

Web Appendix to:

POLITICAL ATTITUDES AND INFLATION
EXPECTATIONS: EVIDENCE AND IMPLICATIONS

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1 Australia: unemployment expectations

Each month, the Melbourne Institute Survey of Consumers asks respondents whether they expect the unemployment rate to increase, decrease or remain unchanged. The data are cross-sectional and for each survey month t we fit the ordered logit

$$u_{i,t}^* = \mathbf{X}_{i,t}\Gamma_t + \beta_t ALP_{i,t} + \gamma_t OTHER_{i,t} + \varepsilon_{i,t}, \quad (1)$$

where $u_{i,t}^*$ is the latent percentage point change in unemployment over the next year expected by individual i , and all other terms are as defined for Equation (5) in the main text. Figure A1 shows the odds-ratio for an ALP voter relative to an otherwise similar Liberal/National voter. The unemployment variable is ordered such that an odds-ratio greater one indicates higher unemployment. Following a change of government, supporters of the winning party expect relatively lower inflation and unemployment, in line with the evidence from the United States (Figure 4 in the main text and Figure A1 in the Web Appendix).

Table A1: Average Inflation Rates by Party of President or Prime Minister

United States				
Full sample: 1949:Q2 to 2017:Q1				
Inflation measure	Democrat	Republican	Difference	<i>p</i> -value
PCE	2.75 (0.81) [0.54]	3.32 (0.51) [0.41]	-0.57 (0.96) [0.65]	0.38
CPI	3.22 (0.94) [0.64]	3.58 (0.57) [0.47]	-0.36 (1.10) [0.76]	0.63
GDP	2.71 (0.74) [0.49]	3.44 (0.49) [0.39]	-0.72 (0.89) [0.59]	0.23
Post-Volcker period: 1980:Q1 to 2017:Q1				
PCE	2.32 (0.69) [0.56]	3.01 (0.44) [0.32]	-0.69 (0.82) [0.58]	0.24
CPI	2.85 (0.80) [0.64]	3.38 (0.44) [0.37]	-0.53 (0.92) [0.66]	0.42
GDP	2.23 (0.62) [0.50]	3.01 (0.40) [0.30]	-0.78 (0.74) [0.50]	0.12
Australia				
Full sample: 1946:Q3 to 2017:Q1				
Inflation measure	ALP	Liberal/National	Difference	<i>p</i> -value
CPI	5.80 (1.27) [0.94]	4.56 (1.04) [0.76]	1.24 (1.65) [1.17]	0.29
GNE	5.28 (1.72) [1.20]	4.23 (1.35) [0.66]	1.04 (2.19) [1.33]	0.43
Inflation targeting period: 1993:Q2 to 2017:Q1				
CPI	2.78 (0.18) [0.32]	2.35 (0.19) [0.38]	0.43 (0.26) [0.49]	0.38
GNE	2.02 (0.22) [0.23]	2.15 (0.18) [0.28]	-0.13 (0.29) [0.33]	0.70

Notes: (United States) PCE is the personal consumption expenditures chain-type price index, CPI is the consumer price index for all urban consumers, GDP is the gross domestic product implicit price deflator. The first quarter in each president's term is assigned to the previous president. (Australia) CPI is the consumer price index and GNE is the gross national expenditure implicit price deflator; the sample period is 1959:Q3 to 2017:Q1 for the GNE deflator. All data are expressed at an annualized rate. Numbers in parentheses are standard errors clustered by president/prime minister and numbers in brackets are Newey-West standard errors computed using six lags; the *p*-value is for a test of no difference between the parties and uses Newey-West standard errors. The top panel extends the analysis of Blinder and Watson (2016).

Table A2: Political Affiliation in First and Second Interviews
Michigan Survey of Consumers

		Second Interview				Total
		Republican	Democrat	Independent	Don't Know	
First Interview	Republican	836 (87.4)	17 (1.8)	98 (10.2)	6 (0.6)	957 (100.0)
	Democrat	26 (2.4)	910 (84.5)	121 (11.2)	20 (1.9)	1077 (100.0)
	Independent	113 (9.9)	119 (10.5)	884 (77.7)	22 (1.9)	1138 (100.0)
	Don't Know	14 (21.5)	16 (24.6)	23 (35.4)	12 (18.5)	65 (100.0)

Notes: Entries show the number of people reporting each type of political affiliation in their first and second interviews. Numbers in parentheses are percentages for each row. For example, 87.4 percent of people identifying as Republican in the first interview also identified as Republican in the second interview. The sample comprises surveys between 2006 and 2017 for which respondents were asked about the political affiliation in both interviews.

Table A3: Political Affiliation and Change in Inflation Expectations:
 2016 and 2008 United States Presidential Elections
 Michigan Survey of Consumers

	(1)	(2)	(3)	(4)
	2016 Election		2008 Election	
	Year-ahead inflation	5-10 year inflation	Year-ahead inflation	5-10 year inflation
Republican	-1.113** (0.436)	-0.087 (0.360)	0.241 (0.945)	-0.749 (0.521)
Democrat	1.182*** (0.433)	0.482 (0.329)	-1.859* (0.946)	-0.834 (0.512)
$H_0: R = D$ (p -value)	0.00	0.08	0.01	0.87
N	415	403	359	366
R^2	0.107	0.095	0.184	0.077
Controls	Yes	Yes	Yes	Yes

Notes: This table reports results analogous to those in Table 1 in the main text except that the sample of respondents is restricted to those reporting the same partisanship (Republican, Democrat or Independent) in their interviews before and after the 2008 and 2016 presidential elections. The sample is smaller than in Table 1 because only some of the post-election surveys asked respondents about their political affiliation. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5 and 10 percent levels, respectively.

Table A4: Heterogeneity in Inflation Expectations by Voting Intention: 2013 Federal Election
Melbourne Institute Survey of Consumers

Dependent variable: Year-ahead inflation expectations							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Support	-0.372***	-0.354***	-0.354***	-0.469***	-0.266***	-0.521***	-0.353***
	(0.071)	(0.056)	(0.067)	(0.100)	(0.081)	(0.174)	(0.073)
Support×Age<45	0.276**						
	(0.137)						
Support×Age>65	-0.053						
	(0.099)						
Support×Female		0.003					
		(0.093)					
Support×College			0.003				
			(0.090)				
Support×Income 30-60k				0.207			
				(0.132)			
Support×Income 60-100k				0.149			
				(0.139)			
Support×Income >100k				0.117			
				(0.128)			
Support×Blue collar					-0.064		
					(0.133)		
Support×Retired					-0.127		
					(0.105)		
Support×Unemployed/home duties					-0.191		
					(0.207)		
Support×Mortgage						0.337*	
						(0.195)	
Support×Outright homeowner						0.124	
						(0.183)	
Support×Metro location							0.001
							(0.093)
N	11,574	11,574	11,574	11,574	11,574	11,574	11,574
R ²	0.040	0.040	0.040	0.040	0.040	0.040	0.040
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample pools people interviewed in a symmetric one-year window around the September 2013 federal election. The dependent variable in each regression is survey respondent's year-ahead inflation expectations. *Support* takes the value one if a survey respondent's voting intention matches the party of government, minus one if a survey respondent's voting intention matches that of the party in opposition and zero for survey respondents reporting an Independent, minor party or unsure voting intention. Main effects are included in each regression but for brevity only interactions with *support* are shown; coefficients are relative to the following base categories: age 45-64, male, income <30k, white collar employment, renter and non-metro location. Each regression includes survey month fixed effects. Robust standard errors are reported in parentheses. ***, **, and * indicate significance at the 1, 5 and 10 percent levels, respectively.

Table A5: Post World War II United States Presidents:
 Presidential Scholars' Rankings and Average Inflation Outcomes

President	Years in office	Rank	Score	Score ex-Econ	PCE	CPI	GDP
Dwight D. Eisenhower	1953-1961	1	744	672	1.7	1.4	2.0
Harry S. Truman	1945-1953	2	737	668	3.0	3.5	3.1
John F. Kennedy	1961-1963	3	722	651	1.2	1.3	1.3
Ronald Reagan	1981-1989	4	691	630	3.8	4.0	3.7
Lyndon Baines Johnson	1963-1969	5	686	622	2.7	3.0	3.0
Barack Obama	2009-2017	6	668	598	1.5	1.7	1.6
Bill Clinton	1993-2001	7	633	554	1.9	2.6	1.9
George H. W. Bush	1989-1993	8	596	543	3.2	4.0	3.0
Jimmy Carter	1977-1981	9	506	464	9.0	10.6	8.4
Gerald R. Ford Jr.	1974-1977	10	509	464	6.1	6.4	6.3
Richard M. Nixon	1969-1973	11	486	433	5.7	6.2	5.9
George W. Bush	2001-2009	12	455	417	2.0	2.4	2.3
Averages by ranking tercile:							
Top			724	655	2.4	2.6	2.5
Middle			646	579	2.3	2.8	2.4
Bottom			489	445	5.7	6.4	5.7

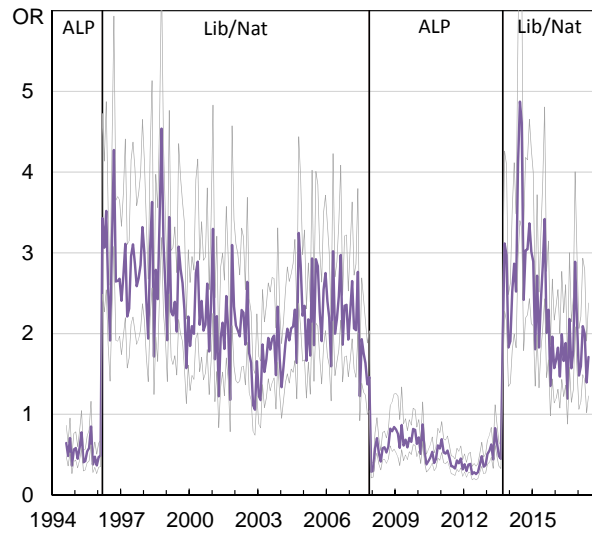
Notes: Rankings are from the 2017 C-SPAN Historians Survey of Presidential Leadership (C-SPAN, 2017). *Score* is based on ten equally weighted categories (e.g. international relations, administrative skills). *Score ex-econ* excludes the economic management category from the overall score; rankings are based on *Score ex-econ*. PCE is the personal consumption expenditures chain-type price index, CPI is the consumer price index for all urban consumers, GDP is the gross domestic product implicit price deflator. The first quarter in each president's term is assigned to the previous president.

Table A6: Inflation and Presidential Quality

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	π_t^{GDP}	π_t^{PCE}	π_t^{CPI}	π_t^{CPI}	π_t^{CPI}	π_t^{CPI}
$PresQual_t$	-0.258** (0.113)	-0.226* (0.116)	-0.323** (0.144)	-0.311** (0.143)	-0.438** (0.187)	-0.710*** (0.204)
π_{t-1}	0.737*** (0.070)	0.748*** (0.055)	0.701*** (0.065)			
$E_t \pi_{t+1}^{MS}$				1.441*** (0.069)		
$E_t \pi_{t+1}^{Naive}$					0.727*** (0.088)	
$E_t \pi_{t+1}^{Greenbook}$						1.020*** (0.098)
$UnemploymentGap_t$				-0.155 (0.105)	-0.197* (0.115)	-0.244 (0.164)
<i>Constant</i>	0.811*** (0.214)	0.770*** (0.151)	1.024*** (0.183)	-2.600*** (0.352)	1.044*** (0.306)	-0.032*** (0.372)
N	279	279	279	147	263	120
R^2	0.605	0.606	0.547	0.699	0.497	0.547

Notes: The dependent variable π_t^{GDP} is gross domestic product implicit price deflator inflation, π_t^{PCE} is personal consumption expenditures chain-type price index inflation, and π_t^{CPI} is consumer price inflation for all urban consumers. All three measures are annualized and at a quarterly frequency. $PresQual_t$ is a measure of presidential quality from the C-SPAN Presidential Historians Survey (2017), rescaled to have mean zero and standard deviation one. An overall score for each president is derived from ten equally weighted categories which judge a president's performance on issues such as international relations and their administrative skills. To guard against reverse causation, we exclude the economic management category from the overall score in our analysis. The last three columns add the measure of presidential quality to the regressions in Coibion, Gorodnichenko and Kamdar (2018). Inflation expectations are taken from the Michigan Survey of Consumers, $E_t \pi_{t+1}^{MS}$, using the method of Atkeson and Ohanian (2001), $E_t \pi_{t+1}^{Naive}$, and from the Greenbook, $E_t \pi_{t+1}^{Greenbook}$. $UnemploymentGap_t$ is the difference between the actual unemployment rate and the CBO's NAIRU. The sample period for column (1)-(3) is 1947:Q2 to 2017Q1, for column (4) the sample period is 1978:Q1 to 2014:Q3, for column (5) the sample period is 1949:Q1 to 2014:Q3 and for column (6) the sample period is 1979:Q4 to 2009Q4. Newey-West robust standard errors (five lags) are in parentheses. ***, **, and * indicate significance at the 1, 5 and 10 percent levels, respectively.

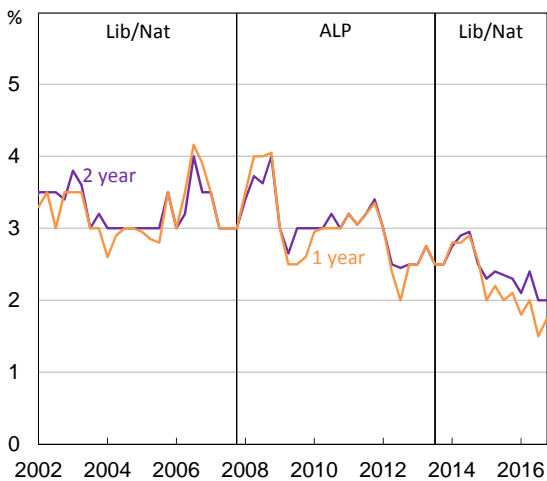
Figure A1: Australia: Unemployment Expectations for ALP Relative to Liberal/National Voters: Odds-ratio
Melbourne Institute Survey of Consumers



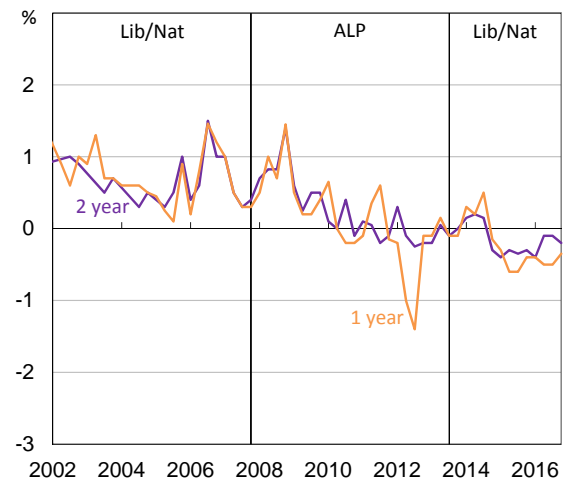
Notes: An odds-ratio greater than one indicates that ALP voters expect higher unemployment over the next year than Liberal/National voters, controlling for observed differences between the two groups of voters; see Equation (A1). Two standard error bands are also shown. Vertical lines indicate federal elections at which there was a change of government.

Figure A2: Australia: Inflation Expectations of Union Officials

(a) Median Union Officials' Inflation Expectations

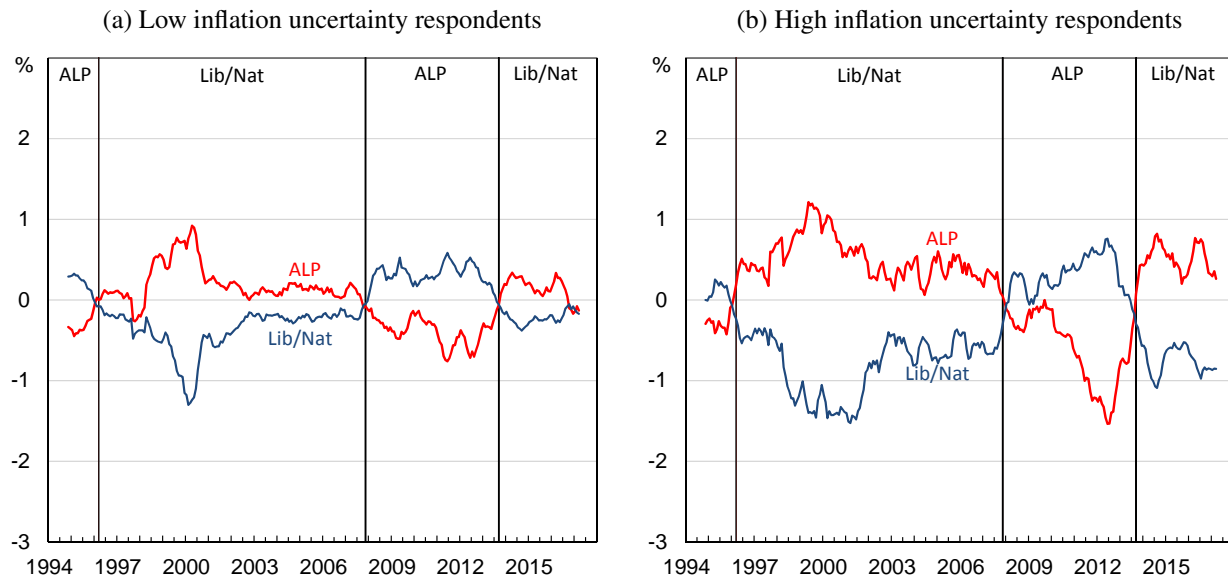


(b) Unions' Less Professional Forecasters' Expectations



Notes: Panel (a) shows the median one and two year ahead forecast for inflation by union officials from the Australian Council of Trade Unions. Panel (b) shows union officials' median inflation forecast less the median inflation forecast from professional forecasters surveyed by Consensus Economics. Vertical lines indicate federal elections at which there was a change of government.

Figure A3: Australia: Inflation Expectations by Voting Intention Relative to Overall Mean
Melbourne Institute Survey of Consumers



Notes: Panel (a) shows mean inflation expectations for ALP and Liberal/National voters relative to the overall mean for respondents identified to have a high level of uncertainty about inflation. Panel (b) does the same for respondents identified to have a low level of uncertainty about inflation. Respondents' level of inflation uncertainty is estimated using the method of Binder (2017). For ease of interpretation data shown are a seven period centered moving average. Vertical lines indicate federal elections at which there was a change of government. Labels at top indicate party of government.

References

- Atkeson, Andrew, and Lee E. Ohanian.** 2001. “Are Phillips Curves Useful for Forecasting Inflation?” *Federal Reserve bank of Minneapolis Quarterly Review*, 25(1): 2–2.
- Binder, Carola C.** 2017. “Measuring Uncertainty Based on Rounding: New Method and Application to Inflation Expectations.” *Journal of Monetary Economics*, 90: 1–12.
- Blinder, Alan S., and Mark W. Watson.** 2016. “Presidents and the US Economy: An Econometric Exploration.” *American Economic Review*, 106(4): 1015–1045.
- Coibion, Olivier, Yuriy Gorodnichenko, and Rupal Kamdar.** 2018. “The Formation of Expectations, Inflation and the Phillips Curve.” *Journal of Economic Literature*, 56(4): 1447–1491.
- C-SPAN.** 2017. “Presidential Historians Survey 2017.” Available at: <https://www.c-span.org/presidentsurvey2017>. Accessed 27 June 2017.