preference estimates with 95% confidence intervals. Triangles represent effective minimum wages.

Also note that that these estimates make sense given the breakdown of individual ideal points by party. In a place like San Francisco, even if a large majority of Democrats prefer

a \$15 minimum wage, a small proportion of Republicans favoring no minimum wage floor would drive down the estimated average preference below \$15 per hour. For example, in Figure OA6 in the online appendix, we show the estimated minimum wage preferences for various subgroups in New York City (where we have over 800 respondents) compared to our overall MrsP estimate. A Republican man with a high school degree earning less than \$25,000 per year living in New York has a predicted minimum wage preference of \$8.50, while a Democratic woman with a college degree earning between \$50,000 and \$100,000 would prefer a minimum wage of \$16.30. As we adjust the subgroup weights we converge on our MrsP estimate. In Figure OA7 (also in the online appendix), we compare the average minimum wage preferences in the raw data to our MrsP estimates for the 15 cities for which we have at least 50 observations in the original survey. The quantities are quite similar, and this exercise helps to lend face validity to the individual survey responses and also offers intuition as to how the MrsP estimates are constructed.

Local preferences and policy

Our findings in Figure 3 provide a first hint of over-responsiveness in the sense that we observe wages that are substantially lower than what residents want in conservative states but higher than average preferences in liberal states. As we later show, this conservative bias is particularly pronounced in states with preemption laws, while liberal bias is more likely among cities that adopt their own local minimum wage ordinances. We also note here that our estimates of city-level preferences are precise enough to rule out that these patterns are simply due to noise in our predictive model. For most of the cities in Figure 3, we can rule out that deviations between preferences and policies are simply due to measurement error based on conventional significance levels.

We next visualize the relationship between average preferences and actual minimum wages across all the cities in our sample. Figure 4 plots effective city minimum wages against our estimates of city-level preferences. Confirming earlier empirical studies (e.g. Tausanovitch and Warshaw, 2014), we find a strong evidence of responsiveness, or a relationship between preferences and policies *across* cities ($\beta = 1.87$, 95% CI[1.85 – 1.90]). However, the fact that the slope of the line is greater than 1 suggests that policies tend to be over-responsive to variation in preferences and are either too high or too low. Such

Figure 4: Minimum wage preferences and policy outcomes

Note: Circles plot estimated city minimum wage preferences against effective minimum wages. Lines are linear predictions estimated via WLS separately for cities with (dashed) and without (solid) local minimum wages.

“leapfrogging” of policies has been demonstrated empirically in a variety of contexts (e.g. Bafumi and Herron, 2010) and might indicate that policies are responsive to the median voter of the party in power rather than the median city resident.

Because we measure minimum wage preferences and effective policies on the same scale, we can also assess the deviation of preferred and actual minimum wages *within* cities. We find that the average within-city difference between preferred and actual minimum wages is \$1.33. However, while the direction of this policy bias is conservative on average—meaning that minimum wages are lower than what most respondents want—minimum wages were *higher* than what the average resident wanted in about 25% of localities.

We next compare the deviation between average city preferences and effective local minimum wages across the various institutional settings described in Table 1. Effective minimum wages are determined by both state and local governments. First, states decide whether to (1) allow local governments within the state to set their own minimum wages, (2) preempt this ability and enforce a single state minimum, or (3) preempt local increases but mandate differential local wages across jurisdictions within the state, as in

New York and Oregon. Next, in the first set of states (without preemption), cities can then determine whether to (1) set a minimum wage higher than the state floor or (2) stick with the state minimum. Finally, counties in states without preemption can also chose to increase minimum wages within county boundaries, which then also applies to municipalities within that county.

We refer to the signed difference between a city’s average preference and the effective local minimum wage as *policy bias*. Positive values indicate conservative bias—that is, places where resident preferences are higher than the prevailing minimum wage. Negative values indicate that local minimum wages are higher than resident ideal points. Figure 5 compares the distribution of city-level policy bias across the three types of state conditions described in the previous paragraph: states without preemption, states with preemption, and states with a tiered approach.

Figure 5: Policy bias and decentralization

Note: The left panel shows violin plots that visualize the distribution of policy bias (i.e. average preference - policy) in localities across states. The right panel shows the distribution of policy bias across cities within states with no preemption based on the type of local minimum wage law.

The raw data suggest that the highest degree of policy bias exists in states with preemption laws. City minimum wages in states with preemption are \$2.63 lower than city residents would ideally want. On the other hand, in states without preemption, local minimum wages basically reflect average preferences, albeit with substantial variation. Notably, cities in the special cases of Oregon and New York—where state laws mandate variation in local wages—enjoy both low degrees of policy bias and also low variance.

Table 2: Local policy bias across states

	Relative Bias		Absolute Bias	
	(1)	(2)	(3)	(4)
Preempted	3.15 (0.45)	2.93 (0.52)	1.43 (0.18)	1.36 (0.50)
Tiered	-1.03 (0.63)	-1.23 (1.12)	0.37 (0.45)	-0.02 (1.01)
(Intercept)	-0.52 (0.42)	0.47 (0.54)	1.20 (0.07)	1.19 (0.46)
Controls	Y		Y	
R ²	0.68	0.75	0.38	0.44
Obs.	16, 154	16, 154	16, 154	16, 154

Baseline condition is no preemption. Controls include an indicator for the presence of term limits, the party in control of government in 2020, an indicator for Nebraska (which has a non-partisan legislature), and a measure of state legislative professionalization. All models are weighted by city population.

Of course, the states that allow cities to set their own minimum wages are different from the states that opt to engage in preemption. These states tend to be more Democratic, wealthier, and less likely to be in the south. If cities in these states are able to adopt higher minimum wage policies but choose not to, it is likely that city officials feel that local interests are already well-represented by state policies. Similarly, states that engage in preemption might do so precisely because certain cities want wages that are higher than the state average. Given that the adoption of state institutions and local policies are endogenous, we cannot claim that preemption causes an increase in policy bias. Rather, our goal is to descriptively document the prevalence of policy bias across different types of minimum wage regimes.

To do so, we now predict the degree of policy bias in a regression framework that allows us to compare the average bias across state regime type while adjusting for several obvious confounders. In Table 2, we predict average bias in states with preemption and a tiered approach relative to the baseline category of states without preemption. The first two columns focus on overall policy bias (e.g. preferences minus effective minimum wages), while the last two columns focus on the *absolute value* of the difference (without respect for the direction of the bias).

In columns 1 and 3, we simply compare average and absolute bias across conditions, while

in columns 2 and 4 we add various state-level control variables, including an indicator for the presence of term limits, the party in control of government in 2020, an indicator for Nebraska (which has a non-partisan legislature), and a measure of state legislative professionalization.¹⁶ Interestingly, the estimates of bias remain quite similar. This offers suggestive evidence that, for example, the conservative bias in states with preemption is not solely driven by Republican control of state government.

Next, we turn to the question of whether minimum wage policies determined at the local level improve representation. To eliminate the bias introduced by preemption that we showed in the previous table, we focus on comparing policy bias across cities in states *without* preemption. In other words, given the option to adopt higher local minimum wages, do effective local wages come closer to matching average preferences? Specifically, we compare three types of cities: (1) cities that stick with the state minimum wage, (2) cities that increase their own minimum wages, and (3) cities that are forced to adopt county-level minimum wages. These results are shown in Table 3.

As before, we examine both average policy bias (columns 1 - 3) and absolute bias (column 4 - 6). Columns 1 and 4 show the baseline predictions across the city conditions. Columns 2 and 5 add city population (logged), median rent, median income, and democratic vote-share at the county level in 2016 as control variables.¹⁷ Columns 3 and 6 focus specifically on California, a state with over 900 localities and over 160 instances of local minimum wages that are higher than the state average.

Surprisingly, when cities or counties enact higher minimums than the state, we actually observe even higher levels of policy bias than in places subject to state preemption. However, the direction of the bias flips. Cities that enact their own local minimum wage ordinances have minimum wages that are \$1.50 higher, on average, than resident ideal points. It appears that local legislation moves policy outcomes in the liberal direction demanded by city residents but that this delegation also leads to overly generous minimum wages.

¹⁶The data are from Correlates of State Policy Project (Grossmann, Jordan, and McCrain, 2021).

¹⁷We also considered controlling for the presence of direct democracy initiatives at the local level using data available at the Initiative & Referendum Institute, but it turns out virtually every city with a locally determined minimum wage also has an initiative process (with the exception of Chicago).

Table 3: Bias across local minimum wage policies

	Relative Bias			Absolute Bias		
	(1)	(2)	(3)	(4)	(5)	(6)
City minimum wage	−1.55 (0.32)	−1.65 (0.33)	−2.06 (0.60)	1.01 (0.25)	0.91 (0.25)	1.59 (0.52)
County minimum wage	−1.71 (0.19)	−2.31 (0.12)	−2.54 (0.35)	1.18 (0.13)	1.51 (0.10)	2.12 (0.30)
(Intercept)	−0.40 (0.17)		−1.56 (0.79)	1.06 (0.12)		0.77 (0.71)
States	All	All	CA	All	All	CA
Controls		Y	Y		Y	Y
State FE		Y			Y	
R ²	0.21	0.84	0.81	0.23	0.67	0.77
Obs.	7,794	7,794	995	7,794	7,794	995

Baseline condition is cities that follow state minimum wage. Controls include city population (logged), Democratic voteshare at the county level in 2016, city median rent prices (2020 ACS), and city median income (2020 ACS). All models are weighted by city population.

There are several possible explanations for this descriptive result. Local politicians may be responding to the preferences of a subset of progressive residents or labor groups who prefer higher minimum wages than the average city resident. Alternatively, local politicians might lack better or more accurate information about voter preferences, as predicted by theory. Instead, because \$15 per hour is a common benchmark in the minimum wage movement, local officials may simply adopt this policy when city residents want “higher” minimum wages. As a result, minimum wage policies may end up leap-frogging resident preferences when policymaking is devolved to the local level.

To be clear, our city-level estimates of minimum wage preferences in 2020 are a snapshot and reflect a particular moment in time. As a result, we are unable to speak to how preferences evolve and interact with changes in policy. For example, once a higher minimum wage is enacted, it is likely that resident preferences will eventually change over time, too (e.g. Campbell, 2012). However, to date we lack *any* sort of measure of city-level wage preferences, let alone dynamic measures that evolve over time. Our data and methodological approach represent the first attempt to generate such measures, and we hope that the approach offered in this paper offers a way forward to researchers studying this issue.

Considering Policy Counterfactuals

While the descriptive results in the previous section are interesting, they are not particularly informative about how changes in decentralization might affect policy bias. States that pass preemption laws are almost certainly different from those that don't, as are cities that enact their own minimum wage ordinances in states without preemption. In both cases, we observe substantial policy bias—although in opposite directions.

Given that, in equilibrium, we don't observe substantial improvement in policy representation in cities with higher local minimum wages, we now consider whether various counterfactual federal minimum wage policies would reduce the levels of bias we observe across cities and states. To do this, we estimate the degree of policy bias that would have existed between resident preferences and actual minimum wages across cities if the federal minimum wage was set at different rates. Figure 6 plots the absolute bias that would exist for two types of federal minimum wages: policy floors that would continue to allow states and localities to set their own higher minimums (the solid line), and a binding federal policy that would apply across the entire country (the dashed line).

The current degree of absolute policy bias with a \$7.25 minimum wage is \$1.87, while increasing the federal minimum wage to \$10.50—the optimal floor according to our calculations—would drive this down to 80 cents. Note that as a “policy floor,” the federal minimum wage is implicitly meant to guard citizens from excessively conservative state policies (Buzbee, 2007; Miller and Wright, 2008). However, our findings reveal that many cities enact overly liberal policies that also introduce policy bias. In light of this, we also calculated counterfactual levels of policy bias in the presence of binding federal minimum wages (i.e. where all cities and states are forced to adopt the same policy). Surprisingly, our results show that for a wide range of federal minimum wages, uniform policies would in fact reduce absolute policy bias compared to a federal floor where state and local governments can continue to set their own higher minimum wages. Note, however, that around the current status quo the ability of states to set higher minimum wages substantially improves representation.

On the other hand, a \$15 federal minimum wage is popular among Democrats and many

Figure 6: Policy bias and decentralization

labor sectors. In 2019, the Raise the Wage Act—designed to gradually raise the wage to \$15 per hour—was cosponsored by 181 members of the House of Representatives and 31 senators (congress.gov, 2019). However, this policy would result in wages that are \$4 higher than residents in most cities prefer. From a normative standpoint, such “liberal” bias may still be desirable if it disproportionately helps the poor and working class—although scholars continue to debate whether minimum wages help or hurt low-skilled workers (e.g. Card and Krueger, 1994; Neumark, Salas, and Wascher, 2014; Cengiz et al., 2019; Reich, 2021) While according to some surveys a majority of Americans say they support a \$15 minimum wage (Pew Center 2019), these surveys typically do not provide other options such as \$10 or \$12 per hour. This suggests that the public cares about the direction of the policy bias, rather than only about the absolute magnitude. But in terms of matching policy to stated preferences, a \$15 federal minimum wage would actually move prevailing wages farther away from the ideal points of most city residents.

Of course, as we have already discussed, literature on policy feedback effects suggests that it is very likely that any policy changes to the minimum wage might also shift public

preferences (e.g. Pierson, 1993; Campbell, 2012; Galvin and Hacker, 2020). But it’s also important to note that politicians care about and are constrained by public preferences in the short term. A \$15 minimum wage policy might eventually lead voters to adopt higher average wage preferences; but to pass such a policy, politicians must also feel confident that they won’t lose their next reelection. Understanding the short-term dynamics in the relationship between preferences and policies is therefore still critical when thinking about what is feasible in terms of policy change.

Discussion

In this paper, we estimate local preferences over minimum wages and examine whether decentralization is associated with closer congruence between policies and preferences. In doing so, we offer some of the first systematic evidence on the presence of policy congruence at the local level. We find that even though there is a strong correlation between local preferences and prevailing minimum wages, local policies appear to be overly responsive, and large deviations between preferences and policies exist within many jurisdictions. While the absolute magnitude of policy bias is relatively similar across cities with different levels of policy delegation, states with preemption laws produce noticeably worse outcomes, with prevailing local wages that are substantially more conservative than city preferences. On the other hand, local minimum wage ordinances are associated with policies that are *higher* than the average preference of residents.

We conclude that if the goal is simply to shift policies in a liberal direction, granting cities the discretion to increase minimum wages is likely an effective policy. The conservative bias in states with preemption may hurt poor residents disproportionately. Recent empirical work assessing the economic effects of minimum wage hikes in cities like Seattle have uncovered little evidence that such policies increase unemployment (Allegretto et al., 2018; Cengiz et al., 2019; Harasztosi and Lindner, 2019). While a meta-analysis Neumark and Shirley (2021) concludes that many studies find negative effects of minimum wage increases on employment, especially for low skilled workers, other scholars have pointed out that this approach doesn’t account for differences in the quality of the research methods employed (Reich, 2021). Ultimately, the optimal minimum wage policy remains a normative question. What we can conclude is that if the goal is to more closely

match policy to resident preferences, decentralization does not appear to be a particularly effective strategy.

Using our estimates of city minimum wage preferences, we also explore how hypothetical changes in the way minimum wage laws are enacted would shape policy representation. We find that a \$15 minimum wage at the federal level would be higher than what residents in most cities want. Instead, a more moderate policy change at \$10.50 would maximize representation according to our data. We also note that under the current status quo, the ability of states and cities to exceed the federal minimum wage is beneficial from the perspective of reducing policy bias. However, given the degree of liberal bias in many localities, we find suggestive evidence that a binding federal minimum would in some cases lead to the closest match between resident preferences and minimum wage policies across cities.

Overall, these findings demonstrate that decentralizing policymaking authority is not a panacea for improving representation. While state preemption clearly distorts policy in a conservative direction, local control of minimum wages can lead to liberal bias and policies that are similarly far from resident preferences. However, it is important to note that political constraints also shape the ability of legislators to enact minimum wage increases at any level of government. Republican lawmakers and business lobbyists often oppose minimum wage hikes, even when such increases are popular among voters of both parties.¹⁸ If state or federal officials are unwilling or unable to dictate local minimum wage policies from above given the political environment, allowing cities to pass their own minimum wages is likely an important tool to increase policy responsiveness at the local level.

¹⁸<https://www.marketplace.org/2019/12/26/minimum-wage-hikes-increasingly-tied-to-cost-of-living/>

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Online Appendix:

Locally Controlled Minimum Wages Leapfrog Public Preferences

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A Supplementary Information on Data

A.1 Summary statistics

Table OA1: Individual level summary statistics

Variable	Mean	Std. Dev.	Min	Max
Minimum wage preference	11.0	5.5	0	30
Age (18-40)	43.3%	49.5%	0	1
Age (40-60)	32.9%	47.0%	0	1
Age (60+)	23.8%	42.6%	0	1
Female	51.3%	50.0%	0	1
White	70.6%	45.6%	0	1
Black	12.8%	33.4%	0	1
Other	16.7%	37.3%	0	1
Hispanic	13.0%	33.6%	0	1
No high school	6.5%	24.6%	0	1
High school	22.4%	41.7%	0	1
Some college	30.4%	46.0%	0	1
College	24.9%	43.2%	0	1
Grad degree	15.9%	36.6%	0	1
Republican	40.6%	49.1%	0	1
Independent	10.4%	30.5%	0	1
Democrat	49.0%	50.0%	0	1

Table OA2: Comparing Sample Responses with Recent Polls

Survey Options	Morning Consult	Implicit Range	Lucid Sample
Status Quo	24.2%	Less than \$9.125	30%
\$11 per hour	31.9%	\$9.125 - \$13	35%
\$15 per hour	44%	More than \$13	34%

Note: Shows the percent of respondents from a recent Morning Consult/ Politico poll that favor keeping the federal minimum wage at the status quo (\$7.25), increasing it to \$11, or increasing it to \$15. If we assume that respondents pick the wage that is closest to their ideal point, we can generate cutpoints and determine which percentage of the respondents in our sample would prefer each of these options. Note that the Morning Consult/ Politico poll frames the question in terms of increasing the minimum wage and shows all options at once, which likely produces anchoring effects. The question in this poll also asks whether respondents would favor “gradually increasing the federal minimum wage by 2025,” which might help to explain the slightly higher proportion of respondents selecting this category relative to our survey, where we ask what the minimum wage should be today.

Figure OA1: Distribution of ideal points by party

Table OA3: City-level summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Median rent (\$1000)	16,158	1.1	0.6	0.1	4.0
Median income (\$1000)	16,158	60.7	29.4	9.2	250.0
Population	16,158	15520.1	93576.1	1000.0	8622698.0
Democratic vote-share	16,158	44%	17%	7%	96%
Minimum wage preference (\$)	16,158	10.5	0.8	7.4	14.1
Effective minimum wage (\$)	16,158	9.5	2.1	7.3	15.7
Bias (\$)	16,158	1.1	1.7	-3.7	4.9
Absolute bias (\$)	16,158	1.7	1.1	0.0	4.9
Local law	16,158	3%	16%	0	1
Preempted	16,158	52%	50%	0	1
Tiered	16,158	9%	29%	0	1
State law	16,158	36%	48%	0	1

A.2 Referenda results from 2016

In order to generate localized estimates of minimum wage preferences, we exploit four statewide ballot initiatives that took place in Arizona, Colorado, Maine and Washington in 2016. The minimum wage in these states was already higher than the federal minimum, and these referenda each proposed an additional increase. All four ballot initiatives passed, though with relatively narrow margins and, there was substantial variation in the support for these initiatives in each state. In our analysis, we rely on vote counts aggregated at the county level, the smallest units at which results are available in all states. We summarize information about these referenda below. ¹⁹

¹⁹These data are freely available online in spreadsheet forms at <http://results.arizona.vote/2016/General/n1591/Results-State.html>, <http://results.enr.clarityelections.com/CO/63746/184388/Web01/en/summary.html>, <http://www.state.me.us/sos/cec/elec/results/results16-17.html> and <http://results.vote.wa.gov/results/20161108/Export.html>.

Figure OA2: Distribution of city ideal points

Table OA4: Minimum wage ballot initiatives in 2016

Initiative	Jurisdiction	Type	Date	Existing Wage	Proposal	Votes in favor (%)
Proposition 206	Arizona	Statewide	2016	8.15	10.00	58.3
Amendment 70	Colorado	Statewide	2016	8.56	9.30	55.3
Question 4	Maine	Statewide	2016	7.50	9.00	55.5
Initiative 1433	Washington	Statewide	2016	9.55	11.00	57.4

A.3 Non-Parametric Validation of Estimates

To further validate the MrsP approach that we use to generate our estimates of city preferences, we rely on Multilevel Regression and Bayesian Additive Regression Trees using the BARP package in R (Bisbee, 2019). This procedure allows survey data to be aggregated to different levels of geography but uses a non-parametric approach to estimate preferences. We feed the same individual and geographic predictor variables into

Figure OA3: MRSP Estimates and 2016 Ballot results

Note: Circles plot county level support for ballot initiatives in four states against estimated city minimum wage preferences aggregated to the county level. Circles are proportional to the square-root of population sizes. Lines show best fitting regression estimated via WLS.

the model as described in the main text, but BARP flexibly selects which variables and higher-order interactions to include in the predictive model using a data-driven approach. All results are available in the replication files.

Figure OA4 shows the correlation between our MrsP estimates and the BARP estimates of city minimum wage preferences. Note that because BARP is more computationally demanding than our MrsP approach, we were only able to generate estimates for cities with populations above 20,000. Circles are proportional to the square-root of population sizes. There is a tight correlation between both sets of estimates, although the BARP estimates are slightly higher, on average. However, our substantive results remain virtually identically across both sets of estimates. Figure OA5 shows the degree of policy bias across the four conditions of interest using both MrsP and BARP. Our conclusions about the direction and degree of policy bias remain consistent across both sets of estimates.

Figure OA4: Distribution of city ideal points

Figure OA5: Figure 5 using Barp estimates

Table OA5: Preferences and policies by decentralization

	N	$\bar{P}$	$\bar{W}$	$\overline{(P - W)}$	$\overline{ P - W }$
Preempted	8,361	10.44	7.81	2.63	2.63
Tiered	1,527	11.76	13.31	-1.55	1.56
State	5,838	11.20	11.27	-0.06	0.93
Local	432	12.10	14.09	-1.98	2.12
Total	16,158	11.01	10.22	0.79	1.88

Note: W and P denote minimum wages and corresponding preferences, respectively. $\overline{(P - W)}$ shows the average difference between these two values, and $\overline{|P - W|}$ shows the average absolute value of the difference.

Figure OA6: Estimates of Minimum Wage Preferences by Subgroup Within New York City

Figure OA7: Distribution of city ideal points

Note: Circles show MrsP estimates against raw average preferences in cities with more than 55 survey respondents. The blue circles denotes cities where the effective minimum wage is \$15, while the red circles denote cities where the effective minimum wage is \$7.25. The two dashed line shows a boundary of $\pm \$1$ difference.