

Term lengths and legislators’ temporal focus

Pat Leslie

Chris Hanretty

Politicians concerned about re-election have reasons to favour present benefits over future benefits when those benefits arrive after the next election. This suggests that longer term lengths can increase politicians’ ability to focus on the future. We investigate the effects of term length on politicians’ future focus, as inferred from their legislative speech. We study future focus in the Australian Senate, where, following “double dissolution” elections, legislators are elected either to short (three-year) or long (six-year terms). We study all double dissolution elections in the period 1974-2019, testing the association between longer terms and future focus. We then study very particular circumstances in the 2016-2019 Senate, where four senators were promoted from short to long terms as a result of the ineligibility of those elected ahead of them, allowing a difference-in-difference specification. We find no substantively or statistically significant effect of an increase in term length on individual legislators’ future focus.

Word count: 3996 excluding references.

Introduction

Many problems facing society have a temporal aspect. Social problems may be temporally extended, such that they cannot be resolved in the short- to medium-term. Resolving problems can require inter-temporal transfers, where some group must incur costs or forgo benefits to benefit a future group. Social problems of this type include existential challenges like climate change and natural disaster mitigation and some everyday matters of public policy, like public pensions (Fiorino 2018; Healy and Malhotra 2009; Jacobs 2011). This temporal aspect of public policy problems is present in all societies, but it is often argued that democracies are particularly bad at dealing with these temporal aspects, and more particularly that they suffer from shorter time horizons or “democratic myopia” (MacKenzie 2021). Problems which cannot be resolved in a single electoral term may be put into a “too difficult” box (Clarke 2012) and remain as “wicked problems” (Head and Alford

2015); benefits which only accrue after the next election may be heavily or entirely discounted, particularly where incumbents' prospects of returning to office are uncertain (Jacques 2022).

Different options exist for combating democratic myopia (Boston 2021). One reform proposal that concerns existing institutions and which is supported by incumbent politicians involves increasing the length of legislative (and/or executive) terms (MacKenzie 2016, table 2.1; Birch 2023, 12; Järvensivu 2012). If politicians cannot think beyond the next election, then moving the next election back a year will extend their time horizons by at least one year, and more where there is an expectation of re-election.

Legislative term length, while it varies across countries, rarely changes within any given country. Any association between term length and democratic myopia may therefore be the result of country-specific factors rather than term length itself. This limits researchers' ability to make causal claims about the potential benefits of longer terms. There are, however, occasions where term length varies within a polity, sometimes because of a need to (re-)create staggered terms. Scholars have used within-legislature variation in term length to explore the consequences of longer terms for legislative effort, measured by the number of bills introduced, speeches made, or votes attended (Dal Bó and Rossi 2011; Titiunik 2016; Koh, Matsumura, and Onishi 2022). Their studies demonstrate that term length increases have the capacity to substantially affect legislator behaviour.

Here we consider the impact of within-legislature variation in term length on politicians' *future focus*, or the degree to which politicians talk about the future in legislative debate (Shipp, Edwards, and Lambert 2009; Müller 2022). This is one measurable way to assess the likely impact of longer terms on democratic myopia: if legislators fail to consider the future in their collective deliberations, then they cannot appropriately value future benefits relative to short-term costs.

Longer terms may influence a legislators' temporal focus through a logic of consequences or a logic of appropriateness. In a logic of consequences, longer terms may allow legislators to focus on policy activities with delayed expected returns (Jacobs 2016, 445) rather than short-term busywork done to improve re-(s)election prospects (Louwerse and Van Vonn 2022). In a logic of appropriateness, the duty to "consider constituents' interests over the course of the parliamentary term" captures more of the future for legislators with a six year term than legislators with a three year term.

We investigate temporal focus in the Australian Senate, where term lengths vary across legislators, and where in one particular legislative term unusual circumstances created something close to a natural experiment. We find no statistically or substantively meaningful effects of longer term lengths on future focus. These findings contribute to ongoing research into plausible remedies for democratic myopia.

The Australian context and the data used

The Australian Senate is the upper chamber of the Australian Parliament, and represents the six Australian states and the two self-governing internal territories (Australian Capital Territory and the Northern Territory). The Senate has been justified variously as a chamber of territorial representation, a chamber of minority representation, and a “house of review” (Uhr 2002, 4–6). Whilst it cannot initiate or amend money bills, it otherwise enjoys the same powers as the lower chamber, the House of Representatives (HoR).

The size of the Senate has changed over time: at present, there are 76 senators, or twelve from each state and two from each internal territory. Senate elections are ordinarily staggered so that half of each state’s delegation is elected every three years for six-year terms. However, when both the HoR and Senate are dissolved at the same time (a “double dissolution election”), all members of the Senate are elected, with half given six-year terms and half given three-year terms. Thus, in a double dissolution election the first to sixth-elected senators from Queensland would receive six-year terms, whilst the seventh to twelfth-elected senators would receive three-year terms. While the Senate is often described as elected by single transferable vote, since 1984 voters have been able to vote “above the line” and express preferences between party lists rather than giving a full preference ordering over candidates. More than 95% of voters vote above the line. This means that this system functions more like a closed party list, as the order of election is almost always determined by the list share of preferences and the within-list order of candidates (Sawer 2005).

Candidates for the Senate must be Australian citizens eighteen years of age or older, and must be eligible to vote. Additionally, Section 44 of the Constitution provides that senators must not be “a subject or a citizen” of a foreign power, must not be awaiting sentence for certain criminal

convictions, must not be bankrupt or insolvent, hold any “office of profit under the Crown”, or otherwise have any personal financial arrangement with the Australian Commonwealth. Prior to the 2016-2019 Senate, little attention was given to Section 44 restrictions. However, they play a key role in our analysis, as section 4 describes.

Politicians’ future focus

Proceedings of the Senate are recorded in Hansard, and are made available in XML format at the Australian Parliamentary Library’s website, parlinfo.aph.gov.au. We parsed these XML files to get a record of each speaker’s contributions on each sitting day. We filtered a number of questions and answers which were “read into the record”, rather than being delivered orally.

We turned legislative speech into daily measures of temporal focus as follows. Two researchers independently hand-coded 3,900 sentences from the UK House of Commons between 1979 and 2022 as being either past-, present-, or future-focused. The two researchers agreed a consensus coding for each sentence; this consensus coding was used to fine-tune a large language model (`distilBERT` English cased: Sanh (2019)) in order to predict probabilities of membership in each category. Detailed coding instructions can be found in the appendix. We then applied this model to the Senate corpus. Statistics on the rates of intercoder agreement and agreement between human coders and the fine-tuned language model are reported in the appendix. We take model-generated sentence-level probabilities and aggregate to the speaker-day level, weighting the probabilities for each sentence by the number of characters in the sentence.

This procedure gives us measures of past-, present- and future-focus for each senator who spoke on a sitting day. These measures are all proportions strictly greater than zero and strictly less than one. Here we focus on levels of future focus. The average (character-weighted) level of future focus across all sitting days considered here is 12.3 percent (weighted standard deviation across speaker-days: 6.3 percentage points). In the appendix we give details of alternative measures involving a binary classifier (future versus all else) and the count of references to dates more than five years in the future.

Part 1 - observations across multiple legislative terms

As an initial test of the effect of longer terms on temporal focus, we test differences in future focus comparing senators elected to longer or shorter terms in double dissolution elections: that is, individuals elected to the 1974-1975, 1975-1978, 1983-1985, 1987-1990 and 2016-2019 parliaments. Because these were double dissolution elections, just under half of these individuals received longer, six-year terms. Although the allocation of senators to longer terms was not random, we know that the order of election depends primarily on each list's share of preferences and order within the party list. We therefore adopt a selection-on-observables strategy and control for these 'mechanical' determinants of order of election.

Figure 1 shows the future focus of legislators as a function of their within-state order of election, excluding senators elected from territories. Order of election is expressed relative to the threshold for election to a longer term. Comparing senators who were elected one place above or on the threshold for a longer term to senators who were one or two places below shows no apparent difference. Our specification is:

$$y_{it} \sim \text{Beta}(\text{logit}(\mu_{it}), \phi)$$
$$\mu_{it} = \alpha_i + f(t) + \beta \cdot D_{it} + X\gamma$$

where:

- y_{it} is the proportion of legislative speech of legislator i on day t which is focused on the future
- μ_{it} is our linear predictor
- ϕ is an estimated dispersion parameter
- α_i represents the fixed effect for legislator i
- $f(t)$ is a smooth function of time (a period effect)
- D_{it} is an indicator variable which has a value of one if legislator i has been allocated a six-year term
- β is an estimate of the treatment effect
- X is a matrix of control variables
- γ is a vector of control variable coefficients

We estimate these parameters using a general additive model from the `mcgv` package for **R** (Wood 2011).

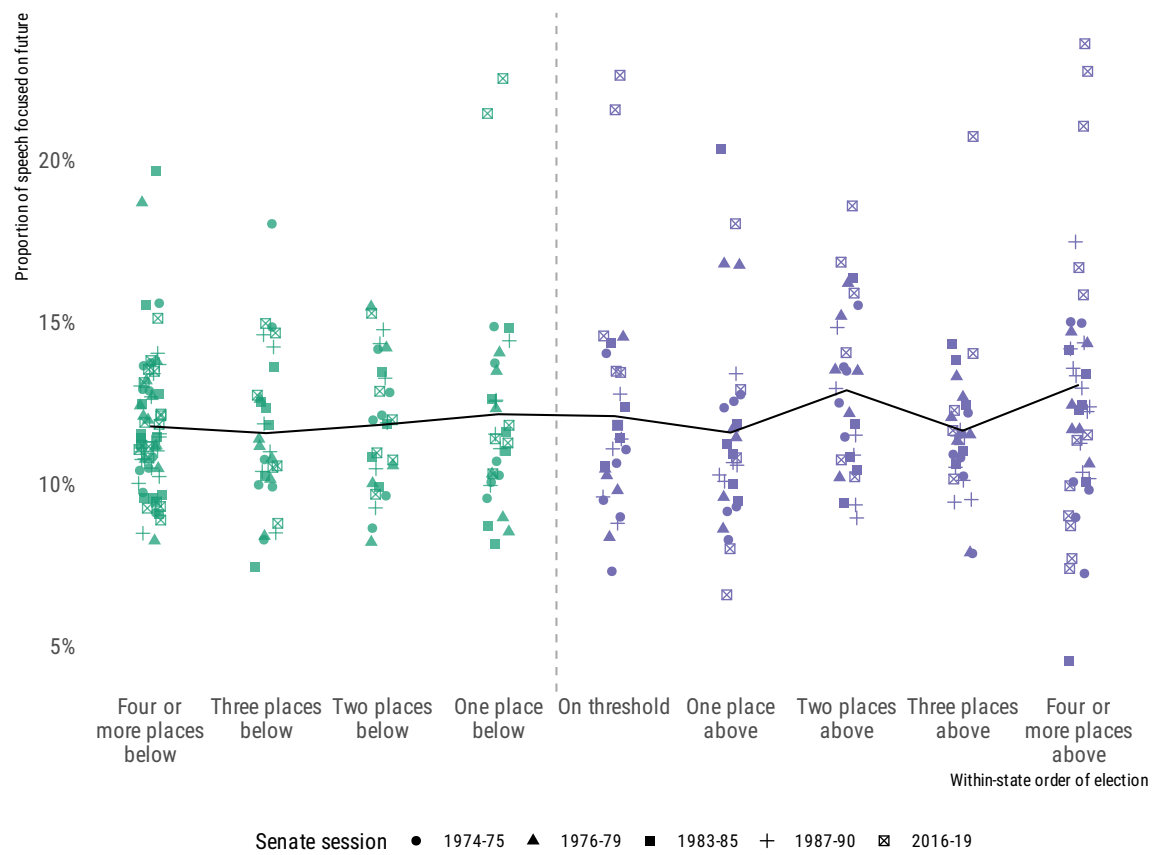


Figure 1: Proportion of future-oriented speech as a function of within-state order of election

In order to claim that β recovers a causal effect, we have to identify all those factors which are antecedents both of treatment and future focus. Here we understand the treatment assignment mechanism fairly well. State affects treatment assignment, because senators from the territories can't receive six-year terms. "Legislative session" subtly affects treatment probability, in that treatment probability was higher when senators from the territories were not included and when more senators were declared ineligible. The main determinant of treatment, however, is the *notional individual quota*, or the Droop quota for the party list as a whole, minus the individual's position on the list. If all voters vote above the line, individuals with a notional individual quota of greater than one are guaranteed to be elected. Individuals with notional individual quotas less than one may be elected, but this depends on the fragmentation of vote shares.

Controlling for notional individual quota, list share of the vote, and position on the list should be enough to identify a causal effect. In practice, we also need to control for whether individuals hold (shadow) ministerial office. Government ministers speak much more about the future, and (shadow) cabinet members often place highly on their parties' lists. Controlling for ministerial status is not a consequence of treatment to a longer term because frontbench status precedes list position. No senators left the (shadow) cabinet because they failed to secure a longer term. Indeed, where cabinet members fail to secure a longer term it is often because their party needs them to run at the top of the ticket in three years' time. Models which do not control for (shadow) ministerial office are available in the appendix; in these models the effects of longer terms are significant and negative.

Table 1: Regression models of proportions of future focused speech in Senate terms following double dissolution elections. Column (1) reports the results of a beta regression model. Column (2) reports the results of a linear regression. 95% confidence intervals in square brackets. State and period fixed effects included but not reported here.

	By speaker-day		By speaker-month	
	Beta	Normal	Beta	Normal
Intercept	-0.884 [-1.476, -0.291]	0.107 [0.065, 0.148]	-3.320 [-4.036, -2.603]	0.102 [0.068, 0.135]
Treated to six year term	-0.004 [-0.017, 0.008]	0.000 [-0.004, 0.004]	-0.004 [-0.011, 0.004]	0.000 [-0.005, 0.005]
Speaker is Minister	0.383 [0.373, 0.394]	0.044 [0.040, 0.048]	0.408 [0.401, 0.414]	0.044 [0.040, 0.049]
Speaker is Shadow Minister	0.047 [0.039, 0.055]	0.004 [0.001, 0.007]	0.048 [0.043, 0.052]	0.004 [0.001, 0.008]
Party: National	0.065 [-0.035, 0.165]	0.008 [-0.005, 0.020]	0.077 [-0.032, 0.186]	0.008 [-0.005, 0.020]
Party: ALP	-0.100 [-0.158, -0.042]	-0.013 [-0.020, -0.006]	-0.100 [-0.163, -0.037]	-0.013 [-0.020, -0.006]
Party: Australian Democrats	-0.014 [-0.145, 0.116]	-0.006 [-0.024, 0.012]	-0.025 [-0.165, 0.115]	-0.006 [-0.024, 0.012]
Party: Greens	-0.036 [-0.163, 0.092]	-0.012 [-0.029, 0.005]	-0.042 [-0.179, 0.096]	-0.012 [-0.029, 0.005]
Party: Independent	-0.172 [-0.302, -0.043]	-0.020 [-0.036, -0.003]	-0.184 [-0.324, -0.044]	-0.019 [-0.036, -0.003]
Party: Other	-0.092 [-0.227, 0.044]	-0.015 [-0.033, 0.003]	-0.089 [-0.235, 0.057]	-0.015 [-0.033, 0.003]
Party or list share of the vote	0.355 [0.165, 0.545]	0.014 [-0.050, 0.079]	0.268 [0.158, 0.379]	0.001 [-0.080, 0.082]
Position within list (one to twelve)	-0.032 [-0.050, -0.014]	-0.001 [-0.007, 0.005]	-0.025 [-0.036, -0.015]	0.000 [-0.008, 0.007]
Party is in government	-0.077 [-0.090, -0.064]	-0.006 [-0.010, -0.002]	-0.076 [-0.083, -0.068]	-0.005 [-0.010, 0.000]
Notional individual quota	-0.037 [-0.054, -0.020]	-0.003 [-0.008, 0.003]	-0.031 [-0.041, -0.021]	-0.002 [-0.009, 0.005]
Num.Obs.	35123	35123	6360	6360
R2	0.180	0.184	0.420	0.419
RMSE	0.11	0.11	0.06	0.06

Models following this selection-on-observables strategy are shown in Table 1. We gauge the substantive significance of these terms by calculating the average marginal effect of being treated to a six-year term. Receiving a longer term causes a change of -0.04 percentage points in future focus (95% confidence interval: -0.18 to 0.09 percentage points). These estimates indicate that longer terms do not cause substantively or statistically significant changes in future focus.

Part 2: Difference-in-difference estimates from a single parliamentary term

In the following section, we add to our initial findings with a difference-in-difference analysis, focusing on the circumstances surrounding the unlikely promotion of four senators following a constitutional crisis in 2017, in which several senators and MPs were judged ineligible to hold office due to their dual citizen status.

Description

In July 2016 there were double dissolution elections to the HoR and the Senate. The Liberal–National coalition won 30 of 76 seats in the Senate. The Australian Labor Party (ALP) won 26 seats, and the remaining 20 seats were won by smaller parties, of which the largest Senate delegation came from the Green Party (nine seats).

A year after the election, in July 2017, the “citizenship crisis” began, and affected eight senators and seven members of the HoR, who either resigned or were found ineligible for election, as a result of holding dual citizenship. The crisis began with the resignation, on the 14th July 2017, of Green Senator Scott Ludlam, who held New Zealand citizenship from birth and who had not (under New Zealand law) lost that citizenship following naturalization as an Australian citizen. The crisis reached its peak with the High Court’s ruling in the “Citizenship Seven” case in November,¹ and arguably ended with a further High Court ruling in the case of Senator Katy Gallagher in May of 2018.²

Though Section 44 has been part of the Australian Constitution since Federation, it caught out so many legislators for three main reasons. First, some legislators were unaware that they held citizenship of another country. Second, some legislators did not know that they needed to renounce their citizenship both under Australian law and *under the law of the country of citizenship*. Third, it was unclear whether lack of knowledge of dual citizenship could be a defence against a finding of ineligibility. In the Citizenship Seven case, the High Court ruled that introducing a mental element

¹*Re Canavan; Re Ludlam; Re Waters; Re Roberts [No 2]; Re Joyce; Re Nash; Re Xenophon*, [2017] HCA 45.

²*Re Gallagher*, [2018] HCA 17.

into Section 44 would be “be inimical to the stability of representative government [since] Stability requires certainty as to whether, as from the date of nomination, a candidate for election is indeed capable of being chosen to serve”, and this cannot require “an investigation into the state of mind of a candidate”.

Because eight individuals were elected to the Senate without being eligible, those individuals needed to be replaced. The High Court ruled that votes cast “above the line” (i.e., party preferences) should count in favour of the next eligible candidate. The Senate, in turn, decided that short and long terms would be allocated upon the basis of order of election, with certain senators moving up and acquiring longer six-year terms. Although this only had legal effect from 19th March 2018, when the relevant order was tabled in the Senate, interviews with affected senators suggest that they typically realized they would get a longer Senate term from the moment the person ahead of them on the list resigned.

In total, four senators were promoted to longer terms after the citizenship crisis. Here, we discuss the case of Rachel Mary Siewert, who was elected as a Senator for Western Australia for the Australian Greens. Siewert was in second place on the Greens list, and elected twelfth overall. As such, she was originally allocated a three-year term. Ahead of Siewert on the Greens list was Scott Ludlam, elected third overall, and holder of a six-year term. Ludlam was the legislator who was first affected by the citizenship crisis, and so the earliest that Siewert could have realized she would inherit a six-year term was the date of Ludlam’s resignation, 14th July 2017. We discuss the cases of three other senators, Jonathon Duniam, David Bushby, and Concetta Fierravanti-Wells in the appendix.

We consider each of these four legislators to have been “treated” to a six-year term dating from the resignation of the individual elected ahead of them. We believe this is reasonable based on interviews with some of the senators affected. An alternative approach is to hold these individuals as treated only from the point at which all recounts were formally tabled in the Senate on the 19th March 2018. We present these alternative results in the appendix where we consider these individuals as treated from that point. The results are not materially different.

Modelling strategy

As a result of the ineligibility of a number of senators, four legislators were “treated” to longer legislative terms part-way through their term. This treatment is plausibly exogenous, insofar as it depended on a combination of (i) their position on their party’s list; (ii) the rank-order of the seats allocated to their party; and (iii) the ineligibility of a senator ranked above them on the party list. This allows us to investigate the effects of term lengths within a single national context, within a single legislative term, and even within-person.

In order to distinguish person effects, period effects and treatment effects, we use a difference-in-difference design where the sample is restricted to legislators who were initially allocated a three-year term following the 2016 elections. We therefore exclude senators who were initially allocated a six-year term,³ and senators who were appointed to replace senators who resigned or were declared ineligible. We exclude senators who were initially allocated a six-year term because treatment is staggered (some senators were treated at the beginning of the legislative term; others were treated part-way through), and because, where treatments are staggered two-way fixed effects designs can fail to recover average treatment effects where the effects are heterogeneous over time (Baker, Larcker, and Wang 2022). We exclude senators who were appointed to fill casual vacancies because we are not confident that the evolution of these senators’ future orientation is parallel to the evolution of senators appointed some months earlier.

We depart from the standard two-way fixed effects framework in two respects. First, because our outcome variable is a proportion, we use a beta regression rather than a linear regression (Ferrari and Cribari-Neto 2004). Because it incorporates information about bounds and consequent heteroskedasticity, beta regression is more efficient than linear regression and avoids predicting out-of-bounds values. Second, because our reporting period (the speaker-day) is very short and unevenly distributed (not everyone speaks on each day), we allow for the effects of period to follow a smooth cubic regression spline. We do, however, adopt person fixed effects, such that the treatment effect we recover is the average within-person treatment effect rather than an across-unit treatment effect.

³Although there are estimators for staggered treatment difference-in-differences designs (Callaway and Sant’Anna 2021), these still require some pre-treatment observations.

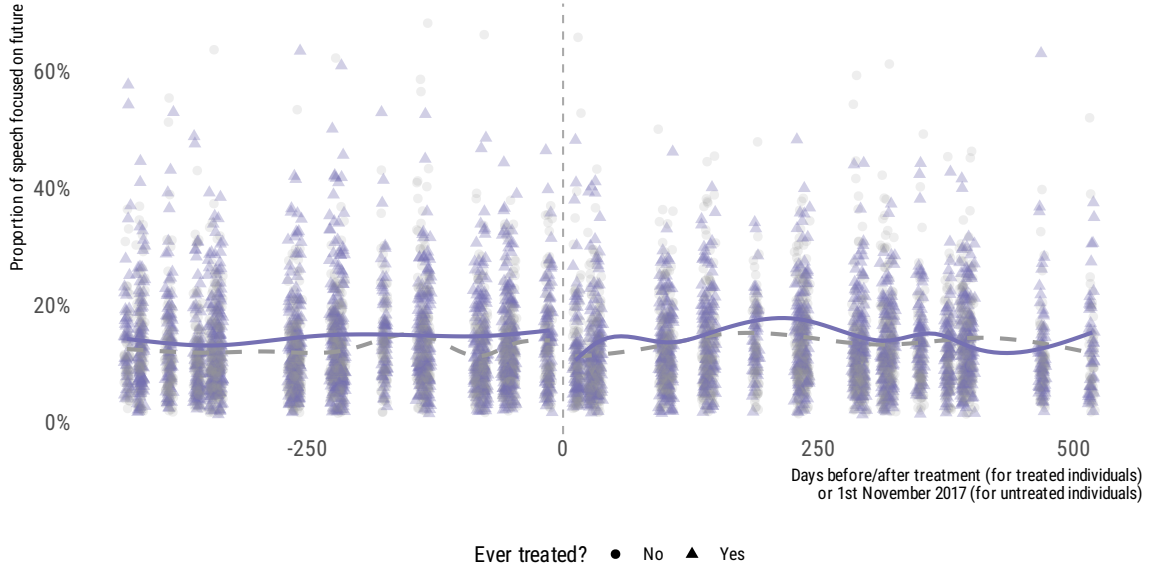


Figure 2: Proportion of future-oriented speech over time for treated and untreated senators, 2016 to 2019 session

Our outcome model is the same as before. However, our linear predictor changes to become:

$$\mu_{it} = \alpha_i + f(t) + \beta \cdot D_{it}$$

where D_{it} is an indicator variable which has a value of one if legislator i is one of the four legislators who was promoted from a three-year to a six-year term, and if t is greater than the date upon which the legislator above legislator i on the party list became ineligible for election.

A design like this can recover an average treatment effect on the treated where the treatment is not anticipated, and where the parallel trends assumption holds. Consider “no anticipation” first. The citizenship crisis was a crisis *precisely because* no-one anticipated it: Scott Ludlam’s resignation was unexpected but set in motion a chain of resignations. From interviews with affected senators, no senator anticipated promotion to a longer term before the resignation of the individual ahead of them on their party list.

Now consider the parallel trends assumption. One way of assessing the plausibility of this as-

sumption is to see whether treated and untreated individuals had different trends with respect to other variables that might affect future focus. For example: our findings would be less credible if untreated senators were disproportionately likely to enter government after November 2017, since government ministers tend to talk more about the future. In the appendix we report additional analyses which drop one treated senator at a time, including one senator who exited government after treatment (Concetta Fierravanti-Wells), and an additional analysis which excludes one untreated senator who entered government in August 2018. There were no other senators, treated or untreated, who entered or exited government. Unsurprisingly, the results are almost identical.

Table 2: Difference-in-difference models of future focused speech according to response distribution and period of observation. 95% confidence intervals in square brackets.

	By speaker-day		By speaker-month	
	Beta	Normal	Beta	Normal
Intercept	-1.414 [-1.476, -1.352]	0.212 [0.202, 0.222]	-1.366 [-1.379, -1.353]	0.211 [0.199, 0.224]
Treated to six year term	0.002 [-0.088, 0.092]	0.001 [-0.012, 0.014]	0.005 [-0.015, 0.024]	0.001 [-0.016, 0.018]
Num.Obs.	3420	3420	798	798
R2	0.267	0.273	0.487	0.489
RMSE	0.08	0.08	0.05	0.05

Figure 2 shows levels of future focus for treated and untreated senators as a function of time before or after treatment. Untreated senators are given a notional treatment date of the 1st November 2017.⁴ This notional treatment date falls in between sitting days. The Senate had convened on the 26th October and began sitting again on the 13th November. In the meantime the High Court ruled on the “Citizenship Seven” case on October 27th, and affected senators resigned between the 2nd November and 14th November. Solid lines give loess smooths before and after treatment for treated senators; dashed lines represent the loess smooth for untreated senators. The plot shows that treated senators generally spoke more about the future at all points in time, and it is hard to see a change after the date of treatment.

Table 2 shows the results of four difference-in-difference models of the proportion of future focus in legislative speech, according to the period of observation and the distribution used for the

⁴In the difference-in-difference models which follow, the treatment date for each affected senator is the date at which the senator above them on the elected list resigned, in order to satisfy the “no anticipation” assumption.

response variable. In no model is the effect of treatment statistically significant. The substantive significance of the effects can be gauged by calculating average marginal effects of treatment. The average marginal effect of treatment according to the daily beta distributed model is to increase future focus by 0.02 percentage points (95% confidence interval: -0.97 to 1.02 percentage points). If we instead take the monthly model, we can rule out substantively significant effects of greater than half a percentage point, because the average marginal effect is similar (0.05 percentage points) but the 95% confidence interval is narrower (-0.16 to 0.27 percentage points). There is therefore no good evidence from the 2016-2019 Senate that longer terms promote future focus in legislator speech.

Conclusion

We have shown that legislators who receive longer terms do not talk more about the future. If talking more about the future is necessary for acting with the future in mind, then longer terms do not (on their own) create the preconditions to address democratic myopia. We view talk about the future as a low hurdle, since political speech is stated rather than revealed preference.

We make several supplementary analyses in the appendix that corroborate our primary conclusions. First, although we have discussed future focus rather than discussing orientation towards the *near* or *far* future, supplementary analysis in the appendix shows that legislators who receive longer terms are no more likely to make specific references to dates more than five years in the future. In the appendix, we also show the results from a fine-tuned classifier which only uses two categories: future and other. The results are also unaffected. Finally, in the appendix, we also address concerns that our significance threshold is too high, or that one tailed tests may be appropriate, given our theoretical expectation of a positive effect. Our findings are robust to 90% confidence intervals, which are equivalent to running two one-sided significance tests with $\alpha = 0.05$.

The credibility of our *causal* claim from the second analysis rests on particular features of Australian constitutional law. This may, limit our ability to generalize as it is possible that the effect of changing legislative terms for *all* legislators is different to the effect of changing terms for a minority of legislators, in that global changes may generate changes in the agenda which might not result

from changes to individual legislators' terms. However, short of an as-if random change to the term length of several different national legislatures, we suggest that evidence from the Australian Senate is the best evidence that is likely to be available on the effects of term length on future focus.

Conflicts of interest

The authors declare none.

References

- Baker, Andrew C, David F Larcker, and Charles CY Wang. 2022. “How Much Should We Trust Staggered Difference-in-Differences Estimates?” *Journal of Financial Economics* 144 (2): 370–95.
- Birch, Sarah. 2023. “Voting for the Future: Electoral Institutions and the Time Horizons of Democracy.” *Political Studies Review*, 14789299231204550.
- Boston, Jonathan. 2021. “Assessing the Options for Combatting Democratic Myopia and Safeguarding Long-Term Interests.” *Futures* 125: 102668.
- Callaway, Brantly, and Pedro HC Sant’Anna. 2021. “Difference-in-Differences with Multiple Time Periods.” *Journal of Econometrics* 225 (2): 200–230.
- Clarke, Charles. 2012. “The ‘Too Difficult Box’: Its Temptations and How to Avoid Them.” *The Political Quarterly* 83 (2): 303–10.
- Dal Bó, Ernesto, and Martín A Rossi. 2011. “Term Length and the Effort of Politicians.” *The Review of Economic Studies* 78 (4): 1237–63.
- Ferrari, Silvia, and Francisco Cribari-Neto. 2004. “Beta Regression for Modelling Rates and Proportions.” *Journal of Applied Statistics* 31 (7): 799–815.
- Fiorino, Daniel J. 2018. *Can Democracy Handle Climate Change?* John Wiley & Sons.
- Head, Brian W., and John Alford. 2015. “Wicked Problems: Implications for Public Policy and Management.” *Administration & Society* 47 (6): 711–39. <https://doi.org/10.1177/0095399713481601>.
- Healy, Andrew, and Neil Malhotra. 2009. “Myopic Voters and Natural Disaster Policy.” *American Political Science Review* 103 (3): 387–406.
- Jacobs, Alan M. 2011. *Governing for the Long Term: Democracy and the Politics of Investment*. Cambridge University Press.
- . 2016. “Policy Making for the Long Term in Advanced Democracies.” *Annual Review of Political Science* 19 (1): 433–54.
- Jacques, Olivier. 2022. “Electoral Competition and the Party Politics of Public Investments.” *Party Politics* 28 (6): 1029–40.
- Järvensivu, Tomi. 2012. “Four Steps to a Growth-Free, Prosperous Finland.” *Green European Journal* 3: 38–42.
- Koh, Yumi, Yuri Matsumura, and Ken Onishi. 2022. “Dissolution Risk and Legislative Effort of Politicians.” *Electoral Studies* 78: 102492.
- Louwerse, Tom, and Cynthia Van Vonna. 2022. “Moving up or down: Parliamentary Activity and Candidate Selection.” *The Journal of Legislative Studies* 28 (2): 216–42.
- MacKenzie, Michael K. 2016. “Institutional Design and Sources of Short-Termism.” In *Institutions for Future Generations*, edited by Iñigo González-Ricoy and Axel Gosseries. Oxford University Press.
- . 2021. *Future Publics: Democracy, Deliberation, and Future-Regarding Collective Action*. Oxford University Press.
- Müller, Stefan. 2022. “The Temporal Focus of Campaign Communication.” *The Journal of Politics* 84 (1): 585–90.
- Sanh, V. 2019. “DistilBERT, a Distilled Version of BERT: Smaller, Faster, Cheaper and Lighter.” *arXiv Preprint arXiv:1910.01108*.
- Sawer, Marian. 2005. “Above-the-Line Voting in Australia: How Democratic?” *Representation* 41 (4): 286–90.
- Shipp, Abbie J, Jeffrey R Edwards, and Lisa Schurer Lambert. 2009. “Conceptualization and

- Measurement of Temporal Focus: The Subjective Experience of the Past, Present, and Future.” *Organizational Behavior and Human Decision Processes* 110 (1): 1–22.
- Titunik, Rocio. 2016. “Drawing Your Senator from a Jar: Term Length and Legislative Behavior.” *Political Science Research and Methods* 4 (2): 293–316.
- Uhr, John. 2002. “Explicating the Australian Senate.” *Journal of Legislative Studies* 8 (3): 3–26.
- Wood, S. N. 2011. “Fast Stable Restricted Maximum Likelihood and Marginal Likelihood Estimation of Semiparametric Generalized Linear Models.” *Journal of the Royal Statistical Society (B)* 73 (1): 3–36.