## **Probability of Winning for Various Poll Results and Sample Sizes**

	Poll Sample size						
<b>Poll Result</b>	500	1000	1500	2000	2500		
45%	1.3%	0.1%	0.1%	0.1%	0.1%		
46%	3.7%	0.6%	0.1%	0.1%	0.1%		
<b>47%</b>	9.0%	2.9%	1.0%	0.4%	0.1%		
48%	18.6%	10.3%	6.1%	3.7%	2.3%		
49%	32.8%	26.4%	21.9%	18.6%	15.9%		
<b>50%</b>	50.0%	50.0%	50.0%	50.0%	50.0%		
51%	67.2%	73.6%	78.1%	81.4%	84.1%		
<b>52%</b>	81.4%	89.7%	93.9%	96.3%	97.7%		
53%	91.0%	97.1%	99.0%	99.6%	99.9%		
<b>54%</b>	96.3%	99.4%	99.9%	99.9%	99.9%		
<b>55%</b>	98.7%	99.9%	99.9%	99.9%	99.9%		

## **Notes:**

- 1. This table is based on the assumption that voter preferences are distributed with an underlying standard deviation of 0.5.
- 2. This table only takes into account random sampling error. Other possible forms of error may exist. For example, polling samples may be skewed towards a particular kind of voter. It may also be incorrect to assume that respondents who say that they "don't know" which way they plan to vote can be folded into all other respondents. And respondents may not be representative of the voting population.
- 3. Like most nationwide opinion polls, this table also takes no account of the fact that the electoral college system in the US, and the parliamentary election system in Australia, mean that it is possible to win the popular vote but lose the election.
- 4. In recent Australian polls, sample sizes have been AC Nielsen 1397, Galaxy 1000, Morgan 1019, Newspoll 1700.

**Source: Andrew Leigh & Justin Wolfers** 

Data used in Andrew Leigh & Justin Wolfers, "Pollsters at odds with simple

probabilities", Australian Financial Review, 7 October 2004, p.71

Poll	Date	Sample	Labor two-party preferred voteshare	Coalition two- party preferred voteshare	Labor chance of winning	Coalition chance of winning
AC Nielsen	2-3 Oct	1397	48%	52%	7%	93%
<u>Galaxy</u>	1-3 Oct	1000	48%	52%	10%	90%
<u>Morgan</u>	2-3 Oct	1017	51.5%	48.5%	83%	17%
<u>Newspoll</u>	2-3 Oct	1700	49.5%	50.5%	34%	66%
Weighted combination	-	5114	49.19%	50.81%	12%	88%

## What the major opinion polls were saying on the eve of the Australian federal election (8 October 2004)

Poll	Date	Sample	Labor two- party preferred voteshare	Coalition two- party preferred voteshare	Labor chance of winning*	Coalition chance of winning*
AC Nielsen	5-7 Oct	2029	46.00%	54.00%	1%	99%
Galaxy	1-3 Oct	1000	48.00%	52.00%	10%	90%
Morgan	7-8 Oct	1311	51.00%	49.00%	77%	23%
Newspoll	5-6 Oct	1700	50.00%	50.00%	50%	50%