To the editors,

Thank you again for giving us the opportunity to revise our manuscript "Can Citizens Set City Policy? Evidence From A Decentralized Welfare State" (UAR-18-203) for the Urban Affairs Review.

We greatly appreciate the time and effort taken by you and the three reviewers to review the manuscript. Your comments have been extremely helpful and we have made our best effort to accommodate these suggestions in the revised version of the manuscript. We believe the revisions, made because of your feedback, have made for a stronger, clearer, and ultimately more persuasive paper. We hope that you agree with us and deem the revisions satisfactory. However, needless to say, we would be willing to make further revisions if desired.

Below we first address the points raised by the editor in the decision letter, which also summarizes the main changes made to the manuscript. We then respond to the specific comments made by each of the reviewers on a point-by-point basis. For ease of reading, we reproduce your and the reviewers' comments before each of our responses.

Sincerely, The authors

## **EDITOR COMMENTS**

1. Reviewer #1 has a few minor comments regarding data-related choices (comment #1) and the substantive interpretation of the results (comment #3). The most important comment by this reviewer relates to the use of local vote share to assess ideological preferences. An abundant literature, both in the US and European contexts, suggests that ideological preferences are more pronounced in national level elections than in local level ones. This is partly due to the fact that many local government systems feature nonpartisan elections (with local lists/candidates independent from national parties). Even though this argument may actually support the authors' assertions, we agree with the reviewer that a better explanation should be provided to ground your choice.

As we write to the reviewer below, this is a good point that we had overlooked in the initial manuscript. In our revision, we have tried to more fairly present the advantages *and* disadvantages. The advantages being that citizens policy views may differ across domains, preferring more conservative (or progressive) policy at the local level, and that the electorate is often differently composed at local elections, meaning that the electorates ideological profile is not captured in national elections. The disadvantages being that local parties might adjust their ideological profile to appeal to local voters. However, we also argue that we think this disadvantage is somewhat smaller in our study where we look at changes in support for right-wing parties rather than the level of support for these parties.

We also highlight in the new manuscript that all municipalities feature multiple parties, and that most of these parties are the same as those who run in national elections, reducing concerns related to non-partisan elections.

2. Reviewer #2 recommends working on the theoretical development of the manuscript. Even though the paper was submitted as a Research Note and should remain as such, some modest level of theoretical grounding and/or advancement is always desirable. The reviewer suggests two possible ways to accomplish this, either by providing a better understanding of the time structure of policy responses to local preferences or by exploring the theoretical mechanism behind the link policy preferences-policy responses.

In our revision, we have added a theory section where we discuss what the implications the timing of municipal policy change has for both accountability and the underlying mechanisms that produce local responsiveness. We present these discussions in the new section "Dynamic and Adaptive Local Responsiveness".

In terms of the underlying mechanism producing local responsiveness, we note that since policy responds a few years after the preferences of the voters' have changed, voters need to express their wishes in the electoral process in order to change the re-election incentives of the politicians in

office. This casts doubt on alternative explanations, highlighting structural, slow-acting factors, as well as explanations that suggest politicians continually alter policy in response to (non-electoral) signals that citizens' preferences are changing.

From the standpoint of electoral accountability, we argue that it is reassuring that policy responds within the four year election cycle. In this way, citizens will be able to recognize and act on whether politicians have changed policy based on the change in preference they expressed at the last election.

3. Reviewer #3 is primarily concerned with the clarification of methodological procedures. The first three comments by this reviewer are related to the lack of transparency/clarity in the way data, methods, and results are presented. We encourage you to improve these aspects of your work and see some benefit in moving some information from the appendices into the main text. For example, Appendix F should be added to the main document to allow a better understanding of the results.

We agree that data and results were not presented with sufficient clarity. We have substantially altered the result section in response to this comment from the editor and reviewer 3. In particular, we now present a wide range of descriptive statistics on Danish municipalities. This should give the reader a better idea about the structure of the data. Additionally, we present the main results in Table 2, instead of doing so visually.

As suggested by reviewer 3, we have also sought to improve the transparency of our measure of fiscal conservatism. In the appendix, we have added a number of analyses gauging the index's reliability and discussing its validity. Furthermore, we have added additional discussion of the benefits and pitfalls when using a Bayesian measurement model. Finally, we now discuss which aspects of fiscal conservatism each item is supposed to capture, and present descriptive statistics on each item.

4. Both Reviewer #2 and #3 require a better justification for case selection. While data availability is a good reason to replicate previous studies, generalizability of results is an important concern expressed by the reviewers and shared by the editors.

We agree that this was not adequately dealt with in the original manuscript, and in our revision we now argue that even though the Danish case cannot be seen as especially typical or atypical, the Danish municipalities are a critical case—a particularly interesting for those interested in the prospects for responsive local governments. Municipalities in Denmark are entrusted with spending one third of the GDP and are responsible for running large parts the vast Danish welfare state. If local citizens are not able to steer local policy in Denmark, where policy is so consequential and play such an integral part in the life of most voters, it is especially democratically problematic.

We have added these points to the section "Empirical Context" as well as to the concluding section. 5. Please provide complete references to OECD (2016) (p.1), Fiva et al. (2016) (p.1), Sances (2017b) (p.2), and Ansolabehere and Schaffner (2015) (p.5).

We have edited these references. We thank the editor for spotting these mistakes.

## **RESPONSE TO REVIEWER 1 (R1)**

We are happy to note that R1 thinks the "manuscript makes an important contribution to the literature on urban policy responsiveness, and that it is an excellent fit for the Urban Affairs Review." Naturally, R1 also has some concerns, raising a number of good points.

1. I would like more details about why these fiscal policy indicators are more "fine-grained" than those used in previous research. Most previous studies centered in American politics (which comprise the bulk of this literature) rely on the U.S. Census of Governments. The authors should make more explicit why their indicators are more precise than those of the Census of Governments (COGs) specifically. The authors certainly have better longitudinal coverage, which they note (and could make an even bigger deal about). But, are the policy items measured in Danish data more precise than the items in the COGs? This is certainly plausible, as the COGs data are quite coarse—but, the authors should show this.

We thank the reviewer for pointing this out, and we have tried to make clear what the difference is between our data sources and those used in the previous literature. i.e., the COG.

First, our measure is annual whereas the COG is only collected every five years. Since we have an annual measure, it possible to study *when* the effect of changes in preferences on city policy sets in. This is hard to do when measuring policy in five year increments (i.e., one would only to be able to see effects with the COG at t, t+5, t+10 and so on, whereas it is possible for us to examine effects a t, t+1, t+2 and so on). Our annualized measure also makes it easier to study how current changes in preferences predict future changes in policy (which we do in our paper to rule out reverse causality). Studies relying on the COG have been forced to interpolate preferences from election results before and after the collection of the COG to get a measure of preferences and policy at the same time. This makes it hard to neatly separate changes in preferences from changes in policy over time, since a measure of preferences at time t will be influenced by preferences at t+1.

Further, all municipalities in Denmark are required by law to report on their fiscal policy to the central government each year using common accounting standards. Arguably, this makes the policy information more reliable than the information reported in the COG, which is (at best) based on records from state governments, which do not have common accounting standards.

This discussion of our measure and the COG has been added to the section "An Annual Measure of Municipal Fiscal Policy Conservatism" and features prominently in the new theory/literature review section ("Dynamic and Adaptive Local Responsiveness").

2. The authors should offer more justification for why local vote share is actually the right independent variable measure. Previous studies used national vote share not because it was the only data available, but because they believed it would better correlate with local ideological preferences than local election returns. Consider the case of Massachusetts, which as a long history of electing Republican state governors. Public opinion surveys and national election returns indicate a far more liberal electorate than gubernatorial Republican vote share would indicate. I would anticipate that local policies in Massachusetts would on average reflect the liberal leanings of its mass public, which would be more accurately measured using national vote return data. I'm curious what the author(s) results look like if they rely on national election returns as their measure of ideology instead?

This is a good point that we had overlooked in the initial manuscript. We have tried to explicate our reasons for using the local election returns in the revised manuscript, noting that "there are several advantages to using local rather than national election returns. For one, citizens might differ in their policy views across domains, preferring more right wing policy at the local level than at the national level. The electorate at local elections could also be differently composed than electorates in national elections, and therefore one might not capture the local electorates' ideological profile by using national election returns."

Acknowledging R1's critique we add to these points that "using local rather than national election returns also has a potential drawback: local parties might adjust their ideological profile to appeal to local voters. As such, in more conservative municipalities, left-wing parties might become more conservative to attract the more conservative electorate and vice versa, attenuating the correlation between conservative preferences and support for right-wing parties."

We also note, however, that we think this problem is less of a concern in our case, "because we look at how changes in net support for right-wing parties come to affect changes in policy. Even if the level of support for conservative relative to liberal policy is obscured by local convergence in party platforms, increased support for right-wing parties and decreasing support for left-wing parties should still reflect a shift away from conservative preferences in the electorate."

We want to thank R1 for forcing us to think about this issue, and we hope that she/he can accept our arguments. The additions can be found in the section "Municipal Policy Preferences", which has been completely rewritten in light of R1's comments.

3. I liked the authors' efforts at providing substantive significance, but it would be helpful to have more details, since I don't know Danish cities: "With an effect of this magnitude, moving

the voters from the Social Democratic stronghold Albertslund to the highly conservative Solrød would transform the fiscal policy in Gentofte to roughly that of Stenløse. This would move Gentofte down by more than 20 positions (out of 271 municipalities) in our ranking of fiscal conservatism." A more intuitive approach for a broader readership might be to tell us what kind of policies we might expect a city to pursue "with an effect of this magnitude."

We agree with R1 that this interpretation is unlikely to be helpful to an audience without knowledge of Danish municipalities. On page 12 of the revised manuscript, we provide an interpretation of the results, which we believe is more meaningful to a broader audience. We rely on the correlation between the overall measure of fiscal conservatism and a number of its component parts to gauge what kind of change in real-world policy we would expect. This allows us to elicit expected reductions in various taxes and forms of spending under a (typical) change in the electoral support for right-wing parties.

## **RESPONSE TO REVIEWER 2 (R2)**

We are glad that R2 thinks the paper in the data are "terrific". R2 main concern relates to the theoretical ambitions of the paper. In particular, R2 recommends "that the authors refocus the paper. One option would be to highlight the dynamic results that they report toward the end of the paper. Thus, the paper might be reframed to analyze the timing of municipal policy change. They find that responsiveness occurs between four and eight years after local preferences change. This is interesting and could be explored much more thoroughly. Why does the timing take this structure? What does this mean for accountability? (...)"

Following the lead from R2 we have added a theory section where we discuss what the implications the timing of municipal policy change has for both accountability and the underlying mechanisms that produce local responsiveness. We present these discussions in the new section "Dynamic and Adaptive Local Responsiveness".

In terms of accountability, we now write that "slower adaption of city policy to citizen preferences will mean that policy and preferences will be 'out of sync' for longer. Slow adaption will also mean that voters will not able to discern whether elected officials has set policy on a course that is aligned with what the voters want, making it difficult for voters to hold politicians accountable."

In terms of how adaptiveness might speak to *why* policy is responsive, we now write that: "if policy instantly responds to changes in preferences, then it suggests that politicians have observed the changing mood of the electorate—perhaps because of constituent interaction, and already tried to push policy in the direction that the voters want. If policy responds only a few years after the preferences of the voters' have changed, then it suggests that voters need to express

their wishes in the electoral process in order to change the re-election incentives of the politicians in office. Finally, if policy only adapts slowly, over a decade or so, then it suggests that a more slow moving force is at work. Erikson describes one such slow-moving force, namely that: "...the recruitment of candidates from the same constituencies as the voters they hope to represent means that the values of the legislators should reflect state ideology to some extent." This change in the focus of the paper is reflected throughout the paper.

However, two caveats are important to note before moving on. First, as we note in the manuscript, "adaptiveness cannot be used as definitive proof that one or another mechanism explains the link between preferences and policy, but it should furnish us with a clue about the mechanism that other scholars can use in developing theories about local responsiveness." Second, since this is a research note the theoretical discussion has to be quite brief to stay within the Urban Affairs Review word limit. In spite of this, we hope that our revisions satisfies R2.

In addition to this, R2 has some other suggestions.

1. The literature review should motivate the authors' theory rather than simply review what people have argued. The authors should explain what new insights they bring with their new data.

Following this comment by the reviewer, we have restructured the literature review, so that we highlight how our data can cast light on new issues related to the dynamism and adaptiveness.

2. The authors include a lengthy appendix. However, the additional tests are disjointed and not well motivated in the paper. The text needs to better detail the problems that the various choices are seeking to address.

We have tried to address this problem, detailing the implications of our methodological choices, and, in order to present our results more fully, we have included part of the Appendix in the main text.

3. Some of the policies included in the fiscal policy index were not well explained. Co-payment for public services does not seem to be a direct measure of city policy.

We thank the reviewer for pointing this out – we realize that we were not clear enough about the specificities of welfare spending in the Danish context. We have added more explanation on page three of the appendix (B). We also spend more words describing some interesting patterns in the distributions of welfare spending in Danish municipalities.

One factor is particularly important to point out: In Danish municipalities day care, relief stays, food deliveries, and stays in nursing home are to a very large degree publicly financed. Therefore, the cost of, for instance, day care or a stay at a nursing home averages to approximately DKK 2,500 (or \$380). However, the municipalities themselves choose the maximum co-pay (i.e.

the level of public funding). Because of this, the main reason why these prices vary across municipalities and time is that local politicians choose to spend more or less public money on these partly public services. Therefore, the prices of these services are important to any measure of fiscal conservatism in a Danish context. This is not a general feature of non-Scandinavian welfare systems, but we note that the results maintain without including these items in the measure of fiscal conservatism.

4. The paper needs to include a longer discussion of generalizability of Danish cities. It is possible that we want to know about Danish cities just for the sake of knowing about Danish cities, but I was not convinced.

We agree with the reviewer, that we did not adequately address this issue in the original manuscript. We have tried to address these concerns, especially in terms of adding some context about how Danish municipalities differ from those in other countries, and what this means for inference. We discuss this in the conclusion of the revised manuscript.

In terms, of why we study Danish municipalities, in the revised manuscript we argue that even though the Danish case cannot be seen as especially typical or atypical, we believe Danish municipalities are a critical case. It is a particularly interesting case for those concerned with the prospects for responsive local governments. Municipalities in Denmark are entrusted with spending one third of the GDP and are responsible for running large parts the vast Danish welfare state. If local citizens are not able to steer local policy in Denmark, where policy is so consequential and play such an integral part in the life of most voters, it is especially democratically problematic. We make this argument in the section "Empirical Context".

We thank the reviewer for forcing us to think harder on the question of case selection.

## **RESPONSE TO REVIEWER 3 (R3)**

We are grateful for the reviewer's assessment that the paper "will contribute to the discussion on citizen preferences and municipal response", and for noting that they "strongly support this manuscript." R3 also has some different concerns which we lay out and respond to below.

1. First, despite the detailed robustness checks and nice visualization of results, I was surprised with the lack of basic statistical information in the manuscript. I do not see any basic information, which is commonly seen in academic papers, such as descriptive statistics, correlation matrix, VIF. Figure 2 only shows results of independent variables. However, the readers do not know what control variables included in the models and coefficients of the control variables. Also, if I understand the manuscript correctly, the author(s) created a fiscal conservativism index from various fiscal policy indicators presented in table B1. The paper

should present how each indicator is correlated to the index and show the validity of index showing Cronbach's alpha or other measures. Table F1 does not indicate information on significance level for each star. Does \*\*\* indicate statistical significance at which level? Also, table F1 omits many details. Readers like myself may want to see full results of analysis. We agree that the presentation of our data and results should be made clearer, and we would like to thank R3 for pointing this out. To increase the transparency of the results in the main text, we have:

- 1. Moved the visualization of fiscal conservatism over time (what was previously Figure D2) into the main text as Figure 1, on page 7. This should give the reader a better sense of the distribution of the index and how it changes over time.
- 2. Added a new Table 1 on page 9 with summary statistics on the main variables as well as some other socio-economic features of the municipalities. The table allows for comparison between the pooled versions of the variables as well as the within-municipality changes, which allows the reader to better assess differences in the coefficients we present later.
- 3. In the revised manuscript, we present the main results in Table 2 on page 11 instead of plotting the coefficients (Figure 2 in the original manuscript). This makes it easier to inspect the model specification. It also allows the reader to assess coefficient sizes directly against the summary statistics presented in Table 1.

As suggested by R3, we have added a number of additional analyses to Appendix C. The aim is to allow for better interpretation of what the index measures as well as inspection of its validity and reliability:

- 1. To assess the reliability of the index, in Table C1, we present the overall Chronbach's alpha as well as measures of how the alpha would change if we were to leave out each single item.
- 2. Figure C1 shows the pairwise correlation between each item and the overall measure of fiscal conservatism. This allows us to discuss more specifically what it is our index captures and, relatedly, to assess which factors are most important in defining the measure.
- 3. We have added summary statistics (Table B2) on the items as well. While all items are mean centered and variance standardized before being used to estimate fiscal conservatism, they are presented in non-standardized form in Table B2. This allows the reader to inspect key characteristics of municipal fiscal policy.

2. Table B1 shows that availability of number of data years differ depending on indicator. That's why the authors used imputation to cover the missing data. However, as the author(s) may have noticed, imputing data sometimes create bias. In my opinion, one reason why many components of the index fail to reach statistical significance as showed in figure J1 is imputation bias, while the index itself achieved statistical significance results. I'd like to see more authors' elaboration and explanation for this in the manuscript.

We agree that the use of multiple imputation is not without risk, and we do take steps to reassure ourselves and the reader that our results are not driven by bias induced through the imputation procedure. In the original manuscript, we were not sufficiently clear about this, and we have sought to clarify in the revised version.

As noted by the reviewer, many of the items in the full index of fiscal conservatism have missing values before 1993. To make sure that our results are not driven by bias induced through imputation, we reproduce the results from the full index with a smaller index comprised only of the three variables for which we have complete data for the period. These are property tax, income tax and spending per capita. On page 10 of the revised, we have added a clarification of why we conduct this robustness check.

Because we use a Bayesian estimation technique to construct the measure of fiscal conservatism, missing values are imputed as an integral part of the estimation itself. The benefit of this approach over, e.g., frequentist factor analysis is that we can make use of indicators with missing values during different years in the same measure. The benefit over first imputing the data and then constructing the index is that the Bayesian technique puts less weight on items during the years, where data on them are missing. In this way, items like the cost of daycare, which is largely missing before 1993, adds to our knowledge of fiscal conservatism after 1993, but only to a limited degree before. On page 8 of the revised manuscript, we have sought to bring more clarity to this part of the procedure.

This also means that, in Appendix J, when we estimate the relationship between support for right-wing parties and each component of the overall index, we do not impute missing values. We have added a few lines to notify the reader of this. Like the reviewer, we have been considering why some of the individual components do not reach statistical significance, and we believe that it is, because some of the items only have few non-missing years. For instance, the price of staying at a nursing home only has seven years of data, which explains why it can achieve a very large coefficient, yet is estimated with quite a lot of noise and therefore does not reach standard levels of statistical significance it itself.

In this sense, the combined measure of fiscal conservatism becomes more than the sum of its parts. This is in part, because the Bayesian estimation technique allows us to use information from variables that – like the price of nursing homes – would not allow us to draw any firm conclusions, but still are valuable in conjunction with other information on municipal fiscal policy.

We want to thank R3 for forcing us to be more transparent about how we construct our measure of fiscal policy conservatism and the data that goes into it. This goes for the reviewer's comments relating to validity, reliability and imputation. We hope that she/he can accept our arguments and additional analyses.

3. Table B1 shows meaning of lower/higher values of each indicator in terms of fiscal conservatism. I do not understand why higher values of cost of day care, price of relief stay, food delivery, and stay in nursing home are considered as fiscal conservatism? I'd like to see some explanations for this.

We thank the reviewer for pointing this out – we realize that we were not clear enough about the specificities of welfare spending in the Danish context. We have added more explanation on page three of the appendix (B). We also spend more words describing some interesting patterns in the distributions of welfare spending in Danish municipalities.

One factor is particularly important to point out: In Danish municipalities day care, relief stays, food deliveries, and stays in nursing home are to a very large degree publicly financed. Therefore, the cost of, for instance, day care or a stay at a nursing home averages to approximately DKK 2,500 (or \$379). However, the municipalities themselves choose the maximum co-pay (i.e. the level of public funding). Because of this, the main reason why these prices vary across municipalities and time is that local politicians choose to spend more or less public money on those partly public services. Therefore, the prices of these services are important to any measure of fiscal conservatism in a Danish context. This is not a general feature of non-Scandinavian welfare systems, but we note that the results maintain without including these items in the measure of fiscal conservatism.

4. On a related note, I'd like the author(s) to justify the case selection of Danish municipalities in a more meaningful way, focusing on other than the data availability. I agree with the author(s) that the majority of municipal level studies focus on US municipalities. However, please don't' get me wrong, but in my opinion, the Danish municipalities, are also becoming "over-studied" because of the data availability and convenience. In fact, the majority of recent studies on municipal amalgamation/merger focuses on Danish municipalities. What can readers learn from this study of Danish municipalities other than utilizing dynamic models with the available rich data? How are Danish municipalities different from municipalities in other advanced democratic countries? In particular, what does fiscal conservatism mean in the Danish context? How is it different from one in other countries such as US, Germany, Japan, France? My main point is that the authors should justify why they select Danish municipalities from non-methodological perspectives. If the data availability is a main reason, it is difficult to see future studies of countries where data availability at the local level is limited. That is not what we want.

We agree with the reviewer, that we did not adequately address this issue in the original manuscript. We have tried to address these concerns, especially in terms of adding some context

about how Danish municipalities differ from those in other countries, and what this means for inference. We discuss this in the conclusion of the revised manuscript.

In terms, of why we study Danish municipalities, in the revised manuscript we argue that even though the Danish case cannot be seen as especially typical or atypical, we believe Danish municipalities are a critical case. It is a particularly interesting case for those concerned with the prospects for responsive local governments. Municipalities in Denmark are entrusted with spending one third of the GDP and are responsible for running large parts the vast Danish welfare state. If local citizens are not able to steer local policy in Denmark, where policy is so consequential and play such an integral part in the life of most voters, it is especially democratically problematic. We make this argument in the section "Empirical Context".

We thank the reviewer for forcing us to think harder on the question of case selection.

5. Regarding voter preferences, can we assume that voters always have certain choices of electoral candidates with diverse ideologies? The independent variable is a difference between left-wing support and right-wing support. But, do voters usually have choice? Are there enough candidates at the local election? For example, some studies such as Suzuki & Han (2018) show that walkover election (no-electoral contestation) is associated with fiscal autonomy. I understand that the microdata of electoral campaigns may not be available. But, I encourage the author(s) to at least refer to the potential bias that may have been created by this issue.

We agree with the reviewer that this could be a source of bias. However, part of the answer to this concern can be found in the specificities of the Danish case. Besides the relatively high turnover in Danish local elections, they are generally also strongly contested. For instance, in the latest municipal election in 2017, which was not extraordinary, there were upwards of 9.000 candidates – i.e. approximately 1/400 of the citizens, who legally can run, choose to run for local office. In combination with the multiparty, proportional electoral system, this ensures that there generally are no walkover elections in the Danish municipalities. On page 7, we have added a footnote which explains these concern and outlines these features of Danish municipal elections.

6. On a related note, what about the effects of electoral budget cycle and municipal merger? Results of previous studies suggest fiscal behavior of municipalities are somewhat different right before elections and merger reforms. Such data might not be available or it may be time-consuming to get such data, but again I'd like the author(s) to be at least aware of the potential biases without considering these effects. The author may want to cite relevant literature such as follows.

We agree with the reviewer that both electoral budget cycles and municipal merger could be causes for concern. However, we do not believe that these factors would induce major biases in our results.

- 1. We believe that the results in Figure 3 alleviate concerns regarding electoral budget cycles. The results do show that an effect of a change in the electoral support for right-wing parties can be detected the one year prior to the election. However, they also indicate that the relationship between electoral support for right-wing parties and fiscal conservatism remain stable in the period between four years and 9 years into the future. Thus, the effect is stronger in the period between the two up-coming elections than it is during the year before the election takes place i.e. the period, where we would expect an electoral budget cycle. On page 16 of the revised manuscript, we have added these thoughts.
- 2. A lot of municipalities were merged eight years before (1970) and once again right after our study period ends (2006). However, there are almost no municipal mergers in the period under study. Accordingly, we do not think this is interfering with our results.