

Presidential approval in Taiwan: An analysis of survey data in the Ma Ying-jeou presidency[☆]



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ABSTRACT

Presidential popularity is the “causal agent” of presidential effectiveness. High approval ratings mean more power and greater ability to govern. Taiwan’s President Ma Ying-jeou enjoyed high approval ratings when he was elected in 2008, but his popularity declined rapidly soon after, to about 14%. How do Taiwan citizens evaluate their presidents? What factors help to explain the Ma’s declining popularity during his presidency? Consistent with conventional wisdom, this study finds that the country’s overall economic conditions play a vital role in the popularity of Taiwan’s president. Closely following is citizens’ evaluation of the president’s ability in managing cross-Strait relationship, national defense, and diplomacy. Ma’s staffing of key cabinet positions has also had an effect on his popularity, which is unusual in the study of presidential approval. The personal integrity of the president, a trait that Ma has emphasized strongly, has not had a positive effect on his declining popularity in Taiwan.

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Scholarly research on presidential approval in the United States began half a century ago (Mueller, 1970, 1973; Neustadt, 1960), and since then, voluminous studies on the subject have been published in English.¹ The extensive academic attention paid to the subject is understandable. Presidential popularity ratings are not only a manifestation of public sentiment for the president but also “causal agents” of presidential effectiveness (Stimson, 1976: 2).² Indeed, presidential power rests in part on public support. High approval ratings pay off electorally for the president and for the president’s party. Approval ratings also play a crucial role in a national leader’s calculations of decision-making, because widespread public support increases a president’s ability to bargain and to persuade. A

popular president is more likely to get his or her policy agenda through the legislature and/or helps his or her partisan candidates’ electoral bids. Approval ratings are more than a snapshot of the public sentiment for the president at any given moment, because higher presidential approval essentially means more power and a greater ability to govern. In the research of American politics, a number of studies have documented the impact of approval ratings on congressional and presidential elections (Gronke et al., 2003; Lewis-Beck and Rice, 1982, 1984; Newman and Ostrom, 2002), presidential policy initiatives and legislative success (Canes-Wrone and Shotts, 2004; Canes-Wrone and de Marchi, 2002; Ostrom and Simon, 1985), and veto politics (Rohde and Simon, 1985). Research on presidential approval thus speaks to important questions rooted in democratic theory.

While research on presidential approval is abundant, very few studies written in English have been conducted on democratic polities other than the United States. The current research is one of the few such studies with data collected in non-US democratic countries.³ Using six waves of survey data collected in Taiwan

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¹ Gronke and Newman (2003) provide a comprehensive review of the American literature on presidential approval. For more recent studies, see Fox (2009) and Kriner (2006).

² As Stimson pointed out a long time ago, “presidential popularity” and “presidential approval” are two conceptually distinct and empirically separable notions but one is frequently used as a reference to the other. This study shall thus use the two terms interchangeably (1976: 1n1).

³ There are a few studies in English on public support for executive branches in other countries, including Cuzán and Bundrick (1997), Lewis-Beck (1980), Treisman (2011), Weyland (1998, 2000), and Yantek (1988). Several studies were conducted on Taiwan’s presidential approval (Chen and Keng, 2009; Lee and Wu, 2003; Pao, 2010; Sheng and Pai, 2008) and its electoral effects (Hsiao and Yu, 2008; Hsu, 2009; Lim, 2000; Wu and Lee, 2003, 2004; Yu, 2012) but they were published in Chinese.

between September 2012 and December 2013, and aggregate electoral data of the 2008 and 2012 presidential elections at the township level, coupled with information gathered through focus group interviews, this study examines the following questions: How do Taiwan citizens evaluate their president, and specifically the incumbent President Ma Ying-jeou, of the Nationalist Party (Kuomintang, KMT)? What factors help to explain the patterns we observe? While the study is limited by the available data and only examines the popularity of one president in Taiwan, our answers to these questions nevertheless have important implications for the young democracy of East Asia, considering that Ma has had low approval ratings during most of his six years in office since 2008.⁴ The findings of the current study will also contribute to a more general theoretical understanding about how citizens of democratic polities use information to govern themselves. It attempts to contribute not just to making sense of Taiwan, but also, more broadly, to the theoretical understanding of democratic theory in general.

1. The literature on presidential approval

Empirical studies on the American presidency have long concluded that the state of the economy is an important factor in presidential approval (Clarke, Rapkin, and Stewart, 1994; Kinder, 1981; Monroe, 1984; Mueller, 1970, 1973; Norpoth, 1985; Stimson, 1976). When economic conditions are good, the president gains public support. The approval rating declines if the economy deteriorates. The crushing defeat of Jimmy Carter by Ronald Reagan in 1980 and the loss of George H. W. Bush to Bill Clinton in 1992 are typical examples of this kind. Reflecting this conventional wisdom, one observer stated that “economics is the fate of politicians” and that “there can be little doubt that the economy matters for presidential popularity” (Norpoth, 1985: 167, 180). Two hypotheses regarding the citizen as evaluator have been developed in this “reward-punishment” model that may underlie the relationship between economic conditions and presidential popularity.⁵ The first hypothesis maintains that when citizens’ personal or household well-being, that is, their pocketbook, suffers they are more likely to punish the incumbent president. The question from Ronald Reagan’s 1980 presidential debate, “Are you better off than you were four years ago?” has been cited as a typical appeal to voters’ personal economic conditions (Lewis-Beck and Stegmaier, 2007).⁶ An alternative argument to the pocketbook hypothesis is that rather than focusing on personal finances, the public tends to emphasize the economic well-being of the nation. The so-called sociotropic hypothesis thus maintains that it is the state of national economy that plays a central role in the minds of citizens as evaluators. Presidential approval rises as the public perceives a healthy national economy, and the rating declines when the overall economic prospect appears to be gloomy.

Citizens’ assessments of presidential performance in areas other than economy has also attracted scholarly attention. It maintains that the public is mindful of whether the incumbent has the capacity to get the job done in an effective way. In this context, the

international dimension has been added to the analysis of presidential approval. In an era of globalization, foreign policy and domestic agenda are not entirely independent of each other, and frequently the calculus of decision-making in one domain bears important implications for the other, especially the economy. Citing the substantial literature on the effects of “internationalization,” Burden and Mughan (2003) have shown that foreign trade and various international events have important implications for citizens’ reactions to those who govern them in democratic polities. Because modern presidents have a tendency to promise economic benefits from global economic integration, they are held accountable for these promises. Similarly, some observers note that public attitudes about foreign affairs are consequential in presidential elections as “the candidates are waltzing before a reasonably alert audience.” When given a choice, “the public votes for the candidate who waltzes best” (Aldrich et al., 1989: 136). Presidential approval ratings depend just as much on the handling of foreign affairs as they do on the management of the economy. Thus, presidential performance in areas other than the economy, especially in the area of foreign affairs, which may bear both political and economic consequences, are said to affect approval rating (Aldrich et al., 1989; Burden and Mughan, 2003; Marra et al., 1990; McAvoy, 2006; Nickelsburg and Norpoth, 2000).

In addition to presidential performance, the character and integrity of the person in office have also attracted scholarly attention. V. O. Key’s insight on “the role of [a president’s] personality” (1966: 56) provides an intellectual origin of this inquiry. Using Franklin Delano Roosevelt, the thirty-second president of the United States, as an example, Key stated that “his personal qualities may have intensified both hatred and love for him. And the popular image of Roosevelt enabled many persons to support or to oppose him without detailed knowledge of what policies he was for or against; they could accurately regard him as for or against their kind of people” (1966: 56). Later developed in the literature on the relations between character assessment and vote choice (e.g., Kinder, 1986; McCurley and Mondak, 1995; Sullivan et al., 1990), three reasons have been provided to justify the importance of character in the public’s assessment of politicians. First, seeking for and digesting political information is a costly endeavor, which not everyone has the time or ability to engage in. The assessment of presidential character offers the public a useful shortcut without constantly looking for otherwise costly information. Second, judgment of character also serves an instrumental function because it provides a clue as to how the president will run the country. Third, since the presidency usually is the principal position in the government, it has important symbolic meaning and sets public standards for all political behavior (Greene, 2001; Kinder, 1986). Presidential character thus is likely to play an important role in citizens’ evaluation of presidents (McCurley and Mondak, 1995: 865).

Finally, empirical research has demonstrated that political attitude and behavior are affected by contextual factors. Rather than treating citizens as isolated beings, this literature maintains that the circumstances in which individuals are placed are consequential to their decision-making. Through interpersonal communications or personal experience and observation that occur on a daily basis, the public may obtain information in places where they live or work. Ordinary citizens may also be influenced by the distribution of political preferences locally in the form of electoral support for a candidate or a political party. They may be drawn to a given perspective and form a position toward that viewpoint as a result. When individuals are making vote choices or deciding whether to support the incumbent government, they are likely to take cues from their local context and act accordingly (Burbank, 1995; Huckfeldt and Sprague, 1987; Johnson et al., 2002; Johnston et al., 2000, 2007; Marsh, 2002). The analysis is thus “built on an

⁴ Ma has been characterized as a “9% president” by Taiwanese media and members of the opposition Democratic Progressive Party. See “Editorial: KMT Distances Itself from Ma” *Liberty Times*, February 20, 2014. <http://www.taipetimes.com/News/editorials/archives/2014/02/20/2003583910> (January 20, 2015).

⁵ For a concise discussion of the “reward-punishment” model, see Lewis-Beck (1988) and Lewis-Beck and Stegmaier (2007).

⁶ For the full text of the October 28, 1980, presidential debate between Ronald Reagan and Jimmy Carter, see the website of the Commission on Presidential Debates at <http://www.debates.org/index.php?page=october-28-1980-debate-transcript> (January 20, 2015).

assertion of behavioral interdependence: the actions of individual citizens are to be understood as the intersection between individually defined circumstances” (Huckfeldt and Sprague, 1993: 281).

The above discussion thus yields the following theoretical expectations to be examined in the subsequent sections: presidential approval is affected by the public's assessment of a president's performance in various areas, particularly in the areas of economy and external relations, and also, a president's popularity may be affected by citizens' view of his or her personal integrity and by the context in which individuals live or work.

2. Presidential approval during Ma's presidency

Taiwan is a democracy under threat. Located only about a hundred miles away from the southeast coast of the Chinese mainland, Beijing leaders have vowed to “unify the island with the motherland” ever since the government led by Chiang Kai-shek of the KMT retreated to the island from the Chinese mainland in 1949. The 1970s saw a shift of China's strategy toward Taiwan away from reliance on “military liberation” to a wave of “peaceful initiatives.” Though cross-Strait interactions have since intensified, Chinese leaders have refused to renounce the use of military force to realize their cause of unification. Attempting to compel Taipei to accept its unification formula, known as “one country, two systems,” Beijing has also isolated Taiwan internationally. Despite continuing political and military hostility, cross-Strait economic exchanges have nevertheless increased exponentially since 1990s. Like many countries in Asia, Taiwan's export-oriented economy has been progressively integrated with the economic activities of the Chinese mainland during the past decade.

During the same period, significant political changes occurred in Taiwan. In their attempt to realize their ambitious goal of recovering the Chinese mainland, the KMT leaders initially imposed harsh authoritarian rule and implemented a variety of measures to foster Chinese identity among the island citizens. Activities that might encourage a separate Taiwanese identity and promote the island's independence were censored and suppressed. When the opposition Democratic Progressive Party (DPP) was established in 1986, the rapid democratization was set into motion. Taiwan soon witnessed its first peaceful transfer of political power from one political party to another after Chen Shui-bian of the DPP was elected the president in 2000. Chen has strong pro-independence credentials, and the DPP is the only major party on the island that has a plank for pursuing Taiwan's *de jure* independence. During the eight-year period of his administration, Chen implemented a series of de-Sinicization measures to awaken Taiwanese identity among the local population while consciously suppressing the Chinese identity previously promoted by the KMT government. The issue of unification versus independence has caused a major political cleavage in the society, with the political divide being reflected in the island citizens' party identification. Those who support Taiwan's independence are more likely to identify with the DPP, whereas KMT supporters tend not to reject the possibility of cross-Strait unification (Wang and Chang, 2005).

The island country witnessed its second peaceful transfer of political power at the national level in 2008, when Ma Ying-jeou of the KMT won the presidential election. Ma was characterized as a “Teflon pot” (*buzhanguo*) due to his incorruptible image and self-discipline.⁷ Campaigning on clean politics and peaceful cross-Strait relations, along with the momentum provided by the KMT's triumphant victory in the parliamentary election held early in the

year, Ma won a landslide in the election, with a 58.5%–41.5% victory. In the first few months after his inauguration, Ma's presidential approval ratings were between 50% and 65%, according to various media reports.

With strong popularity among the public, the newly elected President Ma implemented a policy of rapprochement toward China. He proclaimed that his administration would pursue a “three-no” policy—“no unification, no independence, and no use of military force”—and would strive to maintain “the status quo in the Taiwan Strait” under “the framework of the ROC [the Republic of China] Constitution.” Ma also reversed the confrontational diplomacy of the previous administration and called for a “diplomatic truce” (*waijiao xiubing*) between Beijing and Taipei. Under this new initiative, the Ma administration not only stopped the practice of “dollar diplomacy” to buy off new allies, but also refrained from actively promoting Taiwan's independent and sovereign status in the international community. Taipei's cross-Strait and foreign policies have thus been welcomed by Beijing and praised by Washington because they have reduced cross-Strait tension and stabilized the relationship between the two sides of the Taiwan Strait. A number of accords were reached between Beijing and Taipei, including the landmark trade deal known as the Economic Cooperation Framework Agreement. Taiwan has also been able to sustain diplomatic ties with existing allies lest they be bought off by Beijing's generous foreign aid (Wang et al., 2011).

Despite the progress made in cross-Strait relations and diplomacy, the Ma administration has been handicapped by domestic issues. First of all, the downward spiral of the global economy took Taiwan's export-dependent economy along with it. Although the economy subsequently rebounded, it trailed behind other East Asian countries in terms of economic growth rate, unemployment rate, and per capita income. By the end of 2011, the economic reality was far from Ma's 2008 campaign pledges of 6% GDP growth, unemployment below 3%, and US\$30,000 per capita income (Chen, 2012). Although Ma was able to win a second term in 2012, the total number of votes he received fell short of those in 2008 by almost 800,000. Shortly after Ma won reelection, a series of policy reforms he initiated encountered fierce public opposition. These included permitting a rise in both gas and electricity prices, imposing a capital gains tax on securities transactions, and lifting restrictions on importing U.S. beef products. The Ma administration was seen as incompetent, inefficient, and lacking intergovernmental coordination, and his policies of allowing energy price hikes and the importation of U.S. beef were seen as hurting the public's livelihood. Moreover, in June 2012 a bribery scandal involving a major cabinet member who had been repeatedly promoted by Ma erupted. The scandal dealt a serious blow to Ma's image as “Mr. Clean,” and the public further questioned his ability to appoint the right persons to key cabinet positions.

It was against this backdrop that six waves of surveys were conducted in Taiwan between September 2012 and December 2013.⁸ In each of the surveys, Taiwan citizens over the age of 20 were asked the following question: How satisfied are you with his

⁷ The analogy was borrowed from Weisman (1984: 39; quoted in Ostrom and Simon, 1989).

⁸ The surveys were conducted quarterly via telephone interviews under the auspice of the Planning and Executive Committee of the Taiwan's Election and Democratization Study (TEDS) Project. This is the first time that survey data related to presidential approval were systematically collected on the island. Because the six surveys contain a battery of questions directly relevant to presidential approval (see Appendix 1), they provide the most comprehensive survey data at the micro level that are available on Taiwan. The coordinator of the multiyear TEDS project is Professor Chi Huang, and the data are managed and distributed by the Election Study Center (ESC), National Chengchi University, in Taiwan. The authors thank the ESC for making the data available. All errors are our own. More information is available on the TEDS website (<http://www.tedsnet.org>; January 20, 2015).

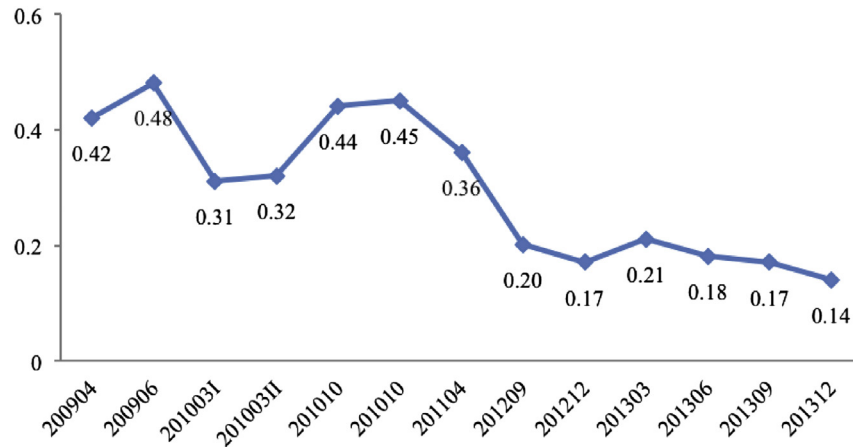


Fig. 1. Ma Ying-jeou's presidential approval rating: April 2009–December 2013. Data source: Chen, 2008; Huang, 2010, 2011, 2012; Lin, 2011; Tsai, 2011; Yu, 2010.

[Ma Ying-jeou's] overall performance as president over the past six months? Respondents' answers to this question are treated as the measure of *presidential approval*. Along with the data collected in previous surveys, Fig. 1 shows Ma's presidential approval ratings from April 2009 to December 2013. One year after Ma's victorious win in March 2008, with a 58.5% vote share, his popularity dropped to 42% and dipped further, to 31% in March 2010. Although his presidential approval saw a rebound in the following months, it shows a consistent downward trend thereafter, to 14% by December 2013. How can the pattern of Ma's popularity be explained? What are the factors responsible for Ma's declining approval rating? To address these questions, statistical analyses are provided in the following section.

3. Explaining presidential approval: the analysis

It is commonly recognized that time-series analyses provide powerful investigative tools for studying presidential approval (Gronke and Newman, 2003). The advantage of a time-series analysis is that it can clearly delineate the trend of presidential support and determine whether the variability in approval ratings are real or just artifacts, or if they are affected by some long-term determinants. Despite these advantages, time-series analysis was not employed in the current study for two reasons. First, most of these studies pooled monthly or quarterly approval ratings at aggregate levels over a period of several decades across multiple administrations (e.g., Brace and Hinckley, 1991, 1993; Clarke and Stewart, 1994; MacKuen et al., 1992; Norpoth, 1996). Although these studies are valuable in identifying the conditions affecting the time path of presidential popularity, treating approval ratings as the opinion of an aggregate fails to investigate the direct linkage between the conditions and an individual's choice-making process. Since citizens' support for politicians is a personal decision, the absence of analysis at the level of the individual creates a gap in the literature on presidential approval (Ostrom and Simon, 1988). Second, due to Taiwan's short democratic history, time-series data on presidential approval on either a yearly or quarterly basis are not available. We thus employ data collected through the aforementioned six surveys conducted in Taiwan.⁹

⁹ Other surveys have been conducted in Taiwan that contained a question on presidential approval, but they did not have relevant questions about the president's performance in specific issue areas. The six polls employed in this study have the most comprehensive survey data that are available about Taiwan.

3.1. A preliminary analysis

Table 1 presents Taiwan citizens' appraisals of Ma's performance in various areas. Because the state of economy is an important factor in presidential approval, the first two measures elicit respondents' economic concerns. The sociotropic aspect is tapped by their assessment of Ma's efforts of *boosting the economy*, while the pocketbook side of economic concerns is gauged by his perceived ability in handling matters related to *people's livelihood*, which, in the Taiwan context, is generally understood as issues of personal economic well-being.¹⁰ Because the ratings for these two issues range from 11% to 17% in the six surveys, both measures indicate that the respondents had a low appraisal of Ma's performance in the area of economy. The president enjoyed higher marks in managing *cross-Strait relations*, *foreign affairs* and *national defense*, because most of the ratings ranged from percentages in the mid 20s to the upper 30s. However, Ma's ability in *staffing key cabinet positions* was questioned by the public, with only 14%–22% of the respondents expressing satisfaction. The public offered an above-average rating for Ma's *integrity*, which shows that citizens viewed him as a politician with high moral standards.

Table 2 shows the breakdown of the effects on positive presidential evaluation based on citizens' appraisal of Ma's performance in various areas. Three interesting patterns can be identified. First, there appears to be a strong relationship between the economy and approval in all six surveys. Indeed, 72%–88% of the respondents who were satisfied with Ma's performance in boosting the economy and improving people's livelihood provided positive presidential evaluations. Only about 10% of the respondents who showed dissatisfaction in the two areas gave their approval. That is, 90% of the respondents who were not satisfied with Ma's economic performance gave him a negative rating. Second, respondents' assessments of Ma's performance in handling issues related to cross-Strait relations, foreign affairs, and national defense, as well as in staffing key cabinet positions, also seemed to affect Ma's popular support, albeit less so, because 40%–60% of satisfied citizens expressed a positive evaluation. Like their assessment of Ma's

¹⁰ Though one may argue that the meaning of people's livelihood may not be identical to that of a pocketbook concern, this is the most relevant item available within the data. In addition, many respondents of focus-group interviews considered people's livelihood synonymous with personal economic well-being. We thus employed the item of people's livelihood as the measure, or a proxy measure, of respondents' pocketbook concerns.

Table 1
Percentages of satisfaction with President Ma's performance.

	2012/09	2012/12	2013/03	2013/06	2013/09	2013/12
Boosting the economy	12.2	13.0	15.4	17.0	14.1	12.2
People's livelihood	12.3	13.1	13.1	16.5	12.6	11.2
Cross-Strait relations	37.0	37.9	35.8	29.1	33.1	30.3
Foreign affairs	33.4	38.8	44.1	30.1	37.3	27.1
National defense	29.1	28.9	29.7	25.1	23.3	23.5
Staffing key cabinet positions	22.0	19.0	21.5	18.6	14.0	15.7
Integrity	60.1	58.2	N/A	55.9	N/A	49.8

Notes:

1. The English version of the survey questions is listed in [appendix 1](#).
2. Both "Staffing key cabinet positions" and "Integrity" are coded as 1's if responses are greater than 5 on an 11-point scale and 0's otherwise.

Table 2
Positive presidential evaluation and satisfaction in issue areas.

	2012/09		2012/12		2013/03		2013/06		2013/09		2013/12	
	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
Boosting the economy	87.5	9.6	76.1	7.2	80.9	9.5	71.9	7.1	72.7	7.3	71.8	6.8
People's livelihood	84.8	9.8	74.2	7.4	75.2	11.4	73.0	7.6	77.1	7.5	75.3	6.9
Cross-Strait relations	49.0	3.2	41.6	1.8	54.4	3.9	54.2	2.7	50.0	1.6	43.6	2.2
Foreign affairs	51.5	4.5	41.09	2.2	47.9	2.4	53.8	3.1	45.6	1.1	47.1	2.7
National defense	54.8	6.0	47.9	4.0	53.6	6.4	54.3	5.5	58.5	4.5	45.4	4.8
Staffing key cabinet positions	59.2	8.6	48.6	8.3	57.8	10.6	55.8	9.9	65.5	9.3	59.5	6.6
Integrity	32.0	2.4	25.5	3.7	N/A	N/A	30.3	3.5	N/A	N/A	27.6	2.1

Notes:

1. Percentages of presidential approval in cells.
2. Y: "satisfaction" in the relevant category; N: "dissatisfaction" in the relevant category.

economic performance, respondents were equally likely to disapprove of Ma if they showed dissatisfaction in these areas. In other words, Ma's performance in these areas did not help him gain high approval ratings, though he could be faulted heavily if there was negative assessment. Finally, Ma's incorruptible image did not much help his low presidential popularity because only 30% of the respondents who viewed him as a politician with high moral standards provided a positive presidential evaluation.

In sum, the above analysis shows that Ma has suffered from a continual decline in approval ratings during his presidency. Taiwan citizens expressed significant dissatisfaction about the state of the national economy and their personal well-being, which contributed to Ma's low presidential popularity. Even though the president has enjoyed relatively higher marks in such areas as cross-Strait relations, foreign affairs, and national defense, Ma's performance in these areas appear to have hurt, more than have helped, his approval ratings, while his incorruptible image appears to have contributed very little to presidential popularity in the public mind.

3.2. Multivariate analyses

To ascertain if the above findings are spurious, data from the aforementioned six surveys were pooled for multivariate analyses. The dependent variable, *presidential approval*, is coded dichotomously, with 1 indicating positive endorsement and 0 otherwise. The seven indicators listed in [Table 1](#) are the key independent variables in the analysis, and they are also coded dichotomously, with 1 signifying respondents' satisfaction with Ma's performance in the relevant category. In addition, several control variables are included in the analysis. Previous studies show that presidential approval varies according to individuals' political affiliations ([Clarke et al., 2005](#); [Fox, 2009](#); [Hibbs et al., 1982](#)). A respondent's partisan identification is also important in Taiwan because it generally reflects the individual's position on the issue of

unification versus independence, as previously indicated.¹¹ Two partisan dummy variables, *Pan-Blue affiliation* and *Pan-Green affiliation*, were created accordingly, with 1 for respondents in the relevant category and 0 otherwise, with nonpartisan voters as the baseline group. Respondents in the Pan-Blue camp are those who identified with the KMT, the People's First Party, and the New Party, while the Pan-Green camp includes those who identified with the DPP and the Taiwan Solidarity Union. It is commonly believed that citizens who self-identify as mainlanders or as Chinese are more likely to support Ma because the president is a mainland and considers himself to have a Chinese origin. Respondents' ethnicity is recoded into two dummy variables, *Hakka* and *Mainlander*, which are coded 1 for respondents in the relevant category and 0 otherwise, with *Benshengren* as the baseline group.¹² Two dummy variables, *Taiwanese* and *Chinese*, were created in the same way to assess respondents' identification. Respondents with a dual identity (i.e., consider themselves as both a Taiwanese and Chinese) serve as the base category. Finally, respondents' levels of education, gender, and age are also included. *College education* was created

¹¹ Variables assessing respondents' unification/independence positions were included in the analysis, and they were not statistically significant. For the sake of having a parsimonious model, this study excludes the variables of respondents' unification/independence positions.

¹² Benshengren, Hakka, and Mainlander are the three major ethnic groups in Taiwan. Comprising about 77% of the island's residents, Benshengren are island residents whose ancestors migrated to Taiwan from the Chinese mainland several hundred years ago; they are the largest ethnic group on the island. Hakka refers to the 10% of island residents who are descendants of immigrants who migrated to Taiwan roughly at the same time as Benshengren from areas in central China. With about 12% of the total population, Mainlanders are those Chinese migrants who fled to the island at the end of the Chinese civil war. While Mainlanders are not a homogeneous ethnic group due to their diverse origins from various Chinese provinces, the rocky start from the moment the forces of Chiang Kai-shek first arrived on Taiwan in 1945 and the subsequent historical development have imposed a distinct but common ethnic identity on those who are known as Mainlanders.

with 1 for respondents who have a college (and above) degree, and *female* is coded as a dummy variable according to respondents' gender. The variable of *age* is a continuous variable and is measured by the number of years since birth.

To evaluate the contextual effects on individuals' support for President Ma, electoral information at the level of the township was collected. As hypothesized, citizens' assessment of the incumbent government is likely to be affected by the information they acquire from the places where they live or work. Due to a lack of data on interpersonal communications, Ma's *vote share*–2012 in the presidential election for each township was compiled to assess the distribution of preferences within that context.¹³ Presidential approval by an individual is expected to be higher if the percentage of presidential votes for Ma in a township is greater. The electoral data were gathered from Taiwan's Central Election Commission.¹⁴ The macro-level information is merged with the aforementioned survey data at the micro level, and the merged six data files were then pooled for analysis.

The above design encompasses both micro-level and macro-level information, and the data structure consists of two levels, that is, individuals are placed within a township. Such a data structure is inherently multilevel and demands an assessment of the need for multilevel models (Luke, 2004; Rabe-Hesketh and Skrondal, 2012; Snijders and Bosker, 2012; Steenbergen and Jones, 2002). Because the dependent variable is measured dichotomously, an “empty model” of binary logit analysis is employed. With no level-1 and level-2 variables, the intra-class correlation coefficient (ICC) is less than 0.02,¹⁵ which shows that a multilevel analysis is not needed. This evidence suggests that there is little variation in the predicted probabilities of presidential approval across towns in Taiwan, or substantively speaking, it means that Ma's popularity in general does not vary much from town to town, other things being equal. This may be due to the fact that Taiwan is a small island country with one of the highest population densities in the world. Interactions between individuals are frequent and intense, and thus approval ratings are rather similar at the township level.

Methodologically speaking, the low ICC indicates that a probit model with binary outcomes would be appropriate. However, endogeneity of independent variables imposes a potential threat to the validity of the statistical results.¹⁶ This issue may arise due to simultaneous determination, selection bias, measurement error, or the omission of relevant variables in the analysis (Jackson, 2008; Persson and Tabellini, 2003: 114). For instance, respondents who are unsatisfied with Ma's economic performance in boosting the economy and/or improving people's livelihood tend to give him a low approval rating. Similarly, those who dislike the president may also think he is doing a poor job in handling issues related to the national economy and/or people's livelihood. Endogeneity may also arise because a right-hand-side explanatory variable is affected by another unobserved or observed variable. The statistical symptom of endogeneity is that an endogenous independent variable and the error term may be correlated. The assumption of conditional independence of the error term in regression analysis is thus violated, which leads to biased and inconsistent estimation. The standard approach of addressing the endogeneity issue in linear regression models is the employment of instrumental variables with a two-

stage least squares (2SLS) equation (Bollen, 2012; Sovey and Green, 2011). However, when left-hand-side (LHS) variables are categorical in nature, solutions acquired through instrumental variables become unreliable (Terza et al., 2008).

To tackle the issue of endogeneity in nonlinear regression models, this study employs a generalized structural equation model (SEM) developed by Huang (2015), which employs the shared latent factor approach (Skrondal and Rabe-Hesketh, 2004: 107–108). Like the 2SLS, the model sets up separate equations for the dependent variable and the suspected endogenous variable. A shared latent variable, *L*, is introduced to link the error terms of the dependent variable and the suspected endogenous variable. Appropriate probability models are then employed to assess these equations. A covariance matrix of the error terms is derived, and the correlation between the error terms of the aforementioned equations can be tested for endogeneity. Specifically, the model consists of a system of equations for the LHS variables marked with asterisks (*), which are assumed to be continuous but unobserved:

$$\text{Suspected endogenous variable} : M_{1i}^* = \gamma_1 X_i + \gamma_2 Z_i + C_i \gamma_3 + \mu_{1i} \tag{1}$$

$$\text{Presidential approval} : Y_i^* = \alpha + \beta_1 M_{1i}^* + \gamma_4 X_i + C_i \gamma_5 + \mu_{2i} \tag{2}$$

where *M** is the suspected endogenous variable, *Y** refers to presidential approval, *X* represents a vector of the key independent variables and *C* is a vector of the aforementioned control and contextual variables, and *Z* in equation (1) is respondents' political interest, which is included as the instrumental variable coded dichotomously with 1 for those expressing an interest in politics and 0 otherwise. Because the LHS variables in both equations are dichotomous, probit models with binary outcomes are employed. As suggested by Huang, a shared latent variable, *L_i*, is also introduced to induce the dependence between the error terms of the two equations. Thus,

$$\mu_{1i} = L_i + \varepsilon_{1i} \tag{3}$$

$$\mu_{2i} = \lambda L_i + \varepsilon_{2i}, \tag{4}$$

where *L_i* ~ *N*(0, 1), *ε_{1i}* ~ *N*(0, 1) and *ε_{2i}* ~ *N*(0, 1). The coefficient of *L_i* is constrained to 1 in equation (3) for the sake of identification. The correlation between the error terms *μ_{1i}* and *μ_{2i}* is

$$\rho = \frac{\lambda}{\sqrt{2(\lambda^2 + 1)}}. \tag{5}$$

The test of endogeneity is a test of *H₀*: *ρ* = 0, which is equivalent to the test of *H₀*: *λ* = 0. A statistically significant correlation coefficient, or *λ* coefficient, signifies the presence of endogeneity. Because this generalized SEM approach is limited to one pair of error terms across two equations due to identification, the test of endogeneity is repeated for each of the seven key independent variables suspected to endogeneity.

Note that the question on presidential integrity was not included in two of the six surveys, the presence of the variable of integrity in the regression model automatically eliminates about 1300 cases. To avoid the possibility of biasing the results due to different sample sizes, two separate analyses are conducted, with and without the variable of integrity. Table 3 shows that only one correlation coefficient is statistically significant in both panels,

¹³ Ma's vote share in the 2008 presidential election was excluded due to its high collinearity with Ma's 2012 vote share.

¹⁴ The electoral data are from Taiwan's Central Election Commission at <http://db.cec.gov.tw/histMain.jsp?voteSel=20120101A1> (January 20, 2015).

¹⁵ The ICCs are calculated with the following equation: $\rho = \sigma_{\mu_0}^2 / (\sigma_{\mu_0}^2 + \pi^2/3)$. See Raudenbush and Bryk 2002: 298, 334.

¹⁶ The authors want to thank two anonymous reviewers for making this point.

which indicates that the residuals of people's livelihood and presidential approval are correlated. This result justifies the employment of the generalized SEM listed in equations (1) and (2) for statistical estimation. After treating people's livelihood as the endogenous variable and the inclusion of the latent confounding factor, Table 4 shows the results, with and without the variable of integrity. Also listed in the table are the expected changes in predicted probabilities of presidential approval for each independent variable. Note that the statistical results of both panels are very similar despite the large difference in sample size. This demonstrates that the results are rather robust. Collectively, the two panels in Table 4 reveal several major findings.

First of all, as expected, all regression coefficients associated with boosting the economy are statistically significant and bear positive signs. The results confirm the sociotropic hypothesis. Indeed, citizens' concern about the national economic situation is the single most important contributor to Ma's popularity because it has the largest effect on approval rating among all citizens' assessments. Both panels show that, on average, respondents who appreciate Ma's ability to boost the economy are 20% higher in probability to give positive presidential approval. Ma's perceived ability to stimulate the national economy thus plays a paramount role in the public mind about him as a competent president. Coupled with the data presented in Table 1, which shows a low appraisal of Ma's performance with regard to the economy, this evidence explains the president's declining popular support. The fact that none of the coefficients associated with people's livelihood are statistically significant indicates that its effect on presidential approval identified in Table 2 is spurious. Taiwan citizens tend to pay more attention to the country's economic conditions when they assess a president's performance. The pocketbook hypothesis is thus rejected.

Second, citizens' concern about the economy is closely followed by their evaluation of Ma's ability in handling issues related to cross-strait relations, national defense, and foreign affairs, albeit to a lesser degree. Specifically, those who appreciate Ma's competence in these areas are 5%–8% more likely to give a positive rating. These findings reflect Taiwan citizens' anxiety over the island country's relationship with China, which has important implications for almost every aspect of their lives. As Beijing leaders assertively claim sovereignty over the island and refuse to renounce the use of military force against Taiwan while continuing to isolate Taipei internationally, the public's assessment of a president's management of cross-strait relations, national defense, and foreign affairs naturally plays an important role in their presidential rating.

Third, the statistically significant and positive coefficients associated with Ma's appointment of cabinet ministers deserve special attention. Respondents who appreciate Ma's cabinet appointments are more likely to give him a positive rating. The finding that presidential approval depends on the president's ability in staffing key cabinet positions is somewhat unusual in the literature of presidential approval because no studies have identified this

aspect as a factor contributing to presidential popularity, a point we will explore further later. Interestingly, while Ma places much emphasis on high moral standards for himself and his ministers, presidential integrity has no effect on his approval ratings because the related coefficient is statistically insignificant.

Fourth, as hypothesized, the coefficients associated with Pan-Blue affiliation and Pan-Green affiliation are statistically significant and bear opposite signs. That is, Pan-Blue supporters are more likely to give a positive rating to Ma, whereas Pan-Green identifiers are less likely to. Such a partisan divide is consistent with findings derived from research on presidential approval in the United States. Meanwhile, all but one of the regression coefficients related to the respondents' identity, ethnicity, education level, gender, and age are statistically insignificant, indicating that respondents' demographic characteristics have little effect on their approval of the president.

Finally, both regression coefficients related to Ma's vote share in 2012 are statistically significant and bear negative signs. The finding confirms the hypothesis that context has a significant effect on individuals' political behavior. The negative coefficients indicate the loss of popularity of Ma in towns where he received support in the 2012 election. On average, the probability of a positive rating declines by 8%–11% with 1% of the vote share Ma previously received in an average town. This shows that Ma's low approval rating is due in part to the loss of his loyal base.

4. Discussion and conclusions

The above evidence shows that Ma's popularity is highly related to the public's appraisal of his presidential performance in various areas. Consistent with conventional wisdom and previous findings in Taiwan (Chen and Keng, 2009; Lee and Wu, 2003; Sheng and Pai, 2008), the state of the economy plays a vital role in the popularity of Taiwan's president. The island citizens believe that the current administration's policies directly affect the national economy and feel that the president bears the primary responsibility of mollifying the negative consequences of national economic problems. Qualitative data from focus-group interviews also provide an interpretative understanding of the "sociotropic" linkage. One respondent's remarks are instructive: "Being a leader, [Ma] needs to provide the people with a promising future for the country. However, I don't see any hope ... for the county's economic prospects" (Appendix 2: 2013TSG03). These complaints come from respondents of all political affiliations, including Pan-Blue identifiers, who presumably are Ma's supporters. As a self-declared Pan-Blue respondent commented, "I am disappointed in Ma Ying-jeou [because] he fails to resolve economic problems ... such as the unemployment issue for the young people and the capital gains tax (Appendix 2: 2013TSB05). As quantitative survey data in Table 1 show, only 11%–17% of the respondents are satisfied with Ma's performance in boosting the national economy. This explains why Ma's popularity has suffered.

Note that the public's "sociotropic" concern is closely linked to their anxiety over the increasingly close economic ties between Taiwan and China. As one respondent at the focus-group interview succinctly put it, "The relaxation of [Taiwanese businesses] investment in China would create 'hollowing out' effects" on Taiwan's economy (Appendix 2: 2013TNG05). Another respondent expressed distrust of Ma's conciliatory approach toward China and believed that his policies have only increased the island's growing dependence on the Chinese market: "The mainland [China] plans to employ economic means to resolve the Taiwan issue. It provides many economic benefits to Taiwan. Right? ... When Taiwan develops complete dependence on the Chinese economy, it will resolve the Taiwan issue by using the economy as leverage"

Table 3
Test of Endogeneity ($H_0: \rho = 0$).

	Without "integrity"	With "integrity"
Boosting the economy	0.11	-0.12
People's livelihood	0.58**	0.58**
Cross-strait relations	0.03	0.00
National defense	0.40	0.19
Foreign affairs	0.04	0.04
Staffing key cabinet positions	-0.02	0.19
Integrity	-	-0.08

Table 4
Presidential approval in Taiwan.

Variables	Panel 1		Panel 2	
	Coef. (s.e.)	AME (d.s.e)	Coef. (s.e.)	AME (d.s.e.)
Boosting the economy	2.22*** (0.50)	0.20 (0.02)	2.29** (0.74)	0.20 (0.03)
People's livelihood	−0.19 (0.25)	−0.01 (0.01)	−0.03 (0.33)	−0.00 (0.02)
Cross-Strait relations	1.38*** (0.28)	0.08 (0.01)	1.34*** (0.38)	0.08 (0.01)
National defense	1.1*** (0.25)	0.07 (0.01)	1.02** (0.33)	0.06 (0.01)
Diplomacy	1.11*** (0.26)	0.06 (0.01)	0.93** (0.33)	0.05 (0.01)
Staffing key cabinet positions	1.25*** (0.28)	0.09 (0.01)	1.26** (0.40)	0.09 (0.01)
Integrity	—	—	0.34 (0.27)	0.02 (0.01)
Pan-blue	0.41* (0.18)	0.02 (0.01)	0.48* (0.24)	0.03 (0.01)
Pan-green	−0.73** (0.30)	−0.04 (0.01)	−1.11* (0.48)	−0.06 (0.02)
Taiwanese	−0.01 (0.14)	−0.00 (0.01)	−0.00 (0.18)	−0.00 (0.01)
Chinese	0.39 (0.29)	0.02 (0.02)	0.68* (0.38)	0.04 (0.02)
Hakka	−0.09 (0.21)	−0.01 (0.01)	−0.02 (0.25)	−0.00 (0.01)
Mainlander	0.15 (0.17)	0.01 (0.01)	0.03 (0.21)	0.00 (0.01)
College education	−0.12 (0.14)	−0.01 (0.01)	−0.23 (0.19)	−0.01 (0.01)
Female	0.01 (0.13)	0.00 (0.01)	−0.02 (0.16)	−0.00 (0.01)
Age	−0.01 (0.01)	−0.00 (0.00)	−0.01 (0.01)	−0.00 (0.00)
Ma's vote share−2012	−1.39* (0.73)	−0.08 (0.04)	−1.92* (0.95)	−0.11 (0.06)
L	1.47*** (0.40)	—	1.42** (0.59)	—
N	4071		2740	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, one-tailed test.

Note: Coef.: regression coefficient; s.e.: standard error; AME: average marginal effect; d.s.e: delta-method S.E.

Data source: Huang 2012.

(Appendix 2: 2013PSB01). Such discontents may explain the recent massive protest in Taiwan known as the Sunflower Movement. Led by a group of young students protesting a proposed cross-Strait trade-in-service agreement, the movement reflects the public's concern about Taiwan's increasingly close economic ties with China, fearing that they would heighten the island's growing dependence on the Chinese market and infringe on Taiwan's national security and sovereignty.¹⁷

The complaint about Ma's ability of staffing key cabinet positions is also evident across different political affiliations. Since Ma assumed the presidency in 2008, his cabinet has had a large proportion of doctorates and professors serving as ministers, probably larger than in any other government in the world. Such appointments may be due to the fact that Ma himself has a doctor of juridical science (SJD) degree from Harvard Law School and was a university professor before becoming a politician. This may also be due to Ma's emphasis on high moral standards and the desire of running a clean government. Since holding a professorship as a profession traditionally possesses high occupational prestige in Taiwan society, his inclination to place like-minded individuals in key cabinet positions is thus understandable. Critics, however, have pointed out that "these political newcomers on loan from universities have no sense of mission and no team spirit. They are just a bunch of 'happy-go-lucky temporary workers'" (Shih, 2014). Data in Table 1 show that most respondents appear to agree with this assessment, and among participants of focus-group interviews, there is a widespread perception that the cabinet is weak. As one respondent stated, "His team is totally incompetent." Using some of his cabinet members who were arrested for corruption charges as examples, the respondent asked a rhetoric question: "Are members

of his team really as incorruptible as was said during the presidential campaign?" (Appendix 2: 2013TSN10). Another respondent complained, "He [Ma] filled [the cabinet] with a lot of scholars. ... I am not saying that scholars are no good, but they lack practical experience. ... When they encountered obstacles during the process of implementing a policy, they soon withdrew or resigned from the position" (Appendix 2: 2013TSN06). Interestingly, the personal integrity of the president, a trait that Ma has emphasized often, is not helpful to his declining popularity. In fact, respondents of focus-group interviews believed that the characterization of Ma as being a "Teflon pot" has been an indirect contributing factor to his low approval rating, since he lacks the courage to support his cabinet (Appendix 2: 2013TSN06).

The above findings have important implications for the study of presidential approval as a whole. Consistent with the conventional wisdom, the state of the economy plays a vital role in Taiwan's presidential popularity. Like American voters who tend to pay most attention to the nation's economic health (Clarke and Stewart, 1994; Kinder, 1981; MacKuen et al., 1992), Taiwan citizens' evaluation of the president's performance is also based primarily on the country's overall economic conditions. The fact that presidential performance in the areas of cross-Strait relations, diplomacy, and national defense are important to Taiwan's presidential approval is consistent with previous findings (Aldrich et al., 1989; Marra et al., 1990). Contrary to Almond's (1950) observation that public attitudes toward foreign policy lack intellectual structure and tend to be unstable, the empirical evidence in Taiwan, along with that gathered in the American setting, shows that citizens are well versed in these areas. This conclusion is particularly significant in the case of Taiwan because the island's relationship with China has important implications for every aspect of the island citizens' lives. Given that the president is facing a reasonably alert public, performance in these areas also has an effect on the popularity of Taiwan's president.

¹⁷ The "Sunflower Movement" lasted more than 20 days between March 18 and April 10, 2014, during which time student demonstrators occupied the Legislative Yuan and damaged the main government buildings of the Executive Yuan. The movement also led to a massive demonstration against the Ma administration's cross-Strait policies in front of the presidential office on March 30 (J. R. 2014).

Appendix 1. Survey questions

1. How satisfied are you with his [President Ma Ying-jeou's] overall performance as president over the past six months?
2. How satisfied are you with his performance in promoting economic development?
3. How satisfied are you with his performance in handling the livelihood issues?
4. How satisfied are you with his performance in handling the cross-Strait relations?
5. How satisfied are you with his performance on national defense?
6. How satisfied are you with his performance in diplomacy?
7. In human resource allocation, if 0 means that he employs persons irrelevantly, 10 means that he employs persons relevantly, how would you rate Ma using a 0-to-10 scale?
8. In personal morality, if 0 means that he has bad personal morals, 10 means that he has good morals, how would you rate Ma using a 0-to-10 scale?

Appendix 2. Focus group participants

1. Taiwan's election and democratization study

Northern Taiwan Pan-Green Group

Code	Sex	Age	Education
2013TNG01	Male	38	College
2013TNG02	Male	55	University and higher
2013TNG03	Male	33	College
2013TNG04	Female	21	Senior high school
2013TNG05	Male	38	University and higher
2013TNG06	Male	40	College

Northern Taiwan Pan-Blue Group

Code	Sex	Age	Education
2013TNB01	Male	59	Senior high school
2013TNB02	Male	45	University and higher
2013TNB03	Female	37	University and higher
2013TNB05	Male	52	College
2013TNB06	Female	49	Junior high school
2013TNB07	Female	66	College
2013TNB08	Male	37	University and higher
2013TNB09	Female	55	University and higher

Northern Taiwan Nonpartisan Group

Code	Sex	Age	Education
2013TNN01	Male	38	University and higher
2013TNN02	Female	57	Elementary school and under
2013TNN04	Male	66	Elementary school and under
2013TNN05	Female	44	Senior high school
2013TNN06	Female	43	College
2013TNN07	Male	57	University and higher
2013TNN08	Male	56	University and higher
2013TNN09	Male	52	Junior high school

Southern Taiwan Pan-Green Group

Code	Sex	Age	Education
2013TSG02	Male	25	University and higher
2013TSG03	Female	28	University and higher
2013TSG05	Male	70	College
2013TSG06	Female	53	Senior high school

Southern Taiwan Pan-Blue Group

Code	Sex	Age	Education
2013TSB01	Male	62	Senior high school
2013TSB02	Female	66	Junior high school
2013TSB03	Male	44	Junior high school
2013TSB04	Male	46	College
2013TSB05	Female	40	University and higher
2013TSB06	Male	47	Senior high school
2013TSB07	Female	61	University and higher

Southern Taiwan Nonpartisan Group

Code	Sex	Age	Education
2013TSN01	Male	79	Elementary school and under
2013TSN02	Male	36	University and higher
2013TSN03	Male	48	College
2013TSN04	Male	39	University and higher
2013TSN05	Female	45	University and higher
2013TSN06	Male	62	College
2013TSN08	Male	39	University and higher
2013TSN09	Female	52	Senior high school
2013TSN10	Male	27	Senior high school

Data source: [Huang 2012](#).

2. Presidential popularity and its political effects

Southern Taiwan Pan-Green Group

Code	Sex	Age	Education
2013PNG02	Female	69	Senior high school
2013PNG03	Male	62	University and higher
2013PNG04	Female	49	College
2013PNG07	Female	31	University and higher
2013PNG08	Male	47	University and higher

Northern Taiwan Pan-Blue Group

Code	Sex	Age	Education
2013PNB02	Female	27	Senior high school
2013PNB03	Female	44	College
2013PNB05	Female	52	College
2013PNB06	Male	51	University and higher
2013PNB09	Female	50	College
2013PNB10	Female	43	Senior high school

Northern Taiwan Nonpartisan Group

Code	Sex	Age	Education
2013PNN01	Female	63	Elementary school and under
2013PNN02	Male	59	University and higher
2013PNN03	Male	55	College
2013PNN04	Male	53	Elementary school and under
2013PNN05	Male	52	Junior high school
2013PNN07	Female	80	Elementary school and under

Southern Taiwan Pan-Green Group

Code	Sex	Age	Education
2013PSG01	Female	62	Junior high school
2013PSG02	Female	51	University and higher
2013PSG03	Male	51	Junior high school
2013PSG04	Female	57	Junior high school
2013PSG05	Male	52	College
2013PSG10	Female	49	Senior high school

Southern Taiwan Pan-Blue Group

Code	Sex	Age	Education
2013PSB01	Female	64	Senior high school
2013PSB02	Female	53	Senior high school
2013PSB03	Male	56	Elementary school and under
2013PSB04	Female	66	University and higher
2013PSB05	Male	38	Senior high school
2013PSB06	Male	42	University and higher
2013PSB07	Male	52	Senior high school
2013PSB08	Female	37	College

Southern Taiwan Nonpartisan Group

Code	Sex	Age	Education
2013PSN01	Female	51	Senior high school
2013PSN02	Female	26	University and higher
2013PSN05	Male	60	College
2013PSN08	Female	50	Senior high school
2013PSN10	Female	60	University and higher

Data source: Cheng 2011.

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