Too Far to Vote? A Preliminary Analysis of Residential Absentees' Electoral Behaviour in Taiwan[*]

Chi-lin Tsai[**]

Abstract

Most of studies on absentee voting in Taiwan have concentrated on normative and institutional analysis. This article brings empirical analysis onto focus by using survey as well as census data to examine the electoral behaviour of the electors who do not reside in their registered households, i.e. residential absentees. Research results – which cover several nationwide elections held between 2000 and 2012 – confirm that residential absentees are indeed less likely to vote than are those who live in their registered households. However, the data show no compelling evidence for the claim that the result of the 2012 presidential election would have been turned around, had all of residential absentees turned out to vote. Due to the limitations of data, these findings can only be extrapolated to people who are residentially absent but still living in Taiwan. In order to make better projections about the possible impacts of the forthcoming absentee voting system, future research should therefore manage to include the other types of residential absentees into investigation.

Keywords: voting, voter turnout, residential absence, absentee voting

[**] Ph. D. student, Department of Government, University of Essex, UK. E-mail: ctsaib@essex.ac.uk.

According to the current election and recall acts in Taiwan, electors can only cast ballots in person at their designated polling stations at the locations of their officially registered households（戶籍地）on Election Day. This stipulation renders voting less convenient for people who do not reside in their registered households（i.e. residential absentees, 不在籍者）, thus raising concern over the equal suffrage. Over the past two decades, there has been widespread public debate about whether and how to design a suitable absentee voting system for Taiwan.[1] Despite being the centre of this debate, the relation between residential absence and electoral behaviour has seldom been empirically investigated in Taiwan. Instead, scholars have long concentrated on normative and institutional aspects – expounding the spirit of absentee voting, introducing the modes of absentee voting, and assessing the feasibility of absentee voting in Taiwan (Chang and Fan 2010; Chen 2010; 2011; 2012; Chen and Tzeng 2012; Chou 2005; Hsu 2011; Kao 2004; Lin 2010a; 2010b; Lin and Chu 2011; Lo 2011). Those studies did yield insightful results, but unfortunately they have not touched the very fundamental controversy over absentee voting. As professor Chung-li Wu（吳重禮）stated in a public hearing organised by the Ministry of the Interior (2012, 15-16. Heresafter MOI):

We could've spent two hours talking about the legal, institutional, and technical issues, but none of those would get to the point... There is a way to persuade political parties to accept [absentee voting] *– the Kuomintang* (KMT) *will benefit from an increase in turnout, and the Democratic Progressive Party* (DPP) *will also gain an advantage, because turnout in the areas with a massive exodus of population* [i.e., the DPP strongholds] *will be boosted...*

Simply put, it is the potential electoral impacts of absentee voting that arouses the controversy, and the impacts are largely decided by residential absentees. In order to assess those potential impacts, this article examines the residential absentees' electoral behaviour in Taiwan's nationwide elections held after 2000, and addresses two research questions: (1) Compared to residential "presentees"（在籍者）, are residential absentees really less likely to vote? (2) If

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[1] Absentee voting – a mode of convenience voting – aims to make voting more convenient by allowing electors to cast ballots at a place and time other than the polling station on Election Day (Gronke et al. 2008, 438-441). There are other modes of convenience voting, such as postal voting, proxy voting, early voting, internet voting, voting centres, etc., but none of them is available in Taiwan now. Refer to the online supplement of this article for an overview of the controversy about absentee voting in Taiwan.

they are, can any political party gain a significant electoral advantage by mobilising residential absentees to vote? The remaining part of the article proceeds as follows: the first section reviews the major works of literature and postulates whether and how residential absence relates to voter turnout and election results. The second section introduces the research data employed in this study, and discusses their limitations. Research questions are examined by both of the aggregate- and individual-level analysis in the third section. Finally, the article concludes with a discussion about the implications of the findings.

I. Literature Review and Research Questions

1. Residential Absence and Voter Turnout

The urge to implement an absentee voting system is driven by the concern over the adverse effect of residential absence on voter turnout. This concern is justifiable from the perspective of the rational choice theory – a theory formulating the decision of turnout as cost-and-benefit calculation and arguing that people turn out to vote only if the expected benefits of the action outweigh the costs (Downs 1957, 271-272). Although the rational choice theory has been criticised for its definitions of turnout benefits, it is less contentious in respect of the idea that "voting is inherently costly" (Downs 1957, 265).[2] In Taiwan, where there is no absentee voting system, living away from the registered household incurs even more costs of collecting electoral information about the designated polling districts and travelling back to the designated polling stations. These extra costs can be nontrivial, thereby deterring residential absentees from voting.

Apart from tangible cost-and-benefit calculation, residential absentees may also lack of psychological incentives to vote. Living away from the registered household means less in-

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[2]   Originally, Downs (1957, 270) defined two types of turnout benefits. The short-run benefit comes from casting a pivot ballot to make the favourite party win the election; the long-run benefit comes from keeping democracy lasting. Both of these definitions have the problem of free riders, i.e. nonvoters can enjoy these benefits too. In order to circumventing this problem, several modified definitions have been proposed (See Green and Shapiro 1994; Whiteley 1995). For example, it is well-known that Riker and Ordeshook (1968) expanded the definition by adding selective incentives, i.e. the benefits exclusively for voters; satisfaction from compliance of civic duty is of this sort. However, many of the modifications expand the definitions of benefits from tangible to psychic gratification, so they have been criticised as inconsistent with the framework of the rational choice theory (Green and Shapiro 1994).

person interactions with people and things in the designated polling district, so residential absentees may be ignorant or apathetic about what their fellow townspeople feel deprived of, unable to cultivate a sense of attitudinal engagement (Verba, Schlozman, and Brady 1995), and short of the social capital (Putnam 1995). Since these psychological factors are important motivations for political participation (Clarke et al. 2004, 224-227), lack of opportunities to develop these motivations make residential absentees less enthusiastic about voting.

The above deductive reasoning – which suggests that residential absentees are less keen to vote owing to their higher costs and weaker motivation for voting – is largely supposed by empirical studies on voting distance. It has been found that the longer the distance between an elector's residence and his/her designated polling station, the lower the propensity to vote (Bhatti 2012; Brady and McNulty 2011; Dyck and Gimpel 2005; Haspel and Knotts 2005; McNulty, Dowling, and Ariotti 2009). Moreover, voting distance is not a purely geographic concept. The distance perceived by electors has proven to be more crucial to turnout than the actual distance (Orford and Schuman 2002; Taylor 1973). Residential absentees usually face or perceive a longer voting distance, so they are presumably less willing to vote than are residential "presentees."[3]

As opposed to all have been discussed thus far, the cognitive-mobilisation theory may cast doubt on the adverse effect of residential absence on voter turnout. The theory holds that, in an era of education expansion and information explosion, it is easier for people to "possess the skills and resources necessary to become politically engaged with little dependence on external cues." (Dalton 1984, 267) Meanwhile, it is also easier for people in this new era to be involved into politics, because education and information increase people's awareness of politics, which in turn enhances dissatisfaction with government performance and prompts political participation (Clarke et al. 2004, 230). These ideas are to some extent supported by the empirical studies that established a positive association between education and turnout (e.g., Dee 2004; Milligan, Moretti, and Oreopoulos 2004; Sondheimer, Milstein, and Green 2010). Taken together, in view of the cognitive-mobilisation theory, residential absentees are unnecessarily less likely to vote, because the cognitive improvement can compensate for the adverse effects of residential absence.

Finally, contextual factors are worthy of consideration as well. Geographically, Taiwan is a

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[3] Consider that A and P are two citizens of a city. Both of them live near the city border, but P lives within the boundary and A lives beyond the boundary. Geographically, A and P face a similar voting distance, but psychologically, A may perceive a longer voting distance than P does, because A has to cross border for going to his/her designated polling station, while P does not have to. In other words, the existence of the city border may lead the residential absentee, A, to exaggerate his/her voting distance.

small country, so it is not immediately clear if residential absence can really affect voter turnout. On the one hand, space limitation plus high educational attainment and information literacy seem to make cognitive mobilisation a more plausible argument. On the other hand, small territory does not automatically imply miniscule influence of residential absence, because turnout is a low-cost and low-benefit decision, and "any small forces can be just enough to change individuals' choices." (Aldrich 1993, 274) Both arguments are theoretically sound, but none of them should be taken for granted. By using empirical data on Taiwan's nationwide elections held after 2000, this study examines whether or not residential absentees are less likely to vote than are residential "presentees."

2. Residential Absence and Election Results

If residential absence have no influence on voter turnout, there is little point in discussing the consequences for election results. By contrast, if residential absence does depress voter turnout, the next step is to assess its potential electoral impacts. This issue has been the very centre of the controversy over absentee voting in Taiwan, but has not been treated in much detail in academia. Studies to date have focused on the normative and institutional aspects – for example, some believed that absentee voting will mobilise residential absentees, and consequently increase political engagement, enhance governance legitimacy, and consolidate democracy (Lin and Chu 2011); others doubted about the government's ability to cope with the heavy workload added by absentee voting, so they worried about electoral chaos and frauds (Lin 2010a; 2010b; Lo 2011).

While being overlooked in academia, the impacts of residential absence on election results have attracted considerable attention from the mass media. A prevalent claim is that absentee voting will be run to suit the convenience of millions of the Taiwanese residing in China, and hence will disproportionately benefit the pro-China parties (Liberty Times, April 17, 2007).[4] Another claim accentuated by the DPP's defeat in the 2012 presidential and legislative election is that, had absentee voting been implemented, the DPP might have suffered less from the inappropriate Election Day and won the election (Apply Daily, January 16, 2012).[5] Despite

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[4] Editorial, 2007, "It Is Not Permissible to Let China Manipulate Taiwanese Politics by Taiwanese Merchants' Absentee Ballots," (in Chinese) *Liberty Times*, April 17, http://news.ltn.com.tw/news/opinion/paper/125705 (accessed December 20, 2014).

[5] Apple Daily, 2012, "The Pan-Green Blames Tsai's Election Defeat on the Difficulty in Getting Back to the Hometown to Vote," (in Chinese) *Apple Daily,* January 16, http://www.appledaily.com.tw/appledaily

disagreeing on who would gain electoral advantages, both claims agreed that the mobilisation of residential absentees will favour some parties over the others.

The claims in the public debate are often made based on aggregate data, thus prone to the problem of ecological inference – i.e., the individual-level truth could be different to the observed aggregate information (King 1997, 3). For example, the editorial of the *United Daily News* on 20th February 2012 argued that, according to the Directorate General of Budget, Accounting, and Statistics, residential absentees accounted for more than 15% of Taiwanese population, but the DPP lost to the KMT by less than 6% of population votes, so it was possible that implementing absentee voting could have turned around the result of the 2012 presidential election (United Daily News, February 20, 2012).[6] Indeed, there was such possibility, but it can never be confirmed by merely contrasting between two pieces of aggregate information (i.e. 15% versus 6%). More specifically, the validity of that editorial relies on three assumptions: (1) residential absentees in Taiwan were less likely to vote, (2) they could have been mobilised by absentee voting, and (3) Most of them would have voted for the DPP in the election. With only two pieces of aggregate information, it is hard to tell whether these seemingly plausible but actually unproven assumptions were valid or not, so an argument like that editorial is at risk from the problem of ecological inference.

Individual-level survey data can compensate for the limitations of aggregate data. Unfortunately, residential absence – which, as I believe, should be a routinely-collected demographic variable – has been badly neglected by opinion polls in Taiwan. Only a few of surveys had collected that variable, but they did not put enough effort to assess the electoral impacts of residential absence (e.g., Liu et al. 2003; MOI 2010; National Policy Foundation 2002). Those surveys were oriented heavily towards the issues such as how many people support implementing absentee voting, or how many people believe that the government will effectively and fairly implement absentee voting. The survey conducted by the Ministry of the Interior in October 2010 was exactly an example. It showed that 20.74% of Taiwanese adults were residential absentees (under a loose definition), and 47.41% of them would definitely apply for absentee voting, which was equal to around 1.7 million ballots. However, the survey did not collect information about partisanship or past voting behaviour, so further projections about the

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/article/headline/20120116/33964097/ (accessed December 20, 2014).

[6] Editorial, 2012, "It Is Necessary to Implement 'the Transfer Voting'," (in Chinese) *United Daily News*, February 20, http://paper.udn.com/udnpaper/PID0004/211365/web (accessed December 20, 2014).

potential impacts of residential absence were impossible.

Aggregate-level speculations about the electoral impacts of residential absence has been floated in the public debate, especially during Taiwan's 2012 presidential and legislative election. The academic society has not responded to those speculations by providing individual-level insights. Seeking to fill this gap, this study uses survey data to examine whether the DPP could have gained extra votes to turn around the result of the 2012 election, had residential absentees been mobilised to vote.

II. Data and Measures

1. Research Data

Data for this study are gathered from multiple sources at various time points. *The General Report of 2010 Population and Housing Census* (Directorate-General Budget, Accounting, and Statistics 2011. Hereafter DGBAS) and the election archive of the Central Electoral Committee (CEC) provide aggregate date about residential absence and voter turnout respectively. Individual-level survey data are obtained from two academic projects (Table 1) – Taiwan's Election and Democratisation Study (TEDS) and the Taiwan Social Change Survey (TSCS).[7] These survey data are selected since they contain variables (or proxies) of residential absence and voter turnout in Taiwan's presidential or legislative elections held after 2000. In addition to the latest election held before the fieldwork period of each survey (i.e. target election), TEDS2004LA, TSCS451 and TSCS632 also asked respondents about whether they have voted or not in other elections. Hence, there are ten survey data but fourteen turnout estimates.

The face-to-face interviews of TEDS and the TSCS have excluded two outlying counties – Kinmen and Lienchiang – from their target populations. The telephone survey, TEDS2013PA 03, covered these two counties in the target population, but ended up with only one Kinmenese respondent and none from Lienchiang, so I exclude these outlying islands from analysis, unless

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[7] The TSCS is hosted by the Institute of Sociology and the Centre for Survey Research, Academia Sinica, Taiwan. The three series of TEDS employed by this study were conducted by the Election Study Centre of National Cheng-chi University, Taiwan. Both projects are sponsored by the Department of Humanities and Social Science of the Ministry of Science and Technology, Taiwan. More information is on the TSCS and TEDS websites (http://www.ios.sinica.edu.tw/sc/; http://www.tedsnet.org). The author appreciates the assistance in providing data by the institutes aforementioned.

specified otherwise. Respondents under 20 years old are also excluded, as they are not electors. (For example, the analysis of the 2001 legislative election includes respondents born before 1982.)

Table 1　Research Data

Survey	Topic	Mode	Field Period		R.A.	Target E.	Other E.
TEDS2004LA	2004 Legislative Election – A	F2F	Jan-Mar	2005	M2	2004L	2004P
TEDS2013	Benchmark Survey	F2F	Jun-Aug	2013	M2	2012P&L	
TEDS2013PA03	Presidential Satisfaction Wave 3	TEL	Mar	2013	M2	2012P&L	
TSCS632	Phase 6 Wave 3 Questionnaire 2	F2F	Jul-Oct	2012	M1	2012P&L	2008P
TSCS631	Phase 6 Wave 3 Questionnaire 1	F2F	Jul-Oct	2012	M1	2012P&L	
TSCS612	Phase 6 Wave 1 Questionnaire 2	F2F	Jul-Sep	2010	M1	2008P	
TSCS551	Phase 5 Wave 5 Questionnaire 1	F2F	Jul-Aug	2009	M1	2008P	
TSCS522	Phase 5 Wave 2 Questionnaire 2	F2F	Jul-Sep	2006	M1	2004L	
TSCS512	Phase 5 Wave 1 Questionnaire 2	F2F	Jul-Sep	2005	M1	2004L	
TSCS451	Phase 4 Wave 5 Questionnaire 1	F2F	Jul-Sep	2004	M1	2004P	2001L 2000P

Sources: Compiled by author; see text and references for details.

Notes: "R.A." indicates the type of residential-absence measure. "Target E." means the latest presidential (P) or legislative (L) election held before the survey. Some surveys measured turnout for more than one election ("Other E.").

2. Measures of Residential Absence

Three types of residence-absence measures are discussed in this section. Measure 1 and 2 are used to identify the residential status of the TSCS and TEDS respondents respectively, and Measure 3 is proposed for future telephone survey research.

Measure 1. Ask the respondent where he/she is living as well as where his/her registered household is, and contrast between the two locations.

Measuring survey respondents' residential status requires information about two locations – registered household and actual residence. If the addresses of these locations are recorded separately, the information is sufficient to create not only a dichotomous variable of residential absence (i.e., absence/presence), but also a continuous variable of voting distance. However, asking about addresses may increase item non-responses, as addresses are sensitive personal information. This problem can be avoided at the expense of the precision of information.

Asking about the towns/districts（鄉鎮市區）of the residence and registered household is less sensitive, and allows for measuring the town/district-level residential absence. Likewise, residential absence can be measured at the level of city/county, villages/communities（村里）, etc., depending on how pollsters weigh the precision of information against the risk of item non-responses. The TSCSs listed on Table 1 recoded respondents' residential locations at the postcode level, which is almost as precise as is the town/district level.[8] Of 14,365 respondents, only one did not give that information, which means the item non-response of the postcode-level measure should not be a cause for concern (Chang 2005; 2006; 2011; 2013; Fu 2007; 2010).

Measure 2. Ask the respondent whether he/she is living in the registered household or not.

Measure 2 directly asks respondents about whether they live in the registered households. Two questions are merged into one, so the measure becomes simpler but less informative. Respondents now take the responsibility for judging whether they are residential absentees or not. In order to prevent respondents from giving answers at inconsistent levels, question wording must define the level of residential absence as clear as possible. TEDS2013PA03, 2004LA, and 2013 adopted Measure 2, and their item non-response rates of 2.18%, 0.00% and 0.04% respectively (Huang 2013a; 2013b; Liu 2004).

Measure 3. Ask the respondent where his/her registered household is, locate his/her residence by telephone numbers, and then contrast between the two locations.
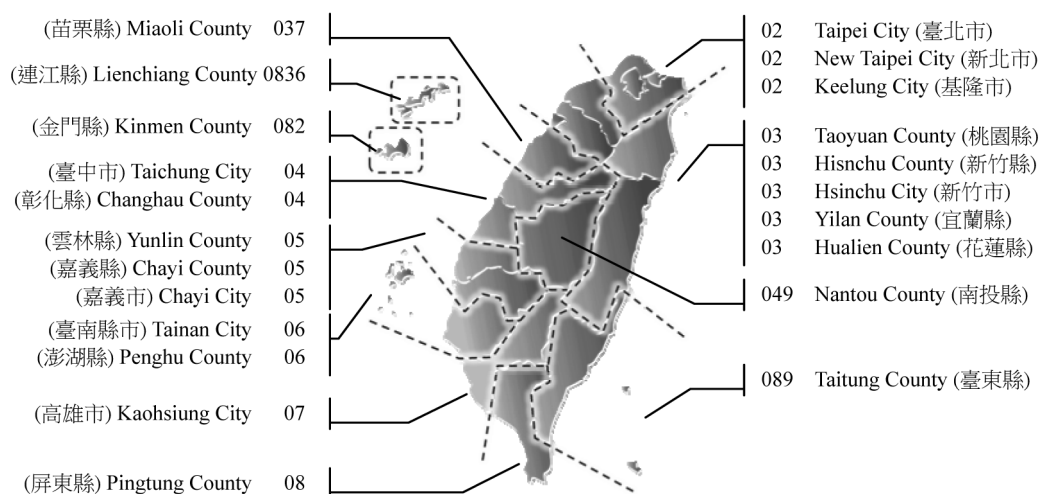
Opinion polls in Taiwan usually collect information about respondents' registered households for stratified sampling and weighting, but omit the information about residential households. For telephone surveys, a trick to retrieve this missing information is to locate respondents' residences by their landline prefixes.[9] As shown on Figure 1, Taiwan can be partitioned into 12 areas based on the prefixes, so the trick helps to measure residential absence at the prefix level, which is less precise than is the county/city level, as some counties/cities share the same prefix. Nonetheless,

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[8] The TSCS uses the official registered household data as the sampling frame, so there is no need to ask respondents where their registered households are.

[9] This trick assumes that respondents are interviewed in their actual residences by phone. This should be a reasonable assumption, given that academic surveys in Taiwan always exclude non-household phones and administer within-household sampling.

constructing more precise measures with the trick are actually possible. In the sampling stage, it is very common for telephone surveys in Taiwan to use landline numbers as information about respondents' residences to preliminarily stratify the sample at the county/city, the town/district, or even the village/community level. In order words, survey organisations are capable to locate landlines in a great degree of precision, and hence, with the trick, they are absolutely able to measure residential absence far more precisely than at the prefixes level.

Moreover, Measure 3 is retrospectively applicable. The variable of residential absence can be re-constructed in telephone surveys conducted in the past, as long as the locations of respondents' registration households had been collected, and respondents' landline numbers are still archived. To the best of my knowledge, Measure 3 has not been applied to any electoral survey in Taiwan, but given its retrospective property, Measure 3 opens up a possibility for researchers to retrieve a large amount of information for researching residential absence.

(苗栗縣) Miaoli County 037	02 Taipei City (臺北市)
(連江縣) Lienchiang County 0836	02 New Taipei City (新北市)
	02 Keelung City (基隆市)
(金門縣) Kinmen County 082	
	03 Taoyuan County (桃園縣)
(臺中市) Taichung City 04	03 Hisnchu County (新竹縣)
(彰化縣) Changhau County 04	03 Hsinchu City (新竹市)
	03 Yilan County (宜蘭縣)
(雲林縣) Yunlin County 05	03 Hualien County (花蓮縣)
(嘉義縣) Chayi County 05	
(嘉義市) Chayi City 05	049 Nantou County (南投縣)
(臺南縣市) Tainan City 06	
(澎湖縣) Penghu County 06	
	089 Taitung County (臺東縣)
(高雄市) Kaohsiung City 07	
(屏東縣) Pingtung County 08	

Source: Chunghwa Telecom Co., Ltd. (http://www.cht.com.tw/personal/longdist-call.html)

Figure 1   Areas and Telephone Prefixes in Taiwan

No matter which type of measures is adopted, detecting residential absence always involves collecting two pieces of sensitive personal information, thus raising concerns over data anonymity. This issue can be dealt with by abstracting the information. Pollsters, for example, can collect precise information about the locations, but dichotomise the information into residential absence/presence, and release only the binary variable to data users – this is exactly the policy of TEDS2013PA03.

3. Limitations of the Data

The sample representativeness is the major limitation of the research data of this study. Part of residential absentees are consistently excluded from the face-to-face samples of the TSCS and TEDS by design, because their target populations did not cover: (1) citizens whose registered households are in Kinmen or Lienchiang, (2) wanted criminals, and (3) residents of military reservations, hospitals, institutions, schools, vocational training centres, accommodations, or prisons (e.g., Chang 2013, 7; Huang 2013b, 16). There are also some residential absentees who were included in the target populations but hard to reach, such as the Taiwanese who were living in foreign countries during the field period.

Figure 2 compares the survey estimates of residential-absence rates with the census report that is less susceptible to the representativeness problem discussed above (DGBAS 2011, 38). Estimates based on the TSCS and TEDS are on average 7.15% and 9.20% respectively – both are significantly lower than the census result, 20.98%, computed by excluding Kinmen and Lienchiang. This gap is of course partly due to the difference in field periods. The census data was collected in the end of 2010, but the TSCS and TEDS were scattered over a span of ten years, from 2004 to 2013, and hence the survey-census gap may be a reflection of the fluctuation in residential-absence rates over time. However, this cannot be the only reason for the gap; otherwise, the TSCS612 – which was chronologically close to the census period (see Table 1) – should not underestimated residential absence so much. Judging from this, sample un-representativeness remains a plausible reason for the survey-census gap.[10]

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[10] I rule out two implausible explanations for the gap between the census and the survey results. Firstly, non-respondents on the variables of residential absence are rare in TEDS and the TSCS, so item non-response should not be the cause of the gap. Secondly, although survey estimates are based on respondents aged 20 and over, the census report does not provide sufficient information for filtering out those aged 19 and less. However, as I will discuss later, pre-adults' residential rate is lower than others', so the survey-census gap would become even wider, if those aged 19 and less could be filter out from the census data.
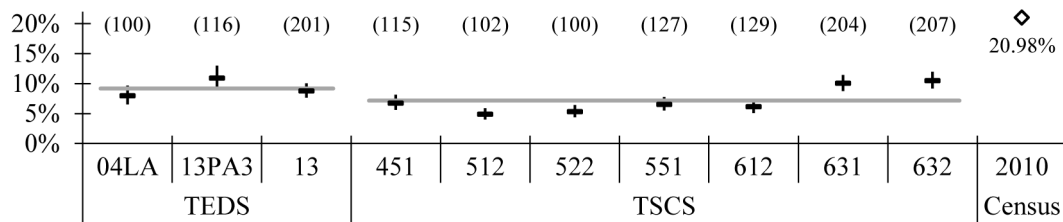
Sources: See Table 1 and the 2010 census report (DGBAS 2011).

Notes: Numbers in parentheses are the weighted *n* of residential absentees in samples. Black vertical lines are the 95% confidence intervals of the estimates. Thick grey bars are residential-absence rates averaged over survey estimates.

Figure 2　Survey Estimates of the Residential-Absence Rate

Given the limitations of the data, the findings reported in following sections need to be interpreted with caution. It is uncertain whether residential absentees' under-representativeness occurs randomly among the samples of the TEDS and the TSCS. More importantly, considering the difficulty in interviewing Taiwanese expatriates, it would be better to interpret the survey-based findings of this article as the findings mainly about the residential absentees who are still living in Taiwan.

The findings of this study may be somewhat limited, but by no means pointless. First of all, the "transfer voting（移轉投票）" is very likely to be the first absentee voting system in Taiwan, and it is primarily designed for the residential absentees who are still living in Taiwan. (For more details, see the online supplement of this article.) This study can help to gain a better understanding of this important part of residential absentees, and offer valuable insight into the current politics of Taiwan. Moreover, the analysis employs census as well as survey data, so in fact the findings are less restrictive than they appear to be, if both types of data reach similar conclusions.

III. Data Analysis

1. Residential Absence in Taiwan

(1) Aggregate level

Before addressing the two research questions of this study, this section begins with a descriptive analysis of residential absentees' demographic characteristics. According to the

2010 census report (DGBAS 2011), 21.17% of the Taiwanese do not live in their registered households. There is a geographical variation of the residential-absence rates (see Figure 3). Kinmen and Lienchiang are noticeable outliers. 62.22% of the Taiwanese registering their households in these two outlying islands do not actually reside there. The residential-absence rates of the other areas are much lower in comparison, but still distinguishable from each other. Northern Taiwan has the lowest proportion of residential absentees (17.22%), followed by the south (23.30%), the middle (23.86%), and then the east (33.52%).
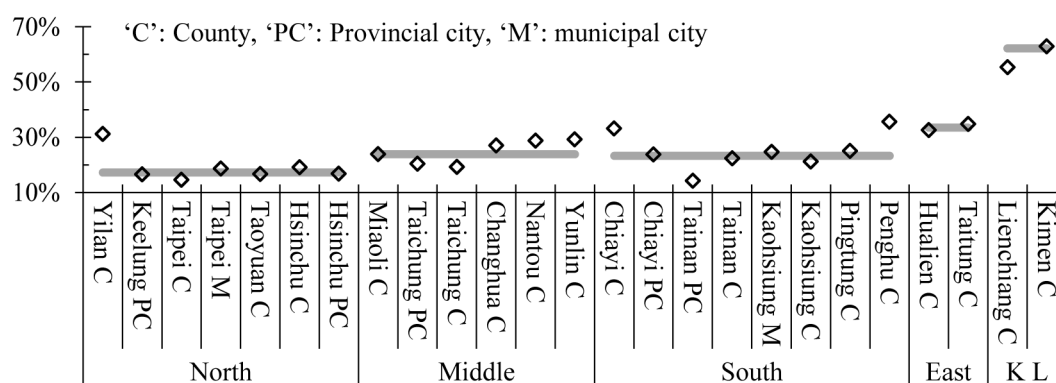

Source: The 2010 census report (DGBAS 2011, 8).

Notes: This plot is arranged in accordance with the administrative divisions before the 2010 re-organisation. Thick grey bars are residential-absence rates averaged over cities/counties within an area.

Figure 3   Rates of Residential Absence from the 2010 Census

The geographical distribution of residential absentees is generally consistent with the public's everyday perception that the residential-absence rate of the south is higher than that of the north. This public perception, together with another one called "North-Blue and South-Green（北藍南綠）," seems to suggest that residential absence may work to the disadvantage of the Pan-Green parties (e.g. DPP) in elections.[11] However, this argument may over simplify the reality. Further analysis is therefore needed.

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[11] "North-Blue and South-Green" describes a geopolitical phenomenon that northern Taiwan is the stronghold of the Pan-Blue parties (e.g. KMT), and the southern is the Pan-Green's (e.g. Pao 2009, 83-84). Despite being widely-discussed, this phenomenon is in fact arguable (see Hung 2003a; Wu and Hsu 2003). Discussion about the existence of this phenomenon is beyond the scope of this paper. Here I only consider this phenomenon to be one of the public's perceptions, which could be right or wrong, but regardless, it helps to explain why some people think of the Pan-Green as the victims of residence absence.
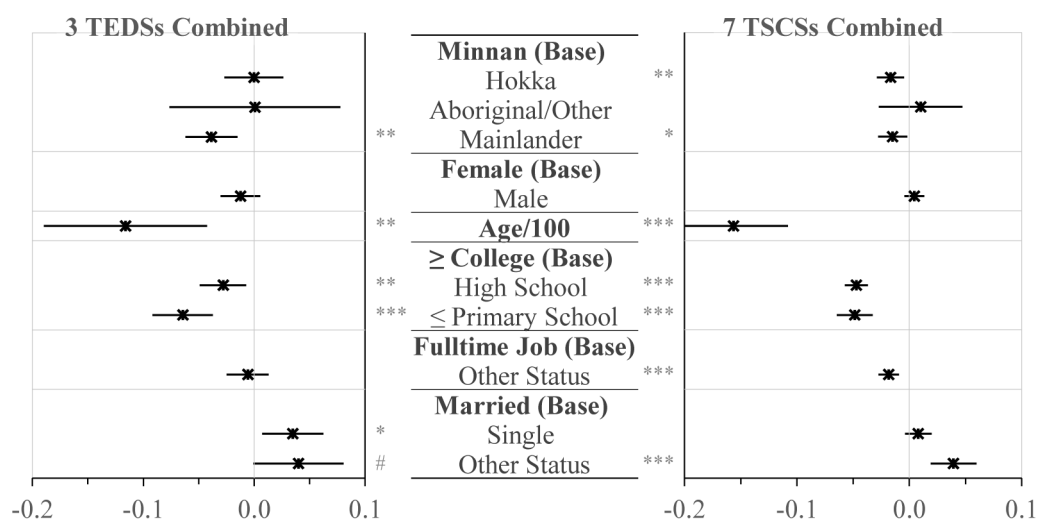
Sources: See Table 1 and Footnote 12.

Notes: ***p<.001; **p<.01; *p<.05; #p<.1. This figure plots the average marginal effects (AME) of the covariates of two logistic regressions. The dependent variable is residential absence, which is 1 if "absence" and 0 if "presence." The covariate, Age, is divided by 100. In the left panel, the AMEs of marriage status are estimated only by TEDS2004LA and 2013 combined, as TEDS2013PA03 lacks that variable. Horizontal lines through the estimates are the 95% confidence intervals.

Figure 4　Residential Absentees' Demographic and Socioeconomic Characteristics

(2) Individual level

Apart from the geographic distribution, the TSCS and TEDS make it possible to depict residential absentees' other characteristics, including gender, age, ethnic, education, employment, and marital status. The analysis here is descriptive but adopts logistic regression, so that continuous variable need not to be categorised, and spurious correlations can be to some extent avoided by including control variables (see Simpson 1951).[12]

By reporting the average marginal effect (AME) (StataCorp. 2013, 1167-1172), Figure 4 shows how residential status correlates with six demographic characteristics. Negative AMEs indicate negative correlations between the characteristics and residential absence. The TSCS and TEDS data indicate that, ceteris paribus, the Mainlander（中國大陸各省籍）in comparison

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[12] These demographic variables are analysed because they are widely used in literature and commonly available in the TSCS and TEDS. Additionally, models control the difference in the surveys as well. The model based on TEDS uses three data – 2004, 2013PA03, and 2013 – so it includes two dummies; likewise, the model using seven TSCS data includes six dummies. Figure 4 does not list these dummies, as they are not the foci of interest here.

to the Minnan（台灣閩南籍）, the elder, and those without a college degree have a higher proportion of residential "presentees." Equivalently, the Minnan, the youth, and the college-educated are related to higher residential-absence rates.[13]

Many studies have found that the Minnan and the youth tend to support the Pan-Green parties, and people with higher educational attainment tend to favour the Pan-Blue parties (e.g., Chen 2000; Pao 2009; Sheng and Chen 2003; Shyu 2002; Wu and Hsu 2003). These findings imply that residential absentees resemble the Pan-Blue's supporters in one characteristic (education), and resemble the Pan-Green's supporters in three (ethnic and age, plus geography discussed previously.) Intuitively, residential absence seems more likely to jeopardise the Pan-Green's chance of winning elections, but strictly speaking, both political camps' supporters relate to residential absence in some aspects. With only these demographical analyses, it is hard to tell which political parties, if any, would suffer electoral disadvantages due to residential absence.

2. Residential Absence and Voter Turnout

(1) Aggregate Level

Residential absence would not place any political party at electoral disadvantages, unless residential absentees are really less likely to vote than their "presentee" counterparts. To examine the first research question of this study, Figure 5 presents three scatter plots of turnout rates by residential-absence rates using aggregate-level data. The results confirm a negative correlation between residential absence and turnout. The strength of the correlation varies with the level of elections. The largest Pearson's correlation coefficient (ρ=-0.7928) appears in presidential elections, which is followed by a moderate correlation (-0.5571) in legislative elections, and the correlation is almost ignorable in magistrate/mayoral elections (0.0368). Additionally, cities/counties with lower residential-absence rates are slightly more sensitive to election types than cities/counties with higher residential-absence rates. For example, in the first two plots, the gap between the two black regression lines is wider at the left end than at the right end. This phenomena can also be observed by comparing the black lines in the first and the third plots, and by comparing the black lines in the second and the third plots.

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[13] There are various translations of "台灣閩南籍." The questionnaires of the TEDS use the term "Minnan," and the TSCSs use "Fukienese." Others like "Hokkien" and "Hoklo" have also been used somewhere else. Throughout this article, I follow the translation made by TEDS.
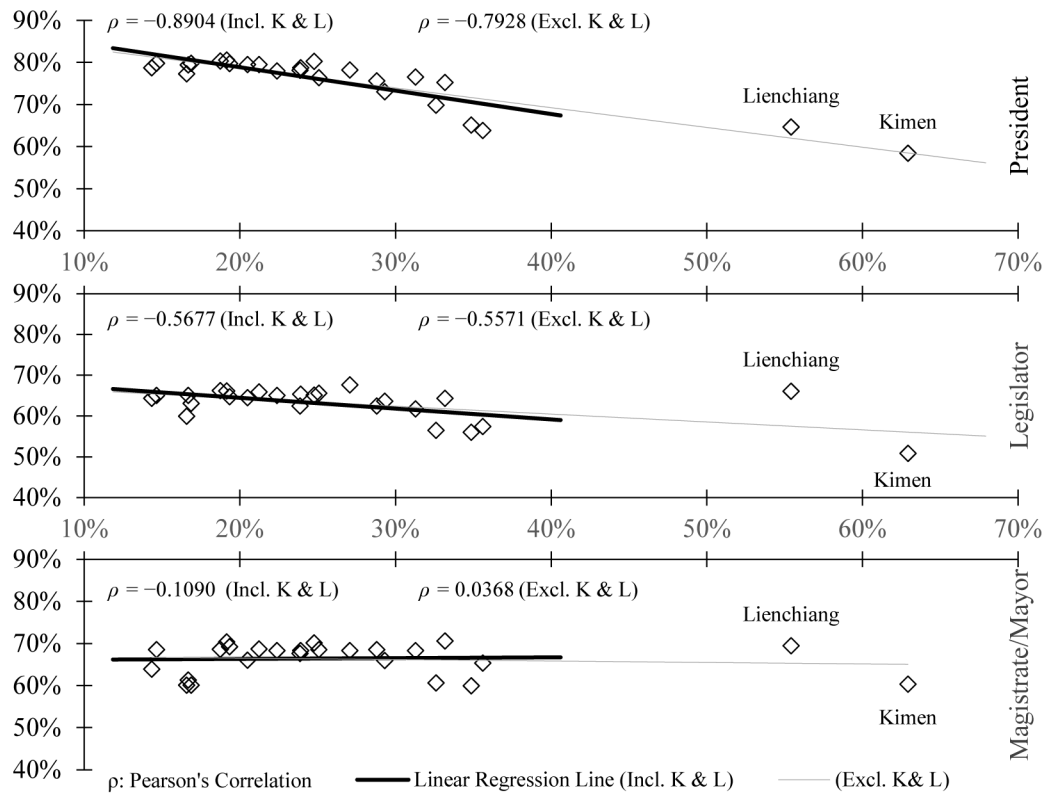
Sources: The 2010 census report (DGBAS 2011); CEC (http://db.cec.gov.tw).

Notes: Each diamond represents a county/city defined by the administrative divisions before the 2010 re-organisation. The x axis represents the residential-absence rate. From the top to the bottom panels, the y axes respectively represent the average turnout rates over four presidential elections, four legislative elections, and three magistrate/mayoral elections between 2000 and 2012.

Figure 5　Residential-Absence Rates and Turnout Rates (Aggregate Level)

Electoral salience is a possible explanation for these results. In general, there are three excuses for not voting – I can't vote, I don't want to vote, and nobody asked me to vote (Brady, Verba, and Schlozman 1995, 271). Salient elections to some extent dispel these excuses by heightening people's political interest, intensifying the activities of mobilisation, etc. (Franklin 2004, 152). In salient elections, e.g. the presidential election, although both residential absentees and "presentees" can have a strong desire to vote and can receive lots of requests for voting, it is easier for residential "presentees" than for absentees to get to the designated polling stations and cast their ballots. As consequence, the turnout of cities/counties with lower residential-absence rates boosts, while the turnout of cities/counties with higher residential-absence rates does not. Compared to presidential elections, legislative and magistrate/mayor elections are usually,

though not necessarily, less salient. In lower salient elections, the desire and request for voting decrease. Residential "presentees" become less keen to vote, so the turnout of cities/counties with lower residential-absence rates plummets. Residential absentees also become less keen to vote in the less salient election, but that only means they change the excuse from "I can't vote" to "I don't want to vote" or "nobody asked me to vote," so the turnout of cities/counties with higher residential-absence rates remains largely unaffected.

Overall, Figure 5 shows a negative linear correlation between residential absence and voter turnout, and if the above explanation is correct, this correlation is manifested by electoral salience. These results provide some evidence for the argument that residential absence depresses electros' propensity to vote, but the evidence should be treated with caution. First, due to the lack of data, Figure 5 can only use the residential-absence rates measured by the 2010 census to approximate the situations in other election years. Second, in order to avoid over-approximating, Figure 5 only includes the elections held between 2000 and 2012. Last but not least, aggregate-level inferences are inherently prone to the problem of ecological inference as mentioned previous. In order to compensate for this problem, I re-examines the effect of residential absence on voter turnout by individual-level data.

(2) Individual Level

Figure 6 shows the relation between residential absence and voter turnout based on the 10 survey data listed in Table 1. The upper panel reports the residential absentees' and presentees' turnout estimates in 14 elections. The lower panel consists of 14 logistics regressions and reports the AMEs of residential absence on turnout. Negative AMEs indicate that residential absence depresses individuals' willingness to vote. The columns with a "«" sign deserve more attention, since they are the target elections of the survey projects, and the estimates of the target elections are presumably more accurate.

Figure 6   Residential-Absence and Voter Turnout (Individual Level)
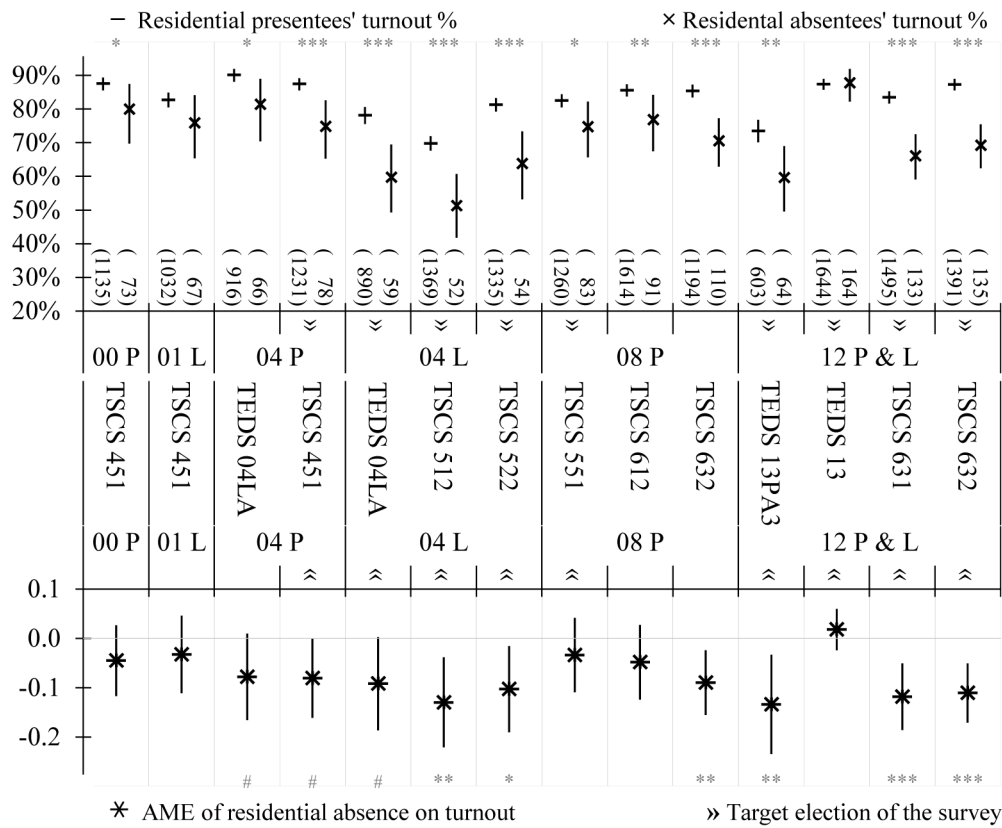
Sources: See Table 1.

Notes: *** *p*<.001; ** *p*<.01; * *p*<.05; # *p*<.1. "P" and "L" stand for presidential and legislative elections respectively. The upper panel visualises 14 cross-tabulates (voter turnout is on the y axis.) Numbers in parentheses are the weighted *n* of self-reported voters. Differences between residential absentees' and presences' turnout are tested by the Chi-squared test. The lower panel visualises 14 logistic regressions using turnout as the dependent variable (1 if "voted" and 0 if "didn't"), and residential absence as the independent variable (1 if "absence" and 0 if "presence"). Control variables are partisanship, the region of registered households, the squared age, and all six variables on Figure 4. Vertical lines through the estimates are the 95% confidence intervals.

Both of the upper and the lower panels of Figure 6 confirm that residential absence depresses the willingness to vote. All of the data, except for TEDS2013, show that residential absentees are less likely to vote than are the "presentees." More than half of the tests are statistically significant at least at the significance level of 0.1.[14] Averaging over 14 estimates, the

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[14] The insignificant results may be partly due to the inaccurate measures of the self-reported turnout and residential absence. Notice that many of those insignificant results appear in the elections held long before the field periods of the surveys (i.e. non-target elections.) Hence, the residential absence measured at the field periods may not accurately reflect the situation during an election held a long time

bivariate analysis estimates that residential absentees' turnout is lower than the "presentees" by 12.19 percentage points. After controlling some demographic, socioeconomic, and partisanship factors, the multivariate analysis also predicts that, on average, there is nearly an 8-percentage-point difference in the probability of voting between residential "presentees" and absentees.

Moreover, Figure 6 gives further support for the argument that the effect of residential absence on voter turnout varies with electoral salience. Although Figure 6 shows no clear relationship between the effect of residential absence and election types, it does show that residential absence was more influential in the 2004 legislative election and the 2012 election, and in fact, both were salient elections in term of electoral competitiveness. When the election salience is operationalised by the absolute logarithm of the ratio between the Pan-Blue's and the Pan-Green's vote shares, then the correlation between this salience index and the AMEs of residential absence is -0.38.[15] That is, the impact of residential absence on turnout propensity is greater when the election is more salient (or say more competitive). This is indeed a suggestive finding, though the number of observations is limited (n=14).

Finally, is a student less likely to vote, if he or she is studying at a university (or college) outside the city/county of the registered household? This question caused considerable concern in the 2012 election. Some of the TSCSs had asked respondents about which university they were attending at the time of interview. Using these data, Figure 7 shows that students studying at a university outside their registered cities/counties are consistently less likely to vote than are those going to a university within their registered cities/counties, but the difference is not statistically significant. The overall analysis (last column) shows that attending a university outside the city/county of the registered household is related to a lower turnout rate by roughly 5 percentage points, though this is still statistically insignificant. It should be noted that the finding reported here is inconclusive. Although all of the effect sizes are insignificant, the effect directions are indeed consistent in all elections under investigation (i.e. a negative relation). Considering the sample sizes on Figure 4 are limited, how residential absence affects college students' turnout

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ago. Similarly, respondents' self-reported turnout of an election held long before the interviews are also more error-prone.

[15] This salience index approaches to zero, as the vote shares of the two political camps become close to each other. In other words, the more salient the election, the smaller the value of the index. From left to right, the AMEs of residential absence listed Figure 6 are 0.05, 0.03, 0.09, 0.13, 0.10, 0.08, 0.08, 0.03, 0.05, 0.09, 0.13, -0.02, 0.12, and 0.11; the corresponding vector of election salience are 0.23, 0.08, 0.03, 0.03, 0.03, 0.00, 0.00, 0.15, 0.15, 0.15, 0.07, 0.07, 0.07, and 0.07.

remains an open question for future studies.
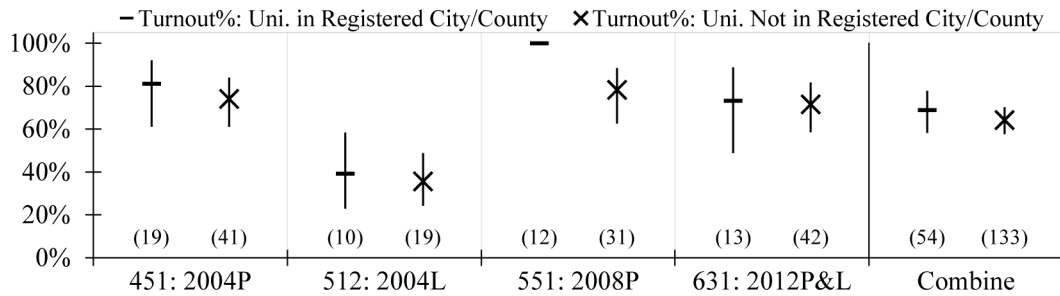
Sources: See Table 1.

Notes: *** $p<.001$; ** $p<.01$; * $p<.05$; # $p<.1$. Voter turnout is plotted along the y axis. Numbers in parentheses are the weighted n of voters. Vertical lines through the estimates are the 95% confidence intervals. The confidence interval cannot be computed for the TSCS511 respondents whose registered households and universities are in the same city/county, since them all reported having voted in the 2008 presidential election. The differences in turnout between two groups are tested by the Chi-squared test.

Figure 7　Voter Turnout of University Students

## 3. Residential Absence and Election Results

(1) Survey studies

Turning to our second research question, this part examines whether any political party would have gained extra votes in the 2012 presidential election, and whether the election results would have been changed, had residential absentees been mobilised to vote. The analysis focuses on the 2012 election for two reasons. First, it was the latest nationwide election and was surrounded by controversies over absentee voting. (See the online supplement for more details about the controversies in the election.) Second, there are more than one datasets related to the 2012 election and containing the variables needed for analysis. Analysis with multiple datasets prevents erroneous findings that do not reflect the truth but the peculiarity of the data.[16]

Figure 8 presents the distribution of respondents' voting choice in the 2012 election, and it suggests that the mobilisation of residential absentees could not have had a substantial impact

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[16] The analysis requires not only the information about residential absence and voter turnout, but also the voting choice. There is no sufficient information for analysing the 2000 presidential election and the 2001 legislative election. For other elections, the analysis can only be conducted by a single dataset (i.e., TEDS2004LA for the 2004 legislative elections, TSCS451 for the 2004 presidential election, and TSCS551 for the 2008 presidential election.) The 2012 presidential election is the only one election with multiple datasets for the analysis (i.e. TSCS631, 632, TEDS2013, and 2013PA03.)

on the election result. Despite the fact that residential absence depressed electors' turnout propensity, the residential absentees who did not manage to vote were actually a minority group, constituting only 1.09-4.67% of the electorate, according to the survey estimates. Assuming that 4.67% were a representative estimate, and considering that Ing-wen Tsai（蔡英文）lost to Ying-jeou Ma（馬英九）by 4.41 percentage points in population votes, then in order to turn around the election result, more than 94% of residentially absent nonvoters should have managed to vote for Tsai, which seemed to be an unrealistic expectation.[17] Certainly, we would never know whom residentially absent nonvoters might have voted for, but from Figure 8, we do know that residentially absent voters did not vote overwhelmingly in favour of Tsai. If this pattern of voting choice had also applied to residentially absent nonvoters, then the mobilisation of the residential absent nonvoters could only have increased the turnout rate, rather than changed the election result.
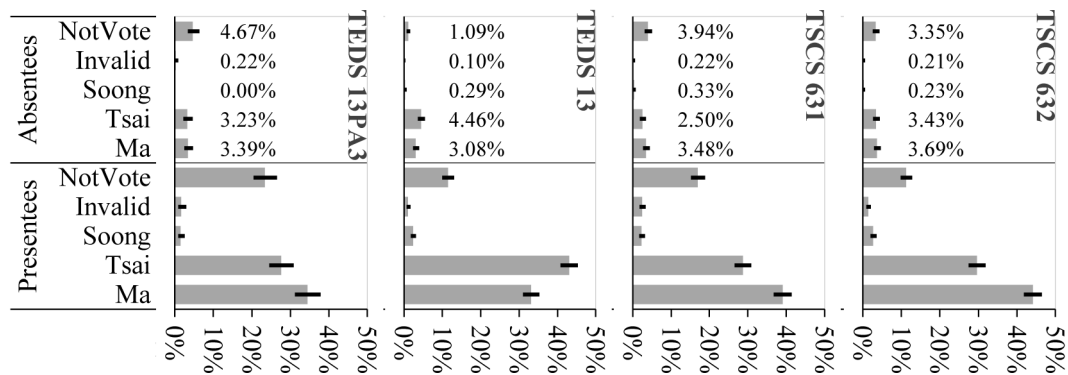
Sources: See Table 1.

Notes: Grey bars are the weighted distribution of voting behaviour. Black horizontal lines on the head of the bars are the 95% confidence intervals of the distribution. "Invalid" means casting invalid ballot. "Soong," "Tsai," and "Ma" are three candidates in the election.

Figure 8   Voting Behaviour in the 2012 Presidential Election

(2) Simulation studies

Figure 8 gives almost no evidence for a substantial impact of residential absence on the 2012 election, but there are two issues worth of more consideration. First, it might be inappropriate to presume residentially absent nonvoters and voters share the same pattern of candidate preference.

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[17] According to the official data published by the CEC, 6,891,139 electors voted for Ma (38.10%), 6,093,578 for Tsai (33.69%), 369,588 for Soong (2.04%), 97,711 spoiled their ballot papers (0.54%), and 4,634,439 did not vote (25.62%).

It could be possible that residentially absent nonvoters were overwhelmingly in favour of Tsai. Second, the survey data may underestimate the number of residentially absent nonvoters. In order to make a better prediction of the electoral impact of residential absence, a simulation study – which follows the algorithm suggested by King, Tomz, and Wittenberg (2000, 350) – is carried out to take account of these two issues:

Step 1. Regressing the voting choice (Y_i) on a set of predictors (X_i) by a logistic regression. Y_i=1, if 'voted for Tsai', and Y_i=0, if 'voted for Ma'.[18] (See my online supplement.)

Step 2. Drawing a vector of $\tilde{\beta}$ from the multivariate normal distribution with mean equal to $\hat{\beta}$, and variance equal to $\hat{V}(\hat{\beta})$, where $\hat{\beta}$ is the coefficient vector of the regression, and $\hat{V}(\hat{\beta})$ is the variance-covariance matrix of the coefficients.

Step 3. Drawing one value $\tilde{Y}_i$ from the Bernoulli distribution with success probability $\tilde{\pi}_i = 1/\left(1 + e^{X_i\tilde{\beta}}\right)$, where $\tilde{\pi}_i$ is the ith respondent's predicted probability of voting for Tsai.

Step 4. Predicting the ith respondent would vote for Tsai, if $\tilde{Y}_i$ =1, and vote for Ma, if $\tilde{Y}_i$ =0.

Step 5. Doing Step 3 and 4 for all of self-reported voters, and computing $\tilde{p}_1$, which is the percentage of the respondents who are predicted to vote for Tsai among self-reported voters.

Step 6. Doing step 3 and 4 for residentially absent nonvoters, and computing $\tilde{p}_2$, which is the percentage of the respondents who are predicted to vote for Tsai among *residentially absent nonvoters* as well as self-reported voters.

Step 7. Weighting the sample to meet a series of hypothetical rates of residential absence (w), and computing a series of $\tilde{p}_1^w$ and $\tilde{p}_2^w$ based on those different hypothetical rates.

Step 8. Repeating Step 2 to 7 for 3,000 times for each of the four surveys, and computing $\tilde{d}^w = \sum_{m=1}^{3000}\left(\tilde{p}_{2,m}^w - \tilde{p}_{1,m}^w\right)/3000$, which indicates the impact on Tsai's vote share made by the mobilisation of residentially absent nonvoters, given the hypothetical rate of residential absence w.

This simulation attempts to overcome the downside of Figure 8. First, the simulation does not assume residentially absent nonvoters to vote in exactly the same way that residentially absent voters did. Instead, Step 6 tries to predict the voting decisions of residentially absent nonvoters by logistic regressions. Second, the simulation tries to mitigate the problem of the

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[18] It can be seen from Figure 8 that there are only a few of respondents reporting having voted for Soong or casted an invalid ballot, so the simulation focuses on Tsai and Ma, and uses binomial logistic regressions to predict two-party vote shares.

underestimation of residential absence. Step 7 makes it possible to approximate electoral impacts of residential absence under different rates of residential absence. For example, the residential-absence rate observed by TEDS2013PA03 is round 11%, which is marked by the vertical line on the top-left panel of Figure 9. The intersection between the vertical line and while curve (on the middle of the grey band) is $\tilde{d}^{11}$=1.3; that is, given that the residential-absence rate were 11%, Tsai's vote share would have increased 1.3 percentage points, had residential absent nonvoters been mobilised to vote. (Equivalently, that is a 1.3-percentage-point decrease in Ma's vote share, because the analysis is based on the two-party vote share.) Moving the vertical line along the x-axis allows us to see how Tsai's extra vote share could have varied according to the different rates of residential absence (from 5% to 30%).
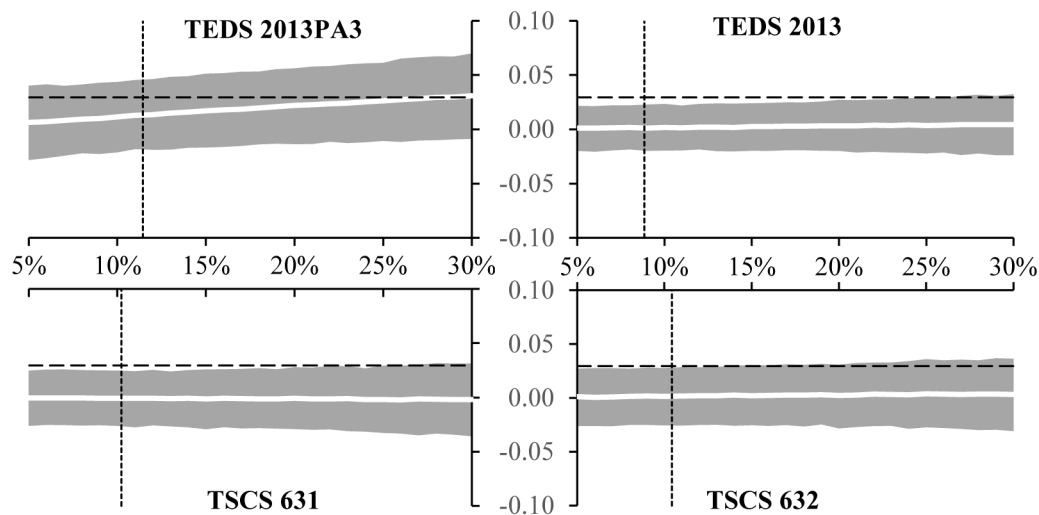
Sources: See Table 1.

Notes: X-axis shows the (hypothetical) rates of residential absence (w). Vertical lines mark the rates of residential absence estimated by the surveys. White curves ($\tilde{d}^w$) indicates how many extra percentage points of the vote share that Tsai would have gained, had residential absent nonvoters casted their votes. Grey bands around white lines cover the ranges between the 2.5th and the 97.5th percentile of $\tilde{d}^w$. Horizontal dash lines mark 0.0294, which is the extra percentage points of the vote share that Tsai needed for reversing the election result.

Figure 9   Residentially Absent Nonvoters' Potential Impact on the 2012 Presidential Election

The simulation results still suggest that there would not have been a big change of the 2012 election result, even if residential absentees had managed to vote. As can be seen from the panels of TEDS2013 and TSCS632, the white curves ($\tilde{d}^w$) always slightly lie above zero and

below 0.0044, regardless the rate of residential absence (*w*). That is, had residentially absent nonvoters been mobilised to vote, Tsai would have gained a few more votes, but the impact on the election result could have been almost ignorable, let alone turned around the election. (To win the election, Tsai needed more than 2.94 percentage points of the two-party vote share, which is marked by horizontal dash lines.[19]) The results based on TEDS2013 and TSCS632 also show that, the slopes of the white curves are positive but extremely gentle. That is to say, if the residential absence rate had not been underestimated, the electoral impact of residential absence would have been a little greater than what TEDS2013 and TSCS632 suggest in the first place, but again, the impact would have been almost negligible.

The simulation based on TSCS631 yields similar results. The only difference is that mobilising residential absentees could have slightly decreased, rather than increased, Tsai's vote share by up to 0.002 percentage points. The simulation based on TEDS2013PA03 predicts a larger impact of residential absence, though the conclusion generally remains unchanged. As mentioned before, the residential-absence rate observed by TEDS2013PA03 is round 11%, which corresponds to a 1.3-percentage-point increase in Tsai's vote share by the mobilisation of residential absent nonvoters. The increase in her voter share would have exceeded 2.94 (horizontal dash line) and reversed the election result, if the residential-absence rate had been 29%. However, 29% is not a very realistic number for the residential-absence rate in early 2012, because the census indicated that the residential-absence rate were 20.98% in the late 2010 (see Figure 2), and it appears unlikely that the rate could increase 8 percentage points within one and half year. Therefore, the simulation based on TEDS2013PA03 still points to a conclusion that residential absence made no substantial impact on the 2012 election result.

Overall, the analysis in this whole section reveals no compelling evidence for the claim that the mobilisation of residential absentees could have made a significant impact on the result of the 2012 presidential election. Nevertheless, it should be noted that there are limitations of the simulation. For example, due to the lack of variables, the logistic models might be unable to predict the voting decision very accurately, and that might, in turn, affect the simulation results. Moreover, weighting might be unable to recover the loss of information, if the rate of residential absence was underestimated in a non-random manner. These limitations mean that the findings need to be interpreted cautiously.

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[19] Excluding Kinmen and Lienchiang, Tsai's two-party vote share is 6,089,967/(6,851,956+6,089,967) = 47.06%, so she needed an extra 2.94-percentage-point of the vote share to overtake Ma's vote share.

IV. Discussion

Despite no immediate impact on election results, residential absence could still have serious consequences for the democracy of Taiwan, owing to its damaging effect on voter turnout. It has been found that young electors tend to abstain from voting (e.g., Fieldhouse, Tranmer, and Russell 2007; Goerres 2007; Shiao 2009; Tsai 2001; Tsui and Wu 2011; Yang 2003). Political apathy among the youth has been believed to be a threat of democracy. In Taiwan, residential absence probably should take some responsibility for this problem.

There is a life cycle of residential absence in Taiwan. Living with their parents and being registered in parents' residences, most of the pre-adults are residential "presentees." Many of them become residential absentees during their early adulthood, because they leave home for studying, working, doing mandatory military or substitute service, and so forth. Usually residential absentees do not consider amending their household registration from parents' residences to the actual residences (i.e., they do not become residential "presentees" again), until they marry, have a career, or buy their own residences. Demographic research has provided the evidence for the life cycle of residential absence. As Yung-tai Hung (Hung 2003b, 13)found, the residential-absence rate is 16.4% for the Taiwanese younger than 20, but rockets to 29.7% for those aged 20-29, then decreases to 18.1% for people aged 30-39, and remains around 15.0% for those aged 40 or older. This life cycle of residential absence is also observed on Figure 4 of the present article – the age's AMEs are significantly negative. (Figure 4 analyses adults aged 20 and over, so the negative relation between age and residential absence is exactly a reflection of the life cycle.)

Almost one in every three Taiwanese youth is a residential absentee. Such a high proportion, together with the demobilisation effect of residential absence, may partly account for the low turnout of Taiwanese youth. Furthermore, voting is a habitual behaviour (Aldrich, Montgomery, and Wood 2011; Denny and Doyla 2009; Dinas 2012; Fowler 2006; Gerber, Green, and Shachar 2003; Gerber and Shachar 2000). If the youth tend to begin their political lives as nonvoters due to residential absence, they may gradually get into a habit of non-voting, and may not be able to get out of it, even if they become residential "presentees" again in middle age. In the long run, that would be a threat of the democracy of Taiwan. This is a really important issue worthy of further investigation.

No matter whether residential absence can account for the low turnout of Taiwanese youth

or not, one thing is for sure – residential absentees have a lower turnout propensity. Apparently, Taiwan's small territory, education expansion, and information explosion are unable to fully compensate for extra turnout costs and weak turnout motivation incurred by residential absence. More direct help is needed. Absentee voting or the other modes of convenience voting appears to be a viable option, but how helpful it can be is still under debate. Many studies have suggested that convenience voting is useful to retain frequent voters, but incapable to mobilise frequent non-voters (Barreto et al. 2006; Berinsky 2005; Gronke, Galanes-Rosenbaum, and Miller 2007; Gronke et al. 2008; Stein 1998). By contrast, Stein and Vonnahme (2008) concluded that the major impact of "Election Day voting centres" implemented by Larimer County in Colorado was mobilisation rather than retention.[20] Hanmer and Traugott (2004) reported that postal voting mobilised as well as retained Oregon electors in the 2000 American presidential election. Some studies, however, have pessimistically argued that convenience voting can only consolidate, rather than eliminate, inequality in political participation (Berinsky, Burns, and Traugott 2001; Gimpel, Dyck, and Shaw 2006; Gronke and Toffey 2008).[21] These inconsistent findings suggest that the effect of convenience voting may be context-dependent. In fact, Kousser and Mullin (2007) did find that postal voting can raise the turnout of low-salient elections, but reduced the turnout of those high-salient. In this regard, it is also reasonable to suspect that the experience of the western counties cannot fully apply to Taiwan. More research into Taiwanese residential absentees is therefore needed to better understand how much convenience voting can help to combat the undesirable effect of residential absence on voter turnout.

Lack of empirical data is definitely the biggest challenge faced by the political studies on residential absentees in Taiwan. This article discusses three methods for identifying whether a survey respondent is a residential absentee. The third method, which locates respondents' residential households by their landline numbers, is particularly useful. It opens up a possibility

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[20] Election Day voting centres are non-precinct-based locations for voting, which allows electors in a zone (e.g., county or constituency) to vote at any of voting centres within the zone (Stein and Vonnahme 2008, 490). Compared to other modes of convenience voting, the Election Day voting centre is conceptually similar to the transfer voting system discussed in Taiwan during the 2012 Presidential election, because electors still have to cast a ballot in person at a polling station on Election Day.

[21] These studies argued that convenience voting demands more political resources from electors (e.g., additional knowledge of using convenience voting), thereby making voting more convenient only for the resourceful electors, rather than their un-resourceful counterparts. In other words, convenience voting retains voters, but also demobilises nonvoters further, so it consolidates the inequality in political participation.

to re-construct information about residential absentees from the past surveys, and hence offers a cheap way to re-collect a large amount of research data. Moreover, individual- and aggregate-level data complement each other. As long as the problem of ecological inference can be resolved, aggregate data will be a great help in overcoming the limitations faced by survey data (e.g., the difficulty in getting information about Taiwanese expatriates.) Therefore, it is worth making the most use of aggregate data on residential absence, for instance, by geography information systems and ecological inference methods.

V. Conclusion

By using survey and census data, this study examines the electoral behaviour of the electors who did not reside in their registered households (i.e. residential absentees) in Taiwan's nationwide elections held between 2000 and 2012. The research results confirm that residential absentees are less likely to vote than are residential "presentees." This negative effect of residential absence on turnout varies with electoral salience – the higher the salience, the larger the effect. However, the analysis does not find compelling evidence for the claim that the result of the 2012 presidential election would have been turned around, had all of residential absentees managed to vote. Although the DPP would have gained extra vote share from the mobilised residential absentees, the impact would have been almost ignorable.

This study has gone some way towards responding the widespread concern about the implementation of absentee voting in Taiwan. However, it is important to bear in mind that the findings of this study may not be extrapolated to all residential absentees. Considering the difficulty in interviewing Taiwanese expatriates, the survey-based findings are better to be interpreted as the findings mainly about the residential absentees who are still living in Taiwan. This is indeed a limitation that needs to be overcome in future studies, because Taiwanese expatriates, especially those residing in China, have been thought to be having a pivotal role in elections. Future research should therefore manage to include them under investigation.

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住太遠所以不投票？
台灣不在籍民眾選舉行為之初探

蔡奇霖 *

《本文摘要》

　　台灣關於不在籍投票的研究大多著重於規範性與制度性分析。不同於這些研究，本文聚焦於台灣不在籍民眾的實際選舉行為。透過分析普查與抽樣調查的資料，本文發現在 2000 年之後舉行的全國性選舉中，相較於居住在戶籍地的選民，不在籍者的確較少前往投票。不過針對 2012 年總統選舉作進一步的分析後發現，即便不在籍的選民全都去投票，2012 年總統選舉的結果也不會因而逆轉。礙於資料的限制，本文的分析對象僅能包括居住在台灣的民眾。未來的研究應設法納入居住在國外但設籍於台灣的民眾，以對實施不在籍投票所可能產生的影響作更精確的分析。

關鍵詞：投票、投票率、不在籍、不在籍投票

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* 艾塞克斯大學政府系博士生。