

When do shadow ministers become ‘realities’? Evidence from the UK, 1964–2024

Published in *Government and Opposition*

Nicholas Allen (Royal Holloway, University of London, UK) &

John Bartle (University of Essex, UK)¹

APPENDIX

Contents of Appendix

Table A1: Descriptive statistics for continuous variables by prime minister	2
Table A2: Dummy variables (% = 1, yes) by prime minister	4
Table A3: Full models for Figures 2 and 3 (binomial logistic regression)	5
Table A4: Alternative models for portfolio continuity (binomial logistic regression)	6
Table A5: Alternative models for personal continuity (binomial logistic regression)	7
Table A6: Continuity in all governments (binomial logistic regression)	8
Table A7: VIF statistics for models reported in Figure 2	9

¹ email: nicholas.allen@rhul.ac.uk & jbartl@essex.ac.uk

Table A1: Descriptive statistics for continuous variables by prime minister

Variable	Mean	SD	Min	Max	Median	Skewness	Kurtosis
Total							
Total years in post	2.47	1.61	0.24	13.50	2.45	1.33	4.77
Years in post under leader	2.17	1.21	0.24	4.87	1.90	0.38	-0.92
Years in post as % leaders' tenure	60.59	32.10	6.50	100	59.75	-0.11	-1.44
Years as MP	12.80	6.86	0.75	39.92	10.70	0.95	0.70
Age in years	50.98	7.79	30.67	75.61	50.48	0.46	0.07
Wilson I							
Total years in post	3.46	1.72	1.65	8.67	2.86	0.96	0.75
Years in post under leader	1.67	0.01	1.65	1.67	1.67	-1.07	-0.87
Years in post as % leaders' tenure	99.66	0.58	98.69	100	100	-1.07	-0.87
Years as MP	17.67	4.97	7.39	32.35	18.13	0.86	1.65
Age in years	55.86	7.76	40.52	75.01	55.77	0.40	0.25
Heath							
Total years in post	2.22	1.44	0.64	4.87	2.60	0.37	-1.19
Years in post under leader	2.22	1.44	0.64	4.87	2.60	0.37	-1.19
Years in post as % leaders' tenure	45.26	29.46	12.98	99.55	53.13	0.37	-1.19
Years as MP	13.26	6.70	4.22	33.98	13.59	0.97	1.17
Age in years	47.90	7.19	34.72	67.01	46.54	0.45	-0.26
Wilson II							
Total years in post	2.16	1.22	0.24	3.62	2.22	-0.18	-1.37
Years in post under leader	2.16	1.22	0.24	3.62	2.22	-0.18	-1.37
Years in post as % leaders' tenure	58.30	33.02	6.50	97.49	59.75	-0.18	-1.37
Years as MP	13.16	7.75	3.71	28.68	9.39	0.87	-0.59
Age in years	49.92	8.45	30.67	75.61	49.82	0.48	0.12

Thatcher							
Total years in post	2.80	1.25	0.47	5.15	2.45	-0.18	-0.93
Years in post under leader	2.78	1.21	0.47	4.21	2.45	-0.30	-0.99
Years in post as % leaders' tenure	65.65	28.51	11.02	99.55	58.07	-0.30	-0.99
Years as MP	12.39	5.65	5.18	27.54	10.49	0.78	-0.07
Age in years	49.98	6.65	37.01	66.70	49.86	0.10	-0.25
Blair							
Total years in post	2.46	2.01	0.76	13.50	1.53	2.54	9.60
Years in post under leader	1.86	0.78	0.76	2.78	1.53	-0.11	-1.52
Years in post as % leaders' tenure	66.91	27.94	27.17	100	54.82	-0.11	-1.52
Years as MP	12.00	6.83	2.84	37.59	9.90	1.33	1.61
Age in years	50.22	5.78	37.24	65.53	49.98	0.38	-0.16
Cameron							
Total years in post	3.11	1.51	0.67	7.81	2.86	0.51	0.14
Years in post under leader	2.95	1.23	0.67	4.42	2.86	-0.25	-1.19
Years in post as % leaders' tenure	66.68	27.72	15.21	99.88	64.53	-0.25	-1.19
Years as MP	11.46	7.08	3.87	39.92	8.93	1.41	2.78
Age in years	50.46	6.72	38.61	69.90	49.71	0.41	-0.11
Starmer							
Total years in post	1.66	1.20	0.60	4.25	0.84	0.94	-0.56
Years in post under leader	1.66	1.20	0.60	4.25	0.84	0.94	-0.56
Years in post as % leaders' tenure	38.95	28.27	14.17	99.87	19.64	0.94	-0.56
Years as MP	12.35	6.59	0.75	27.20	9.17	0.75	-0.20
Age in years	52.68	9.38	35.27	73.85	51.99	0.26	-0.85

Table A2: Dummy variables (% = 1, yes) by prime minister

Variable	Overall	Wilson I	Heath	Wilson II	Thatcher	Blair	Cameron	Starmer
Portfolio continuity	49.3%	41.0%	57.1%	55.6%	60.5%	45.1%	41.5%	50.5%
Personal continuity	83.7%	89.7%	88.1%	88.9%	95.3%	86.6%	73.2%	76.9%
Supported leader						79.3%	36.6%	49.5%
Appointed by predecessor	14.0%	74.4%	0%	0%	4.7%	24.4%	13.4%	0.0%
Shadow cabinet member	29.4%	33.3%	31.0%	22.2%	41.9%	23.2%	31.7%	29.7%
Prior government experience	26.9%	38.5%	50.0%	57.1%	46.5%	6.1%	11.0%	14.3%
Retirement age	5.0%	10.3%	2.4%	4.8%	2.3%	1.2%	2.4%	11.0%
Female	18.6%	7.7%	2.4%	6.3%	4.7%	22.0%	11.0%	49.5%
Left the Commons	4.8%	5.1%	0%	11.1%	2.3%	1.2%	1.2%	9.9%
Labour MP	62.2%	100%	0%	100%	0%	100%	0%	100%
High prestige portfolio	19.5%	10.3%	14.3%	15.9%	20.9%	22.0%	13.4%	30.8%
Medium prestige portfolio	55.2%	59.0%	57.1%	58.7%	55.8%	56.1%	59.8%	45.1%
Low prestige portfolio	25.3%	30.8%	28.6%	25.4%	23.3%	22.0%	26.8%	24.2%
Total count (N)	442	39	42	63	43	82	82	91

Table A3: Full models for Figures 2 and 3 (binomial logistic regression)

	Figure 2		Figure 3: shadow cabinet interaction		Figure 3: prior govt experience interaction	
	Portfolio continuity	Personal continuity	Portfolio continuity	Personal continuity	Portfolio continuity	Personal continuity
Supported leader	-0.122 (0.313)	0.062 (0.403)	-0.120 (0.320)	0.070 (0.405)	-0.131 (0.314)	0.065 (0.403)
Years in post under leader	0.535*** (0.159)	-0.073 (0.194)	0.538** (0.183)	-0.064 (0.198)	0.554*** (0.163)	-0.078 (0.196)
Shadow cabinet member	1.123** (0.355)	3.194** (1.042)	1.143 (0.736)	3.663 (2.433)	1.114** (0.356)	3.203** (1.044)
Years-shadow interaction			-0.010 (0.305)	-0.191 (0.853)		
Prior government experience	2.206** (0.848)	1.669 (1.258)	2.206** (0.848)	1.676 (1.254)	2.902+ (1.567)	1.244 (2.552)
Years-prior govt interaction					-0.286 (0.513)	0.146 (0.793)
Appointed by predecessor	-0.195 (0.502)	-0.147 (0.634)	-0.198 (0.511)	-0.160 (0.637)	-0.182 (0.500)	-0.151 (0.635)
Years as MP	-0.034 (0.031)	-0.054 (0.037)	-0.034 (0.031)	-0.055 (0.037)	-0.036 (0.031)	-0.054 (0.037)
Retirement age	-0.984 (0.917)	0.155 (1.174)	-0.987 (0.922)	0.146 (1.175)	-1.107 (0.967)	0.171 (1.175)
Female	0.088 (0.355)	-0.186 (0.468)	0.088 (0.355)	-0.188 (0.468)	0.101 (0.357)	-0.186 (0.467)
Left the Commons	-16.960 (668.321)	-20.582 (1035.566)	-16.959 (667.222)	-20.806 (1025.509)	-18.015 (1090.579)	-20.558 (1031.472)
Low prestige portfolio	0.750* (0.346)	0.708 (0.485)	0.751* (0.347)	0.713 (0.485)	0.745* (0.347)	0.715 (0.486)
Cameron government	-1.067* (0.432)	-1.114* (0.527)	-1.068* (0.436)	-1.120* (0.528)	-1.081* (0.434)	-1.111* (0.527)
Starmer government	0.405 (0.389)	-0.324 (0.532)	0.405 (0.389)	-0.322 (0.533)	0.405 (0.390)	-0.324 (0.533)
Intercept	-1.170* (0.545)	2.217** (0.714)	-1.176* (0.575)	2.199** (0.718)	-1.185* (0.547)	2.221** (0.714)
N	255	255	255	255	255	255
AIC	312.5	215.6	314.5	217.6	314.2	217.6
log-Likelihood	-143.246	-94.820	-143.246	-94.796	-143.094	-94.804
McFadden R ²	0.19	0.28	0.19	0.28	0.19	0.28

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001. Standard errors in parentheses. For portfolio prestige, high or low prestige is the reference category. For governments, the reference category is the Blair government. The model only includes MPs in 1997, 2010 and 2024.

Table A4: Alternative models for portfolio continuity (binomial logistic regression)

	Portfolio: total years in post	Portfolio: years in post as % of leader's tenure	Portfolio: age (years)
Supported leader	-0.189 (0.311)	-0.149 (0.311)	-0.179 (0.316)
Total years in post	0.380*** (0.106)		
Years in post as % leaders' tenure		0.020** (0.006)	
Years in post under leader			0.552*** (0.161)
Shadow cabinet member	1.218*** (0.356)	1.087** (0.353)	1.031** (0.363)
Prior government experience	2.167** (0.821)	2.251** (0.842)	2.370** (0.877)
Appointed by predecessor		-0.256 (0.518)	-0.151 (0.505)
Years as MP	-0.043 (0.031)	-0.036 (0.031)	-0.009 (0.036)
Retirement age	-1.307 (0.974)	-1.029 (0.909)	
Age in years			0.314 (0.253)
Age squared			-0.003 (0.002)
Female	0.136 (0.354)	0.095 (0.355)	0.116 (0.360)
Left the Commons	-17.799 (1091.232)	-16.928 (665.668)	-17.570 (1095.226)
Low prestige portfolio	0.777* (0.347)	0.754* (0.345)	0.706* (0.350)
Cameron government	-0.753+ (0.398)	-0.487 (0.383)	-1.042* (0.434)
Starmer government	0.573 (0.385)	0.811* (0.410)	0.548 (0.403)
Intercept	-1.020+ (0.528)	-1.427* (0.594)	-8.313 (6.454)
N	255	255	255
AIC	308.7	314.2	310.9
log-Likelihood	-142.372	-144.102	-141.463
McFadden R ²	0.19	0.18	0.20

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001. Standard errors in parentheses. For portfolio prestige, high or low prestige is the reference category. For governments, the reference category is the Blair government. The model only includes MPs in 1997, 2010 and 2024.

Table A5: Alternative models for personal continuity (binomial logistic regression)

	Personal: total years in post	Personal: years in post as % of leader's tenure	Personal: age (years)
Supported leader	0.081 (0.395)	0.058 (0.402)	-0.122 (0.417)
Total years in post	-0.010 (0.119)		
Years in post as % leaders' tenure		-0.004 (0.008)	
Years in post under leader			-0.076 (0.199)
Shadow cabinet member	3.220** (1.042)	3.203** (1.042)	3.222** (1.076)
Prior government experience	1.655 (1.259)	1.668 (1.257)	2.092 (1.336)
Appointed by predecessor		-0.093 (0.646)	-0.018 (0.648)
Years as MP	-0.057 (0.037)	-0.054 (0.037)	-0.032 (0.044)
Retirement age	0.166 (1.184)	0.159 (1.174)	
Age in years			0.565+ (0.317)
Age squared			-0.006+ (0.003)
Female	-0.158 (0.467)	-0.192 (0.468)	-0.066 (0.484)
Left the Commons	-20.559 (1041.781)	-20.601 (1033.579)	-20.640 (940.193)
Low prestige portfolio	0.692 (0.484)	0.712 (0.485)	0.716 (0.499)
Cameron government	-1.176* (0.487)	-1.191* (0.484)	-1.185* (0.535)
Starmer government	-0.282 (0.530)	-0.409 (0.559)	-0.104 (0.552)
Intercept	2.087** (0.657)	2.336** (0.797)	-11.334 (8.080)
N	255	255	255
AIC	214.0	215.5	212.4
log-Likelihood	-94.988	-94.762	-92.185
McFadden R ²	0.28	0.28	0.30

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001. Standard errors in parentheses. For portfolio prestige, high or low prestige is the reference category. For governments, the reference category is the Blair government. The model only includes MPs in 1997, 2010 and 2024.

Table A6: Continuity in all governments (binomial logistic regression)

	Portfolio I	Portfolio II	Portfolio III	Personal I	Personal II	Personal III
Years in post under current leader	0.323*** (0.095)			-0.002 (0.143)		
Total years in post		0.192** (0.069)			0.057 (0.098)	
Years in post as % leaders' tenure			0.010** (0.004)			0.003 (0.006)
Shadow cabinet member	0.678** (0.247)	0.713** (0.246)	0.658** (0.245)	2.728*** (0.656)	2.790*** (0.662)	2.737*** (0.657)
Prior government experience	0.300 (0.294)	0.368 (0.290)	0.319 (0.292)	0.512 (0.508)	0.524 (0.499)	0.485 (0.507)
Appointed by predecessor	-0.214 (0.309)		-0.456 (0.343)	-0.069 (0.459)		-0.210 (0.515)
Years as MP	-0.021 (0.020)	-0.027 (0.020)	-0.021 (0.020)	-0.057+ (0.030)	-0.063* (0.029)	-0.058+ (0.030)
Retirement age	-0.573 (0.576)	-0.615 (0.573)	-0.596 (0.574)	-0.409 (0.734)	-0.407 (0.726)	-0.397 (0.731)
Female	0.109 (0.275)	0.165 (0.273)	0.147 (0.275)	-0.479 (0.406)	-0.438 (0.405)	-0.446 (0.410)
Left the Commons	-2.418** (0.773)	-2.289** (0.770)	-2.382** (0.777)	-4.948*** (0.863)	-4.940*** (0.863)	-4.972*** (0.866)
Low prestige portfolio	0.371 (0.236)	0.393+ (0.235)	0.368 (0.235)	0.394 (0.378)	0.400 (0.378)	0.396 (0.378)
Labour government	0.051 (0.289)	-0.141 (0.276)	-0.174 (0.279)	0.099 (0.503)	0.097 (0.484)	0.099 (0.492)
Cameron government	-0.783* (0.346)	-0.748* (0.341)	-0.703* (0.340)	-1.333** (0.517)	-1.388** (0.513)	-1.362** (0.516)
Intercept	-0.598 (0.367)	-0.254 (0.328)	-0.342 (0.347)	2.445*** (0.611)	2.356*** (0.530)	2.285*** (0.578)
N	442	442	442	442	442	442
AIC	588.0	589.8	593.1	312.1	309.8	311.8
log-Likelihood	-282.003	-283.919	-284.545	-144.071	-143.912	-143.915
McFadden R ²	0.08	0.07	0.07	0.27	0.27	0.27

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001. Standard errors in parentheses. For portfolio prestige, high or low prestige is the reference category. The models in this table cover all seven governments. They exclude support for the leader, which is only available for the Blair, Cameron and Starmer governments. They include dummy variables that include dummy variables to account for Labour's stronger norms and rules governing the appointment of shadow ministers in new governments (1 = Labour, 0 otherwise) and for the 2010 Cameron-led coalition government (1 = Cameron government, 0 otherwise).

Table A7: VIF statistics for models reported in Figure 2

	Portfolio continuity model	Personal continuity model
Years in post under leader	1.80	1.88
Supported leader	1.19	1.24
Shadow cabinet member	1.17	1.03
Prior government experience	1.68	1.30
Appointed by predecessor	1.42	1.51
Years as MP	1.86	1.39
Retirement age	1.30	1.09
Female	1.26	1.31
Left the Commons	1.00	1.00
Low prestige portfolio	1.05	1.06
Cameron government	2.01	2.06
Starmer government	1.62	1.84