Information and Heterogeneity in Issue Voting: Evidence from the 2008 Presidential Election in Taiwan

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A voter's capacity to acquire and retain information moderates the relationship between issues and the vote. Issues differ in their distance from the voter's personal experience. Proximate issues, such as personal economic conditions, affect the vote decisions of highly informed and less informed voters equally. Distant issues, such as national economic conditions and foreign affairs, affect the vote of highly informed voters but not less informed voters. The 2008 presidential election on Taiwan provides a critical test of the effect of information on issue voting. Unification with mainland China versus Taiwan independence is the most important issue in the 2008 election, and voters with higher levels of political information show a larger effect of the issue on their vote. The national economy is also a significant predictor of vote choice, but only for highly informed voters. Personal economic conditions and other proximate issues are not significant predictors of the vote at any information level. KEYWORDS: voting, information, economic voting, foreign affairs, Taiwan, presidential election

DO ISSUES AFFECT ALL VOTERS EQUALLY IN THE VOTING BOOTH? THE ACA-
demic literature is scattered on which issues have a greater effect on
which voters. Several studies show that the effect of an issue on a voter's
choice of candidates depends on the salience, or importance, of that issue
to the voter (RePass 1971; Rivers 1988; Lavine, Borgida, Sullivan, and
Thomsen 1996). Other studies show that voters' uncertainty about their
own opinions or about the candidates' positions affects vote choice (Al-
varez 1997). A voter's level of information or education may affect the
impact of economic conditions on vote choice (Sniderman, Glaser, and
Griffin 1990; Gomez and Wilson 2001, 2006). A separate body of work
examines whether foreign affairs issues matter at all in the voting booth
(Almond 1950; Aldrich, Sullivan, and Borgida 1989). The more general

question across these disparate bodies of literature is: Do some issues weigh more heavily in the decisions of some voters than others?

We offer a theory of heterogeneity in the effects of issues across voters based on a voter's capacity to acquire and retain information. The theory encompasses debates about the effect on vote choice of foreign affairs and the economy. The theory is based on the distance between an issue and a voter's daily life. We posit that issues that are close to a voter's personal experience do not vary in their effect on vote choice according to a voter's level of information. Voters of all information levels can use these *proximate* issues in their voting decisions. Issues that are more *distant* from a voter's daily life and on which a voter cannot rely on personal experience but must gather additional information have an increasing effect on the vote as a voter's ability to acquire and retain information increases.

To test this theory, we turn to a critical electoral context in which both national economic conditions and foreign affairs issues likely matter to voters and candidates: the 2008 presidential election in Taiwan. The 2008 Taiwan Election and Democratization Study (TEDS) provides data on the presidential vote, evaluation of the national economy, and opinions on several issues for a sample of Taiwanese voters. We examine whether the information level of voters *moderates*[1] the relationship between voters' choices of candidates and their opinions on the economy, on Taiwan's relationship with mainland China, and on social welfare programs. Controlling for a voter's party identification and ethnicity, we find that the impact on vote choice of national economic conditions and opinions on cross-strait relations increases with a voter's information level. Personal economic experience and opinions on social welfare programs do not affect vote choice, regardless of a voter's information level.

We begin by summarizing the literature on information and heterogeneity in economic and issue voting. We then discuss the 2008 presidential election in Taiwan and why it represents a critical test case of whether foreign affairs voting and economic voting vary by a voter's information level. Next we describe our data, lay out our hypotheses, and present results from a vote choice model. In the final section, we offer conclusions and further implications.

Information, the Economy, and Issues

Early studies of public opinion and elections demonstrated that people vary in their political sophistication. For example, the classic study by Philip Converse (1964) focused on political sophistication broadly, implying not

only a person's knowledge about politics but also whether that individual holds consistent policy opinions and a well-integrated ideology (see also Luskin 1987). Since only a small portion of voters exhibit what most authors describe as political sophistication, more recent research focuses less on political sophistication and more on political information.[2] A large body of research describes how much people know about politics, finding significant variation across people in their knowledge of political figures, institutions, and policies (e.g., Delli Carpini and Keeter 1996).

Differences in political information across voters explain some differences in political opinions and behavior. John Zaller (1992) shows that stability in political opinions varies with a person's level of information. Michael Alvarez (1997) examines the effects of voters' uncertainty about their own issue opinions and the positions of political candidates. Larry Bartels (1996) and Richard Lau and David Redlawsk (2006) examine how differences in voter information affect a voter's probability of choosing the correct candidate in an election. Scott Althaus (1998, 2003) demonstrates that differences in information across the public affect aggregate opinions on a range of policy issues, while Benjamin Page and Jason Barabas (2000) document differences in opinions on foreign policy between well-informed and less informed citizens.

A narrower range of studies posit that variation in information or education levels across voters leads to differences in the effect of issues or evaluations of the economy on vote choice. Most of this research focuses on variation in economic voting attributable to information.

Studies of economic voting distinguish between sociotropic and egocentric concerns. While early studies of economic voting and most contemporary pundits claim that voters are egocentric—they vote their pocketbooks, or focus on their own financial well-being—most studies find that voters are sociotropic, or care more about national economic conditions (Kinder and Kiewiet 1981; Lewis-Beck 1988). Donald Kinder and Roderick Kiewiet (1981, 132), who defined sociotropic voting, conclude that "differences between the pocketbook and sociotropic characterizations of citizen politics should be regarded not as one of *motivation*, but as one of *information*."

Recent studies unpack the role of information in moderating the effects of the economy on vote choice (Gomez and Wilson 2001, 2006; Godbout and Bélanger 2007; Lacy and Christenson 2007) or presidential approval (Mondak, Mutz, and Huckfeldt 1996), but without generating a consensus.

Brad Gomez and Matthew Wilson (2001, 2006) theorize that heterogeneity in the information levels of voters leads to different political at-

tributions for economic outcomes. The ability to associate blame with the person responsible for a given issue depends on the amount of knowledge voters have about it. Gomez and Wilson (2001, 901) hypothesize that it is cognitively easier to blame the national executive for problems of the nation than for problems in one's personal finances. Voters with little political information should not be able to make the connection between the government and their pocketbooks. Therefore, we should expect pocketbook voting only among well-informed voters. Gomez and Wilson (2001) find support for their theory in US presidential elections. Gomez and Wilson (2006) extend the study to four countries, including Taiwan's 2001 Legislative Yuan elections, finding that less informed voters cast their votes on national economic conditions, while more informed voters cast their votes based on personal economic conditions.

Jean-François Godbout and Éric Bélanger (2007) replicate Gomez and Wilson's study of the 1992 and 1996 US presidential elections using survey respondents' postelection vote choice rather than preelection vote intention. They do not find evidence to support Gomez and Wilson's theory.[3] Dean Lacy and Dino Christenson (2007) use pooled data from the 1980–2004 US presidential elections to show that voter information moderates the relationship between vote choice and prospective evaluations of the economy. Retrospective evaluations of the national economy are statistically significant for the most informed voters but not the least informed. Retrospective evaluations of personal economic conditions have no effect on vote choice at any information level, consistent with Godbout and Bélanger (2007) but contrary to Gomez and Wilson (2001).

Jeffrey Mondak, Diana Mutz, and Robert Huckfeldt (1996) find that a person's own financial situation has a greater effect on presidential approval for less informed people than for the highly informed. Sociotropic evaluations, they find, have a greater effect on presidential approval for highly informed people than for the less informed. People who do not have much information about national politics rely on their personal financial status when evaluating the president; people with more information are more sociotropic.

The effect of the economy on vote choice also varies across countries. Raymond Duch and Randy Stevenson (2006) show that the economy varies in its effect on elections in nineteen Western nations, though on average the economy certainly has an effect on elections. Duch (2001, 895) theorizes that economic voting increases in new democracies as "ambiguity regarding the link between government policy and economic outcomes declines." Citizens also become more informed about democratic institutions, allowing them to link changes in government to

changes in economic conditions. For this reason, economic voting may play a larger role in Taiwanese elections now than in elections before 2000, which generated party turnover in government.

Prior studies have found little if any effect of retrospective evaluations of the economy on Taiwanese presidential elections (Hsieh, Lacy, and Niou 1998) or legislative elections (Hsieh, Lacy, and Niou 2003), consistent with Duch's (2001) finding that voters in newly democratizing countries do not yet see a link between elections and the economy.[4] To carry Duch's argument one step further, economic voting is likely to appear in new democracies first among the most informed voters, who are better able to make the link between elections and the economy.

Heterogeneity in the electoral effects of foreign affairs and other political issues receives far less attention than the economy. Althaus (1998) and Page and Barabas (2000) examine the effect of variation in information on the aggregate distribution of opinions on foreign policy issues in the United States. Paul Sniderman, James Glaser, and Robert Griffin (1990) study the role of a voter's education on the link between policy issues and vote choice. Focusing on US elections in 1980, they find that policy issues taken as a whole, without distinctions between domestic and foreign policy, influence the vote of the most educated voters. Retrospective evaluations of the national economy influence the vote of the least educated voters. Paul Goren (1997) separates economic evaluations, domestic issues, and foreign affairs issues in the 1984 and 1988 US presidential elections to assess the moderating effect of voter "expertise." Goren measures expertise as a combined scale of interviewer ratings of respondents and respondents' answers to a battery of knowledge questions. Voters who score higher on expertise show a greater effect on vote choice of all issues, with the exception of relations with the Soviet Union. Opinions on Soviet relations show a greater effect on voters with high political expertise in 1984 (but at $p < .05$, one-tailed), but not in 1988.

Most of the work on foreign affairs and issue voting focuses on the United States, where the primary question is "Do foreign affairs issues matter in elections?" The conventional wisdom has held that elections and presidential approval in Taiwan are first and foremost about cross-strait relations (Li, James, and Drury 2009). However, recent elections raise the possibility that Taiwanese voters increasingly devote attention to the economy in the voting booth. If the economy is beginning to affect Taiwanese elections, economic voting should appear among the most informed voters as the link between economics and elections becomes clearer (Duch 2001; Duch and Stevenson 2008). The traditional electoral focus on cross-strait relations also poses an informational challenge to

voters since it involves issues that are removed from voters' daily lives, leaving voters to rely on the media, experts, and politicians for information about current affairs and the policy consequences of independence and unification.

An Information Theory of Issues

We test a theory of issue voting that encompasses the economy and other issues. The theory is based on the supposition that some issues are proximate to voters, other issues are distant. The difference between proximate and distant issues is defined by the distance between the issue and a voter's daily life and personal experience. A voter's personal financial situation is a proximate issue. Voters do not need news reports or expert opinion to know when they can pay their bills, when their incomes are rising, or when fuel is becoming more expensive. The national economy is more distant. For voters to know whether national economic conditions are deteriorating, they must pay attention to the news or experts and have the ability to filter and integrate information. Voters cannot necessarily infer national economic conditions from their own experience. Whether the economy is rising or falling nationally, and who should receive credit or blame, requires voters to gather information beyond their personal experience.

The same logic extends to noneconomic issues. Some issues, such as taxes, crime, medical care, and social welfare, are likely to enter a person's daily life. Or, a person is likely to know whether close co-workers or neighbors experience problems on these issues. On many other issues people will generally lack direct knowledge, through their own lives or the experiences of family, neighbors, and co-workers. Voters must turn to the media and experts to gather information and form opinions on issues far from their daily lives. Distant issues can include domestic policy issues that are beyond the personal experience of most voters. For instance, most people lack personal experience with environmental issues and must be able to gather information from other sources, such as the media and experts. Alexander Tahk et al. (2010) find that media coverage of the environment influences public concern about environmental issues, but the media have little influence on whether people believe crime is a serious problem.

The most distant issues in most societies are foreign relations, international trade, and war. Most voters lack direct experience with or knowledge of these issues. Information about such offshore issues is less reliable and harder to verify. Some voters and families may have direct

experience with international relations. But most voters have to rely al-most exclusively on political elites and the media to provide information about foreign policy issues. Even when voters deem foreign policy issues salient, they may lack the personal experience and information neces-sary to understand the issues, to develop informed opinions, and to vote for the candidate who best represents their opinions.

The impact of an issue on a voter's decisionmaking may depend on the salience of the issue, the clarity and differences between the candi-dates' positions, and the nature of the specific election. In some years, some issues are more important than others. Our study is not about the relative importance of different issues to different voters, but about how issues vary in their effect on the vote due to a voter's ability to acquire and retain information. *We hypothesize that the effects of distant issues on the vote increase with voter information, while the effects of proxi-mate issues are unaffected by voter information.* Testing this hypothesis requires analyzing elections in which both proximate and distant issues are important to voters and in which the candidates adopt distinct posi-tions on the issues. In many electoral contexts, foreign affairs issues are not salient or politicians and political parties do not take distinct foreign policy positions. Taiwan's 2008 presidential election represents a good test case, since its voters confronted economic issues and foreign affairs issues on which the candidates advocated divergent positions.

The 2008 Election in Taiwan as a Critical Case
The 2008 presidential election in Taiwan stands as an important event in its own right and as a useful case for comparing the electoral effects of do-mestic issues, foreign affairs issues, and the economy. Taiwan was a one-party regime dominated by the Kuomintang (Nationalist Party, or KMT) until local elections in the late 1990s and the presidential election of 2000 shifted power to the Democratic Progressive Party (DPP). After the DPP's Chen Shui-bian served as president from 2000 to the 2008, Taiwan had an-other opportunity for a change of party control as the KMT's Ma Ying-jeou faced the DPP's Frank Hsieh in the March 2008 election.

A declining economy raised the KMT's prospects of winning back the presidency. Real gross domestic product (GDP) growth in 2007 was 5.9 percent (Central Intelligence Agency 2010), but declining exports due to the global credit crunch caused real GDP to decline by 0.02 per-cent in the second quarter of 2008 and by 3.58 in the third quarter (Trad-ing Economics 2011). Unemployment in 2007 was below 4 percent but rose to 5.85 percent by the second quarter of 2008 (Central Intelligence

Agency 2010). While these numbers are not overly significant by global standards, the economic downturn was noticeable on Taiwan and fueled fears that its export-led economy would decline significantly. In the post-election TEDS survey, respondents were asked, "Would you say that over the past year, the state of the economy of Taiwan has gotten better, stayed about the same, or gotten worse?" Sixty-five percent of voters believed the economy worsened, 30 percent believed it stayed the same, and less than 5 percent believed it improved.

The economy drives election outcomes in many countries (Lewis-Beck and Stegmaier 2000; Duch 2001). The voluminous literature on elections in the United States and Europe certainly underscores the importance of the economy and other, often related, domestic issues. But Taiwanese politics has long centered on foreign affairs due to its relationship with mainland China. Debates about whether Taiwan should declare its independence from China or seek unification separate the parties and divide voters. The DPP promotes independence from China while the KMT has opposed independence in favor of the status quo or eventual reunification with China.

Due to the heightened importance of foreign affairs issues in Taiwan's elections, it stands as an important case for examining heterogeneity in the role of foreign affairs issues in elections. Gabriel Almond (1950) and John Aldrich, John Sullivan, and Eugene Borgida (1989), studying elections in the United States, conclude that foreign affairs do matter to voters when those issues are salient and the candidates adopt distinct positions. But even in elections in which candidates speak often about foreign affairs and adopt distinct positions, most voters have little knowledge of foreign affairs (Almond 1950; Delli Carpini and Keeter 1996). Howard Lavine et al. (1996) find that foreign policy issues are less salient and less likely to arouse self-interest than domestic policy issues. Thus, if foreign affairs issues have little effect on electoral choice, it may be that the issues do not matter much in voters' daily lives, that the candidates do not have distinct positions, or that voters lack the information necessary to understand foreign policy issues. Any one of these explanations could be true in countries where foreign affairs issues lack salience or candidates' positions are indistinct.

Focusing on Taiwan allows us to isolate the effect of voter information on foreign affairs–oriented voting since cross-strait relations are perpetually salient in Taiwanese elections and since the candidates tend to adopt distinct positions. But foreign affairs issues could be important in Taiwan by default during a prospering economy. In 2008, as the economy slowed, we can assess the relative impact of foreign policy when the economy also figured prominently in the election.

Data and Method

Taiwan's Election and Democratization Study of 2008 provides data for a test of information heterogeneity in issue voting.[5] The survey, conducted after the March presidential election, interviewed 1,905 residents of Taiwan, 1,440 of whom voted for one of the two major party candidates. To explain vote choice—a binary dependent variable where 1 indicates a vote for KMT candidate Ma and 0 indicates a vote for DPP candidate Hsieh—we estimate a logit model that includes voters' retrospective evaluations of the national economy and their personal economic condition, their opinion on Taiwan independence versus unification with mainland China, their preference for expanding domestic social welfare programs versus keeping taxes low, and a set of political and demographic control variables including information level.

The statistical model includes two evaluations of the economy. "National economy" is a three-point scale on which a respondent rates the national economy during the past year as better than (1), the same as (0), or worse than (–1) the previous year. "Personal economic condition" uses the same scale to rate the economic situation of the respondent's household.

The model includes two issues that appeared on the survey. Each issue presented respondents with a 10-point scale with labeled endpoints:

> [Unification] "Sometimes people will talk about the question of Taiwan independence or the unification with China. Some people say that Taiwan should declare independence immediately [1]. Other people say that Taiwan and China should unify immediately [10]. Other people have opinions between these two positions. Which position do you occupy?"

> [Social Welfare] "Regarding the question of social welfare, some people believe that the government should merely maintain the current system in order not to increase people's tax [1]. Other people believe that the government should promote social welfare, even though it will lead to tax increase [10]. About where on this scale does your own view lie?"

Respondents placed themselves, the major parties (KMT and DPP), and presidential candidates (Ma and Hsieh) on each of these issue scales. On the issue of independence, the median placement of Ma is 7, closer to unification, while the mean placement of Hsieh is 3, closer to independence. The median voter's position is 5. On the social welfare scale, the median placement of Ma is 6 with Hsieh at 5, and the median voter is at 6.[6]

We measure issues using the voter's position on the issue scale. On each issue a theoretical cut point exists at the midpoint of the candidate's positions. To the left of this cut point voters will vote for one candidate;

to the right they will vote for the other candidate. As voters move further to the left (or right) of this cut point, their utility for the closer candidate increases. Voter utility for the closer candidate will be highest at the extreme end of the scale and then decline monotonically across the scale. We rescale the issues to a –1 to 1 scale in order to make them directly comparable to the economic evaluations.

Several measures of political information are available in the TEDS survey. We use the interviewer rating in the analysis that follows. At the end of the interview with a respondent, TEDS interviewers rate the respondent's level of political information on a scale from 0, "very low," to 3, "very high." As a measure of relevant information, the interviewer rating works at least as well as a battery of ten to fifteen factual questions about political leaders and institutions and about as well as a twenty-seven-item index (Zaller 1985a, 1985b).[7]

The survey includes three factual questions about political leaders and institutions. Early in the survey, respondents were asked: "Who is the current President of the United States?" "Who is the current premier of our country?" "What institution has the power to interpret the constitution?" A respondent could answer zero to three of these correctly. A second measure of political information is the number of correct answers to the three questions. However, over 70 percent of voters knew the name of the US president, and 60 percent knew the name of the premier of Taiwan. Most of the variation on the additive information scale comes from the question on which institution has the power to interpret the constitution, which only 30 percent of voters answered correctly.

As a third measure of political information, we add the four-point interviewer rating (0 to 3 scale) and the four-point knowledge battery (0 to 3 scale) to create a seven-point scale.[8] In a factor analysis, the interview rating and factual knowledge scales load exactly equally on a single underlying dimension.

For each of the three different information measures—the interviewer rating, the knowledge questions, and the combined scale—we center the scale to avoid collinearity in the interactions with economic evaluations and issues. Since the interviewer rating and knowledge questions are four-point scales, we partially center them by subtracting one to create scales with integer values –1, 0, 1, and 2. For the combined measure, which has a true midpoint given its seven points, we subtract the mean and rescale the measure to –1, 0, 1, with a mean of 0. We estimated the model that follows with each of these information scales separately. The substantive conclusions are true regardless of the information scale we use, and we found no statistically significant differences in the estimated coefficients across

scales. We report results from the model that uses interviewer rating since it has the best fit according to the Akaike Information Criterion.

In addition to the issue positions and economic evaluations, we include in the model an interaction of the information measure and each of the issues and evaluations. The interaction terms form our test of whether the effect of an issue on vote choice varies by voter information level.

The testable hypotheses implied by the theory are:

> Hypothesis 1: The effect of the national economy on vote choice increases with the level of a voter's information. (Distant effect)
>
> Hypothesis 2: The effect of personal economic experience on vote choice does not increase with the level of a voter's information. (Proximate effect)
>
> Hypothesis 3: The effect of independence versus unification on vote choice increases with the level of a voter's information. (Distant effect)
>
> Hypothesis 4: The effect of taxes versus social welfare on vote choice does not increase with a voter's level of information. (Proximate effect)

The model includes several control variables. Dummy variables represent a voter's party affiliation and ethnicity. We derive a measure of party identification from the question, "Among the main political parties in our country, including the KMT, DPP, NP, PFP, and TSU, do you think of yourself as leaning toward any particular party?" We code a dummy variable for KMT, DPP, NP (New Party), and TSU (Taiwan Solidarity Union), with PFP (People First Party) or no party affiliation as the baseline category.[9] To capture ethnicity, we define dummy variables for Mainlander and Min Nan, based on the ethnic group of a respondent's father. The baseline category includes Hakka and aboriginal groups. Descriptive statistics of the variables in the model appear in the Appendix.

Results

Results from the model appear in Table 1, which presents the maximum likelihood estimates from the binary logit model, and in Figure 1, which shows the change in probability of voting for Ma due to a one unit change in each of the predictors, along with the associated 95 percent confidence intervals. Due to our scaling of economic evaluations, issue positions, party, and ethnicity, the magnitudes of their coefficients are directly comparable. We later present graphs to unpack the substantive effects of the information interactions.

Table 1 Logit Model of Taiwan's 2008 Presidential Vote

| Predictors	Coefficient	(s.e.)
Information level	.35	(.26)
National economy better	.54*	(.30)
Information x national economy	.31	(.30)
Personal economy better	.23	(.30)
Information x personal economy	.05	(.30)
Unification (vs. independence)	1.30**	(.28)
Information x independence	.61**	(.30)
Social welfare (vs. current system)	.37*	(.19)
Information x social welfare	−.28	(.20)
Mainlander	1.61**	(.73)
Min Nan	−.50	(.36)
KMT identifier	3.00**	(.44)
DPP identifier	−3.55**	(.28)
NP identifier	.74	(.80)
TSU identifier	−1.01*	(.58)
(Intercept)	1.98	(.42)
Number of cases	1,260	
Wald X^2 (15)	280	
Pseudo-R^2	.70	

Source: Taiwan's Election and Democratization Study (TEDS) 2008.
* $p < .10$, two-tailed. ** $p < .05$, two-tailed. "x" indicates interaction of variables.

Table 1 shows that the model is estimated on 1,260 of the 1,440 voters in the sample. The remaining 180 voters lack values on one or more variables, primarily issue self-placement or economic evaluations. We could impute these values, but imputing nonopinions makes little sense in this case. Instead, we think of the model as capturing the behavior of the 88 percent or so of voters who have opinions on the relevant issues.

Several results are clear from Table 1 and Figure 1. Party affiliation is a very strong predictor of vote choice. KMT supporters are much more likely to vote for Ma, while DPP supporters are much more likely to vote for Hsieh. For voters at the midpoint of both issue scales and who believe the national economy and their own personal financial situation were worse during the previous year, identifying with the KMT increases the probability of voting for Ma by .45. For those same voters, identifying with the DPP increases their probability of voting for Hsieh (or decreases the probability of voting for Ma) by about .50. Interestingly, the Pan-Blue alliance of the KMT and NP and Pan-Green alliance of the DPP and TSU appear to have decayed somewhat between 2004 and 2008, as

Figure 1 Change in Probability of Vote for Incumbent Due to One Unit Change in Each Predictor
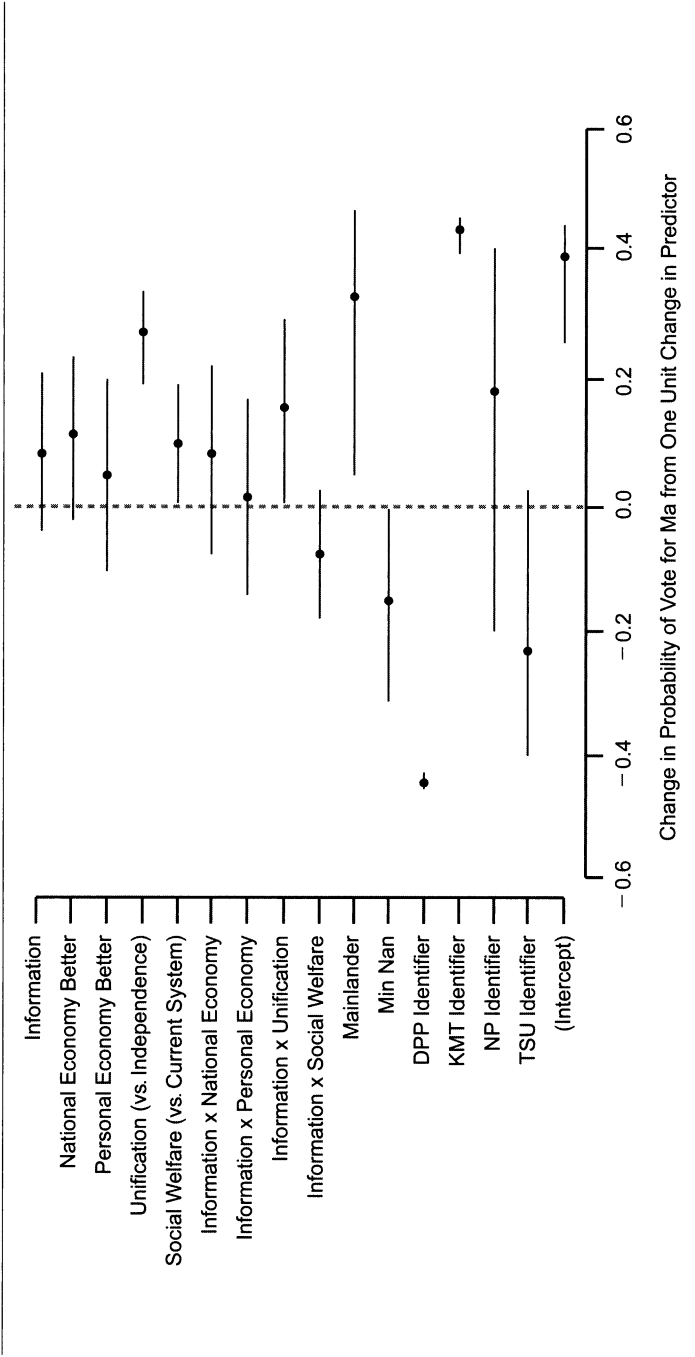
Note: All economic evaluations and issues scaled from −1 to 1. Dots represent predicted change in probability of voting for Ma. Bars represent 95 percent confidence interval. Changes in predicted probability calculated for a political independent who is Min Nan, who believes his/her personal economic situation and the national economy both worsened over the previous year, who is in the second from the lowest category on political information, and who is a moderate on unification and social welfare.

neither NP nor TSU identifiers are statistically more likely to vote for their side's candidate, compared to the baseline category. Voters who identify themselves as mainland Chinese have about a .33 higher probability of voting for Ma, the KMT candidate, than the baseline category of other groups, mostly Hakka Taiwanese and indigenous Taiwanese. Min Nan voters are more likely to vote for Ma, though the effect is not statistically significant.

Of all the issues, including evaluations of the economy, independence versus unification clearly has the greatest effect on vote choice. Given that we are interested in the interaction of these issues with information level, the effect shown in Figure 1 is for voters who have a value of 0 (second from the bottom category) on political information. The effect of such a voter's position on unification versus independence is statistically significant and has the largest substantive effect of all the issues and economic evaluations. As expected, prounification voters are more likely to vote for Ma. A voter whose preference moves one unit on the scale—for instance, from the midpoint to the farthest prounification position—has a .32 higher probability of voting for Ma.[10] The effect of independence versus unification demonstrates the continuing dominance of foreign affairs in Taiwan's elections, which is somewhat surprising given the heightened concern about the economy during the campaigns.

Evaluation of the national economy is statistically significant at the .10 level but not at the .05 level, two-tailed, as a predictor of vote choice for voters near the low end of political information. As we will show, the effect is larger and statistically significant for voters at higher levels of political information. A voter's own financial situation is not statistically significant at any level and has a significantly lower substantive effect than national economic conditions.

Opinion on social welfare, like evaluation of the national economy, is statistically significant at the .10 level but not quite at the .05 level. Substantively, the effect of a voter's opinion on social welfare spending is significantly lower than unification versus independence but close in effect to evaluation of the national economy. A voter whose position is at the maximum of the scale (favors low taxes) has a .09 higher probability of voting for Ma than a voter whose position is at the midpoint of the scale.

The effect of information on issue voting and economic voting can be unpacked from the interaction terms in the model. Figure 2 contains four graphs, each of which shows how an issue or economic evaluation affects the probability of voting for Ma as a function of information level, which is the x-axis. The y-axis represents the change in the probability of voting for Ma due to a one unit change in the voter's issue position (or

Figure 2 The Effects of Economic Evaluations and Issues on Vote Choice Depend on Voter's Information Level
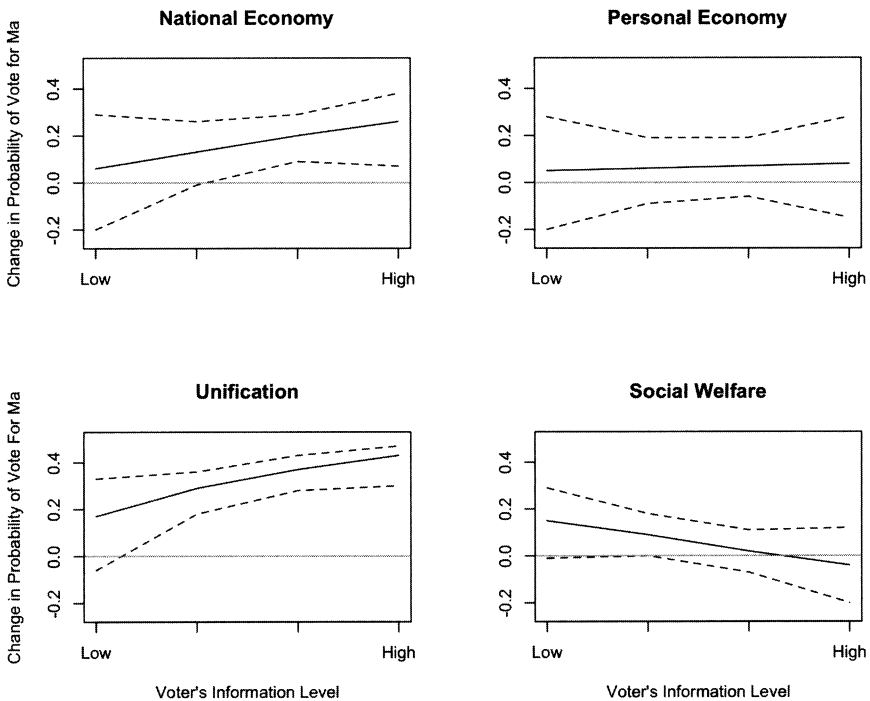
Note: This figure shows the effect of two types of economic evaluations and two issues on the change in the probability of voting for the incumbent, as a function of voter's level of political information. The vertical axis represents the change in the probability of voting for Ma due to a change in voter's position from one standard deviation below the mean to one standard deviation above the mean on each economic evaluation or issue scale. The solid line is average change in effect; dotted lines are the 95 percent confidence interval. Data from TEDS 2008.

economic evaluation). The solid line is the estimated change in the probability of voting for Ma due to the issue or evaluation as a voter's information level increases. The dotted lines represent the 95 percent confidence interval for the effect.

Since all four graphs have the same vertical axis, the heights of the lines are directly comparable. Consistent with previous research, evaluations of the national economy outweigh personal finances in their effect on vote choice (Kinder and Kiewiet 1981). Personal evaluations of the economy do not induce a statistically significant change in voting be-

havior at any level of information. This finding contradicts Gomez and Wilson's conclusions from the 2001 Legislative Yuan election that personal economic conditions affect the candidate preferences of voters with higher information levels.

The national economy shows a larger effect on vote choice than personal economic conditions, and the effect increases with voter information. The upward-sloping line indicates that evaluations of the national economy have a greater effect on the vote decisions of high information voters than on the vote decisions of low information voters. Highly informed voters weigh the national economy more in their voting decisions, probably because they are more informed about national economic conditions. It is important to note that more informed voters show a statistically significant effect of national economic evaluations on their vote decisions while less informed voters do not. However, the difference in the effect of national economic conditions between the most informed and least informed voters is not statistically significant ($b_{difference} = .93$, s.e. $= .89$).

Among the issues, independence clearly has the largest substantive effect. Its effect is also conditional on voter information. For the least informed voters, independence is not quite significant as a predictor of vote choice. For the most informed voters, however, independence is significant and increasing in its effect. Not only is the independence issue statistically significant for the most informed voters, its effect is also significantly larger for the most informed voters than for the least informed voters ($b_{difference} = 1.82$, s.e. $= .90$). This demonstrates that foreign affairs issues have a greater impact on the votes of highly informed voters than on the votes of less informed voters.

Opinion on social welfare has no effect on vote choice for any information level. The effect of social welfare opinion on the vote decreases as voter information increases, but the overall effect of the issue is not statistically significant at $p < .05$ for any voter information level. At $p < .10$, social welfare opinion is significant for the least informed voters. The impact of opinion on social welfare declines as political information increases.

The results confirm three of our hypotheses and partially confirm a fourth. The results partially confirm Hypothesis 1 that the effect of national economic evaluations increases with voter information. We find a positive effect of voter information on the role of national economic evaluations on the vote. The moderating effect of information causes national economic conditions to be statistically significant as a predictor of the vote for the most informed half of the Taiwanese electorate, while the least informed voters do not show a statistically significant effect of national economic evaluations on the vote. However, there is not a statis-

tically significant difference between the most and least informed voters in the effect of national economic conditions on the vote.

The results confirm Hypothesis 2. Information does not moderate the relationship between personal economic evaluations and the vote. The effect of personal economic evaluation on the vote is not significant, confirming decades of previous research on the minimal effect of egocentric economic evaluations (Kinder and Kiewiet 1981). This result contradicts the findings of Gomez and Wilson (2006) that information increases the effect of personal economic evaluations on the vote.

The results for the independence-unification issue confirm Hypothesis 3. Opinion on cross-strait relations is a significant predictor of vote choice, as most studies find. Where Taiwanese voters stand on the issue of cross-strait relations has a large effect on how they vote. We further show that the electoral effect of opinion on unification increases significantly as a voter's level of information increases. The effect of opinion on cross-strait relations is greater for the most informed voters than for the least informed.

The results also confirm Hypothesis 4 that a voter's information level does not affect the relationship between opinion on social welfare and vote choice. In fact, the effect of social welfare opinion declines as voter information increases. The issue is just short of statistical significance for the least informed voters and has no effect on the vote of the most informed voters.

One concern about the results may be that issue salience or attitude importance, not information, is the real moderator of the effect of issues on the vote. More informed voters could attach greater importance to cross-strait relations and to the economy, thereby increasing the effect of those issues on the vote. To test for this possibility, we estimated the model controlling for the importance that voters attach to the issue, based on responses to the question, "What has been the most important issue to you personally in this election?" Responses were open-ended, and we created dummy variables for respondents who listed the economy (1 = any mention of the economy, 0 = otherwise) and cross-strait relations (1 = any mention of cross-strait relations, unification, or independence, 0 = otherwise). We added these dummy variables to the model and interacted them with the appropriate issue. The model with issue importance interacted with issue positions has a worse fit (according to the Akaike Information Criterion) than the model with information interacted with issues. In a model that also includes a three-way interaction of issue importance, information, and issue positions (or economic evaluations), the model fit is also worse than the model in Table 1. Furthermore, the interactions

of issue importance with issues or economic evaluations are not statistically significant. Information, not issue importance, moderates the relationship between issues or economic evaluations and the vote.

Implications and Conclusions

Taiwan's elections are still driven by foreign affairs. The independence versus unification issue remains at the center of Taiwan's electoral politics, even after Taiwan has transitioned to democracy, and even during a slowing economy. The critical domestic issue of social welfare spending, an issue that the candidates spent much time talking about, did not affect voter decisionmaking in the 2008 election on Taiwan.

The effects of the key foreign affairs issue—cross-strait relations—vary by voter information level. Foreign affairs issues have a greater effect on the vote of highly informed voters than less informed voters. This finding supports the proposition that variation in foreign affairs voting across space and time may have much to do with variation in information. Even in Taiwan, where foreign affairs issues are always salient and the party positions always distinct, voter information affects the extent to which voters weigh foreign policy in the voting booth.

What should one infer from these results about the role of foreign affairs in elections in other countries? Much of the research on foreign affairs in elections has centered on the United States, where foreign policy carries less weight than the economy in the voting booth. Aldrich, Sullivan, and Borgida (1989) counter the conventional wisdom by showing that foreign affairs mattered in US elections during the Cold War. Similarly, Goren (1997) finds that voter information increased the effect on the vote of opinions on US-Soviet relations in some elections in the 1980s. Combining Goren's results with the results in this article provides cross-national confirmation that voter information increases the effect of foreign affairs in the voting booth when foreign affairs issues are prominent, such as in the United States during the Cold War or in Taiwan today.

Confirming the theory of proximate and distant issues, higher information voters choose candidates based on evaluations of foreign affairs and the national economy. High information voters base their vote on evaluations of the national economy even more than they use evaluations of their personal circumstances and even more than low information voters use national economic conditions. Voting sociotropically requires information about the national economy. Sociotropic voting may not be an information shortcut but is an information-intensive exercise for many voters.

Our results for economic voting support Duch's (2001) argument that the economy increases its effect on elections as a polity transitions to democracy. Much of the increasing effect of the economy is due to voters becoming more informed about economic conditions and, perhaps, to economic conditions becoming more accurately reported. The more informed voters in Taiwan clearly vote based on national economic conditions. In future elections, we expect national economic conditions to matter in the votes of the most informed segment of voters. Given Duch's theory, the least informed voters may also in subsequent elections show an effect of national economic conditions on their vote.

Information varies across voters primarily because of voters' ability to acquire and retain information. Information moderates the effect of issues such as foreign affairs and sociotropic voting, which have a greater effect on highly informed voters than on less informed voters. Increasing the amount and quality of information available about foreign affairs and national economic conditions may increase the effect of these issues on the vote. However, we believe it is unlikely that greater dissemination of information will change information levels among voters. Voters vary in their attention to politics, their willingness and ability to acquire information, and their ability to retain information once it is available to them. Manipulating or increasing voter information in experimental settings may be easy, but in the real world the dissemination of information appears to have very little effect on the public (Barabas and Jerit 2010). For this reason, we conclude that in Taiwan—as elsewhere—when candidates campaign on national economic conditions or foreign affairs, the most informed voters are their audience.

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Appendix Variable Descriptions

	Number of Cases	Mean	Std. Dev.	Min.	Max.
Dependent variable					
Vote (1 = Ma, 0 = Hsieh)	1,260	.63		0	1
Demographics	1,260				
Mainlander		.13		0	1
Min Nan		.75		0	1
Political variables	1,260				
KMT identifier		.436		0	1
DPP identifier		.321		0	1
NP identifier		.010		0	1
TSU identifier		.009		0	1
Economic variables					
National economy					
(−1 = worse, 0 = same, 1 = better)	1,260	−.629	.55	−1	1
Personal economy					
(−1 = worse, 0 = same, 1 = better)	1,260	−.425	.56	−1	1
Issues				−1	1
Independence (−1)					
vs. unification (1)	1,260	−.088	.52	−1	1
Current system (−1)					
vs. social welfare (1)	1,260	.159	.66		
Information					
Political information					
(−1 = low, 2 = high)	1,260	.74	.74	−1	2

Notes

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    1. Baron and Kenny (1986, 1174) define a moderator as a variable that "affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable."

    2. Many studies use measures of political information as a proxy for political sophistication (Zaller 1992; Gomez and Wilson 2001, 2006).

    3. Gomez and Wilson (2007) offer a rebuttal.

    4. Gomez and Wilson (2006) find that retrospective economic evaluations are statistically significant as predictors of the vote in the 2001 Legislative Yuan election using the same data as Hsieh, Lacy, and Niou (2003). However, Gomez and Wilson's results are based on 836 respondents to the postelection survey, whereas Hsieh, Lacy, and Niou report results based on 1,057 respondents from the same dataset.

5. The 2008 TEDS survey was designed and implemented by a group of political scientists from several universities in Taiwan led by Professor Chi Huang of the National Chengchi University. TEDS was funded by the National Science Council of the Republic of China (ROC) on Taiwan. The population of this survey was all eligible voters aged twenty and over with valid residency in Taiwan and ROC citizenship.

6. Two other domestic policy issues appeared in the survey: economic growth versus protection of the environment, and political reform versus stability. We exclude these issues due to the double-barreled nature of the questions: [Reform] "Looking at Taiwan's overall development, some people believe that large-scale reform is the most important thing, even if it means sacrificing some social stability. Other people believe that stability is the most important and that reform should not be allowed to affect social stability. About where on this scale does your own view lie?" [Economic Development] "Regarding the question of economic development versus environmental protection, some people in society emphasize environmental protection while others emphasize economic development. About where on this scale does your own view lie?" However, when we include these issues in the vote choice model, neither is statistically significant.

7. Bartels (1996) and Goren (1997), among others, have used the interview ratings in published work.

8. Goren (1997) also uses interviewer ratings added to the number of correct responses a voter registers on the knowledge questions, using the 1984–1988 American National Election Studies.

9. Because the PFP has too few observations to be included as a separate variable in our analysis, we include PFP identifiers in the baseline category.

10. The standard deviations on the issues and economic evaluations are all about .55 to .66, so a one unit change on each scale is also the equivalent of a two standard deviation change on the scale. Since each dummy variable has a standard deviation of .5, a one unit change on any of these is also the equivalent of a two standard deviation change.

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