# Is demography moving against the Coalition? 

Age and the conservative vote in Australia, 1987 to 2004

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## Preface

This report was commissioned by Peter Browne from Australian Policy Online to examine Newspoll data for age-related patterns in voting intentions. The starting point was the observation that:

Around the time of the past federal election there was speculation that voter demographics were moving against the government, on the argument that a very conservative group of older voters was inevitably giving way to a younger, less conservative group. We were interested to see whether the Newspoll data showed any trends that supported that view and, correspondingly, conflicted with the standard view that as voters age they become more likely to vote for the Coalition.

The results from an examination of the Newspoll data are presented below. They are written for a general audience, and make use of a series of graphs to illustrate the findings. While there are some technical issues involved, these are presented in a separate section afterwards. The findings are also presented as tables (in Part 3).

Thanks go to Sol Lebovic, then of Newspoll, for his help in providing data and for discussing preliminary findings with Australian Policy Online. Thanks also to Murray Goot for feedback and useful advice, and to Peter Browne for commissioning the report.

## Part 1

## Findings

## Introduction

Does demography favour the Liberal/National Party Coalition in Australia, or is there a shift underway in the opposite direction?

As is well known, John Howard's Coalition has struck a chord with older voters over the last decade. ${ }^{1}$ Large proportions of older voters (those aged 60 and over) have consistently favoured the Liberal/National Parties since the mid 1990s, with the first preference vote for the Coalition in this age group averaging well over 50 per cent.

As the population ages, can we expect this voting pattern to continue, leading to a consolidation of support for the conservative parties? Or, on the other hand, will the movement of 'baby boomers' into the ranks of older Australians moderate this conservatism, and perhaps even reverse it?

This paper is a brief attempt to answer this question by drawing on a well-known data source, Newspoll. While it is always difficult to be definitive with these kinds of questions, the attempt is certainly worthwhile. The results below suggest that demography will not be on the side of the Coalition in coming years. As the 'baby boomers' age, the voting patterns of older Australians appear to be changing, and changing in a direction which is adverse for the Liberal/National Party vote.

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## Analysis

The analysis in this report draws on 17 years of Newspoll public opinion polling data. People's voting intentions in the lead up to the Federal elections from 1987 through to 2004 are analysed by age groups (in five year brackets). ${ }^{2}$ The results are shown as a series of graphs (Part 2) and tables (Part 3) and the key findings are presented below. For ease of expression, the terms 'support for' and 'voting intention' are used interchangeably. ${ }^{3}$

With a time series like this you need to disentangle period effects (like 'Tampa' in 2001) from cohort effects (like the 'baby boomers' moving through the ranks). In other words, has a drop in support for one party resulted from something unique to that election campaign? Or does it reflect a longer term decline in the demographic underpinnings of support as the population ages? While there are a number of sophisticated ways of dealing with this issue, a simple approach is to compare the voting intention of a specific age-group with the average for all agegroups. The 'gap' between these two will change over time, sometimes widening and sometimes narrowing. When the overall average shifts in one direction, this can be viewed as a 'period effect', and the decisive boost in support for the Coalition in 1996 is an example of this. On the other hand, the variation in the gap between a specific age group and the overall average may reflect a cohort effect, and if this gap is steadily narrowing over time, then specific age-related effects may be working their way through.

What can we say about older Australians? Looking at the solid red dots in Figure 1.1 (on page 4), it is clear that voters aged 60 and over have supported the Coalition to a much greater extent than the overall average (shown as hollow blue dots). ${ }^{4}$ The age gap favouring the Coalition ranges from 5 to 10 percentage points. Only in 1990 was the gap not large enough to count as statistically significant. ${ }^{5}$ In every other year, there was a considerable gap. There is, of course, some variability in the size of this gap. In some years where the average support moved against the Coalition, the support by older voters increased and the gap widened (eg. 2001 to 2004). In other years, the gap narrowed (eg. 1996 to 1998).

If we look at the age group which is younger by five years ( 55 to 59) we also notice a similar pattern in the years leading up to 1998. As Figure 1.2 on page 5 shows, ${ }^{6}$ the gap between the overall average and this specific age-group was quite wide until 1998 (with 1990 again standing out as an anomaly). However, for the years 1998 to 2004, the gap either disappeared or narrowed considerably. Now what is inter-

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Figure 1.1: Voting for Lib/National Coalition: 60+ year olds
esting about this age group-the 55 to 59 year olds—is that by around 2000 the first wave of 'baby boomers' had entered their ranks. Those born in 1945 or 1946 were turning 55 in 2000 and 2001. It is possible, therefore, that some of the downturn in Coalition support by this age group in the lead up to the elections of 2001 and 2004 reflects the arrival on the scene of some of these early 'baby boomers'.

This notion finds more support in the data for the next younger age groupthose aged 50 to 54 . If we look at Figure 1.3 on page 5, the voting intention pattern up to, and including 1998, showed strong support for the Coalition. This age group consistently supported the Liberal/National Parties through all these years, though the gap began to close slightly in 1998. However, in 2001 and 2004 this gap evaporated entirely (and even appeared to be reversing in 2004). By 2001, this age cohort was made up entirely of early 'baby boomers': those born between 1947 and 1951.

Looking across the full set of graphs in Part 2, it is evident that as a general rule younger voters-those under 40-favoured the ALP over the Coalition. Voters in the middle-age groups-those between 40 and 59 years-have a less clearcut pattern in their voting intentions. The tendency, however, is toward greater support for the Coalition among the older age groups, particularly in the earlier period (prior to 1998). Finally, as we saw above, voters aged 60 and above strongly favoured the Coalition over the ALP. In summary, this broad picture suggests that as voters grow older, they are more inclined to support the Coalition. ${ }^{7}$

[^2]

Figure 1.2: Voting for Lib/National Coalition: 55-59 year olds


Figure 1.3: Voting for Lib/National Coalition: 50-54 year olds

What appears to be happening in Figure 1.3 is that this overall trend has begun to break down among voters aged in their 50s over the course of the last two elections. They have turned away from the Coalition. This coincides with a change in the composition of this age group: they are now made up of people born in the late 1940s and early 1950s. In other words, the shift away from the Coalition among this particular group of older voters coincides with the arrival of a significant cohort of early 'baby boomers' into their ranks.

If the sentiments of these 'baby boomers' are still Whitlamesque, if they can remember an era when social reform flourished, and if their aversion to economic rationalism and hyper-individualism remains intact, then one can easily imagine that many of these voters will be hostile to the Coalition. The data in these graphs seems to fit this interpretation.
In summary, while in general older voters favour the Liberal/National Parties, the greying of the 'baby boomers' appears to be over-turning this truism. This may well signal a demographic shift working against the Coalition in coming years.

## Technical considerations

It is important to realise that the Newspoll data are not panel data, where the same group of people are tracked over time. Rather, different sub-populations are recruited into the various samples across these years producing a time series of cross-sectional data. You can, of course, follow an age cohort through these kind of data, but it's important to keep in mind that the composition of the cohort will be changing over time. Not only do people die or emigrate, but new entrants-such as immigrants-join the cohort. Consequently, while we may talk about an 'age cohort' in these data, these reservations need to be kept in mind.

Secondly, because the data is based on a survey sample, the figures produced (called 'point estimates') always have a margin of error around them. This is due to sampling variability (also called sampling error). The strategy for dealing with this is to calculate a confidence interval (CI) for each of the point estimates. These CIs are tabulated in Part 2 of this paper, and are shown as vertical bars in the graphs.

Confidence intervals provide a useful way of illustrating the sampling variability in these Newspoll data because they easily show the margin of error around the point estimates by providing a lower bound (or limit) and an upper bound. In the case of a 95 per cent confidence interval (the level used in this paper), these bounds can be defined as follows. If the sample were to be repeatedly taken, then in 19 out of 20 occasions, the true population value of the point estimate would lie within these bounds.
A common practice is to visually examine two point estimates and their associated confidence intervals. If the two confidence intervals do not overlap, then the difference between the two point estimates can be regarded as statistically significant. Conversely, if they do overlap, then the difference between the estimates may not be statistically significant. In the case of these Newspoll data, the mean value for an age group is compared with the mean value for all age groups and where the confidence intervals do not overlap, an age-related difference is evident. ${ }^{8}$

Another kind of reality check on the results is to consider more than one source. In this case, the Newspoll data can be compared with data from the Australian Election Studies (AES) for the same period. The AES is a mail-back survey conducted soon after each election which asks respondents how they have just voted. It is a staple source for academic analysis of voting patterns and the number of usable observations in the data ranges from 1,800 to about 3,000 for each of the various years. The Newspoll data is based on a telephone survey of voting intentions, and is the staple source for newspaper reports and commentators in the lead-up to an election. The number of observations in these data is between 11,000 and 17,000 for each of the various years. These differences in the number of observations are evident in the graphs: the Newspoll data have much narrower confidence intervals than do the AES data. It is also worth noting that in the comparison graphs, both sets of data are presented in 10 year age periods to achieve comparability. Of course, voting intention (Newspoll) and actual voting behaviour (AES) are not the same thing, but the comparison is still worth making because there are few other available data sources which line up so neatly for the time period under review.

So what does the AES tell us? As Figures 15 to 18 (in Part 2) show, the figures are fairly consistent most of the time, though there are a few anomalies. For those aged under 40, the results are consistent until 1998, and then they diverge sharply. Fortunately (for our purposes), among those aged 40 and over the results are much more uniform. Figure 19 shows that for voters aged 60 and over, the inclination towards the Coalition holds strongly across all years, though in 2004 the AES suggests this has begun to weaken. Figure 18 is the 'test' for the 'baby boomers' thesis, and the results show reasonable support for it, though there remains some uncertainty. On the one hand, the mean figures for both the Newspoll and AES data are very close, and both show a large drop in support for the Coalition from 1998 onward. This is certainly consistent with the analysis presented earlier. However, the confidence intervals in the AES data are so large, that we cannot be definitive about the trend in these data. It may well be that the AES and Newspoll data do not line up this closely, once we take these confidence intervals into account. In conclusion, while the AES data may not conclusively support the 'baby boomer' thesis which emerges from the Newspoll data, neither do they provide strong evidence against it.

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## Part 2

## Graphs

As noted earlier, the Newspoll graphs show the confidence intervals for the voting intentions of each age group. The dots indicate the point estimate (the mean value of the percentage intending to vote for the Liberal/National Parties) and the vertical bars show the spread of the confidence interval (abbreviated to CI). The small horizontal lines indicate the upper and lower bounds of the confidence intervals.

Each graph shows one particular age group, and repeats the all-age group average, so that visual inspection of the graph easily indicates whether the voting intention for that age group differs from the overall average for all respondents.

In the case of the AES data the graphs show voting behaviour for each age group, as measured by the reported vote in the House of Representatives in the last election.

In the graphs which show both Newspoll and AES data, the dots and the bars are offset from each year's marker. Those to the left of the year marker represent the Newspoll data, those to the right represent the AES data.

### 2.1 Newspoll

Figure 1. Voting for Lib/Nat: 18-24 year olds


Note: data weighted in calculations for means and confidence intervals.
Source: Newspoll.

Figure 2. Voting for Lib/Nat: 25-29 year olds


Figure 3. Voting for Lib/Nat: 30-34 year olds


Figure 4. Voting for Lib/Nat: 35-39 year olds


Figure 5. Voting for Lib/Nat: 40-44 year olds


Figure 6. Voting for Lib/Nat: 45-49 year olds


Figure 7. Voting for Lib/Nat: 50-54 year olds


Figure 8. Voting for Lib/Nat: 55-59 year olds


Figure 9. Voting for Lib/Nat: 60+ year olds


Note: data weighted in calculations for means and confidence intervals. Source: Newspoll.

### 2.2 AES

Figure 10. Voting for Lib/Nat: 18-29 year olds


Note: data weighted in calculations for means and confidence intervals. Source: AES.

Figure 11. Voting for Lib/Nat: 30-39 year olds


Figure 12. Voting for Lib/Nat: 40-49 year olds


Note: data weighted in calculations for means and confidence intervals. Source: AES.

Figure 13. Voting for Lib/Nat: 50-59 year olds


Figure 14. Voting for Lib/Nat: 60+ year olds


Note: data weighted in calculations for means and confidence intervals.
Source: AES.

### 2.3 Newspoll and AES compared

Figure 15. Voting for Lib/Nat: 18-29 year olds


Figure 16. Voting for Lib/Nat: 30-39 year olds


Figure 17. Voting for Lib/Nat: 40-49 year olds


Note: data weighted in calculations for means and confidence intervals.
Source: Left-side of year marker: Newspoll. Right-side: AES.

Figure 18. Voting for Lib/Nat: 50-59 year olds


Figure 19. Voting for Lib/Nat: 60+ year olds


Note: data weighted in calculations for means and confidence intervals.
Source: Left-side of year marker: Newspoll. Right-side: AES.

## Part 3

## Tables

### 3.1 Newspoll

Table 3.1: Voting by Age Group and Year (percentages)

| ALP | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18-24 | 53 | 42 | 48 | 43 | 41 | 39 | 46 | 44 |
| 25-29 | 59 | 44 | 51 | 42 | 44 | 38 | 43 | 46 |
| 30-34 | 56 | 47 | 53 | 45 | 45 | 39 | 43 | 47 |
| 35-39 | 50 | 43 | 48 | 46 | 45 | 44 | 39 | 45 |
| 40-44 | 45 | 40 | 42 | 42 | 46 | 40 | 41 | 42 |
| 45-49 | 44 | 37 | 41 | 39 | 41 | 40 | 45 | 41 |
| 50-54 | 44 | 37 | 42 | 35 | 37 | 38 | 41 | 39 |
| 55-59 | 44 | 40 | 37 | 33 | 40 | 35 | 35 | 37 |
| 60 plus | 47 | 45 | 40 | 35 | 37 | 35 | 34 | 38 |
| Total | 50 | 43 | 45 | 40 | 41 | 38 | 40 | 42 |
| Lib/Nat | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| 18-24 | 38 | 39 | 37 | 43 | 37 | 45 | 36 | 39 |
| 25-29 | 34 | 35 | 37 | 43 | 39 | 44 | 37 | 39 |
| 30-34 | 36 | 35 | 35 | 41 | 38 | 43 | 41 | 38 |
| 35-39 | 40 | 37 | 39 | 40 | 36 | 41 | 43 | 40 |
| 40-44 | 48 | 42 | 45 | 44 | 39 | 42 | 40 | 43 |
| 45-49 | 48 | 44 | 47 | 50 | 40 | 44 | 38 | 44 |
| 50-54 | 51 | 48 | 51 | 55 | 45 | 46 | 41 | 47 |
| 55-59 | 50 | 46 | 54 | 60 | 43 | 50 | 48 | 50 |
| 60 plus | 48 | 43 | 52 | 58 | 47 | 54 | 55 | 51 |
| Total | 43 | 41 | 44 | 49 | 41 | 46 | 44 | 44 |
| Other | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| 18-24 | 9 | 19 | 15 | 14 | 22 | 16 | 18 | 16 |
| 25-29 | 7 | 20 | 12 | 14 | 17 | 18 | 21 | 16 |
| 30-34 | 9 | 19 | 12 | 14 | 17 | 18 | 16 | 15 |
| 35-39 | 9 | 20 | 13 | 14 | 20 | 15 | 18 | 16 |
| 40-44 | 8 | 18 | 13 | 14 | 15 | 18 | 19 | 15 |
| 45-49 | 7 | 18 | 12 | 12 | 19 | 16 | 17 | 15 |
| 50-54 | 5 | 15 | 7 | 11 | 18 | 16 | 18 | 14 |
| 55-59 | 6 | 14 | 9 | 8 | 17 | 15 | 17 | 13 |
| 60 plus | 6 | 12 | 8 | 8 | 17 | 11 | 11 | 10 |
| Total | 8 | 17 | 11 | 12 | 18 | 15 | 16 | 14 |

Note: Weighted data
Source: Newspoll
Population: Respondents eligible to vote who indicated a party voting intention.

Table 3.2: Voting by Age Group and Year, unweighted (percentages)

| ALP | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 8 - 2 4}$ | 52 | 42 | 45 | 42 | 41 | 38 | 46 | 44 |
| $\mathbf{2 5 - 2 9}$ | 55 | 43 | 49 | 42 | 43 | 36 | 43 | 46 |
| $30-34$ | 53 | 43 | 49 | 43 | 44 | 39 | 41 | 45 |
| $35-39$ | 47 | 41 | 45 | 44 | 44 | 42 | 38 | 43 |
| $40-44$ | 42 | 38 | 39 | 41 | 44 | 38 | 40 | 40 |
| $45-49$ | 42 | 35 | 37 | 36 | 40 | 40 | 43 | 39 |
| $50-54$ | 41 | 32 | 40 | 33 | 35 | 37 | 40 | 37 |
| $55-59$ | 42 | 39 | 34 | 29 | 38 | 35 | 35 | 36 |
| 60 plus | 43 | 42 | 36 | 31 | 35 | 33 | 33 | 36 |
| Total | 47 | 40 | 42 | 38 | 40 | 37 | 39 | 41 |
| Lib/Nat | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| $\mathbf{1 8 - 2 4}$ | 38 | 40 | 40 | 44 | 37 | 46 | 38 | 40 |
| $25-29$ | 36 | 36 | 39 | 44 | 39 | 45 | 37 | 39 |
| $30-34$ | 38 | 36 | 39 | 43 | 40 | 43 | 42 | 40 |
| 35-39 | 44 | 37 | 42 | 42 | 38 | 43 | 44 | 41 |
| $40-44$ | 50 | 44 | 48 | 45 | 39 | 44 | 41 | 45 |
| $45-49$ | 50 | 47 | 51 | 52 | 41 | 44 | 40 | 46 |
| $50-54$ | 54 | 52 | 54 | 57 | 46 | 47 | 42 | 49 |
| $55-59$ | 51 | 47 | 57 | 62 | 44 | 49 | 47 | 51 |
| 60 plus | 51 | 47 | 56 | 60 | 48 | 55 | 55 | 53 |
| Total | 45 | 42 | 47 | 50 | 42 | 47 | 45 | 46 |
| Other | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| $18-24$ | 10 | 18 | 15 | 14 | 22 | 16 | 16 | 15 |
| $\mathbf{2 5 - 2 9}$ | 8 | 20 | 12 | 14 | 18 | 19 | 20 | 15 |
| 30-34 | 9 | 20 | 12 | 15 | 16 | 18 | 17 | 15 |
| $35-39$ | 9 | 22 | 14 | 14 | 18 | 16 | 18 | 15 |
| $40-44$ | 9 | 18 | 13 | 14 | 16 | 18 | 18 | 15 |
| $45-49$ | 8 | 18 | 12 | 12 | 18 | 17 | 17 | 15 |
| $50-54$ | 6 | 16 | 7 | 10 | 18 | 16 | 19 | 14 |
| $55-59$ | 7 | 14 | 9 | 9 | 18 | 16 | 18 | 13 |
| 60 plus | 6 | 11 | 8 | 9 | 17 | 12 | 12 | 11 |
| Total | 8 | 17 | 11 | 12 | 18 | 16 | 16 | 14 |
|  |  |  |  |  |  |  |  |  |

Note: Unweighted data
Source: Newspoll
Population: Respondents eligible to vote who indicated a party voting intention.

Table 3.3: Voting by Age Group and Year, confidence intervals (percentages)

| ALP | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18-24 | 53 | 42 | 48 | 43 | 41 | 39 | 46 | 44 |
| 95\% CI | [50,55] | [39,45] | [44,52] | [40,46] | [37,44] | [35,42] | [43,49] | [43,46] |
| 25-29 | 59 | 44 | 51 | 42 | 44 | 38 | 43 | 46 |
| 95\% CI | [56,61] | [41,48] | [47,55] | [39,45] | [41,48] | [34,41] | [39,46] | $[45,47]$ |
| 30-34 | 56 | 47 | 53 | 45 | 45 | 39 | 43 | 47 |
| 95\% CI | [53,58] | [43,50] | [49,56] | [42,48] | [42,48] | [36,42] | [40,46] | [45,48] |
| 35-39 | 50 | 43 | 48 | 46 | 45 | 44 | 39 | 45 |
| 95\% CI | [48,53] | [39,46] | [44,52] | $[43,49]$ | [42,48] | $[41,47]$ | $[36,42]$ | [44,46] |
| 40-44 | 45 | 40 | 42 | 42 | 46 | 40 | 41 | 42 |
| 95\% CI | [42,48] | [36,44] | [38,46] | [39,45] | [43,48] | $[37,43]$ | [38,44] | $[41,43]$ |
| 45-49 | 44 | 37 | 41 | 39 | 41 | 40 | 45 | 41 |
| 95\% CI | [41,48] | [33,42] | [36,45] | [36,42] | [38,44] | $[37,43]$ | [42,47] | [40,42] |
| 50-54 | 44 | 37 | 42 | 35 | 37 | 38 | 41 | 39 |
| 95\% CI | [40,47] | [32,41] | [38,47] | [31,38] | [33,40] | [35,41] | [38,44] | [37,40] |
| 55-59 | 44 | 40 | 37 | 33 | 40 | 35 | 35 | 37 |
| 95\% CI | [41,48] | $[35,44]$ | [32,41] | [29,37] | $[36,43]$ | [32,39] | [32,38] | [36,39] |
| 60 plus | 47 | 45 | 40 | 35 | 37 | 35 | 34 | 38 |
| 95\% CI | [45,48] | [42,47] | [37,42] | [32,37] | [35,39] | [33,37] | [32,36] | [38,39] |
| Total | 50 | 43 | 45 | 40 | 41 | 38 | 40 | 42 |
| 95\% CI | [49,51] | [41,44] | [43,46] | [39,41] | [40,42] | [37,39] | [39,41] | [42,42] |
| Lib/Nat | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| 18-24 | 38 | 39 | 37 | 43 | 37 | 45 | 36 | 39 |
| 95\% CI | [35,40] | $[35,42]$ | [34,41] | [40,46] | [33,40] | [42,49] | [33,39] | [38,41] |
| 25-29 | 34 | 35 | 37 | 43 | 39 | 44 | 37 | 39 |
| 95\% CI | [32,37] | [32,39] | [34,41] | [40,46] | $[35,42]$ | $[41,48]$ | [33,41] | [37,40] |
| 30-34 | 36 | 35 | 35 | 41 | 38 | 43 | 41 | 38 |
| 95\% CI | [33,38] | [32,38] | [32,38] | $[38,44]$ | [35,41] | [40,46] | [37,44] | [37,40] |
| 35-39 | 40 | 37 | 39 | 40 | 36 | 41 | 43 | 40 |
| 95\% CI | $[38,43]$ | [34,41] | [35,42] | [37,43] | [33,39] | [38,43] | [40,46] | [38,41] |
| 40-44 | 48 | 42 | 45 | 44 | 39 | 42 | 40 | 43 |
| 95\% CI | [45,51] | [38,46] | [41,49] | [41,47] | [36,42] | [40,45] | $[37,43]$ | [42,44] |
| 45-49 | 48 | 44 | 47 | 50 | 40 | 44 | 38 | 44 |
| 95\% CI | [45,52] | [40,49] | [43,52] | [47,53] | [37,43] | $[41,47]$ | [36,41] | [43,45] |
| 50-54 | 51 | 48 | 51 | 55 | 45 | 46 | 41 | 47 |
| 95\% CI | [48,55] | [43,52] | [47,56] | [51,58] | [42,49] | [43,49] | [38,44] | $[46,49]$ |
| 55-59 | 50 | 46 | 54 | 60 | 43 | 50 | 48 | 50 |
| 95\% CI | [46,53] | [41,51] | [49,59] | [56,64] | [39,47] | [46,53] | [45,51] | [48,51] |
| 60 plus | 48 | 43 | 52 | 58 | 47 | 54 | 55 | 51 |
| 95\% CI | $[46,49]$ | [41,46] | [50,55] | [56,60] | [44,49] | [52,56] | [53,57] | [50,52] |
| Total | 43 | 41 | 44 | 49 | 41 | 46 | 44 | 44 |
| 95\% CI | [42,44] | [39,42] | [43,45] | [48,50] | [40,42] | [45,47] | [43,45] | [44,44] |

Note: Weighted data with $95 \%$ confidence intervals.
Source: Newspoll
Population: Respondents eligible to vote who indicated a party voting intention.

Table 3.3: Confidence intervals (CONTINUED) (percentages)

| Other | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $18-24$ | 9 | 19 | 15 | 14 | 22 | 16 | 18 | 16 |
| $95 \%$ CI | $[8,11]$ | $[17,22]$ | $[12,17]$ | $[12,16]$ | $[19,25]$ | $[14,18]$ | $[15,20]$ | $[15,17]$ |
| $25-29$ | 7 | 20 | 12 | 14 | 17 | 18 | 21 | 16 |
| $95 \%$ CI | $[6,8]$ | $[17,23]$ | $[9,15]$ | $[12,17]$ | $[14,20]$ | $[16,21]$ | $[17,24]$ | $[15,17]$ |
| $30-34$ | 9 | 19 | 12 | 14 | 17 | 18 | 16 | 15 |
| $95 \%$ CI | $[7,10]$ | $[16,21]$ | $[10,14]$ | $[12,16]$ | $[14,19]$ | $[15,20]$ | $[14,19]$ | $[14,16]$ |
| $35-39$ | 9 | 20 | 13 | 14 | 20 | 15 | 18 | 16 |
| $95 \%$ CI | $[8,11]$ | $[17,22]$ | $[11,16]$ | $[12,16]$ | $[17,22]$ | $[13,17]$ | $[15,20]$ | $[15,16]$ |
| $40-44$ | 8 | 18 | 13 | 14 | 15 | 18 | 19 | 15 |
| $95 \%$ CI | $[6,9]$ | $[15,21]$ | $[10,15]$ | $[12,16]$ | $[13,17]$ | $[16,20]$ | $[16,21]$ | $[14,16]$ |
| $45-49$ | 7 | 18 | 12 | 12 | 19 | 16 | 17 | 15 |
| $95 \%$ CI | $[5,9]$ | $[15,22]$ | $[9,15]$ | $[10,13]$ | $[16,21]$ | $[14,18]$ | $[15,19]$ | $[14,16]$ |
| $50-54$ | 5 | 15 | 7 | 11 | 18 | 16 | 18 | 14 |
| $95 \%$ CI | $[4,7]$ | $[12,18]$ | $[4,9]$ | $[9,13]$ | $[15,21]$ | $[14,18]$ | $[16,20]$ | $[13,15]$ |
| $55-59$ | 6 | 14 | 9 | 8 | 17 | 15 | 17 | 13 |
| $95 \%$ CI | $[5,8]$ | $[11,17]$ | $[7,12]$ | $[6,9]$ | $[14,20]$ | $[13,17]$ | $[15,20]$ | $[12,14]$ |
| 60 plus | 6 | 12 | 8 | 8 | 17 | 11 | 11 | 10 |
| $95 \%$ CI | $[5,7]$ | $[10,14]$ | $[7,9]$ | $[7,9]$ | $[15,18]$ | $[10,12]$ | $[10,12]$ | $[10,11]$ |
| Total | 8 | 17 | 11 | 12 | 18 | 15 | 16 | 14 |
| $95 \%$ CI | $[7,8]$ | $[16,18]$ | $[10,12]$ | $[11,12]$ | $[17,19]$ | $[15,16]$ | $[15,17]$ | $[14,14]$ |

Note: Weighted data with $95 \%$ confidence intervals.
Source: Newspoll
Population: Respondents eligible to vote who indicated a party voting intention.

### 3.2 AES

Table 3.4: Voting by Age Group and Year (percentages)

| ALP | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 18 to 29 years | 48 | 40 | 49 | 37 | 45 | 43 | 36 | 43 |
| 30 to 39 years | 48 | 46 | 52 | 43 | 48 | 40 | 36 | 46 |
| 40 to 49 years | 40 | 35 | 44 | 41 | 37 | 40 | 41 | 40 |
| 50 to 59 years | 45 | 35 | 40 | 33 | 33 | 34 | 40 | 37 |
| 60 years and over | 47 | 39 | 43 | 36 | 36 | 34 | 35 | 39 |
| Total | 46 | 39 | 45 | 38 | 40 | 38 | 38 | 41 |
| Lib/Nat | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| 18 to 29 years | 42 | 38 | 35 | 41 | 30 | 35 | 43 | 38 |
| 30 to 39 years | 41 | 34 | 35 | 39 | 33 | 36 | 47 | 37 |
| 40 to 49 years | 53 | 46 | 44 | 47 | 39 | 40 | 42 | 44 |
| 50 to 59 years | 48 | 49 | 51 | 53 | 43 | 48 | 46 | 48 |
| 60 years and over | 47 | 50 | 49 | 57 | 49 | 53 | 52 | 51 |
| Total | 46 | 43 | 44 | 47 | 40 | 43 | 47 | 44 |
| Other | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| 18 to 29 years | 10 | 22 | 16 | 22 | 24 | 22 | 21 | 19 |
| 30 to 39 years | 10 | 20 | 13 | 19 | 18 | 25 | 17 | 17 |
| 40 to 49 years | 7 | 19 | 12 | 12 | 24 | 19 | 17 | 16 |
| 50 to 59 years | 7 | 16 | 9 | 14 | 24 | 18 | 14 | 14 |
| 60 years and over | 6 | 12 | 8 | 7 | 15 | 13 | 13 | 10 |
| Total | 8 | 18 | 11 | 14 | 21 | 19 | 16 | 15 |

Note: Data weighted by AEC returns
Source: AES
Population: How voted in House of Representatives.

Table 3.5: Voting by Age Group and Year, unweighted (percentages)

| ALP | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 18 to 29 years | 53 | 43 | 52 | 35 | 46 | 42 | 34 | 45 |
| 30 to 39 years | 53 | 47 | 56 | 40 | 48 | 39 | 34 | 47 |
| 40 to 49 years | 44 | 36 | 46 | 38 | 37 | 39 | 39 | 40 |
| 50 to 59 years | 50 | 36 | 41 | 30 | 33 | 33 | 39 | 38 |
| 60 years and over | 52 | 40 | 45 | 33 | 36 | 33 | 34 | 39 |
| Total | 51 | 41 | 47 | 36 | 40 | 37 | 36 | 42 |
| Lib/Nat | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| 18 to 29 years | 38 | 38 | 37 | 45 | 33 | 38 | 46 | 39 |
| 30 to 39 years | 38 | 34 | 36 | 44 | 36 | 38 | 49 | 38 |
| 40 to 49 years | 50 | 46 | 46 | 51 | 42 | 43 | 44 | 46 |
| 50 to 59 years | 44 | 49 | 53 | 58 | 47 | 50 | 49 | 50 |
| 60 years and over | 43 | 49 | 50 | 62 | 52 | 56 | 55 | 52 |
| Total | 42 | 43 | 46 | 52 | 43 | 46 | 49 | 46 |
| Other | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 4}$ | Total |
| 18 to 29 years | 8 | 20 | 11 | 20 | 21 | 20 | 20 | 17 |
| 30 to 39 years | 9 | 19 | 8 | 16 | 16 | 23 | 16 | 15 |
| 40 to 49 years | 6 | 18 | 8 | 11 | 20 | 18 | 17 | 13 |
| 50 to 59 years | 6 | 15 | 6 | 11 | 19 | 17 | 12 | 12 |
| 60 years and over | 5 | 11 | 5 | 6 | 12 | 12 | 11 | 8 |
| Total | 7 | 16 | 7 | 12 | 17 | 17 | 14 | 13 |

Note: Data weighted by AEC returns
Source: AES
Population: How voted in House of Representatives.

Table 3.6: Voting by Age Group and Year, confidence intervals (percentages)

| ALP | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 to 29 years | 48 | 40 | 49 | 37 | 45 | 43 | 36 | 43 |
| 95\% CI | [43,53] | [35,45] | [43,54] | [32,43] | [39,52] | $[37,49]$ | [30,43] | [41,45] |
| 30 to 39 years | 48 | 46 | 52 | 43 | 48 | 40 | 36 | 46 |
| 95\% CI | [43,53] | [41,50] | [48,57] | [38,48] | [43,54] | [34,45] | [30,43] | $[44,48]$ |
| 40 to 49 years | 40 | 35 | 44 | 41 | 37 | 40 | 41 | 40 |
| 95\% CI | [34,45] | [30,39] | [40,48] | [36,46] | [32,42] | [35,45] | $[36,47]$ | [38,42] |
| 50 to 59 years | 45 | 35 | 40 | 33 | 33 | 34 | 40 | 37 |
| 95\% CI | [39,51] | [30,41] | [36,45] | [27,39] | [28,38] | [29,39] | [35,46] | [35,39] |
| 60 years and over | 47 | 39 | 43 | 36 | 36 | 34 | 35 | 39 |
| 95\% CI | [42,52] | $[34,43]$ | [39,46] | [31,41] | [32,41] | [30,38] | [31,40] | [37,41] |
| Total | 46 | 39 | 45 | 39 | 40 | 38 | 38 | 41 |
| 95\% CI | [43,48] | [37,42] | [43,47] | [36,41] | [38,42] | [36,40] | [35,40] | [40,42] |
| Lib/Nat | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| 18 to 29 years | 42 | 38 | 35 | 41 | 30 | 35 | 43 | 38 |
| 95\% CI | [37,47] | [32,43] | [30,40] | [35,46] | [25,36] | [29,41] | $[36,49]$ | [36,40] |
| 30 to 39 years | 41 | 34 | 35 | 39 | 33 | 36 | 47 | 37 |
| 95\% CI | [36,46] | [30,39] | [31,39] | [34,44] | [28,38] | [31,41] | [40,53] | [35,39] |
| 40 to 49 years | 53 | 46 | 44 | 47 | 39 | 40 | 42 | 44 |
| 95\% CI | [48,59] | [41,51] | [40,48] | [42,52] | [34,44] | [35,45] | [36,47] | [43,46] |
| 50 to 59 years | 48 | 49 | 51 | 53 | 43 | 48 | 46 | 48 |
| 95\% CI | [42,54] | [43,55] | [47,56] | [47,59] | [38,49] | [42,53] | [41,51] | [46,50] |
| 60 years and over | 47 | 50 | 49 | 57 | 49 | 53 | 52 | 51 |
| 95\% CI | [42,52] | [45,54] | [46,53] | [52,62] | [44,54] | [49,58] | [48,57] | [49,53] |
| Total | 46 | 43 | 44 | 47 | 40 | 43 | 47 | 44 |
| 95\% CI | [43,48] | [41,45] | [42,46] | $[45,49]$ | [37,42] | [41,45] | [44,49] | [43,45] |
| Other | 1987 | 1990 | 1993 | 1996 | 1998 | 2001 | 2004 | Total |
| 18 to 29 years | 10 | 22 | 16 | 22 | 24 | 22 | 21 | 19 |
| 95\% CI | [7,14] | [17,27] | [11,21] | [17,27] | [19,30] | [17,27] | [16,27] | [17,21] |
| 30 to 39 years | 10 | 20 | 13 | 19 | 18 | 25 | 17 | 17 |
| 95\% CI | [7,13] | [16,24] | [9,17] | [14,23] | [14,23] | [20,29] | [12,22] | [15,19] |
| 40 to 49 years | 7 | 19 | 12 | 12 | 24 | 19 | 17 | 16 |
| 95\% CI | [4,10] | [15,23] | [9,15] | [8,15] | [19,28] | [15,23] | [13,21] | [14,17] |
| 50 to 59 years | 7 | 16 | 9 | 14 | 24 | 18 | 14 | 14 |
| 95\% CI | [4,11] | [11,20] | [6,12] | [9,19] | [19,29] | [14,23] | [10,17] | [13,16] |
| 60 years and over | 6 | 12 | 8 | 7 | 15 | 13 | 13 | 10 |
| 95\% CI | [3,8] | [8,15] | [6,10] | [4,10] | [11,18] | [10,16] | [9,16] | [9,11] |
| Total | 8 | 17 | 11 | 14 | 20 | 19 | 16 | 15 |
| 95\% CI | [7,10] | [16,19] | [9,12] | [13,16] | [18,22] | [17,21] | [14,18] | [14,15] |

Note: Weighted data with $95 \%$ confidence intervals. Data weighted by AEC returns
Source: AES
Population: How voted in House of Representatives.


[^0]:    ${ }^{1}$ See, for example, Andrew Leigh (2005) Economic Voting and Electoral Behaviour: How do Individual, Local and National Factors Affect the Partisan Choice? The Australian National University Centre for Economic Policy Research, Discussion Paper No. 489, pp. 16-18.

[^1]:    ${ }^{2}$ This analysis, as well as the AES analysis discussed below, refers to first preference votes in the House of Representatives. The Newspoll data is weighted with weights supplied by Newspoll. The AES data is also weighted using weights calculated from Australian Election Commission results.
    ${ }^{3}$ Strictly speaking, Newspoll asks respondents about their voting intentions. While this may not translate into the same voting behaviour on election day, it does provide a reasonable measure of voter 'support'.
    ${ }^{4}$ For more information on how to read these graphs, see Part 2 below
    5 See the next section for a discussion of this concept
    ${ }^{6}$ All of the graphs in this section are repeated on pages 12 and 13 below, where they are labelled Figures 7, 8 and 9

[^2]:    ${ }^{7}$ However, as pointed out earlier, the period effects and cohort effects cannot be easily disentangled, particularly with a time series of this duration.

[^3]:    8 Another approach, often preferred to the confidence interval strategy, is to calculate the standard error of the difference. See Rory Wolfe and James Hanley, "If we're so different, why do we keep overlapping? When 1 plus 1 doesn't make 2", Canadian Medical Association Journal Jan 8 2002; 1 66(1), pp. 65-6. However, the confidence interval approach lends itself to graphing data as carried out here.

