

# It's the Economy Stupid: Macroeconomics and Federal Elections in Australia

LISA CAMERON and MARK CROSBY\*

*Department of Economics,  
University of Melbourne,  
Parkville, Victoria 3010*

*In this paper we examine the impact of macroeconomic conditions on Federal electoral performance in 20th-century Australia. We find that the electorate penalizes a government for high inflation and high unemployment relative to trend. Real GDP growth and real wage growth were not found to have a systematic relationship with incumbent vote share at the Federal level. We also examine the voteshare of the Federal incumbent in three electorates: the safe Liberal seat of Kooyong, the safe Labor seat of Melbourne Ports, and the swinging seat of Latrobe. We find some evidence that unemployment affects electoral outcomes in the swinging seat, but no macroeconomic variables affect outcomes in the safe seats.*

## *1 Introduction*

There is a large theoretical and empirical liter-

Crosby, Brown and Malady (1997) provide some Australian evidence.

In this paper we approach the relationship

(in which case they will try and maximize the utility of the median voter). If all policy makers are office seeking then the policies of different parties will be similar (in a two-party system), and so voters would be less likely to choose governments on the basis of differences among parties. Hence we estimate

the party of the President to differ from the majority party in Congress. In this case it is not clear whether the electorate holds the congress or the President, or a combination of the two, responsible for economic conditions. An advantage of examining the Australian data is that the Austra-

conomic variables on election results: partisan models which allow different impacts of macroeconomic variables on left- and right-wing policy makers, and 'punishment' style models where incumbents are

a majority in the Lower House, so that poor macroeconomic performance would be expected to adversely affect both the Prime Minister and the Prime Minister's party. Hence we use the issue

record for evidence of macroeconomic effects on  
elections using quarterly data for the 1960s

*III Data and Empirical Methodology*

Inflation and real wage data are available at a quarterly frequency from 1912 to 1948 in the Labour Report, and since 1948 are available in DX. Annual numbers were available from 1901

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Second, we compute ten-year simple moving averages of all of the variables, and use the difference from these averages as our explanatory

using the same method we used for unemployment and which is described above. We used the 'C' series until 1948, and thereafter the CPI inflation rate. We use nominal wage data from 1959 deflated by the CPI to construct a real wage series for 1959 to 1996.

Real GDP data are available annually in Butlin (1977) for 1901 to 1959. We use a moving average method using the annual growth rates to construct year on year growth rates for each quarter during this period—for example for the

measure of expected outcomes.

To test the hypothesis that left- and right-wing governments are treated differently according to the state of the macroeconomy we interact the most important explanatory variables with a variable that equals 1 if the incumbent is Liberal, and zero otherwise.

#### *IV Results*

TABLE 1  
*Economic Variables in Levels*  
 Dependent Variable: *Federal Incumbent Voteshare*

Sample	1903-1996					
	(1)		(2)		(3)	
	Coeff.	<i>t</i> -stat	Coeff.	<i>t</i> -stat	Coeff.	<i>t</i> -stat
Unemployment	-0.58	<b>-2.84</b>	-0.29	<b>-2.12</b>	0.01	0.02
Δ Real Wage	-0.3	-1.84	-0.25	-1.84	-0.30	<b>-2.39</b>
Δ GDP	-0.06	-0.30	-0.19	-1.41	-0.17	-1.27
Inflation	-0.26	-1.88	-0.42	<b>-4.90</b>	-0.50	<b>-3.10</b>
1931 dummy			-17.19	<b>-7.15</b>	-21.72	<b>-5.12</b>
1975 dummy			-2.98	<b>-2.88</b>	-1.56	-0.92
WW1	-8.85	<b>-3.97</b>	-11.78	<b>-7.93</b>	-11.32	<b>-7.71</b>
WW2	2.81	1.57	2.52	1.77	2.30	2.02
Honeymoon	3.82	<b>2.06</b>	5.19	<b>3.80</b>	5.39	<b>4.84</b>
constant	55.34	<b>46.01</b>	54.97	<b>53.32</b>	53.04	<b>31.22</b>
LIB					2.50	1.36
LIB*u/e					-0.42	-1.55
LIB*inflation					0.14	0.79
N obs		37		37		37
adjusted <i>R</i> <sup>2</sup>		.53		.72		.72
Root MSE		3.64		2.80		2.81

Boldface *t*-statistics denote significantly different from zero at the 5 per cent level.

in subsequent elections. This is a very large effect given the relatively low variability in voteshares discussed above. The WWI dummy is strongly significant and negative. This is interesting as it does not fit in with the conventional wisdom that wars are good for incumbents, and is also sug-

cent and 1 per cent respectively). To control for the effects of the Depression, specification (2) in Table 1 dummies out the 1931 election.

The 1975 election is another obvious candidate for an unusual result. This was the election following the dismissal of the Whitlam Labor gov-

nor the statistical significance of the coefficients on the economic variables. The inclusion of the 1931 dummy results in inflation becoming a statistically significant explainer of the incumbent's voteshare.<sup>6</sup> Unemployment remains statistically significant although the magnitude of its estimated

high correlations between the economic variables. For example, Okun's law suggests that unemployment and GDP will be highly correlated. However, the correlation between pairs of the explanatory variables is relatively low. No correlation is greater than 0.34 in absolute value. We experimented with

rate decreases the incumbent's voteshare by 0.42 percentage points and an extra percentage of unemployment penalizes the government 0.29 percentage points.

We admit that this procedure for dropping elections is somewhat arbitrary, although it is based on the principle of looking for statistical outliers. We have received numerous suggestions about other elections which were unusual because of perhaps the 'charisma' of a certain candidate, or because of a very important non-economic issue

real wages never became statistically significant as a result of dropping the other economic variables. The coefficients on inflation and unemployment were robust to these changes.

We also conducted formal tests of parameter stability. One might expect that the relationship between the economic variables and voter behaviour has changed over time. We do not reject the null of parameter constancy, although this is due in part to the lack of precision of the estimates in subsamples of the data. When we broke the data

than Labor incumbents. Similarly, the inflation coefficients suggest that the Labor party is worse affected by high inflation than the Liberals. In both cases, however, these differences between parties are not statistically significant. We conclude that

iable) is high relative to trend. If this is the case, the incumbent will not lose voteshare if unemployment is high, but not high relative to recent unemployment experience. The second two columns of Table 2 examine the impact of the increase over

minus the initial level of each of the variables).

Note that in these models we are implicitly restricting the coefficient on the 'expectation' of the economic variable to be the same magnitude as the coefficient on the current value of the variable. In the first case we are restricting the coefficient on

that the influence of macroeconomic variables on incumbent voteshares does not depend on whether the incumbent is the Labor or the Liberal Party. Finally, WWI was unkind to incumbents and there does appear to be a large and statistically significant honeymoon effect in Federal elections.



TABLE 3  
*Individual Seat Results*  
*(Ten-Year Moving Average Model)*

Dep. Variable:	Percentage of the vote received by the Federal incumbent					
	Kooyong		Melbourne Ports		Latrobe	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Unemployment	0.74	0.73	-1.76	-0.77	5.38	<b>3.65</b>
$\Delta$ Real Wage	-0.13	-0.58	0.43	0.94	-0.98	<b>-2.75</b>
$\Delta$ GDP	0.09	0.23	-0.50	-0.60	0.26	0.39
Inflation	0.02	0.09	-0.11	0.26	0.38	1.05
LIB	32.7	<b>17.2</b>	-28.0	<b>-7.95</b>	10.9	<b>6.30</b>
LIB*u/e	-3.08	<b>-2.08</b>	3.17	1.03	-10.0	<b>-5.00</b>
LIB*inflation	-0.41	-1.21	-0.35	-0.74	-0.53	-1.34
Honeymoon	5.20	<b>2.46</b>	8.80	<b>2.91</b>	7.45	<b>2.79</b>
1975 dummy	-0.82	-0.21	8.78	1.19	-19.2	<b>-2.58</b>
constant	28.3	<b>20.5</b>	51.8	<b>16.1</b>	30.0	<b>31.1</b>
N obs		21		21		20
adjusted $R^2$		.90		.76		.59
Root MSF		4.97		7.60		17.6
<i>p</i> -value	.10 (u/e+lib*u/e=0)		.45 (u/e+lib*u/e=0)		.01 (u/e+lib*u/e=0)	
	.26 (inf+lib*inf=0)		.47 (inf+lib*inf=0)		.64 (inf+lib*inf=0)	

Kooyong has always been held by the Liberal Party, Melbourne Ports has always been held by the Labor Party, while Latrobe has been held by the government party in every election except 1980, 1990 and 1993.

with using the individual seats which will not affect the Federal vote share results. In particular, the individual seat of Latrobe, however, economic variables do seem to influence voter behaviour. Unemployment

creation of new seats and redrawing of electoral boundaries will affect the characteristics of the population in each seat in an unpredictable manner. Despite these problems, we feel that the seat results are of potential interest, but the results should be treated with caution.

The dependent variable is the voteshare of the candidate in each of the electorates for the party

ment is statistically significant but unlike the aggregate level results, we see evidence in accord with partisan theory. Note that the impact of unemployment on the Labor party vote when Labor is in power is simply the coefficient on unemployment. The impact of unemployment on the Liberal Party vote when the Liberal Party is in power is equal to the sum of the coefficient on

that this is also not a robust result at the seat level. For instance, in a regression with all of the variables in levels real wages are no longer significant.

The honeymoon effect is very strong in all three electorates. The coefficient on the 1975 dummy is also interesting. It is strongly significant in the swinging seat and with a very large coefficient of -19.2. That is, in 1975 the Labor party received 19.2 per cent less of the vote than they would have been expected to in any other year. This differs from the insignificant effect of the 1975 election in Kooyong and Melbourne Ports. It is interesting that the economic variables do not show up as significant in the safe seats. This is consistent with voters in these seats being more concerned with ideology and other factors than with economic performance.

It is interesting to consider these results from the theoretical perspective. Partisan theory suggests that voters are ideological, and will always vote for the party closest to their own preferred position. Punishment models presume that voters punish or reward incumbents according to the performance of the economy during the incumbent's tenure. In a safe seat, voters know that they are unlikely to affect outcomes, and so voters may be more inclined to vote ideologically. In a swinging seat, voters can influence election outcomes, so that perhaps this leads them to vote according to government performance. Another possibility is that voters in safe seats know that they are likely to get their preferred candidate, and so they can safely send their candidate a message by voting against the incumbent if the economy performs poorly. Our empirical evidence seems to support the first argument rather than the second. While these conjectures are speculative, we feel that they would be fruitful areas for further research, both on the theoretical and on the empirical side.<sup>12</sup>

### V Conclusions

In this paper we have examined the influence of a number of macroeconomic variables on incumbent voteshares in Australian Federal elec-

<sup>12</sup> The literature on voting behaviour often considers the problem of whether or not to vote, rather than how to vote when voting is compulsory (see Palfrey and Rosenthal 1983, for example). The issue of how to vote strategically when voting is compulsory is, to our knowledge, a relatively unexplored area of research. We

tions, as well as for a small number of individual seats. Our approach was to examine a wide range of possible specifications of the link between macroeconomic variables and voteshares, and to search for robust results. The results for the Federal elections show that both inflation and unemployment influence the incumbent voteshare. It is the rate of inflation at the time of the election which affects the voteshare whereas incumbents seem not to be naively punished for high unemployment, but rather are penalized if unemployment is high relative to expected unemployment. There does not appear to be any robust relationship between GDP or real wages growth and the incumbent voteshare at the Federal level, nor is it the case that the incumbent's Federal voteshare is differentially affected by inflation or unemployment depending on whether they are Liberal or Labor.

We find slightly different results at the electorate level. In the safe Liberal seat of Kooyong and the safe Labor seat of Melbourne Ports, the voteshare of the party of the Federal incumbent is not affected by economic variables. However, in the swinging seat of Latrobe, unemployment is a significant determinant of voteshares. The results are consistent with the voters having the perception that the Labor party is more committed to lowering unemployment. A Labor government is more likely to be returned to office if unemployment rises relative to trend whereas the Liberal party is penalized for such an outcome.

A more detailed examination of voting at the electorate level is a fruitful area for future research although the continual redrawing of electoral boundaries and creation of new seats makes this a difficult task.

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