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Change and continuity in the ideological gender gap a longitudinal analysis of left-right self-placement in OECD countries

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Abstract. When asked to place themselves on a left-right scale, men and women tend to take different positions. Over time, however ideological gender differences have taken a different form. While women were traditionally more right-leaning than men, from around the mid-1990s onwards they have been found to take positions to the left of men. Using an originally constructed dataset that includes information on the left-right self-placement of more than 2.5 million respondents in 36 OECD countries between 1973 and 2018, I empirically verify how the ideological gender gap has evolved since. The results show, first, that while women have shifted to the left since the late 1970s, the pace of this change has strongly diminished since the late 1990s. Second, there is important between-country variation in the size of the reversal in the ideological gender gap. Third, with the exception of the Silent generation and the Baby-boomers, newer generations of women have not taken more left-leaning positions than generations before them.

Keywords: gender; generations; Ideological gender gap; left right

Introduction

At least since the publication of the work of Inglehart and Norris (2000), scholars have been aware of a remarkable shift in men's and women's ideological leanings. Traditionally, survey researchers found women to position themselves to the right of men, and women were also found to be more inclined to vote for right-wing parties. This 'ideological gender gap' has been reversed, however. Women are now placing themselves to the left of men and are more likely to vote for left-wing parties compared to men (Abendschön & Steinmetz 2014; Giger 2009; Inglehart & Norris 2003).

In this research note, I make use of an exceptionally comprehensive and longitudinal dataset with information on 2.5 million individuals in 36 OECD countries between 1973 and 2018 to verify whether the modern ideological gender gap is growing further, remains stable, or is decreasing (again) in the more recent period.

To preview the results, I find that even though the shift of women to the left was originally fairly strong, the pace of this change has diminished since the turn of the twenty-first century. Second, even though the overall pattern is one of women shifting to the left, there remains substantial between-country variation in the pace of this change and in the size of the gender gap. Finally, while female Boomers are significantly more left-leaning than women of older generations, the positions of younger generations of women have not continued to shift to the left. These results offer little signs of a 'real' gender cleavage in ideology taking shape.

From a traditional to a modern ideological gender gap

Different socio-demographic variables shape citizens' political preferences and serve as the basis of strong cleavages in party systems (Lipset & Rokkan 1967). In contrast to what holds for class or religion, however, gender differences have never developed into a stable political cleavage (Inglehart & Norris 2003). Focusing on the limited ideological differences between men and women in cross-sectional surveys, though, masks an important over-time change in ideological position taking – among women in particular. In the United States, scholars have drawn attention to a shift in women's and men's partisan leanings, with women increasingly sorting into the Democratic party while men turn to the Republican party (Box-Steffensmeier, De Boef & Tse-Min 2004; Harsgor 2018; Kaufmann & Petrocik 1999). Inglehart and Norris (2000, 2003) furthermore pointed out that by the late 1990s a reversal of men's and women's ideological positions was visible in established democracies more generally.

From previous work, we know that the trend and the size of the ideological gender gap is associated with structural variables that have fundamentally changed women's 'role and position in society and family life' (Abendschön & Steinmetz 2014: 318), such as the increased participation of women in the labor market and their growing economic independence, improved educational opportunities for women, or the process of secularization. As women participate more in the labor market and often experience pay disparities, as they become higher educated, and as they become more secularized, their ideological position appears to be more left wing (Abendschön & Steinmetz 2014; Giger 2009; Inglehart & Norris 2000; Iversen & Rosenbluth 2006).

Furthermore, the reversal of the ideological gender gap has been linked to attitudinal changes. According to Inglehart and Norris (2000), the growth of post-materialist values in advanced democracies is correlated to the reversal of the ideological gender gap. Men's and women's positions differ on issues that are related to 'freedom, self-expression and gender equality' (Inglehart & Norris 2000: 446), and as such issues have gained salience over time – at the expense of economic issues – women have turned to the left (Giger 2009; Inglehart & Norris 2000).

The – sometimes implicit – expectation of much of this work is that a modern gender gap would gradually appear across democracies. While the process can proceed more or less quickly, it is expected that after a period of 'gender dealignment' (i.e., women shifting to no longer holding more right-wing or conservative views than men), follows a period of 'realignment', implying women shift further to a more left-leaning ideological position (Inglehart & Norris 2000). Even in those countries where women are still more right-leaning than men, it is expected that with time, they will not only move to a similar ideological position as men, but move further to the left (Giger 2009).

The mechanism explaining the over-time change, previous work has shown, is a process of generational replacement. Those generational differences originate in the fact that ideological change reflects changing values in society and a trend towards more post-materialism. Such value change is often argued to be driven to a large extent by generational replacement (Harsgor 2018). Inglehart and Norris (2003: 38), for example, state that

the theory of value change (...) suggests that secular social trends have only a glacial effect on cultural norms but that, through the socialization process, the conditions experienced during the formative years of childhood and early adolescence make an indelible impression on people. As a result, the values held in later life continue to be shaped by these seminal experiences.

Structural changes of societal modernization as well likely have a generational component, because younger birth cohorts 'have particularly experienced modernization' (Shorrocks 2018: 136). In fact, it is argued that below the surface of the over-time changes that are being observed, there are more pronounced differences between generations. In other words, it is assumed that generational differences are more important than period effects when studying the ideological gender gap. This expectation, that originates in the work of Inglehart and Norris (2003), receives empirical support by a number of recent publications. Shorrocks (2018), who estimates age-period-cohort models to study the ideological gender gap in Europe and Canada, finds strong evidence in favour of Inglehart and Norris' 'gender-generation hypothesis'. Her findings lead her to conclude that 'studies that focus on the aggregate-level gender gap (...) underestimate the magnitude of political gender differences since the largest gender gaps are to be found within particular birth cohorts' (Shorrocks 2018: 159). Similarly, Harsgor (2018) finds that generational differences are a big part of what explains over-time changes in the partisan gender gap in the United States.

To the extent that new generations of women – who are socialized in a different context than older generations and as a consequence thereof hold more left-wing attitudes – continue to enter the electorate, the result will be a gradual and continued increase of the ideological gender gap. Such changes might even contribute to the appearance of a real gender cleavage in politics. However, with the exception of the longitudinal analyses of Inglehart and Norris (2000, 2003) – that covers the period until the late 1990s – few publications offer a view of the long-time trends in ideological differences between men and women. And even less contributions do so comparatively. As a result, we do not know if the modern ideological gender gap can be found in a growing group of countries, and whether that gap continues to grow stronger over time, stabilizes, or perhaps shrinks in size in the more recent period. This research note fills this void in our knowledge of the differences in men's and women's ideological preferences.

Data and methods

To evaluate in more depth how women's and men's ideological self-placements have changed over time, I make use of an originally constructed dataset with information on the left-right self-placement of over 2.5 million respondents in 36 OECD countries. The dataset is organized in a country-year format and covers the time period between 1973 and 2018. This formidable dataset was constructed by combining the data from the Eurobarometer surveys, the Latinobarometro, the European Social Survey, the World Values Study, the Comparative Study of Electoral Systems and national election studies for particular countries. A complete list of countries and datasets included can be found in Appendix A in the Supporting Information.

The dataset includes information from all current OECD member states. This results in a focus on 36 countries worldwide, which makes for a more diverse sample than what has been used in most previous research that has studied the ideological gender gap. This also implies that not all countries in the dataset have the same level of democratic development. All country-years for which data are included, however, are from settings that were considered at least 'partly free' by Freedom House.¹

Each of these surveys that were used to construct the dataset includes a question asking respondents to place themselves on a left-right scale.² However, not all surveys measure left-right self-placements in exactly the same way. The number of answer categories differs, and some scales have a mid-point while others do not (Kroh 2007). To allow combining these datasets, all scales were first harmonized to 1–10 scales (see also Ferland (2017) and Powell (2000)).³ On this scale, 1 corresponds to the most left-wing position while 10 corresponds to the most right-wing position. Given that the number of response options, and other characteristics of the different surveys that are used might influence the results, I verify whether the results are robust to controlling for the number of answer options and the original surveys the data are from.

To evaluate the evolution of the ideological gender gap over time, and trends in men's and women's ideological positions, I first make use of a nonparametrical technique and estimate local polynomial smoother lines (Fah 2018). I also examine the over-time trend in a parametric way by means of regression analyses – with a focus on the effects of time, gender and the interaction between both. To account for the possibility that the change might be non-linear, the time trend is accounted for by means of a series of decade dummies. I also include country-fixed effects, implying the models serve to analyse within-country variation over time. I complement this pooled analysis with analyses for each of the countries separately, to get a sense of the extent to which patterns are general or context-specific.

To evaluate the extent to which gender realignment is driven by generational replacement, in a second step, I estimate models that include parameters to differentiate between the left-right placements of members of different generations. Members of the same birth cohort grow up in the same socio-historical context. These shared experiences, in particular what happens during their 'formative years', are thought to leave a lasting imprint and affect their political attitudes and behaviour (Inglehart 1990; Mannheim 1928). Given the importance of socio-political events for the development of generations, most work that studies the role of generations in politics relies on country-specific categorizations of different generations. Nevertheless, there is a large amount of overlap between the generational categories that have been developed for different established democracies (Grasso 2016). The Second World War, for example, is thought of as a demarcation for distinguishing generations in most categorizations that are used to study political attitudes and behaviour (Grasso 2016; Van den Broek 1996). Given the strong similarities in generational categories that are developed for different countries, I rely on a single and fairly general categorization that distinguishes between six broad generations: the Greatest generation (1910–1924), the Silent generation (1925–1945), the Baby-boomers (1946–1964), Generation X (1965–1980), Generation Y (1981–1996) and Generation Z (1997-present). In addition, to account for the possibility that this general categorization does not capture well the reality in several of the countries in the dataset, I verify whether results hold when estimating age-period-cohort models that focus on differences between 5-year birth cohorts. When investigating generational effects in this way, it is important to take into account the role of age and period effects as well. Given that these three time-related variables are linearly dependent, we cannot attribute differences between groups that are born in different years to generational effects if the models do not account for the fact that members of different birth cohorts also have a different age or have been interviewed in different time periods (Glenn 2003; Neundorf & Niemi 2014). While it is important to account for the three time effects, their perfect linear dependency implies that models cannot be estimated without restricting at least some of the parameters. One way of restricting parameters is to create categories for a certain time-effect rather than estimating its effect in a continuous way (Neundorf & Niemi 2014). The time period-effect is already restricted by the reliance on decade dummies, and the same holds for the generational effects – for which I distinguish six generational groups. To account for life-cycle effects I add respondents' age at the time of the survey, and I also include age squared to account for the possibility that the relation between age and ideology is nonlinear.

Results

Change over time

How has the ideological gender gap evolved since the late 1990s? As a first step, I focus on a select number of countries for which information on the ideological self-placement of respondents is available from 1973 onwards. More specifically, I use data from Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and the United Kingdom. Given that the full dataset is unbalanced, with some countries only included since the 1990s or even later (see the Supporting Information for details), this focus on a select number of European countries allows for comparability over time.

Figure 1 presents trends in men's and women's ideological positions in these nine countries. The graph shows a picture that is consistent with much of the earlier research on the ideological gender gap. At the start of the time series, there is evidence of a (small) 'traditional' gender gap. That is, around 1970 women – on average – had a higher score on the 1–10 ideological self-placement scale, suggesting they positioned themselves to the right of men. Around the middle of the 1980s, this difference between men and women is strongly reduced and by the middle of the 1990s the gender difference had disappeared while a 'new' gender gap emerged. Furthermore, the data also suggest that the dynamics in the ideological gender gap are mostly the result of women shifting their ideological position to the left. This shift was fairly strong between 1980 and ca. 1995. The over-time analysis that is presented in Figure 1 thus replicates the findings of previous work – that has relied on the same data to study changes in the ideological gender gap in European countries (Abendschön & Steinmetz 2014; Giger 2009; Inglehart & Norris 2003).

More importantly for the purposes of this research note, the over-time analysis that is presented in Figure 1 also offers insights in how the 'new' gender gap has evolved since the turn of the century. From this perspective, Figure 1 shows a fairly stable gender gap. Women's ideological position does not appear to have changed much since the early 2000s. And the contrast in the pace of change before and after 2000 is in fact quite stark. In this set of nine countries, women's position on the left-right axis has shifted from 5.60 to 5.16 between 1980

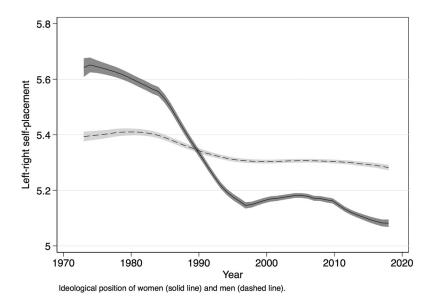


Figure 1. Men's and women's ideological self-placement in 9 European countries over time, 1973–2018. Note: Local polynomial smoother line of men's and women's ideological self-placement (on a 1–10 ideological scale) and 95% confidence intervals are presented. Based on yearly information on respondents' ideological self-placement in Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, the

Netherlands and the United Kingdom.

and 2000. In the next 18 years, it has only shifted 0.08 points, to an estimated average of 5.08. In other words, the pace of the change was more than fivefold before 2000 than it has been after 2000.

These patterns are confirmed when estimating over-time trends in the ideological self-placement of men and women parametrically. In Table 1, I present the results of six ordinary least squares (OLS) regression models that serve to estimate changes in ideological placements over time. To do so, the models include a set of dummy variables to distinguish between the decades that are covered in the dataset. To estimate differences in the trend of men's and women's ideological positions over time, I add to the models interactions between respondents' gender (female = 1, male = 0) and the decade dummies. As can be seen from the estimates in Table 1, this parametric estimation approach shows a picture that is consistent with the results in Figure 1. Note that Models 1 and 2 rely on data from the nine countries that were used in Figure 1.

Looking at the estimates in Table 1, it can be seen, first, that ideological positions were more left wing from the 1990s onwards than they were in the 1970s and 1980s (Model 1). Second, the inclusion of the interactions with gender in Model 2 suggests – like Figure 1 – a strong contrast in the pace of change in men's and women's ideological positions until the 1990s, after which the continued increase in the ideological gender gap appears to flatten off. Importantly, these results appear to hold when broadening the scope of the analyses and also including countries for which we have data since 1985⁴ (Models 3 and 4) or all 36 countries in the dataset (Models 5 and 6).⁵

In a dataset of this size, ideological differences can be estimated very precisely. It should be acknowledged, however, that the size of the effects is substantively rather small. Taking

Table 1. Gender differences and ideological self-placement over time, 1973–2018

	(1)	(2)	(3)	(4)	(5)	(6)
	Countries with data since 1973		Countries with data since 1985		All countries	
Female	-0.081***	0.238***	-0.041***	0.238***	-0.063***	0.238***
	(0.011)	(0.029)	(0.010)	(0.029)	(0.007)	(0.029)
1980s (ref: 1970s)	-0.049	0.017	-0.116	-0.062	-0.115	-0.060
	(0.078)	(0.084)	(0.078)	(0.085)	(0.078)	(0.085)
1990s (ref: 1970s)	-0.262^{***}	-0.096	-0.249^{***}	-0.109	-0.265^{***}	-0.116
	(0.073)	(0.079)	(0.073)	(0.079)	(0.073)	(0.079)
2000s (ref: 1970s)	-0.275^{***}	-0.088	-0.251^{***}	-0.092	-0.251^{***}	-0.092
	(0.073)	(0.079)	(0.073)	(0.079)	(0.073)	(0.078)
2010s (ref: 1970s)	-0.325^{***}	-0.120	-0.334^{***}	-0.155	-0.320^{***}	-0.140
	(0.075)	(0.081)	(0.075)	(0.081)	(0.074)	(0.079)
Female × 1980s		-0.134^{***}		-0.109^{**}		-0.111**
		(0.036)		(0.035)		(0.035)
Female × 1990s		-0.332^{***}		-0.280^{***}		-0.299^{***}
		(0.033)		(0.033)		(0.033)
Female × 2000s		-0.372^{***}		-0.317^{***}		-0.317^{***}
		(0.033)		(0.033)		(0.031)
Female × 2010s		-0.407^{***}		-0.355^{***}		-0.358^{***}
		(0.036)		(0.035)		(0.032)
Country FE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
(N) individuals	1,255,958	1,255,958	1,653,829	1,653,829	2,587,118	2,587,118
(N) countries	9	9	17	17	36	36
\mathbb{R}^2	0.016	0.017	0.022	0.022	0.027	0.028

Note: Estimates and standard errors (clustered by country-year) are reported. The models include country fixed effects. Significance levels: ${}^*p < 0.05$; ${}^{**}p < 0.01$; ${}^{***}p < 0.001$.

the estimates from Model 2, the gap between men's and women's ideological positions has increased by 0.4 points (on a 1–10 left-right axis) in four decades of time (i.e., between the 1970s and the 2010s). Given the length of the time period that is covered by the analyses (45 years), a half point change on a 10-point scale can be qualified as rather small. While such small changes could theoretically build up to a more substantive effect, the fact that the analyses suggest the change has halted in the more recent time period suggest the gap will remain fairly modest in the foreseeable future.

A country-by-country analysis of gender differences in ideology, and how these have changed over time, offers further nuance. First, as evident from the country-specific graphs in Figure 2, whether or not there are differences between men and women varies substantially between countries. These plots also show substantial heterogeneity in the over-time trends of men's and women's left-right self-placement. Clearly, not all countries closely follow the average trend that is depicted in Figure 1. This is also evident when parametrically estimating the interactions between gender and time (decades) in each of the countries separately.

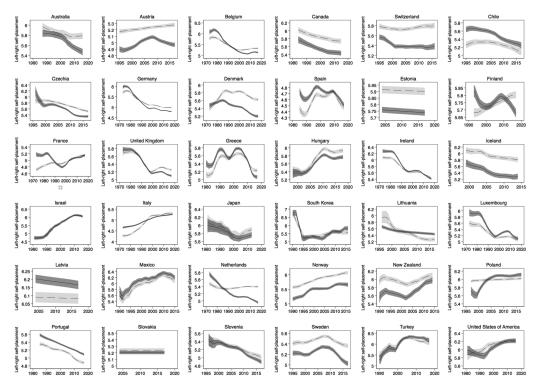


Figure 2. Men's and women's ideological self-placement over time, 1973–2018. Note: Local polynomial smoother line of men's and women's ideological self-placement (on a 1–10 ideological scale) and 95% confidence intervals are presented.

These analyses, that are summarized in Appendix B in the Supporting Information, suggest that the change is in the expected, negative, direction in most (28) countries. In these countries, the average marginal effect of the 'female' variable is either becoming negative or growing more negative over time. However, the size of this over-time change is substantively small in most countries. In fact, there are only 16 countries where the average marginal effect of being female in the 2010s is significantly smaller (or more negative) than it was in the first decade for which data are available in a certain country. To summarize, women have changed their ideological position over time – while men have not. The pace of this change, however, is not constant. While women's ideological position quickly turned to the left between the mid-1980s and the late 1990s, the trend is much reduced since the turn of the twenty-first century. In addition, there are stark contrasts between countries, with very little evidence of change in the ideological gender gap over time in about half of the 36 countries under scrutiny here.

The role of generational replacement

The evidence of women's ideological realignment is present, but fairly weak. So far, however, I have studied average differences between men's and women's ideological positions – irrespective of the generations they belong to. In doing so, I might have underestimated

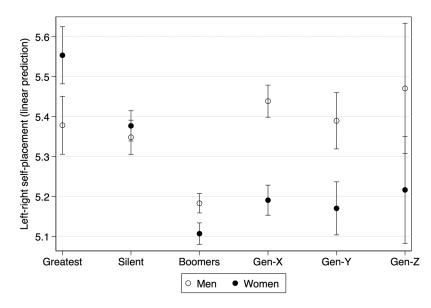


Figure 3. The ideological gender gap by generation.

Note: Estimates and 95% confidence intervals are presented. Estimates from a model that includes information on the nine countries for which there are ideological data since 1973. Full results can be consulted in the Supporting Information.

the extent of change among certain generations (Shorrocks 2018). In addition, even if the overall change is limited, if the ideological gender gap continues to grow larger among the youngest generations, there is a real potential for the ideological gender gap to gain impact as the newer generations continue to gain electoral weight.

To explore this possibility, I estimate a new series of OLS models that include a set of dummy variables to distinguish between respondents who are members of the Greatest generation, the Silent generation, Baby-boomers, and Generations X, Y and Z. In addition, to distinguish generational effects from differences that are driven life-cycle differences, I account for age and age² in the models. As previously, the models include country fixed effects and standard errors are clustered by country.

The full results can be consulted in Appendix C in the Supporting Information, but Figure 3 summarizes the findings. To be consistent with Figure 1, the effects that are plotted in Figure 3 are obtained from models that are restricted to countries for which there are data since 1973.⁶ First, and importantly, Figure 3 shows that the main contrast is between the Greatest and Silent generation on the one hand and Baby-boomers and younger generations on the other. It is in the juncture between the Silent and the Baby-boom generations that ideological gender realignment occurred, as women of the Silent generation were on average still more right-leaning than men, while the opposite holds for women of the Baby-boomer generation. Importantly, however, *both* men and women among the Silent generation and the Boomer-generation were more left-leaning than members of the generations before them. In fact, the general turn to the left – among both men and women – seems a more important shift than the reversal in men's and women's ideological positions. Second, Figure 3 shows that the ideological position of female members of more recent generations

(Generations X, Y and Z) is not substantively more to the left than that of the female Boomers. Across these generations, women's ideological position is consistently to the left of that of men and always hovers around 5.2. Third, from the Generation X onwards, the gap between men's and women's ideological positions appears fairly stable. Fourth, changes in the ideological gender gap among younger generations seem to be driven by generational differences among men, with men of Generation X, Y and Z being somewhat more right leaning than male Boomers.

The results in Figure 3 confirm that gender realignment is a result of generational change (Shorrocks 2018). Importantly, however, they also show that the main shift is now behind us. The turning point in men's and women's ideological positions seems to have been when the Boomers entered the electorate. In addition, the slight increase in the gap that has followed appears to be driven by men. Among newer generations of citizens, differences between men and women appear fairly stable. In this way, Figure 3 also gives a hint at what is to be expected for the future: while newer generations of citizens will continue to join the electorate and replace older generations, the growing impact of Generations X, Y and Z will do little to affect the ideological gender gap.

Importantly, these basic results hold when enlarging the dataset and estimating generational differences in the 17 countries for which there are data since 1985 or in all 36 countries (see Appendix C in the Supporting Information). In addition, to categorize different generations, I relied on a fairly general distinction between six groups. In different countries in the dataset, however, this categorization might reflect more or less well the differences between groups of citizens that are based on their lived experiences. As an alternative and more flexible approach, I therefore also estimated models that account for generational differences through a distinction between 5-year birth cohorts. As can be seen from the results that are reported in Appendix D in the Supporting Information, doing so does not substantively alter the conclusions.

The results suggest that the ideological gender gap has been largely stable since the middle of the 1990s. In addition, the generational patterns that are observed offer little reason to assume that the gap would increase much in the near future. Given the nature of the dataset that is used in this note, that combines information from different data sources, it is important to verify that the inclusion of certain data sources, or the use of a particular answer scale for left-right ideology, does not drive the results. As clear from the results that are reported in Appendix F in the Supporting Information, the coefficients of interest are largely unaffected by controlling for such survey-related elements. That is, the estimates of the time effects, and those of the interaction between gender and time (i.e., decades), are very similar to those reported in Table 1. Second, given that substantially more data are available for some countries than for others (see Appendix A in the Supporting Information), there is a risk that the overall trends are mostly driven by what happens in these countries. As an additional robustness test, I therefore estimated the main models (Models 5 and 6 in Table 1) when weighting all countries for which there are data equally, and when weighting observations by the population size of their countries. The analyses of weighted data still suggest a small over-time increase in the ideological gender gap (see Appendix G in the Supporting Information).

Conclusion

The results that are presented in this note suggest that gender realignment, while present in many countries, reflects a change that is modest in size, that varies strongly between countries, and that is driven by a change among older generations. The change that is observed is not a continuous process, as obvious from the fact that after a period of fairly strong change in the late 1980s and early 1990s, gender differences in ideology have remained rather stable.

What has caused this change in men's and women's ideological positions? The data do not allow testing causal mechanisms but a look at the timing of the change allows some speculation of what might and might not have led to the reversal in men's and women's ideological positions. The aggregate-level pattern suggests a trend that coincides with the end of the Cold War. Even though this historical event might well have contributed to ideological change, the substantial heterogeneity in the timing and the speed of change that is visible from the country-level patterns limit its potential impact. In fact, the widely varying trends in different countries render a single historical event or time period an unlikely explanation of the change that is observed. The data show a pattern that is more in line with traditional explanations of ideological change being driven by gradually shifting values and structural changes in society (Inglehart & Norris 2003). First, the imprint that such changes leave on citizens match with the findings of strong differences between members of different generations. Second, the timing of societal changes such as secularization, or an increased gender equality in the labor market or in higher education – while fairly general phenomena – varies considerably between countries as well (Iversen & Rosenbluth 2006; Shorrocks 2018).

The analyses not only confirm the presence of generational differences, this note adds novel insights in the nature of these generational effects. First, the data suggest a remarkable contrast in gender differences between the Greatest and Silent generations on the one hand and younger generations on the other. Second, from the generation of Baby-boomers onwards, newer generations of women do not appear to take substantively different ideological positions than generations before them. Third, a recent increase in the gender gap is driven by male post-Boomers moving to the right.

Women's ideological realignment appears to be the product of an important – but substantively small – change between the Silent generation on the one hand and Babyboomers and younger generations on the other. These findings imply that most of the effects of 'gender realignment' have probably already been absorbed by the system. As a result, there is little reason to expect a 'real' gender cleavage to start taking shape in the near future. Even though the ideological gender gap is substantively small, and even though the results suggest it will likely remain small, those differences are not meaningless. In most democracies, ideological self-placements are strongly correlated with the vote choice (Dalton, Farrell, & McAllister 2011). Furthermore, this connection is equally strong for male and female voters (Dassonneville et al. forthcoming). As a result, even small changes might have important electoral effects, in particular when elections are very competitive.

The results that are presented in this research note have several important implications. First, they confirm the role of generational replacement in bringing about social and political change (Abramson & Inglehart 1986) and suggest that the context in which

citizens become politically socialized is key to explaining their political attitudes (Hooghe 2004). The change in men's and women's ideological positions occurred as one generation replaced the other, and has been mostly stable since. Second, the results point to changes in public opinion that are altogether small – hence testifying of the stickiness of aggregate public opinion. Third, and finally, the results suggest a large amount of country-level heterogeneity. Even though the shift of women towards the left can be discerned in all but a handful of countries, the timing and the size of this shift vary a lot. As such, the results suggest that future research that seeks to gain a good understanding of the sources of the change in the ideological gender gap should take into account country-level factors and conditions.

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Online Appendix

Additional supporting information may be found in the Online Appendix section at the end of the article:

Appendix A. Countries and datasets included in the analyses

Appendix B. Left-right self-placement by gender over time (1973-2018), country specific estimations

Appendix C. Generational differences, full results and full dataset

Appendix D. Age-period-cohort models with 5-year birth-cohorts

Appendix E. Accounting for autocorrelation in the data

Appendix F. Taking into account scale- and survey-effects

Appendix G. Weighted data

Appendix H. The meaning and relevance of left-right self-placements

Notes

- 1. Turkey is the only country in the dataset where democracy has declined to a 'non-free' status (since 2018). However, the data from Turkey are restricted to the period before this decline in democracy.
- 2. See Appendix H for a lengthy discussion of the relevance of left-right self-placements.

- 3. For example, for converting the median value from a 0–10 scale (γ) to a 1–10 value (κ), Powell (2000: 273) suggests applying the following formula: $\kappa = 5.5 (.90 \times 5 \gamma)$.
- 4. Doing so implies that data from Canada, Greece, Israel, Japan, Portugal, South Korea, Spain, and the United States of America are added.
- 5. The longitudinal nature of the data, with measures of citizens' ideological self-placement measured in different years, implies a risk of autocorrelation in the dataset biasing the estimates. To address this issue, I also verified whether conclusions hold when estimating a series of year-specific models and plotting the coefficient for the gender-variable over time. As can be seen from the graphs in Appendix E, these coefficient plots show patterns that are largely consistent with the estimates from Table 1. In addition, I removed serial correlation from the dataset by taking the difference between the ideological self-placement of an individual and the mean left-right placement in her country-year. As can be seen from results that are reported in Appendix E, using these deviations from the country-year means as the dependent variable in regression models does not affect the conclusions.
- 6. The estimates for models based on data from countries that were included since 1985 and all countries can be consulted in the Supporting Information.

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