Asymmetric Evaluations: Government Popularity and Economic Performance in the United Kingdom

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Abstract

Prospect theory suggests that humans react more strongly to losses than to comparable gains, yet empirical studies of aggregate public opinion often fail to take such reference-point dependent behavior into account. If the yardstick people use to e.g. evaluate the performance of the government was known, modeling such behavior would be straightforward. However, people's reference-points are of course unobservable. This paper proposes a method for estimating aggregate reference-points empirically using threshold models. In a second step, these estimated thresholds can then be used to test for the asymmetric (specifically: loss-averse) behavior implied by prospect theory-type utility functions. Reference-point dependent, asymmetric behavior in line with prospect theory can be shown to exist in the relationship between government popularity and macroeconomic conditions in the United Kingdom using time-series data from 1979 to 2011.

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1 Introduction

Not only in the light of the recent financial crisis, the political relevance of the performance of the economy has become visible. Whether a country's economy grows or shrinks, whether people find jobs or get laid off and whether prices for food, gas and housing are stable or sky-rocketing has a direct impact on everyone's life. In a democratic society however, consumers are not only objects of these macro-economic tides.

The elected government sets the long-term rules of the economic game and often also intervenes into markets on a more short-term basis. And the consumers that benefit or are hurt by changes in economic conditions are also voters, the "rational god of vengeance and reward", in V.O. Key's words (1964: 568). Therefore it is not surprising that in politics, one of the most closely followed "economic" indicators is the mood of these "gods"; the public's assessment of the state of the economy or "consumer sentiment". Furthermore "the economy" and the "handling of the economy" by the government regularly score highest on the list of important topics in politics. Whether the "gods" are rational and whether they reward - or only punish - are ongoing debates. Yet the basic idea of retrospective or economic voting has created a number of both theoretical models of this relationship (most prominently: Fiorina 1981) as well as ample empirical evidence for a connection between economic evaluations and vote choice (cf. Lewis-Beck and Paldam 2000, Duch and Stevenson 2008).

At the same time, theoretical and empirical work in psychology and economics established the existence of so called negativity effects. In short, people react more strongly to negative information than to positive information. If the existence of negativity effects can be established in the processing of politically relevant information, this would have important implications for many fields in political science as well as our normative view of democracy.

This paper shows the existence of asymmetric evaluations in the relationship between economic indicators and the popularity of the government. Specifically, the analysis suggests that in the aggregate, bad economic news decrease approval rates more than good news. The problem in this type of analysis lies in finding the reference point that defines whether changes are framed as gains or losses in prospect theory terms.

I propose the following procedure to test for asymmetric effects in the relationship between

economic factors and governmental approval. The theoretical literature stresses the importance of reference points for the evaluation of changes as either 'gains' or 'losses'. This paper suggests a method to estimate aggregate level reference points using threshold models (Hansen 2000). Having located the reference point, we can test whether above- and below-reference point effects are equivalent or whether negative (below reference point) 'news' have stronger effects on the approval rate.

This method is then applied to the relationship between macroeconomic factors and governmental approval in the United Kingdom, using time series data from August 1979 to September 2011. The data show that there is indeed evidence of reference-point dependent asymmetric behavior, notably in the effect of the unemployment rate on governmental approval, corroborating earlier results using data from Germany.

The remainder of the paper is structured as follows: Section 2 outlines the basic theoretical concept of reference point dependent asymmetric evaluations - or negativity effects - drawing on a large literature within psychology and related work in economics and political science. The third section describes the proposed procedure for estimating reference points and testing for asymmetric effects. The fourth section applies this procedure using time series data on governmental approval in the United Kingdom and the last section concludes.

2 Prospect Theory, Negativity Bias and Retrospective Voting

Prospect theory, originally formulated by Kahneman and Tversky (1979), has dramatically changed our understanding of human decision-making. One of the basic tenets of this behavioral model of decision-making under risk is that people systematically differ in their behavior, depending on whether they perceive their choices to be in the domain of gains or in the domain of losses. In short, depending on the location of their reference point, people are more risk-averse (with respect to gains) or more risk-taking (with respect to losses). Furthermore their hypothesized value function is steeper in the domain of losses: In contrast to what expected utility theory would predict, when evaluating choices, we tend to weigh losses heavier than gains of equal size. In other words, "losses loom larger than gains".

This *loss aversion* resonates with a larger research program in social psychology on what is

sometimes called "negativity bias", "grievance- or valence asymmetry" or the "preferential detection of negative stimuli", and comprises a body of theoretical claims and compelling evidence for humans' notoriously lopsided processing of information: We all detect negative stimuli faster, pay more attention to negative information and weigh losses more than gains of equal size. In short: "bad is stronger than good" (Baumeister et al. 2001). The basic effect is easy to understand and presumably deeply rooted in our evolutionary adaptation to an environment in which avoiding a potential threat was more important than a foregone opportunity. When presented with a stimulus of some sort, a sound, a picture, a word, another person, we automatically evaluate whether the stimulus is positive or negative (Bargh et al 1992). Negative stimuli are "stronger" in many respects (Baumeister et al 2001). We tend to detect negative stimuli better than positive stimuli, we devote more attention to negative information and we are persuaded more easily by bad news than good news (Dijksterhuis and Aarts 2003, Wentura et al. 2000). The empirical support for a broad class of negativity effects is well established, encompassing a range of methods, such as direct behavioral studies, subliminal priming and neurological evidence.

The basic theoretical background can be found in evolutionary psychology. When presented with a stimulus, for example a noise, it can be advantageous to quickly classify the noise into a simple threat/no-threat scheme, which helps avoiding ending up as the main course on a predator's dinner table or losing a pecking order fight to the moment of surprise. As Dijksterhuis and Aarts (2003) put it: "A quick categorization of stimuli allows for the rapid onset of appropriate behavior (i.e., approach or avoidance)."

In sum, the literature in psychology supports the idea that prospect theory type behavior, specifically the observation that "losses loom larger than gains", is indeed a universal feature of human decision-making, grounded in our evolutionary history. Digging even deeper towards the roots of human behavior, McDermott, Fowler and Smirnov (2008) present a model of behavior consistent with what evolutionary biologists call optimal foraging theory and are able to show how prospect theory preferences may be advantageous from an evolutionary perspective.

Studies showing negativity effects in political science are relatively sparse, although the idea itself has some tradition with respect to how voters reward or punish governments. Before V.O. Key (1964) characterized voters as "gods of vengeance and reward", the authors of The American Voter already observed that "a party already in power is rewarded much less for good times than

it is punished for bad times" (Campbell et al 1960: 555).

The earliest, implicit, more empirically-guided models of economic voting suggested the possibility of different effects for positive and negative changes: Mueller (1970) proposed one of the earliest 'popularity functions' and hypothesized an asymmetric effect of the unemployment rate on presidential approval by specifying a threshold model with respect to the unemployment rate at the time of inauguration. He finds that only worsening conditions affect presidential popularity. Bloom and Price (1975) should be credited with basically laying out the idea of differential effects due to valence asymmetry and even referencing some early evidence from psychology. They show that the effect of changes in income on vote choice is contingent on whether the election takes place in times of rising or falling incomes.

Following the Bloom and Price model, Claggett (1986) finds asymmetric effects of economic conditions on aggregate vote shares in congressional elections going back to 1886. Lau (1982) finds negativity effects in job approval and voting behavior and rules out post hoc rationalization and more importantly, the nonequivalence of the positive and negative information as potential rival explanations. Lau (1985) extends these findings using NES data from 1968 to 1980 and finds some evidence for a negativity bias in evaluations of presidential candidates. In a similar vein, Goren (2002) - using NES data from 1984-1996 - shows that in line with theories about negativity effects in impression formation, partisan bias (i.e. positive or negative attitudes towards the other party) moderates relationship between character weakness and evaluations of presidential candidates. The partisan opponents "look for" signs of character weakness. By contrast, Kiewiet (1983) and Lewis-Beck (1988) using individual level data find no asymmetric effects in the economic voting context. This however lead to a critique by Nannestad and Paldam (1997) who point out that whether voters react more strongly to bad than to good times is essentially a time-series question that is difficult to answer using cross-sectional data. They use rolling cross sections showing a grievance asymmetry in economic voting in Denmark using quarterly individual level data from 1985 through 1992.

Turning away from the United States, Headrick and Lanoue (1991) test for and reject the existence of asymmetric effects of unemployment and inflation on government popularity in the United Kingdom between 1953-1987. More recently however, Soroka (2006) finds strong evidence of negativity effects for the relationships between (i) economic factors, (ii) media coverage and (iii)

public opinion in the United Kingdom, using polls and content analysis of media tone for The Times regarding unemployment and inflation. On the other hand, Duch and Stevenson (2008), using individual level data from a variety of countries, find no evidence of asymmetric effects of people's economic evaluations on vote choice.

This study proposes a procedure to test for asymmetric effects in the relationship between economic factors and governmental approval in a more rigorous fashion. The theoretical literature stresses the importance of reference points for the evaluation of changes as either 'gains' or 'losses'. This paper suggests a method to estimate (aggregate) reference points using threshold models (Hansen 2000). Having located the reference point, one can test whether above- and below-reference point effects are equivalent or whether negative (below reference point) 'news' have stronger effects on the approval rate. Let's call this theoretical expectation based on work in psychology the

Asymmetry Hypothesis: *Negative (below reference point) changes in economic indicators have a stronger effect on approval of the government than positive (above reference point) changes.*

This hypothesis is tested using the relationship between macroeconomic factors and governmental approval in the United Kingdom, using time series data from August 1979 to September 2011.

3 Testing Asymmetric Effects using Threshold Models

The goal of this paper is to test for asymmetric effects depending on a reference point when the reference point is unknown. The first part is straightforward. Let's assume the effect of an independent variable x on some dependent variable y depends on the value of x such that the effect of x, i.e. the slope of the regression coefficient is different for values of x above and below some threshold level τ. We can model this nonlinear relationship by allowing $x \geq \tau$ and $x < \tau$ to have different slopes. Practically, we estimate

$$y = \beta_0 + \beta_1 x + \alpha_1 I x + \epsilon \tag{1}$$

where β_0, β_1 and α_1 are parameters to be estimated, ϵ is an error term and I is an indicator

function with

$$I = \begin{cases} 0 & \text{if } x \geq \tau \\ 1 & \text{if } x < \tau \end{cases} \tag{2}$$

The effect of x on y if $x \geq \tau$, is β_1 and the effect of x on y if $x < \tau$, is given by $\beta_1 + \alpha_1$. In order to detect whether there exists an asymmetric effect of x, we only need to compare the slopes above and below the reference point, i.e. assuming stronger negative effects, test whether $\alpha_1 > 0$.

In terms of the theoretical idea at hand, if we think about the relationship between the approval rate and economic performance, we would assume approval to be higher if performance is better. However, in line with prospect theory, the strength of the effect should depend on whether economic performance falls into the domain of gains or the domain of losses, in other words whether the value is above or below a reference point. If performance is below the reference point (domain of losses), the effect on approval should be stronger than if it is above the reference point (domain of gains).

The problem of course is that we don't know the reference point! [1]

A solution for this problem has been proposed in the econometrics literature originally starting with Tong and Lim (1980) and Hansen (1996). Since the reference point τ is unknown, it should be estimated along with the other parameters of the model. Due to the nonlinearity however, τ cannot be estimated via ordinary least squares. Hansen (1996, 2000) suggests estimation via conditional least squares using the following concentration procedure: first the model is estimated separately for all possible values of τ, which yields the sum of squared errors for each model, as a function of τ. Then, by searching over all values of τ, we find the model with parameter $\hat{\tau}$ that minimizes the sum of squared errors. The OLS estimates of this model with threshold parameter $\hat{\tau}$ are consistent estimates of our parameters of interest. The problem with this however is to know whether a reference-point (or threshold) model is appropriate in the first place, since under the null hypothesis of no threshold effect, the parameter $\hat{\tau}$ is not identified. The solution for this is a likelihood ratio test using p-values based on a bootstrap to simulate the asymptotic sampling

[1] An ad-hoc solution would be to simply assume a reference point based on theoretical considerations, and fit a model with e.g. $\tau = 0$. This comes with strong assumptions however. Consider evaluations of the economy and growth as an example. Fixing τ at 0 means economic growth - no matter how meager - is seen as in the domain of gains while only actual recessions are perceived as in the domain of losses. In reality however slow growth rates tend to be evaluated as a decidedly "bad" thing.

distribution of the test statistic (cf. Hansen 1996, 2000). This paper follows Hansen's approach:

Proposed procedure for testing the Asymmetry Hypothesis:

1. *Test for presence of reference point using Hansen's threshold models.*
2. *Estimate reference point and different slopes for values above and below the reference point.*
3. *Test whether slopes are different above and below the reference point*

This testing procedure will be applied to the relationship between macroeconomic factors and governmental approval using time series data from the United Kingdom.

4 Analysis

4.1 Data and Operationalization

The dependent variable of interest, Governmental Approval, stems from Ipsos-MORI's monthly 'Political Monitor' and is defined as the percentage of survey respondents answering "satisfied" when asked *"Are you satisfied or dissatisfied with the way the Government is running the country?"*. The survey has been conducted in this form from August 1979 through September 2011. The data were downloaded from the polling firm's website [2].

While the focus is on objective economic factors and subjective evaluations of the economy, the popularity of the Prime Minister has been found to be tightly correlated with government satisfaction, and cannot be ignored in specifying a model of the public's evaluations of the government (cf. Clarke and Stewart 1995). Prime Ministerial approval data stem from the same source as the Governmental approval data: Ipsos-MORI's monthly 'Political Monitor', and is defined as the percentage of survey respondents answering "satisfied" when asked *" Are you satisfied or dissatisfied with the way [Prime Minister's Name] is doing his job as Prime Minister?"*.

Monthly macroeconomic data and consumer confidence measures were obtained from the OECD's database of monthly economic indicators [3]. Consumer Confidence is the monthly, OECD-wide standardized consumer confidence indicator, and identical to Eurostat's harmonized consumer con-

[2] www.ipsos-mori.com
[3] stats.oecd.org

Table 1: Tests for Order of Fractional Integration

Variable	$\hat{d}$	SE_d	t(d=0)	t(d=1)	Decision
Government Approval	0.88	(0.046)	19.037***	-2.596***	$\hat{d}$
PM Approval	0.85	(0.046)	18.388***	-3.245***	$\hat{d}$
Consumer Confidence	0.95	(0.046)	19.470***	-1.082	$\hat{d}$, 1
Unemployment	1.43	(0.046)	21.325***	9.262***	$\hat{d}$, 1
Inflation	1.18	(0.046)	21.325***	3.877***	$\hat{d}$, 1
Long Term Interest Rate	1.04	(0.046)	21.416***	0.865	$\hat{d}$, 1
Stock Market	-0.05	(0.047)	-1.07	20.375***	0

fidence indicator, which, for the United Kingdom, is based on a nationally representative telephone survey conducted by GfK. [4].

The independent variables of interest are macroeconomic fundamentals: the standardized unemployment rate, inflation and the long-term interest-rate, as well as the monthly performance of the stock market.

4.2 Dynamic Considerations

Several recent studies suggest that approval rates and other factors of interest are neither stationary $I(0)$ nor integrated of order $I(1)$, but rather fractionally integrated of order $I(d)$ (Box-Steffensmeier and Smith 1996, Lebo and Clarke 2000, Lebo, Walker and Clarke 2000, Clarke et al. 2004). This makes intuitive sense since fractionally integrated series can arise from aggregating series with different memory processes, and stationarity tests indeed suggest that the series at hand are fractionally integrated. We use Robinson's (1995) semi-parametric method to estimate the fractional differencing parameter $\hat{d}$ for each series and difference the series accordingly using ARFIMA models in order to remove autocorrelation.[5] The estimates of the order of integration for each series can be found in Table 1.

Previous research suggests a tight relationship between the public's evaluations of the government as a whole and the Prime Minister specifically. Figure 1 shows the evolution of governmental and prime ministerial approval over the investigation period.

[4] stats.oecd.org

[5] While accounting for the fractionally integrated nature of the series using ARFIMA models is the preferred method, ignoring these dynamics and estimating the models simply using differenced (d=1)data yields very similar results and leaves the conclusions in terms of reference point dependent asymmetry tests unchanged.

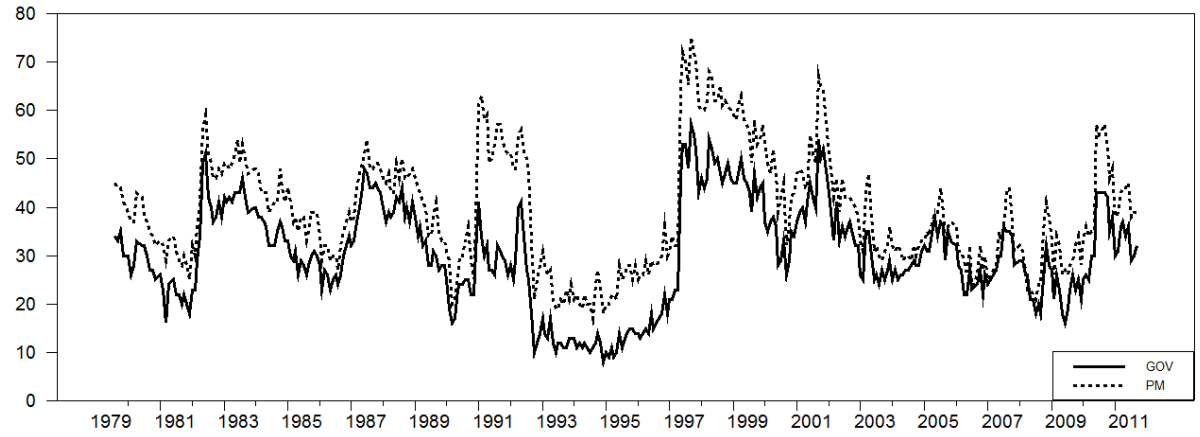

Figure 1: Government and PM Approval 1979-2011

The close correlation between the two approval series (and the consumer confidence indicator) suggests that these variables could be co-integrated. While the focus of this paper is on the determinants of governmental approval, it is important to model the dynamic relationship between the variables correctly. To this end, we test for a (fractional) cointegrating relationship between governmental approval, PM approval and consumer confidence, estimating the following co-integrating relationship (coefficients, standard errors in parentheses):

$$\begin{array}{lccccc} \text{Gov't Approval}_t = & \beta_0 & + \beta_1 \text{PM Approval}_t & + \beta_2 \text{Cons.Confid.}_t & + \epsilon_t & \\ & 3.646 & 0.732 & 0.216 & & \\ & (0.895) & (0.019) & (0.027) & & R^2 = 0.85 \end{array}$$

We find that the order of integration of the residuals is lower than for the original series ($\hat{d}_{residuals} = .0087$). Governmental approval, PM approval and consumer confidence are co-integrated. In order to take this dynamic relationship into account, we add the lagged residuals as the appropriate (fractional) error correction mechanism (ECM) into the models of government approval below.[6]

4.3 Threshold Models

Having taken into account the dynamic properties of the series of interest in terms of order of integration, and after modeling the cointegrating relationship between governmental and prime

[6]While modeling the cointegrating relationship of these series by including an error correction mechanism in the models below is the preferred method, ignoring this relationship and estimating the models without an ECM yields very similar results and leaves the conclusions in terms of reference point dependent asymmetry tests unchanged.

ministerial approval and consumer confidence, we estimate the baseline model of government approval as a function of prime ministerial approval, consumer confidence, unemployment, inflation, the long-term interest rate and stock market performance. Optimal lag length for the explanatory variables was chosen using the AIC and inspection of the the cross-correlation functions. The Durbin-Watson statistic and visual inspection of the residuals show that there is no residual autocorrelation. Estimation results are presented in Table 3, column 1. The results show the expected short term effects of prime ministerial approval and consumer confidence, with a reasonably strong error correction mechanism. The only objective economic variable that appears to have a strong and significant effect on government approval, is the unemployment rate. Increases in unemployment significantly decrease government approval. Finally, it should be noted that this model - based mostly on PM approval, consumer confidence and unemployment - explains a large share of the variance in the approval rate for the United Kingdom.

Having established a (symmetric) baseline model, we can now test for asymmetric effects using threshold models as described above.

What results should we expect? If respondents exhibit reference-point dependent asymmetric behavior in line with prospect theory and our Asymmetry Hypothesis, we would expect to see threshold effects in the evaluation of economic indicators. Since the only important objective factor in explaining popularity seems to be the unemployment rate, we expect asymmetric behavior to be most visible in the effect of unemployment on approval. Both Prime Ministerial approval and Consumer Confidence are evaluations itself. If the behavior hypothesized above operates on the level of perception or evaluation of reality, we would actually not expect any 'additional' asymmetries in the relationship between these different evaluations. In other words, the bias is already priced in. Finally, since the models are estimated in (fractional) differences, i.e. are statements about the effect of changes, an estimated reference point close to zero would make sense conceptually. While in other models any deviation from some optimal level (e.g. inflation target and growth) would be a good guess for the reference point, here the framing of e.g. increases in unemployment as a loss and decreases as a gain would seem natural. Table 2 provides estimates of the threshold parameter $\hat{\tau}$, as well as the results of likelihood ratio tests for each explanatory variable.

There is strong evidence for threshold effects, i.e. reference-point dependent evaluations for both the unemployment rate and consumer confidence. The reference-point for the unemployment rate

Table 2: Threshold Tests

Variable	Threshold	$\hat{\tau}$	F-Test$_{max}$	Bootstrap p-value
PM Approval	No	3.1897	2.329	0.199
Consumer Confidence	Yes	0.1611***	3.647	0.003
Unemployment	Yes	-0.0043**	3.064	0.029
Inflation	No	-0.2968	2.141	0.295
Long Term Interest	No	-0.0367*	2.691	0.085
Stock Market	No	1.1946	2.046	0.326

* $p < 0.1$ * $p < 0.05$ *** $p < 0.01$

is - as expected - virtually equal to zero, and the potential reference point for consumer confidence is relatively close to zero as well. In order to test the Asymmetry Hypothesis, we however have to also look at the difference in the slopes for values above and below the reference point. Since the results for the long-term interest rate are somewhat ambiguous, we will investigate potential asymmetric effects for this series as well.

To summarize, while these results tell us that there is evidence of a break, i.e. potentially reference point dependent behavior in the unemployment and consumer confidence series, we now have to test whether the different effects above and below the reference point are consistent with the asymmetry hypothesis or not.

To this end, Table 3 presents the results of the estimated threshold models for unemployment, consumer confidence and the interest rate each separately as well as combined in one model. For clarity of presentation, the coefficients and standard errors for values above and below the reference point are displayed.

The main results are the asymmetric evaluations in the relationship between unemployment and approval. The threshold tests indicated a reference-point near zero. The estimation results show that the slope coefficients are consistent with the Asymmetry Hypothesis. In the symmetric model, the parameter estimate for an average effect of all values of unemployment is 3.843. When the coefficient is allowed to vary above and below the estimated threshold, a different picture emerges. Increases in unemployment (losses) show a much larger effect than reductions in unemployment (gains). The coefficient (6.415) for increases above the reference point is almost twice the size of the coefficient in the symmetric baseline model, while the effect of reductions in unemployment on approval is small and not statistically significant. If bad news of rising unemployment break, gov-

Table 3: Estimation Results: Baseline and Threshold Models

	Symmetric	Unemp	CC	LTI	U, CC, LTI
Δ^d PM Approval$_t$	0.675***	0.673***	0.675***	0.674***	0.672***
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Δ^d Cons. Conf.$_t$	0.100***	0.096***		0.099***	
	(0.035)	(0.035)		(0.035)	
Δ^d CCI$_t \leq \hat{\tau}$			0.105*		0.083
			(0.060)		(0.061)
Δ^d CCI$_t > \hat{\tau}$			0.094		0.107
			(0.065)		(0.065)
Δ^d Unemployment$_{t-2}$	-3.843***		-3.843***	-3.828***	
	(1.000)		(1.001)	(1.000)	
Δ^d U$_{t-2} > \hat{\tau}$		-6.415***			-6.387***
		(1.745)			(1.752)
Δ^d U$_{t-2} \leq \hat{\tau}$		-0.937			-0.940
		(1.896)			(1.904)
Δ^d Inflation$_t$	-0.356	-0.314	-0.358	-0.387*	-0.337
	(0.228)	(0.228)	(0.229)	(0.230)	(0.231)
Δ^d Interest Rate$_t$	-0.102	-0.098	-0.099		
	(0.329)	(0.328)	(0.331)		
Δ^d LTI$_t \leq \hat{\tau}$				0.397	0.329
				(0.563)	(0.565)
Δ^d LTI$_t > \hat{\tau}$				-0.639	-0.568
				(0.592)	(0.596)
Stock Market$_t$	0.014	0.015	0.014	0.012	0.013
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
$\Delta^d ECM_{t-1}$	-0.203***	-0.203***	-0.203***	-0.200***	-0.200***
	(0.051)	(0.051)	(0.051)	(0.051)	(0.051)
Constant	0.011	0.220	0.023	0.129	0.295
	(0.100)	(0.150)	(0.154)	(0.147)	(0.207)
R^2	0.74	0.74	0.74	0.74	0.74
Durbin-Watson	2.01	2.03	2.02	2.02	2.03
N	376	377	376	376	377

Notes: Dependent Variable:Δ^d Government Satisfaction, monthly from 1979:11 to 2011:02.
Standard Errors in Parentheses, Significance Levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

ernmental approval goes down significantly. The government is being held responsible for negative changes. Positive changes on the other hand do not lead to a comparably large (or any) increase in approval. The government can expect to be punished for bad economic outcomes without being rewarded even-handedly for good times.

The results for consumer confidence are less interesting. While Hansen's threshold estimator indicates the presence of a break in the effect of consumer confidence on approval, inspecting the coefficients above and below the threshold, shows that the difference, while in line with the Asymmetry Hypothesis, is only small and not statistically significant. The effect of consumer sentiment is only slightly stronger for negative changes than for positive changes.

Finally, the signs of the differential effects of the Long Term Interest Rate are in line with expectations, but do not reach statistical significance.

We can conclude that - at least for the direct effect of unemployment on approval in the aggregate - the effect of changes depends on whether they are above or below a reference point. Furthermore, in line with our theoretical expectations, "bad news" affect the approval rate significantly more strongly than "good news".

5 Conclusion

Prospect theory suggests that people evaluate changes in an asymmetric fashion. Depending on a reference point, the value of positive changes (gains) and negative changes (losses) differs, with negative changes affecting evaluations and decision-making more strongly. This idea is supported by a large amount of evidence from psychology. The goal of this paper was to test for the existence of asymmetric evaluations in the relationship between economic factors and governmental approval. The problem with detecting these asymmetric effects however is that the reference point used to evaluate things as "positive" or "negative" is generally unknown. This paper proposes a procedure to estimate aggregate reference points using threshold models (Hansen 1996). Having located the reference point, we can test whether above- and below-reference point effects are indeed different and whether negative (below reference point) 'news' have stronger effects.

This study has successfully applied this procedure to the relationship between economic reality and governmental approval in the United Kingdom. The analysis provides evidence for asymmetric

effects with respect to the effect of changes in unemployment on the approval rate. If unemployment rises, the government will be held accountable in the sense of a decrease in public support. If things turn to the better however, public support will not recover equally. In the long run, this asymmetry in public evaluations leads to an erosion of support for incumbent governments.

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