

Numbers of preferences

Senate Ballot Paper Study 2016

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Summary

- Voters casting ‘above the line’ (ATL) ballot papers at 2016 Senate elections were required to provide at least 6 preferences, while those casting ‘below the line’ (BTL) ballot papers were required to provide at least 12.
 - Savings provisions also allowed for the admission of ATL ballots with at least 1 preference and BTL ballots with at least 6 preferences.
- The vast majority of voters followed the senate voting instructions.
 - 89.8 per cent (12.9 million) of all ballot papers showed at least the minimum number of preferences
 - 6.3 per cent (907,713) of all ballots did not follow the instructions but did meet the requirements of the savings provisions and were thus admitted to the count
 - 3.9 per cent (567,806) of all ballots did not follow the instructions and did not meet the requirements of the savings provisions. They were therefore deemed informal and could not be admitted to the count.
- Of the 13.8 million formal votes cast, 93.5 per cent (12.9 million) were counted as ATL ballots and 6.5 per cent (904,108) as BTL ballots.
 - 93.5 per cent of ATL ballots showed at least six effective preferences
 - 92.8 per cent of BTL ballots showed at least twelve effective preferences.
- Media coverage prior to the election noting that a ‘1’ only ATL preference was still a formal vote (and thereby raising concerns that this could lead voters to ignore the current voting requirements) appears to have had little impact.
 - 2.6 per cent of all formal ATL ballots had a number ‘1’ only.
- Voters in the smaller states and territories were most likely to provide ATL preferences beyond the minimum number required, reflecting at least in part the smaller numbers of ATL groups and candidates in these jurisdictions.
- The 2016 AEC Voter Survey found that 14 per cent of voters believed the Senate ballot paper instructions were difficult to understand, though administrative data indicates that this figure is higher than the proportion of voters who did not comply with these instructions.
 - About 10 per cent of all Senate ballot papers (7 per cent of formal Senate ballots) were not completed with at least 6 ATL preferences or at least 12 BTL preferences).
- Voters finding the Senate ballot paper instructions difficult were more likely to:
 - have less than secondary school education
 - be dissatisfied with the assistance provided by elector staff
 - be dissatisfied with AEC information assisting them to vote.

- The Voter Survey findings suggest that there may be benefits in investigating whether changes to the assistance provided by electoral staff or AEC information assisting people to vote might improve voters' understanding of the Senate ballot paper instructions.
- However while noting the Voter Survey responses, election results demonstrate that the instructions and communications campaigns were successful.
- Changes in the composition of the Senate subsequent to the 2016 federal election have not been incorporated into analyses but would not affect the overall findings.

Key findings

Requirements for marking Senate ballot papers in 2016

Senate ballot papers are classified as either 'above the line' (ATL) or 'below the line' (BTL) based on the preferences used to determine the election result.¹

With the introduction of Partial Preferential Voting (PPV) and abolition of Group Voting Tickets (GVTs) at the 2016 Senate elections, the numbers of preferences required on ATL and BTL ballots were both changed.

- ATL ballots were required to contain at least six preferences, while BTL ballots were required to contain at least 12.
- 'Vote savings' provisions also allowed for the admission of ATL ballots with at least one preference, and BTL ballots with at least six preferences.

Previously, voters were required to either place a number '1' in a single ATL box so as to have their preferences assigned to a GVT, or to number every BTL box.

Notes:

- Table 1 on page 11 summarises the requirements for marking ATL and BTL ballot papers at the 2016 Senate elections.
- Table 2 on page 11 shows the numbers and proportions of ATL, BTL and informal votes at the 2016 Senate elections.

Effective preferences vs. exact preferences

When examining the number of preferences marked on ATL and BTL ballots, a distinction needs to be drawn between exact preferences (the numbers provided on a ballot paper) and effective preferences (preferences that can be counted towards the election result).

If a numerical sequence on a ballot paper is interrupted, the effective preferences end at that point and no further marks are considered.² That is, the exact sequence on the ballot paper is ignored from the point of interruption.

Effective preferences are used to analyse preferences expressed on ballot papers, while exact preferences are used to analyse ballot paper marks. As such, the following sections of this paper use effective preferences to assess compliance with voting instructions (for example, proportions of ballot papers with at least six ATL preferences or at least twelve BTL preferences). Exact preferences are used in analyses that relate to the characteristics of ballot papers as a whole (in particular, ballots with a number '1' only).³

Compliance with voting instructions

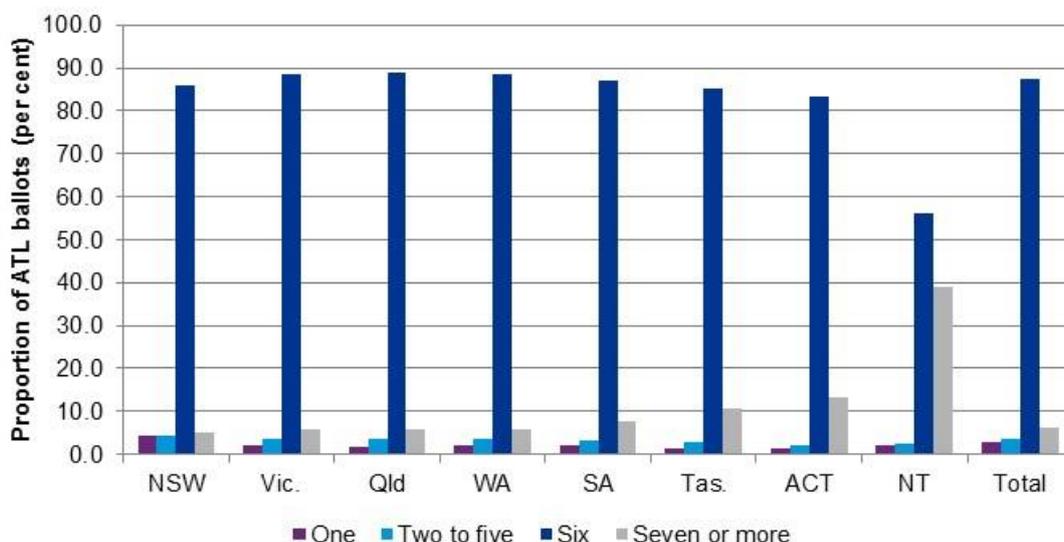
The vast majority of voters at the 2016 Senate elections followed voting instructions. Of the 13.8 million formal votes cast (over 12.9 million ATL ballots and 904,108 BTL ballots):

- 93.5 per cent of ATL ballots showed at least six effective preferences, and 92.8 per cent of BTL ballots showed at least twelve effective preferences.
- The remaining 6.5 per cent of formal ATL ballots and 7.2 per cent of formal BTL ballots were included in the count under vote savings provisions.

3.9 per cent (567,806) of all ballots followed neither the instructions nor the savings provisions and were thus deemed informal.

In total, 89.7 per cent of Senate ballot papers (93.4 per cent of formal Senate ballots) were completed in accordance with voting instructions. That is, they showed at least six ATL preferences or at least 12 BTL ballot papers.

Figure 1. Number of effective preferences marked on above the line ballots, 2016 Senate elections



(Australian Electoral Commission, 2016a)

Notes:

- Table 3 on page 12 shows the numbers of effective preferences on ATL ballot papers.
- Figures 4 to 11 on pages 13 to 19 show the full set of numbers of effective preferences for ATL ballot papers in each state and territory.

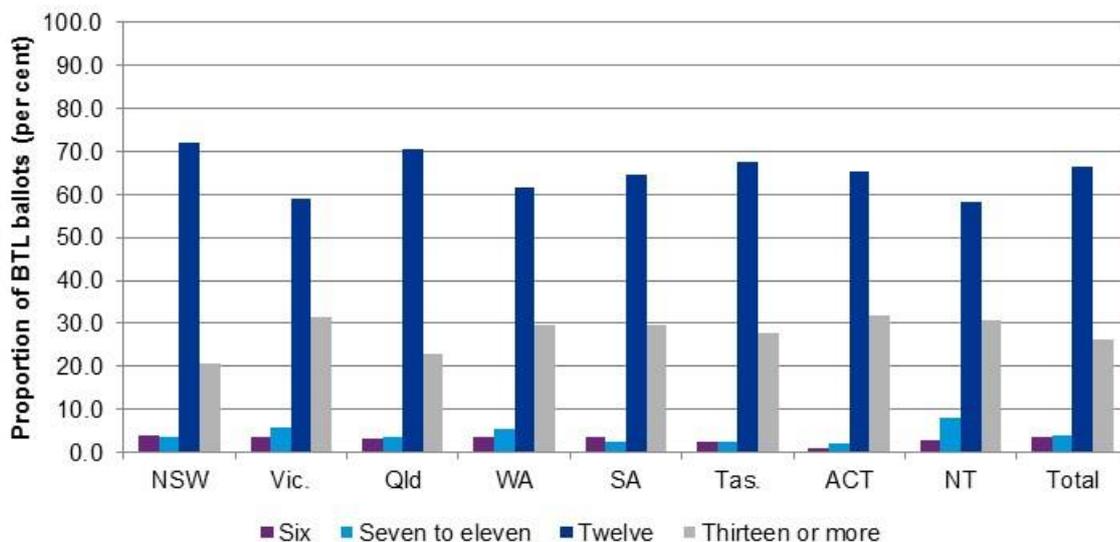
Voters in the smaller states and territories were most likely to provide ATL preferences beyond the minimum number required. This was, at least in part, associated with the smaller numbers of ATL groups in these jurisdictions. For example, while at the national level only 0.8 per cent of ATL ballots

showed an effective preference in every box, this proportion was far higher in the Northern Territory (39.0 per cent) and Australian Capital Territory (10.1 per cent), where there were only seven and ten ATL groups, respectively. Table 4 on page 20 shows the numbers of ATL groups and numbers of Senate candidates in each state and territory

Voters casting BTL ballots were more likely than those casting ATL ballots to provide preferences beyond the minimum number specified in the voting instructions. Nationally, 26.2 per cent of BTL ballots showed thirteen or more effective preferences, while 6.2 per cent of ATL ballots showed seven or more effective preferences.

Voters casting BTL ballots in New South Wales and Queensland were the least likely to provide preferences beyond the minimum number required. This could be related to a combination of the Optional Preferential Voting (OPV) systems used at New South Wales and Queensland state elections⁴ as well the high numbers of candidates in both these jurisdictions.

Figure 2. Number of effective preferences marked on BTL ballots, 2016 Senate elections



(Australian Electoral Commission, 2016a)

Note: Table 5 on page 20 shows the numbers of effective preferences on below the line ballot papers.

ATL ballot papers with a number ‘1’ only

ATL ballot papers showing a number ‘1’ and no other marks could indicate that the voter attempted to use the Senate voting system in place before 2016 (where such ballots were assigned preferences based on a GVT for the selected group).

- Nationally, only 2.6 per cent of ATL ballot papers (330,568 ballots) showed a number ‘1’ only.

- The highest proportions of ATL ballot papers showing a number ‘1’ only were in New South Wales (4.3 per cent), South Australia (2.0 per cent) and the Northern Territory (1.9 per cent).
- The lowest proportions of ATL ballot papers showing a number ‘1’ only were in Tasmania (1.2 per cent), the Australian Capital Territory (1.4 per cent) and Queensland (1.5 per cent).

Together, the relatively small proportions of number ‘1’ only ballots, and high levels of compliance with current voting instructions indicates that most voters did not have difficulty with the new numbering system. It also suggests that media coverage prior to the election (e.g. Overington, 2016; Reynolds, 2016) describing the new Senate voting methods (but noting that a ‘1’ only ATL was still a formal vote) did not lead to high rates of ‘1’ only voting.

Figure 3. Above the line ballot papers with a number ‘1’ only, 2016 Senate elections



(Australian Electoral Commission, 2016a)

Notes:

- Figures used in this graph are based on exact preferences, not effective preferences. They therefore refer to ballot papers showing a number ‘1’ and no other preferences.
- Table 6 on page 21 shows selected exact preferences (including the proportions of ATL ballots showing a number ‘1’ only) for the 2016 Senate elections.

Voters’ understanding of ballot paper instructions

The fact that the majority of voters complied with the instructions on Senate ballot papers does not necessarily mean that voters found the instructions easy to understand.

Most respondents to the 2016 AEC Voter Survey found both the Senate and House of Representatives ballot paper instructions easy to understand. However, the proportion who found the instructions easy to understand was significantly lower for the Senate compared with the House of

Representatives (79 per cent vs. 92 per cent). Fourteen per cent of respondents indicated they found the Senate ballot papers difficult to understand, while 7 per cent stated that they didn't read them (Wallis Market and Social Research, 2016).

Profile of voters finding Senate voting instructions difficult

The Voter Survey indicated that respondents who had not completed secondary school were more likely to find the Senate ballot paper difficult to understand (23 per cent vs 13 per cent among the rest of the population). However, there was no difference in terms of language backgrounds, with respondents from English speaking backgrounds just as likely to find the Senate ballot paper easy to understand as those from non-English speaking backgrounds (76 per cent for both groups). (Wallis Market and Social Research, 2016)

Responses to other Voter Survey questions indicated that the quality of assistance provided by electoral staff and the quality of AEC information were both important in terms of making it easier for voters to cast Senate votes. Forty per cent of respondents dissatisfied with the assistance provided by electoral staff indicated they found the Senate ballot paper instructions difficult to understand, as did 48 per cent of respondents dissatisfied with the AEC information provide to assisting them to vote. (Wallis Market and Social Research, 2016)

Voter Survey respondents who found the Senate ballot papers difficult to understand were also significantly less likely to be confident that their vote would be counted as they intended (75 per cent of persons who found the instructions difficult being confident their vote would be counted as they intended, compared to 91 per cent of persons who found the Senate instructions easy to understand and 93 per cent of persons who did not read them). This does not indicate that other respondents felt their votes would be miscounted; it may reflect that persons finding the instructions difficult were less confident they had filled out the ballot paper correctly. (Wallis Market and Social Research, 2016)

Appendices

Appendix A. Key terms

Term	Definition
Effective preferences	Preferences recorded on a ballot paper which could have moved (i.e. transferred) the ballot paper.
Exact preferences	All preferences recorded on a ballot paper
Full preferential voting (FPV)	A system of voting in which the voter completes the ballot paper by placing numbers from '1' in boxes in order of their preferences for individual candidates until every box on the ballot paper is numbered consecutively.
Group Voting Tickets	<p>Group Voting Tickets (GVTs) applied at Senate elections between 1984 and 2014 and set out the order in which a Senate group wanted its preferences distributed. GVTs were registered with the AEC after the draw for positions on the Senate ballot paper. If a voter chose to put the number '1' in one of the group boxes above the line on a Senate ballot paper, the preferences were distributed according to the group's GVT.</p> <p>Groups could lodge up to three GVTs. If more than one GVT was lodged the group's votes were split evenly between each GVT.</p>
Informal vote	A ballot paper is generally considered informal if it is not filled out correctly in accordance with the Electoral Act and the instructions on the ballot paper. It cannot therefore be included in the scrutiny.
Optional Preferential Voting (OPV)	A system of voting in which the voter completes the ballot paper by placing numbers from '1' in boxes in order of their preferences for individual candidates (or groups). Voters must place consecutive numbers in at least one box (as opposed to all boxes, as is the case for FPV).
Partial Preferential Voting (PPV)	A preferential voting system with a minimum number of preferences (greater than one). The voter may cease numbering at any point after the minimum number of preferences is reached.
Vote savings provisions	Legislated provisions that allow a vote to still be included in the scrutiny where the voter has made their intention clear, despite not precisely following the instructions on the ballot paper.
Scrutiny	The counting process for any votes at an Australian federal election. Ballot papers entering scrutiny are all those accepted into the count.

Appendix B. Tables and supplementary figures

Table 1. Correct marking of preferences and ‘vote savings’ provisions, 2016 Senate elections

Type of Senate ballot paper	Correct marking of preferences (s.239)	‘Vote savings’ provisions (s268B and s.269)
Above the line	Writing at least the numbers 1 to 6 in an uninterrupted sequence reflecting the order of the voter’s preferences. ^a	Writing a single number 1, or the number 1 and one or more higher numbers in ATL boxes A voter who marks only a single tick or cross is taken as having marked the number 1 in the square.
Below the line	Writing at least the numbers 1 to 12 in an uninterrupted sequence reflecting the order of the voter’s preferences. ^b	Writing at least the numbers 1 to 6 in an uninterrupted sequence reflecting the order of the voter’s preferences. A voter who marks only a single tick or cross is taken as having marked the number 1 in the square.

Commonwealth Electoral Act 1918.

Table 2. Above the line, below the line and informal votes, 2016 Senate elections

State/territory	Above the line (ATL)		Below the line (BTL)		Informal		Total no.
	no.	%	no.	%	no.	%	
NSW	4,249,550	90.31	242,647	5.16	213,073	4.53	4,705,270
Vic.	3,314,376	90.71	185,861	5.09	153,499	4.20	3,653,736
Qld	2,555,956	90.67	167,210	5.93	95,831	3.40	2,818,997
WA	1,290,839	91.32	75,343	5.33	47,371	3.35	1,413,553
SA	970,934	88.45	90,231	8.22	36,545	3.33	1,097,710
Tas.	243,774	69.38	95,385	27.15	12,221	3.48	351,380
ACT	216,086	82.94	38,681	14.85	5,754	2.21	260,521
NT	93,277	88.38	8,750	8.29	3,512	3.33	105,539
Total	12,934,792	89.78	904,108	6.28	567,806	3.94	14,406,706

(Australian Electoral Commission, 2016b)

^a If there are fewer than six above the line boxes on a Senate ballot paper, voters casting an ATL ballot are required to number all the ATL boxes consecutively from 1 onwards, in the order of their preference.

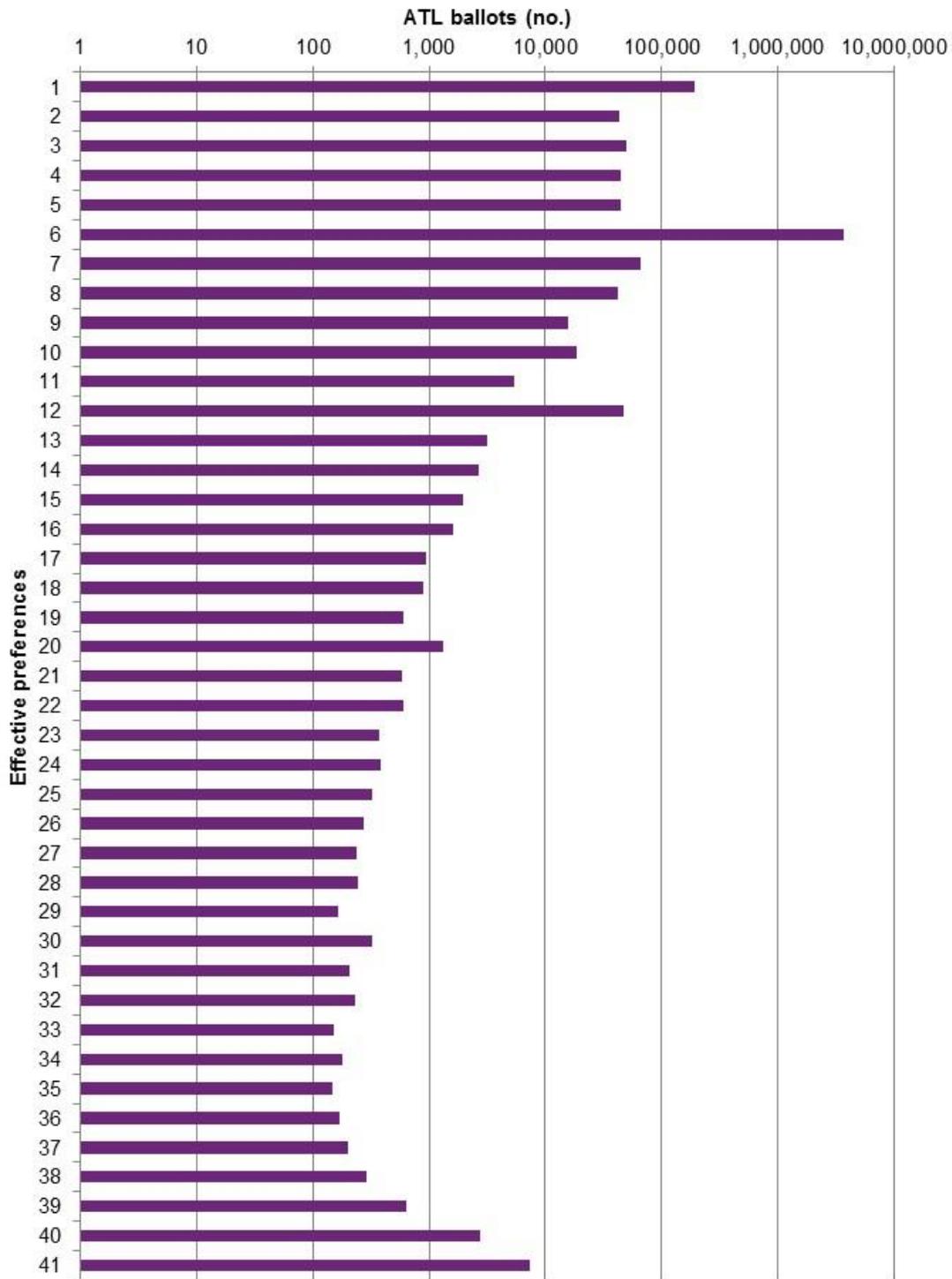
^b If there are 12 or fewer candidates below the line on a Senate ballot paper, voters casting a BTL ballot are required to number all the BTL boxes consecutively from 1 onwards, in the order of their preference.

Table 3. Effective preferences on above the line ballot papers, 2016 Senate elections

State/territory	One %	Two to five %	Six %	Seven or more			Total	
				All ATL groups numbered %	Not all groups numbered %	Subtotal %	%	no.
NSW	4.52	4.28	85.93	0.17	5.09	5.27	100.00	4,249,550
Vic.	2.04	3.65	88.65	0.23	5.42	5.65	100.00	3,314,376
Qld	1.72	3.50	89.03	0.25	5.50	5.75	100.00	2,555,956
WA	1.99	3.59	88.63	0.46	5.32	5.79	100.00	1,290,839
SA	2.18	3.22	86.91	1.18	6.52	7.70	100.00	970,934
Tas.	1.26	2.86	85.24	2.35	8.29	10.63	100.00	243,774
ACT	1.44	2.04	83.37	10.08	3.07	13.14	100.00	216,086
NT	2.28	2.65	56.11	38.95	..	38.95	100.00	93,277
Total	2.77	3.74	87.31	0.79	5.38	6.17	100.00	12,934,792

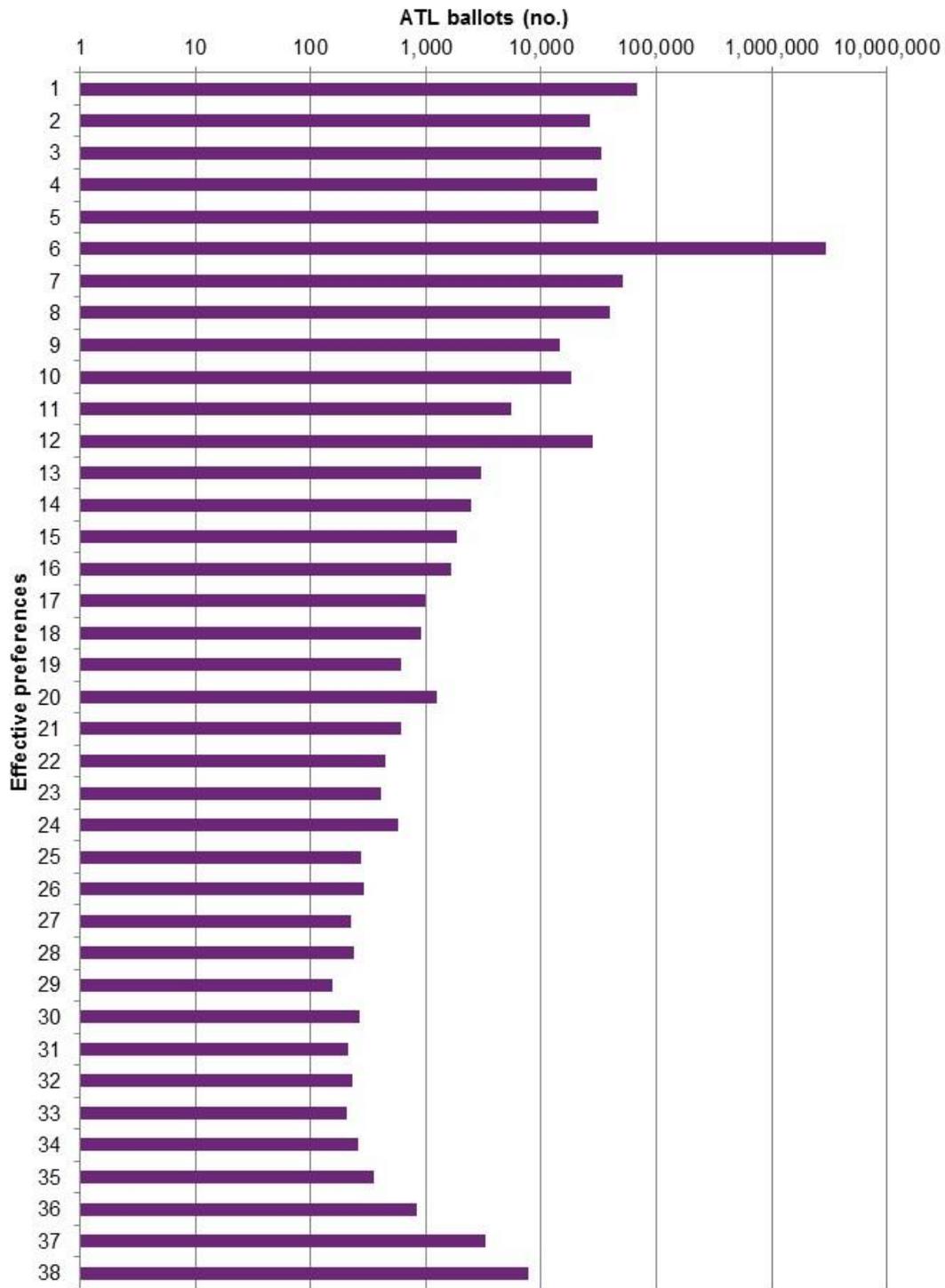
(Australian Electoral Commission, 2016a)

Figure 4. Effective preferences on above the line ballot papers, 2016 Senate election: New South Wales



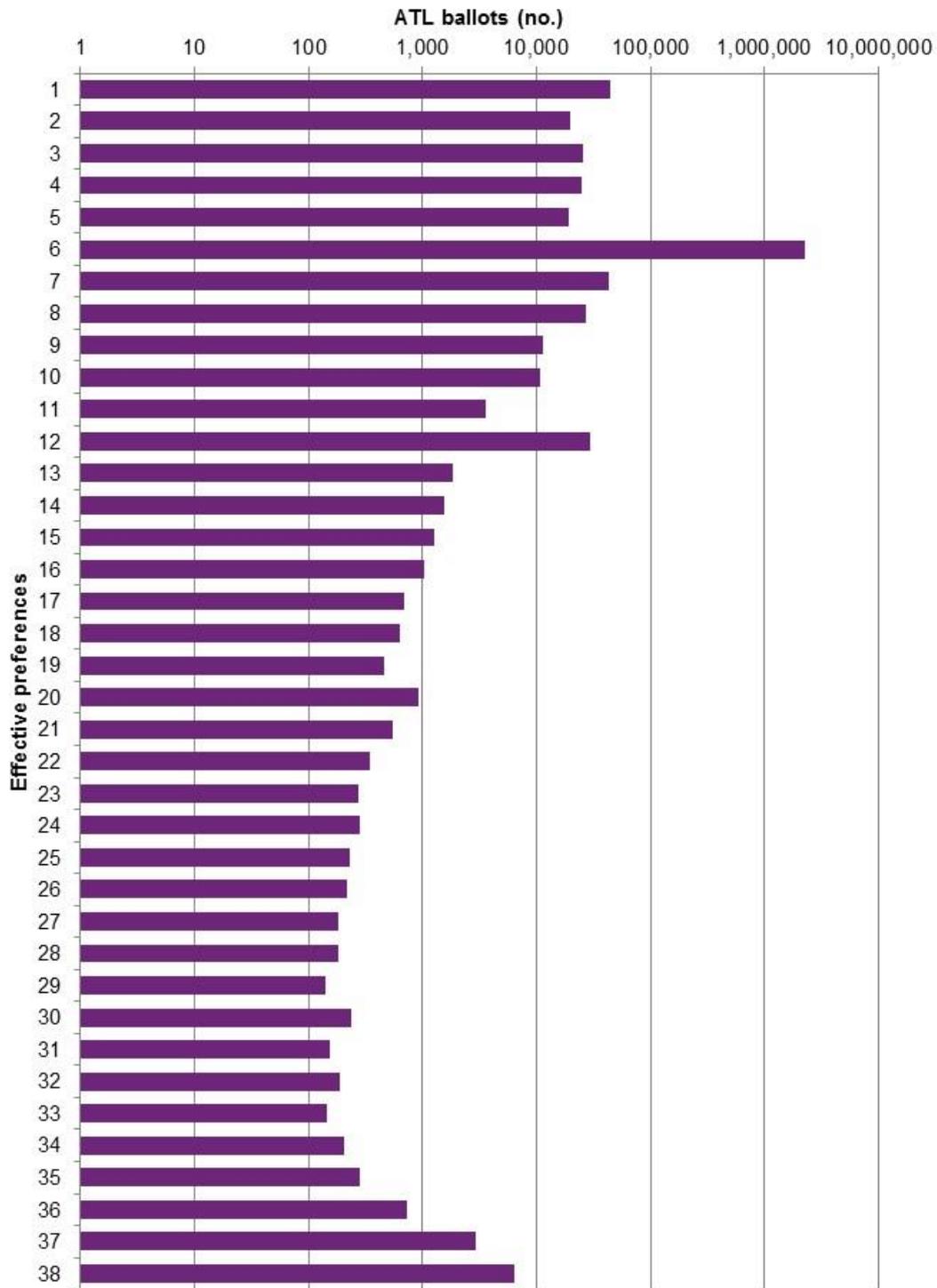
(Australian Electoral Commission, 2016a)

Figure 5. Effective preferences on above the line ballot papers, 2016 Senate election: Victoria



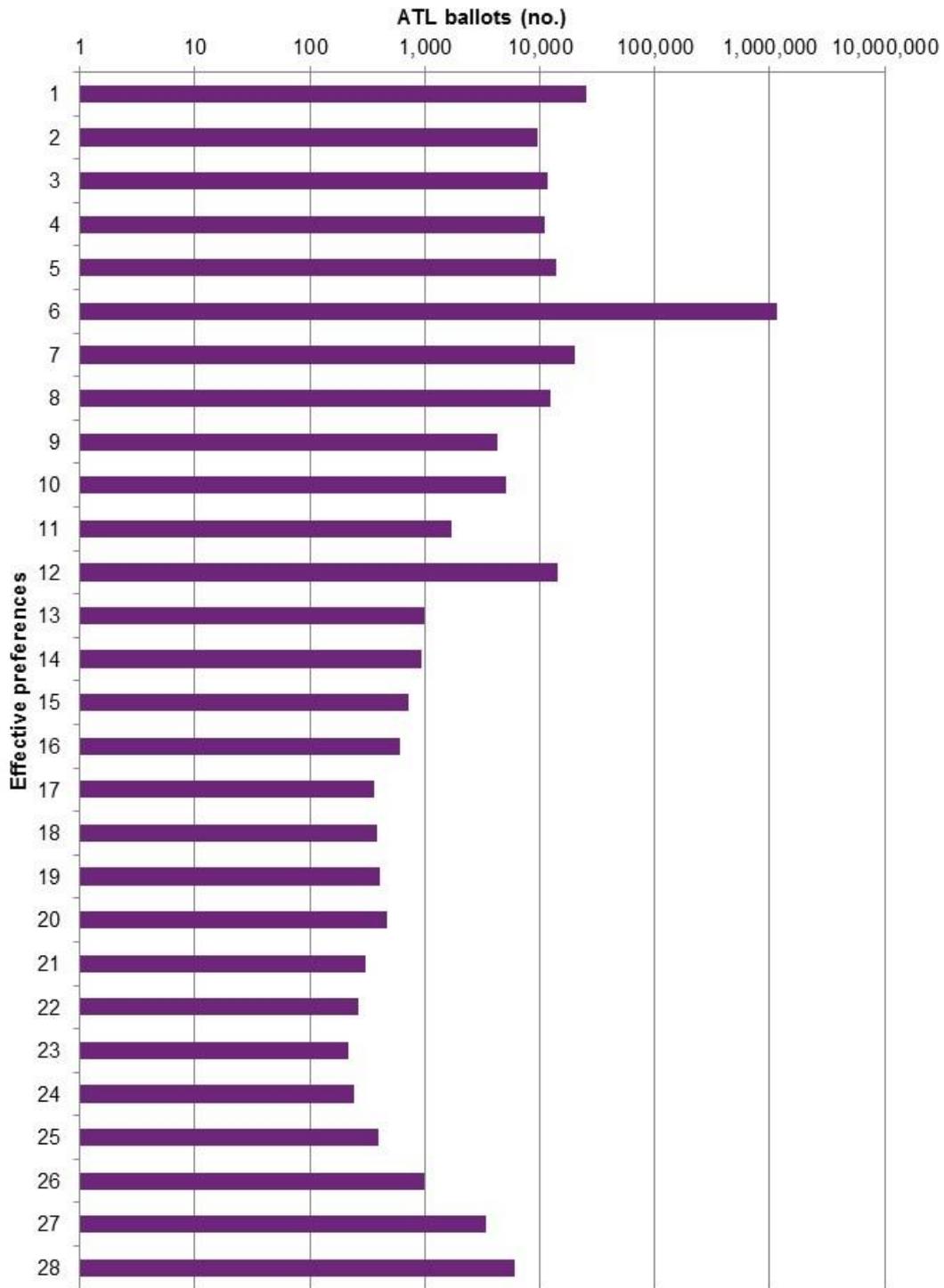
(Australian Electoral Commission, 2016a)

Figure 6. Effective preferences on above the line ballot papers, 2016 Senate election: Queensland



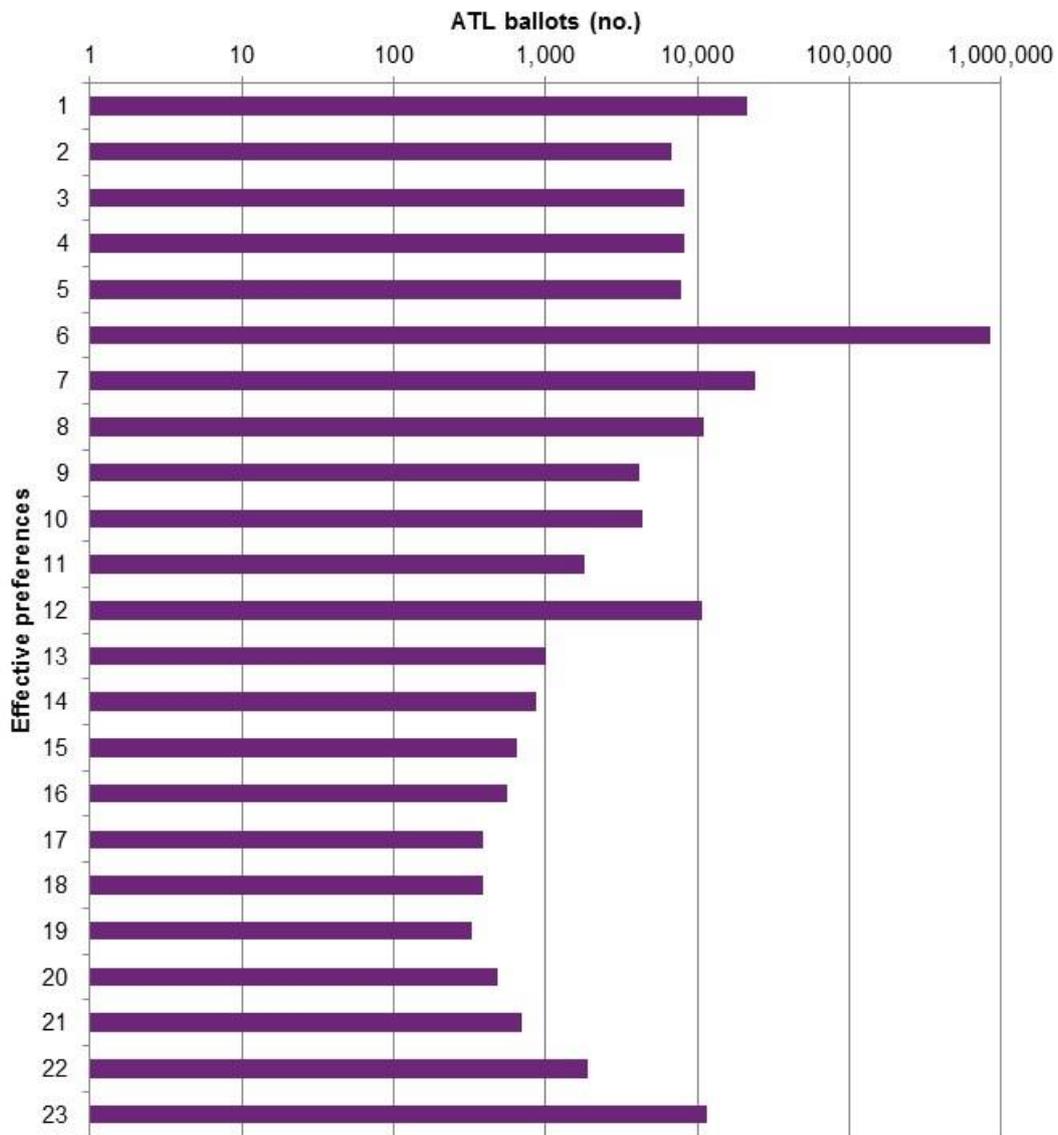
(Australian Electoral Commission, 2016a)

**Figure 7. Effective preferences on above the line ballot papers, 2016 Senate election:
Western Australia**



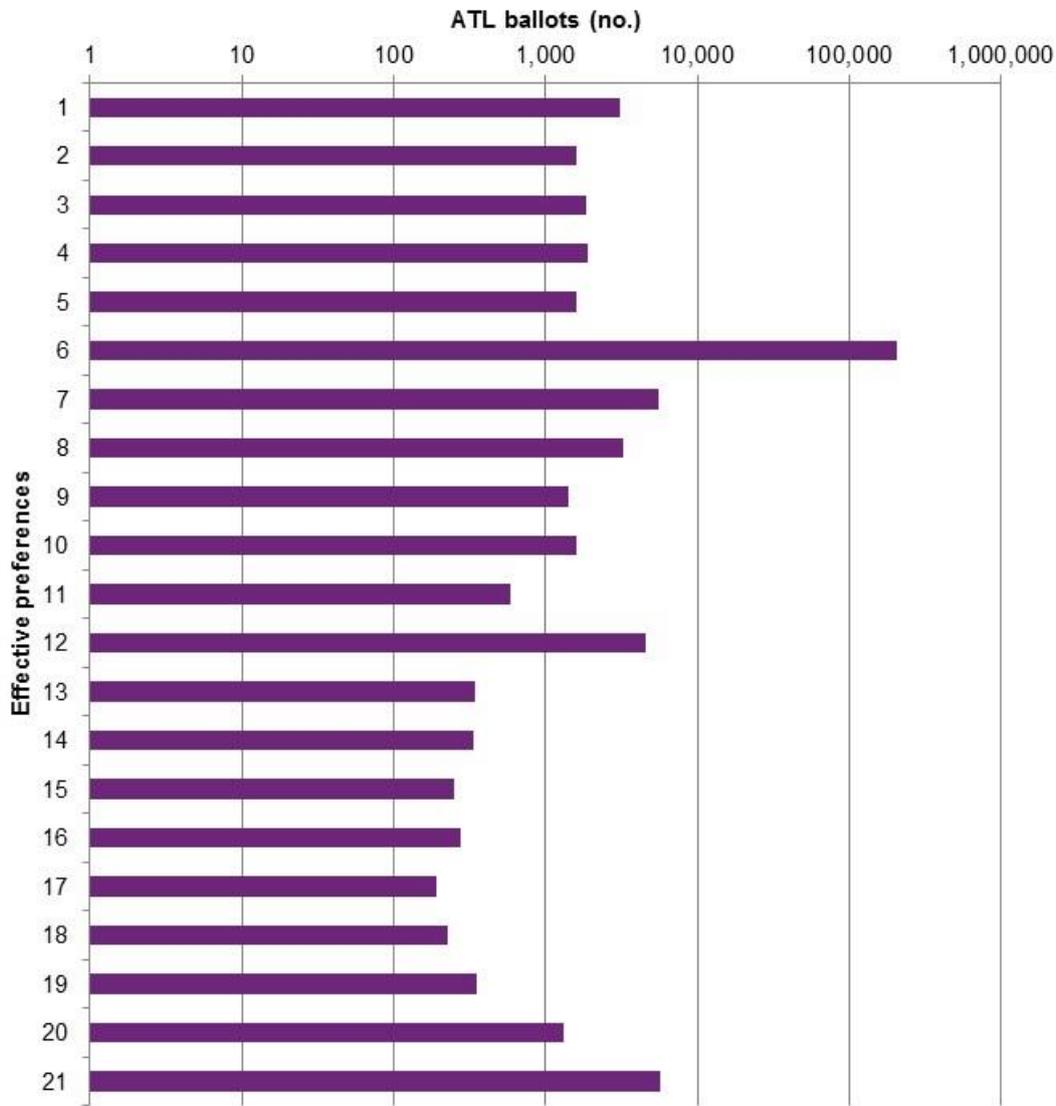
(Australian Electoral Commission, 2016a)

Figure 8. Effective preferences on above the line ballot papers, 2016 Senate election: South Australia



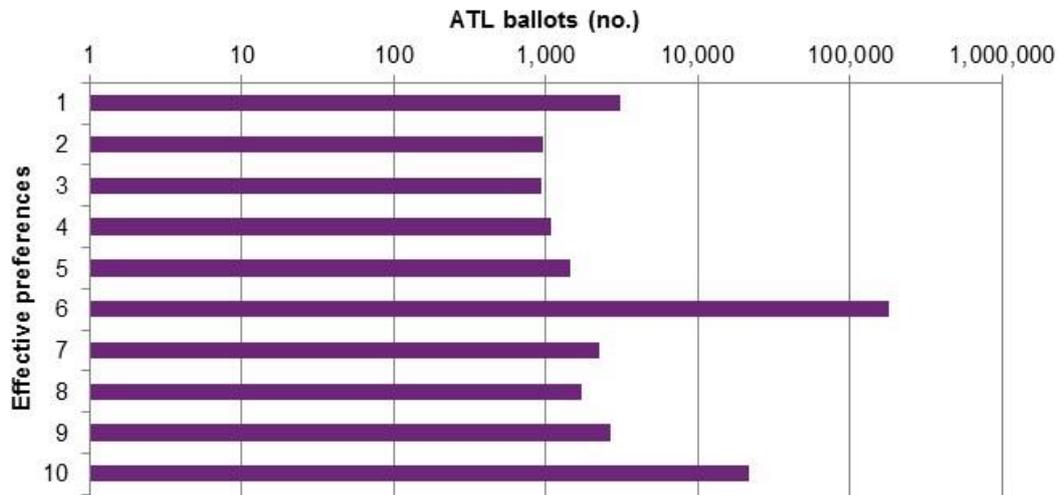
(Australian Electoral Commission, 2016a)

Figure 9. Effective preferences on above the line ballot papers, 2016 Senate election: Tasmania



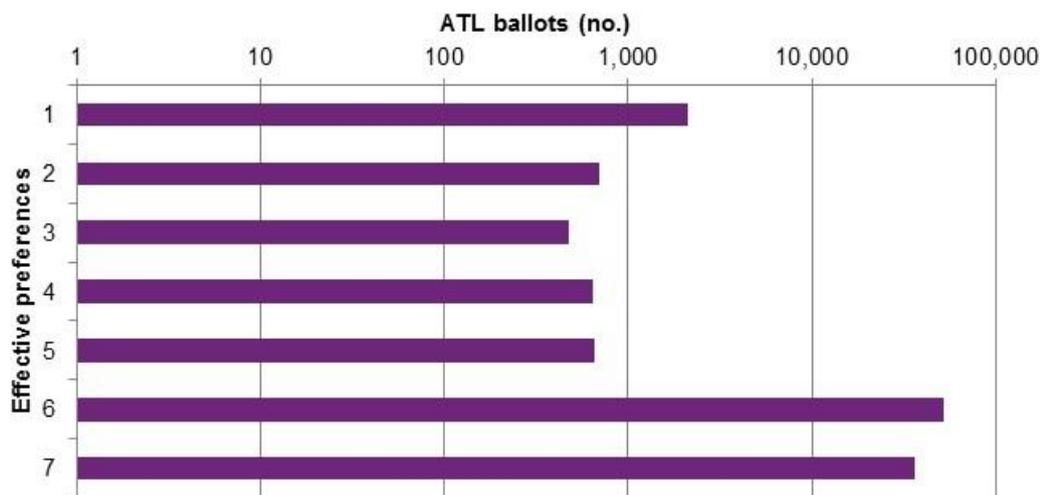
(Australian Electoral Commission, 2016a)

Figure 10. Effective preferences on above the line ballot papers, 2016 Senate election: Australian Capital Territory



(Australian Electoral Commission, 2016a)

Figure 11. Effective preferences on above the line ballot papers, 2016 Senate election: Northern Territory



(Australian Electoral Commission, 2016a)

Table 4. Numbers of above the line groups and candidates, 2016 Senate elections

State/territory	ATL groups no.	Candidates no.
NSW	41	151
Vic.	38	116
Qld	38	122
WA	28	79
SA	23	64
Tas.	21	58
ACT	10	22
NT	7	19
Total	..	631

(Australian Electoral Commission, 2016b)

Table 5. Effective preferences on below the line ballot papers, 2016 Senate elections

State/territory	Thirteen or more						Total	
	Six %	Seven to eleven %	Twelve %	All candidates numbered %	Not all candidates numbered %	Subtotal %	%	no.
NSW	3.91	3.47	71.99	1.60	19.04	20.63	100.00	242,647
Vic.	3.57	5.82	59.15	4.28	27.17	31.45	100.00	185,861
Qld	3.19	3.40	70.60	3.32	19.48	22.80	100.00	167,210
WA	3.43	5.31	61.77	6.06	23.43	29.49	100.00	75,343
SA	3.66	2.33	64.44	8.75	20.82	29.57	100.00	90,231
Tas.	2.25	2.50	67.43	8.00	19.82	27.82	100.00	95,385
ACT	1.04	1.83	65.19	25.13	6.79	31.93	100.00	38,681
NT	2.89	7.97	58.42	23.51	7.21	30.72	100.00	8,750
Total	3.34	3.85	66.59	5.45	20.78	26.23	100.00	904,108

(Australian Electoral Commission, 2016a)

Table 6. Selected exact preferences, 2016 Senate elections

Exact preferences	NSW %	Vic. %	Qld %	WA %	SA %	Tas. %	ACT %	NT %	Total %
Proportion of above the line ballots									
1	4.30	1.76	1.51	1.85	2.04	1.15	1.35	1.86	2.56
6	85.75	88.49	88.84	88.50	86.71	85.06	83.26	55.68	87.14
12	1.09	0.84	1.13	1.10	1.08	1.83	1.02
Proportion of below the line ballots									
6	3.77	3.43	3.06	3.35	3.55	2.15	0.99	2.63	3.21
12	71.87	59.01	70.48	61.65	64.35	67.29	65.14	58.00	66.46

(Australian Electoral Commission, 2016a)

Note: Percentages are of the total formal ATL or BTL ballot papers.

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End notes

¹ Current legislation gives precedence to preferences expressed below the line. As a result, any ballot papers marked both above and below the line are classified as follows:

- If the BTL preferences are formal, the BTL preferences are used
- If the BTL preferences are informal, and the ATL preferences are formal, the ATL preferences are used
- If neither set of preferences is formal, the ballot paper is deemed informal.

² For example:

- A sequence of 1, 2, 3, 4, 5, 6, 7, 8 would be counted as having eight effective preferences
- A sequence of 1, 2, 3, 4, 5, 6, 6, 7, 8 would be counted as having five effective preferences
- A sequence of 1, 2, 3, 4, 5, 6, 7, 9, 10 would be counted as having seven effective preferences.

³ For comparison, ballots with one effective preference would include those with a number '1' only, as well as those with a number '1', followed by a break in a numerical sequence.

⁴ Optional Preferential Voting will not be in effect for the next Queensland state election, due to a recent legislative change to Full Preferential Voting.