Timothy S. Rich

Western Kentucky University

Abstract

What motivates split-ticket voting in mixed electoral systems, where voters choose one party in district races and another party on the party list ballot? While much of the literature assumes strategic intent, three aspects commonly are overlooked: the competitiveness of district races, the presence of a district candidate from one's preferred party, and whether voters know the electoral threshold for party list seats. Furthermore, few studies disaggregate types of split-ticket voting (e.g. not voting for one's preferred party in a district vs. party list). Taiwan provides an intriguing case study for analysis, not only as a relatively new adopter of a mixed system, but also the presence of additional conditions that would encourage at least the consideration of a split ticket. Using survey data from the Taiwan's Election and Democratization Studies (TEDS) after the Taiwan's 2016 Legislative Yuan election, this analysis finds that knowing the threshold, the winner's margin, and the placement of a district candidate from one's preferred party all influence split-ticket voting among those with a partisan preference. However, closer inspection identifies a distinction between defecting from the district versus the party list. Evidence shows that district competitiveness and candidate placement influences defection from the district candidate, while the electoral threshold influences defection from the party list. The results add to our understanding of strategic and non-strategic incentives in mixed systems.

Keywords

Split-ticket Voting, Mixed System, Taiwan, Threshold, Strategic Voting

^{*} Associate professor, Department of Political Science, Western Kentucky University. Grise Hall 300, 1906 College Heights Blvd. #11060, Bowling Green, KY 42101-1060. Office: (270) 745-2790, Fax: (270) 745-2945, Email: timothy.rich@wku.edu

I. Introduction

Most mixed systems provide separate ballots to select a candidate elected in a single member district (SMD) and a party list vote for seats allocated by proportional representation (PR).1) This allows for the potential of ticket splitting, where voters choose one party in district competition and one party on the party list ballot. The assumption remains that voters will attempt to maximize their influence on the election and, if following Duverger's Law (Duverger 1954), mechanical and psychological effects will, in general, lead to sincere voting in the party list tier in general while supporters for smaller parties are more likely to cast a strategic vote in district competition. Yet such expectations ignore several additional factors potentially influencing split-ticket behavior, namely the extent to which voters understand the electoral format and the nomination decisions made by parties themselves. Considering that voting commonly is seen as the primary mechanism for representation and accountability in a democracy, confusion regarding how the mixed system translates votes to seats may lead to results that do not match society's aggregate preferences. Similarly, if parties opt not to run district candidates, for strategic reasons or otherwise, this in essence forces the hands of partisan voters. Such factors call into question whether splitticket voting was indeed rational.

However, this article suggests moving beyond just candidate placement to additional factors that influence ticket splitting including whether

¹⁾ A minority of mixed systems use a fused ballot (e.g. Mexico) where district votes are aggregated to the provincial or country-level to allocate party seats.

knowing the electoral threshold for party list seats encourages a threshold beating strategy and whether the perceived competitiveness of district races, separate from candidate placement, influences strategic behavior. Furthermore, this paper measures ticket-splitting in general as well as the often overlooked disaggregated forms (e.g. Gschwend 2007)—voting against the preferred party in the district while casting a sincere party list vote versus a sincere district vote while voting against the preferred party on the party list. This allows for a clearer indication of what contextual factors influence the district types of defection rather than relying on homogenizing assumptions of ticket splitting.

Taiwan's 2016 election provides an intriguing case for split-ticket voting. The traditional opposition party, the Democratic Progressive Party (DPP) won a majority of seats for the first time, with the DPP's Tsai Ing-Wen also becoming the country's first female president. Alongside historic public disapproval of the ruling Kuomintang (KMT), the DPP's success can be partially attributed to coordination with opposition parties, namely the New Power Party (NPP), a new entrant that emerged from the Sunflower Movement student protests. For our purposes, an analysis of Taiwan in 2016 provides several benefits. First, Taiwan is a relatively new adopter of a mixed systems. As the third election under a mixed format, voters should have basic expectations about how votes will translate into seats even if technical knowledge is lacking. Secondly, Taiwan consistently sees more than two candidates run in district races, a condition necessary for strategic-minded split-ticket voting. Third, this election in particular should have incentivized at least consideration of split ticket-voting. In particular, new entrants into the electoral arena and dissatisfaction with the KMT likely encouraged more voters, including those with partisan attachments,

to consider ticket-splitting than previous elections.

This article contributes to the literature first by explicitly measuring the often overlooked aspects that potentially influence ticket splitting, aspects which may not necessarily promote strategic voting, and second by disaggregating types of ticket splitting. This article first provides a brief background on mixed electoral systems and public understanding of mixed systems. An introduction to Taiwanese legislative politics follows. Empirical analyses find that the presence of a district candidate not only generally boosts the party list vote, but discourages ticket-splitting, while knowing the electoral threshold appears to encourage split ticket voting and district competitiveness has marginal effect. Additional tests find that candidate placement and competitiveness influence defection from the preferred party in the district tier, whereas the electoral threshold influences party list defection. The conclusion suggests additional means to analyze ticket-splitting in mixed systems.

II. Mixed Systems and Ticket-Splitting

Ticket-splitting historically referred to voting for different parties across separate offices during the same election. This includes, for example, voting for a president from one party and a legislator from another. Research in this vein focused on whether ticket-splitting was motivated by strategic intentions, by a desire for divided government, differing expectations of types of representation, or a sign of indifference (e.g. Campbell and Miller 1957; Fiorina 1992; Ladd 1990; Jacobson 1992). Mixed systems provide a venue for split ticket voting within the same type of office, with the primary debate within the mixed electoral systems literature regarding whether the two seat types operate independently and in accordance with Duverger's Law (Lancaster and Patterson 1990; Moser and Scheiner 2005) or if an inherent interaction between the seats distorts Duverger's Law. (Ferrara et. al 2005; Herron and Nishikawa 2001; also see Bawn 1999). However, in regards to split ticket voting, the focus remains largely on Duvergerian assumptions—sincere party list voting and a greater potential for strategic voting in districts away from nonviable candidates.

The individual level research on mixed systems largely focuses on the motivations behind ticket splitting (Kohno 1997; Banducci et al. 1999; Gschwend 2007; Moser and Scheiner 2009), with the general assumption that ticket splitting is a form of strategic voting. Yet rates range considerably even within a country, not only over time but also in how ticket-splitting is measured. For example, research on Korea finds rates ranging from ten to forty percent (Lee 2004; Park and Rhyu, 2009; Han 2013). In addition, the literature largely fails to disaggregate among those who identify with smaller parties, who may view ticket splitting in terms of party survival, and larger parties, at best would be expected to focus on aiding likeminded parties for coalitional insurance (e.g. Gschwend 2007; Plescia 2016). More broadly, variation should not be a surprise as many moving parts seem to influence ticket-splitting - parts that should fluctuate with each election based on the closeness of district races, whether parties run district candidates, and the broader understanding of the mixed system.

At the bare minimum, strategic voting requires preferences over candidates and parties, expectations on their expected electoral performance, a belief that switching their vote choice could influence that outcome and, in single member districts, a minimum of three candidates (e.g. Cox 1997). For most districts in mixed systems, additional candidates beyond the top two are commonplace. With increased polling information, especially in stable democracies, voters increasingly have reasonable expectations regarding district competition (Karp et al. 2002). Furthermore, the expectation remains that voters are less willing to risk wasting their vote in close races, whether in mixed or in pure majoritarian systems (Alvarez and Nagler 2000; Karp et al. 2002).

Much of the mixed systems literature focuses on mixed member proportional (MMP) systems, like that employed in Germany, where the total distribution of seats must be proportional and where non-viable district candidates do not potentially cost the party a seat. In such a compensatory system, sophisticated voters may anticipate that district success for their preferred party will result in no additional party list seats allocated to the same party and thus strategically defect with their party list vote. In contrast, mixed member majoritarian (MMM) systems, like that employed in Taiwan, provide no guarantee of overall proportionality. This combined with Taiwan's district-heavy mixed system (64.6% of seats are SMDs) should further emphasize the importance of district competition. Among those voters favoring non-viable district candidates, close races should promote voters to shift support strategically to candidates with a greater probability of success. In contrast, in non-competitive districts, supporters of otherwise non-viable candidates may see no reason to deviate from their sincere preferences since the election result will remain the same regardless of their vote choice.

H1. As the expected winner's margin in district competition increases, split ticket voting should decrease.

Much of the literature on split ticket behavior assumes that voters evaluate the electability of parties in both offices before deciding to case a split ticket. However, in many mixed systems, voters may have preferred not to split their vote but were essentially forced into this behavior due to supply if parties, for strategic or other reasons, choose not to run candidates in both tiers (e.g. Burden 2009; Hirano 2006).²) Failing to account for a district candidate risks overestimating the extent to which voters purposely split their voters. Similarly, strategic considerations behind ticket-splitting assume a partisan preference. Thus, lumping voters without a partisan attachment potentially overestimates strategic voting.

The lack of a district candidate potentially plays a significant role in ticket-splitting in mixed systems by incentivizing a sincere vote in the PR vote while voters seek an alternative in district competition. Small parties rarely have the means to run in each district, either due to finances or the inability to recruit candidates, and choose to focus their attention on the more attainable party list seats. For example, Japanese election law requires a three-million-yen deposit per district, refunded only if the candidate receives at least ten percent of the vote. Parties, both large and small, may opt not to run district candidates either due to the perceived

²⁾ The lack of a district candidate may also lead voters to defect from their preferred party in both votes in a mixed system.

weakness of the party in a district or as a condition of coalitional pact (e.g. Burden 2009). By 1996, disciplined coalitions in Italy's mixed system limited nominations to one district candidate per coalition, resulting in 56% of voters who submitted a party list ballot for a different party than one in the district (Benoit et al. 2006). Meanwhile, the presence of a district candidate, especially one with deep constituency ties, may encourage a contamination whereby district preferences lead to a straight ticket vote. Conversely, parties may be required to run candidates in more districts than they would expect to be competitive in order to be eligible for public financing or the party list seats, or simply as a means to maintain their separate identity from coalitional partners, factors that provide an opportunity to cast a straight party ticket. Rich (2012) attempts to disaggregate types of split ticketing in South Korea's 2008 legislative election. He finds that limiting cases to where parties nominated candidates in both tiers (which he called "ticket-splitters by choice"), supporters of smaller parties still remained more likely to split their votes. Admittedly smaller parties may run district candidates that are less electorally viable than larger party nominees, but their presence should engender "sticky" voting for the same party with both votes. Overall, in line with the contamination thesis, the assumption remains that the mere presence of a district candidate discourages ticket-splitting.

H2. Partisans will be less likely to split their votes if their preferred party runs a district candidate.

Strategic voting also requires a basic understanding of the electoral

rules, context and how votes translate to seats (e.g. Karp 2006). Split ticket voting in itself is not evidence of strategic behavior as the action is also consistent with randomly voting or other non-strategic calculations. The literature on split ticket voting outside of mixed systems is unclear as to whether the act indicates motivation, indifference, a desire to balance or the strength of partisan identity (Campbell and Miller 1957; Bean and Wattenberg 1998; Rallings and Thrasher 2003; Helmke 2009). Lewis-Beck and Nadeau (2004) argue that ticket-splitting across institutions indicate a "cognitive Madisonianism" desire for divided government; however, the applicability of this motivation within the same legislative house is less clear. Benoit et. al (2006) differentiate between "coalition splitters", which may share some of the same interests indicated by Lewis-Beck and Nadeu, and "coalition stickers". Others suggest a subset of ticket splitters sincerely hold distinct preferences across the seat types (e.g. Gschwend and Vand der Kolk 2006; also see Moser and Scheiner 2005). Furthermore, how one understands the mixed system likely influences the propensity to split ticket vote. Conceptualizations of understanding range from understanding in the most basic sense (e.g. voters have two votes) to the more technical aspects of how these voters translate into seat and ultimately representation. Similarly, voters may not care about the technical aspects of the system as long as their preferred candidate or party wins.

For the purposes here, one technical aspect should directly influence voting behavior: knowledge of the electoral threshold for party list seats. In most mixed systems, a party must receive five percent of the party vote to receive any of these seats. For their survival, and already vulnerable to ticket splitting (Gschwend 2007; Hirano 2006), small parties have greater incentives to educate their supporters regarding the threshold

to prevent falling short (also see Rich 2014), while larger parties face limited incentives, save a coalitional agreement, to educate voters in the same fashion. In fact, for many supporters of larger parties, knowing the threshold may be irrelevant as straight-ticket voting remains the norm and larger parties are more likely to be viable in both district and the party list. Alternatively, sophisticated voters may use knowledge of the threshold to maximize their influence on the outcome of elections, either to avoid wasting votes or to ensure that a coalitional partner clears the threshold. For voters, an expected positive correlation between knowledge and ticketing splitting should be particularly prominent in the party list tier. Voters should realize the low threshold means their vote is unlikely to be decisive in determining party list allocations for their preferred party, especially for larger parties, and thus incentivizes choosing a coalitional partner or other desired party whose chances of clearing the electoral threshold is less certain.

H3. Knowledge of the electoral threshold will positively correlate with ticket splitting.

III. Legislative Elections in Taiwan

Taiwan passed sweeping electoral reforms in 2005 that would replace their single nontransferable vote (SNTV) system for elections to the Legislative Yuan with a mixed member system, while also reducing the number of seats in half from 225 to 113. Many countries see an increase in the effective number of legislative parties after the introduction of a mixed electoral system, yet Taiwan's system remained dominated by two larger parties: the Kuomintang (KMT) and the Democratic Progressive Party (DPP).³) Furthermore, district competition remains largely consistent with Duverger's Law. The average vote share captured by the top two candidates has exceeded ninety percent since the enactment of the mixed system (95.76% in 2008, 94% in 2012, and 91.91% in 2016).⁴)

In 2008, the KMT coordinated with the break-away People First Party (PFP) in both electoral tiers. The "pan-blue" coalition won a super majority of total seats compared to the DPP. Despite capturing a slim majority of the party list vote, the KMT fared disproportionately well in district competition, thus capturing nearly three quarters (71.7%) of all legislative seats. This is possible in mixed member majoritarian (MMM), as they do not require the overall distribution of seats to conform to proportionality, unlike MMP variants in Germany and New Zealand. Meanwhile, two smaller parties, the "blue" New Party (NP) and the "green" Taiwan Solidarity Union (TSU) failed to win a single seat, although the former endorsed two KMT candidates.

In 2012, the KMT again captured a majority of seats, albeit by a slimmer margin (56.6%), as the PFP ran its own party list and the DPP reclaimed traditionally green districts lost in 2008. By the middle of 2014, public opinion towards President Ma Ying-jeou and the KMT had sharply declined, in large part due to the Sunflower Movement protesting the party's passage of a controversial trade agreement with China without

³⁾ The effective number of legislative parties remains largely consistent with Duvergerian expectations: 1.75 in 2008 and 2.23 in 2012.

⁴⁾ Kinmen County has remained a consistent outlier at 71.01%, 65.11%, and 74.35% respectively.

a clause by clause review. Anti-Ma and KMT sentiment led to historic losses for the party in the 2014 local elections (Yeh 2014; Wang and Cheng 2015).

A reinvigorated DPP followed this success in 2016 with their first outright majority (60.2% of seats) in the Legislative Yuan. Much as the KMT benefited from the disproportionality of the mixed system in the past, so did the DPP, capturing 16% more seats than if Taiwan employed a purely proportional system. Besides benefiting from anti-KMT sentiment, the DPP coordinated with smaller parties, including the Sunflower Movement-based New Power Party (NPP). For example, whereas the KMT ran district candidates in 72 of 73 single member districts, the DPP only ran in 60, coordinating with the NPP as well as others and usually in districts the DPP did not expect to win. For example, in only one district did the DPP and NPP both run candidates, Hsinchu City, won by the DPP.

While Taiwan's system remains dominated by two larger parties, the mixed system allows for smaller party representation. The TSU returned in 2012, winning three party list seats. However, the emergence of the NPP in part undercut support for the TSU, resulting in the party failing to clear the five percent threshold for party seats in 2016. The NPP garnered two party list and three district seats in 2016, while the PFP, running separate lists in 2012 and 2016, won three and two party list seats respectively. These parties, along with the NP have also clearly opted to focus their energies on the party list tier, with each only running in a select number of districts (NPP 12, PFP 6, and NP and TSU both 2 districts, respectively). Thus, for smaller parties, they must encourage supporters to turnout but also provide enough incentives to prevent these

voters from defecting to larger parties with a greater likelihood of electoral success.

Viewing the breakdown of seats acquired by each party (Table 1) suggests a level of strategic voting in that few small parties managed any district seats, with the NPP's success in district aided by the lack of a DPP candidate. Comparing votes at the district level for district candidates and the party list further suggests a benefit in nominating district candidates to boost the party list vote.⁵) For example, where the DPP ran a district candidate, the party averaged 44.94% of the party list vote, but only 35.07% without a district candidate. The KMT averaged 27.7% of the vote in districts with a candidate, but only 23.4% without one. Smaller parties general see a modest boost as well: the PFP and NPP both see about a boost of about 0.6%, while the NPP nearly doubled their vote share in the presence of a district candidate (4.19% vs. 8.08%). Surprisingly, the TSU actually saw a decline in vote share (2.52% without a candidate, 1.96% with a candidate).

	SMD	PR
DPP	49	18
KMT	20	11
NPP	3	2
PFP	0	3
Others	1	0

Table 1. Distribution of Seats in 2016 Legislative Yuan Election⁶⁾

Data is available at Nathan Batto's blog: https://frozengarlic.wordpress.com/2016/01/23/2016election-data/

⁶⁾ In addition, six aboriginal seats were filled in two three-seat districts.

IV. Data

Relying on national or regional data to evaluate ticket-splitting potentially leaves analyses open to the ecological fallacy problem, assuming patterns at the aggregate hold for the individual (see King 1997). Post-election survey data from the Election Study Center at National Chengchi University (NCCU)⁷) provides relevant individual-level data necessary to gauge the covariates of ticket-splitting. Admittedly, surveys risk undertimation of ticket-splitting due to biases in recalling one's vote choice (Wright 1993), including nonvoters claiming to have voted. Nevertheless, this survey provides a means to evaluate proclaimed voting behavior directly after an election.

A binary ticket-splitting variable was generated based on the respondent's answers to separate questions on about their district and party list vote.⁸⁾ Based on a question asking the electoral threshold for the PR seats, I recoded answers into a binary variable, with those with correctly identified the five percent threshold coded as a one and those who incorrectly identified the threshold as a zero. Demographic variables (a continuous measure for age and education⁹⁾ and a binary measure for gender (1 =

⁷⁾ Data analyzed in this article were from Taiwan's Election and Democratization Studies (2016-T). The principal investigator is Professor Chi Huang. More information is on TEDS website (http://www.tedsnet.org). The author appreciates the assistance in providing data by the institute and individual(s) aforementioned. The author is alone responsible for views expressed herein.

⁸⁾ Respondents who did not identify a party in both votes were excluded from analysis.

Previous work outside of mixed systems suggest education influences splitting tickets across offices as well as an interest in divided government more broadly (e.g. Fiorina 1992; Campbell and Miller 1957).

female) serve as controls. Supplementing the TEDS data, I included the number of district candidates and the winner's margin over that of the runner up based on electoral data available at on the website of the Election Study Center (ESC) at National Chengchi University.¹⁰ For much of this analysis. I focus on those that claimed to identify with one of the six parties - the DPP, KMT, NPP, PFP, TSU, and NP - as these parties won 112 of the 113 seats and, with the exception of the NPP, have been the same main electoral parties since before reforms to a mixed system.¹¹) Limiting the focus to those with a partisan attachment allows for a closer analysis of strategic factors influencing ticket splitting. In contrast, the voting behavior of those without a partisan attachment would be expected to be shaped by a myriad of factors more difficult to model with no baseline assumption that a voter's preferred inclination might be to vote a straight ticket. Dummy variables for each party were generated based on a survey question on partisan identification, with an additional binary variable of small party status (NPP, PFP, TSU, and NP). Summary statistics are presented in Table 2.

¹⁰⁾ Vote margins would obviously only be known after the fact, but are used here as a proxy for expectations on the competitiveness of district races.

¹¹⁾ The largest omission—the Green/Social Democratic coalition—ran candidates in 11 districts and a combined party list and captured 1.68% of the district votes and 2.53% of the party list vote. While survey data disaggregates party identification, available data does not in terms of vote choice within this coalition. In addition, this analysis leaves out the KMT-breakaway Minkuotang (MKT), which ran 13 district candidates, garnering 1.61% of the district and 1.62% of the party list.

	Obs	Mean	SD	Min	Max
Split Ticket	1819	0.39	0.49	0	1
Knew Threshold	2215	0.47	0.50	0	1
District Candidate of Same Party ID	2206	0.81	0.40	0	1
Number of District Candidates	2206	4.91	2.14	2	12
Winner's Margin	2206	17.98	14.56	0	58
Age	2215	50.34	13.86	21	92
Education	2214	4.68	1.43	1	7
Female	2215	0.48	0.50	0	1
DPP	2215	0.54	0.50	0	1
KMT	2215	0.33	0.47	0	1
PFP	2215	0.06	0.24	0	1
NPP	2215	0.05	0.22	0	1
TSU	2215	0.01	0.09	0	1
NP	2215	0.02	0.12	0	1
Smaller Party	2215	0.13	0.34	0	1

Table 2. Summary Statistics of the Dataset

V. Empirical Analysis

The influence of having a candidate from one's preferred party in the district races requires unpacking in relation to ticket-splitting. The lack of a district candidate presumably would force partisans to split their ticket, but this ignores the non-negligible act of total defection from one's preferred party. In other words, despite identifying with Party A, a voter can opt to cast a straight ticket for another party (e.g. Party B), a decision likely exacerbated by district nomination decisions. Among respondents,

identifying with the six named parties, 28.74% of those without a partisan district candidate cast votes for a different party in both tiers, compared to only 15.58% in the presence of a co-partisan district candidate.

Table 3 displays ticket-splitting rates and party list support based on partisan identification, showing a clear influence of the presence of a co-partisan district candidate and that a non-negligible percent of respondents, absent a district candidate, cast a straight ticket for another party. For example, nearly all DPP supporters in districts without a DPP candidate split their votes, compared to less than a guarter where a district candidate was present. Similarly, only a third of KMT supporters split their ticket when the party had a local candidate, compared to eighty percent in its absence. with similar distinctions within the PFP. Of particular interest, a majority of NPP supporters with or without a district candidate split their votes, although the rates were higher in their district absence. A closer analysis finds that straight ticket voting for a party other than one's preferred is noticeably higher in the absence of a co-partisan in the district race. For example, only 2.5% of KMT identifiers cast a straight ticket for another party if a KMT was present in the district, compared to 20% in their absence. Meanwhile, less than 1 percent of DPP identifiers (.08%) cast a straight ticket for another party when the party ran a district candidate, compared to 4.6% where the DPP bowed out.

The placement of a district candidate and the PR vote presents no consistent pattern. The KMT for example sees a twenty percent boost in the PR vote in districts in which they ran candidates, whereas the PFP sees only a five percent boost. In contrast, the DPP sees a minor decrease and the NPP declines by nearly twelve percent. While unexpected, the pattern seen on the DPP and NPP may be attributable to coordination

efforts between the two parties.

Table 3. Split	licket and	Voting for t	he Party	List Based	on the	Presence of
a Di	strict Candio	date From t	he Party			

	Split Ticketing Rates		Voted For	r Party List
	District Candidate	No District Candidate	District Candidate	No District Candidate
DPP	23.03	95.42	75.22	77.27
KMT	33.16	80.00	63.53	42.86
NPP	61.11	76.39	36.36	48.94
PFP	25.00	88.51	80.00	75.21
TSU	N/A	78.57	N/A	58.82
NP	N/A	84.62	N/A	75.29

Moving to knowledge of the electoral threshold, a clear difference emerges between larger and smaller parties (Table 4). Overall, only 43.5% of respondents knew the electoral threshold was five percent. Less than half of DPP or KMT supporters correctly identified the five percent threshold, whereas over sixty percent of supporters of the other parties knew this threshold. Furthermore, for four parties, knowing the threshold led to higher rates of ticket-splitting, but not among NPP and PFP identifiers, contrasting with expectations. Thus, preliminary evidence is consistent with H3.

	Knew Threshold	Ticket-Splitting Knew Threshold	Ticket-Splitting Did Not Know
DPP	47.31	35.67	29.08
KMT	38.74	45.76	25.89
NPP	63.79	68.85	82.76
PFP	61.07	79.66	88.89
TSU	82.35	83.33	50.00
NP	65.71	87.50	80.00

Table 4. Rates of Knowing the Electoral Threshold and Ticket-Splitting

For greater insight, two logit regressions assess ticket-splitting (Table 5^{12} and limits respondents just to those identifying with the six parties previously mentioned (DPP, KMT, PFP, NPP, TSU, and NP), 67.72 percent of those surveyed. The main independent variables include dummy variables for knowing the electoral threshold is five percent for PR seats and the presence of a district candidate with the same partisan identification as the respondent. Additional controls include the number of district candidates, the winner's margin over that of the runner up, age, education, and gender). The second model includes dummy variables for partisan identification (KMT, NPP, PFP, TSU, and NP), leaving the DPP identifiers as the baseline. Table 6 replaces the dummy variables for parties with a measure of identification with smaller parties (NPP, PFP, TSU, NP) and an interaction term between smaller party identification and knowing the electoral threshold. Table 7 disaggregates types of ticket splitting by only focusing on identifiers that voted for their preferred party in at least one tier. The first models only include those who voted for the preferred

¹²⁾ Models presented include clustered errors at the district level.

party with their list vote to identify splitting from the party in the district, the second two flip to focus on party list splitting if one voted for the district candidate. Table 8 again replaces the party ID variables with a dummy for smaller party identification and includes the smaller party-electoral threshold interaction.

	Coeff	SE	Coeff	SE
Knew the Electoral Threshold	0.333***	0.120	0.402****	0.122
Winner's Margin	-0.015****	0.004	-0.013***	0.004
District Candidate of Same Party ID	-2.878****	0.182	-3.340****	0.265
Number of Candidates	-0.040	0.027	-0.046*	0.027
Age	-0.016****	0.005	-0.019****	0.005
Education	0.146***	0.047	0.117**	0.048
Female	-0.058	0.118	-0.091	0.119
KMT ID			0.447****	0.126
PFP ID			-0.263	0.384
NPP ID			-0.583	0.356
TSU ID			-0.961	0.720
NP ID			-0.451	0.606
Constant	2.332****	0.449	2.899****	0.500
Ν	1811		1811	
Pseudo R2	0.208		0.216	

Table 5. Logistic Regressions on Ticket-Splitting

****p < 0.001, ***p < 0.01, **p < 0.05, *<.10

Starting with Table 5 and limited just to those identifying with the six major parties, knowing the electoral threshold positively corresponded to

ticket-splitting, while district candidate placement and the competitiveness of districts, measured by the winner's margin, negatively corresponded with splitting, all consistent with the hypotheses. That the KMT variable positively corresponds with ticket-splitting remains unclear, although this may be a function of the anti-KMT sentiment in 2016. Replacing the party identification variables with the smaller party dummy variable and adding an interaction term between small parties and knowledge of the electoral threshold produces similar results (see Table 6). Furthermore, the results show that small party supporters cognizant of the threshold were less likely to split their votes.

	Coeff	SE
Knew the Electoral Threshold	0.423****	0.125
District Candidate of Same Party ID	-0.015****	0.004
Number of District Candidates	3.192****	0.26
Winner's Margin	-0.044	0.027
Age	-0.017****	0.005
Education	0.147***	0.047
Female	-0.065	0.118
Smaller Party	0.110	0.416
Smaller Party × Threshold	-0.971**	0.439
Constant	-0.522	0.416
Ν	1811	
Pseudo R2	0.212	

Table 6. Logistic Regression on Ticket-Splitting

****p < 0.001, ***p < 0.01, **p < 0.05, * < .10

Additional tests find largely consistent results. For example, the strength of partisan identification would be expected to influence ticket-splitting. To capture this, I rely on a binary measure among those who claimed a party identification, ranging from somewhat to strong preference. Adding this variable to the original models finds that strong partisans negatively corresponded with ticket-splitting, but did not otherwise alter the key findings of the models. Similarly, interacting this variable with the individual parties did not change the main models. Additional tests that included controls for ethnic and for preferences for Taiwan's future status (independence versus unification) also failed to change the main findings.

Moving to the disaggregated models of ticket-splitting, we see in the first model on Table 7 that the electoral threshold variable is not statistically significant, while the winner's margin negatively correlates with defection, suggesting that noncompetitive races encourage sincere voting. As expected, the presence of a district candidate strongly corresponds with a straight ticket.¹³) Older voters were also less likely to defect from the party in district competition, perhaps in part due to more ingrained party loyalty. Adding the party variables produces similar results. Turning to the second set, the electoral threshold strongly corresponds with defecting from the party list. To put into perspective, the predicted probability of defecting from the party list in Model 4

¹³⁾ Logically the absence of a district candidate should force all partisan voters who backed the party list to ticket split; however, a small percentage of respondents (under one percent) claimed to have voted a straight ticket in the absence of their party fielding a district candidate. Predicted probabilities of defecting from the district candidate in Model 1, holding all other variables at their mean, increase roughly tenfold in the absence of a candidate (.09 vs. .97).

more than doubles if one knows the electoral threshold (.11 versus .24). In addition, the total number of district candidates negatively corresponds with defection. Predicted probabilities at the extremes of the number of district candidates (two and twelve) show that defection from the list drops nearly in half (.19 versus .11). The results here suggest a contamination effect in which the placement of even non-viable district candidates encourages straight ticket voting.

	Defect SMD			Defect PR				
	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE
Knew the Electoral Threshold	-0.309	0.213	-0.348	0.224	0.959****	0.164	1.064****	0.169
Winner's Margin	-0.023****	0.007	-0.021***	0.008	-0.006	0.005	-0.002	0.005
District Candidate of Same Party ID	-5.642****	0.366	-6.687****	0.740				
Number of District Candidates	-0.048	0.047	-0.066	0.049	-0.067*	0.038	-0.071*	0.038
Age	-0.027****	0.008	-0.025***	0.008	-0.014**	0.006	-0.019***	0.006
Education	-0.007	0.080	-0.037	0.083	0.194***	0.063	0.145**	0.065
Female	-0.160	0.201	-0.185	0.206	0.026	0.156	-0.013	0.158
KMT ID			0.508**	0.215			0.683****	0.162
PFP ID			-1.824**	0.812			Dropped	
NPP ID			3.389****	0.858			0.975	1.030
TSU ID			Dropped				Dropped	
NP ID			Dropped				Dropped	
Constant	-0.019	0.702	-0.135	0.715	-1.828****	0.557	-1.734***	0.561
N	1421		1390		1278		1273	
Pseudo R2	0.514		0.509		0.066		0.082	

Table 7. Logistic Regressions on Ticket-Splitting Separated By Type of Splitting

****p < 0.001, ***p < 0.01, **p < 0.05, *<.10

Table 8 again replaces the party identification variables from the extended models in Table 6 with a dummy for small party supporters and includes the interaction with knowledge of the electoral threshold. Here knowledge of the electoral threshold correspondents with defection from the party list given that a voter chose the party's district candidate, significant at .001, but knowledge of the threshold failed to reach significance in regards to district defection among those who voted for the party list of their preferred party. Furthermore, in neither model did the interaction term reach significance. Additional tests for partisan strength, ethnicity, and Taiwan's future status failed to change the core findings.

	Defect SMD		Defect I	PR	
	Coeff	SE	Coeff	SE	
Knew the Electoral Threshold	-0.303	0.219	0.957****	0.165	
Winner's Margin	-0.047	0.047	-0.066*	0.038	
District Candidate of Same Party ID	5.358****	0.419			
Number of District Candidates	-0.022****	0.007	-0.006	0.005	
Age	-0.027****	0.008	-0.014**	0.006	
Education	-0.012	0.081	0.196***	0.063	
Female	-0.154	0.202	0.027	0.156	
Smaller Party	1.224	1.047	-11.518	582.127	
Smaller Party × Threshold	-0.82	1.13	11.339	582.128	
Constant	-0.04	0.703	-1.834****	0.557	
Ν	1421		1278		
Pseudo R2	0.515		0.067		

Table 8. Logistic Regressions on Ticket-Splitting Separated By Type of Splitting and Party Size

****p < 0.001, ***p < 0.01, **p < 0.05, *<.10

In sum, the overall findings here are largely consistent with the hypotheses. Competitiveness of the district races (HI), as measured by margin of victory, decreases ticket splitting, especially in terms of defecting from the district candidate although the substantive effects are minor. That the presence of a partisan district candidate discourages ticket splitting (H2) is consistent with the contamination thesis, although this pattern does not emerge in models on within-coalition splitting. Meanwhile, knowledge of the electoral threshold largely corresponds with a tendency to ticket split, consistent the H3, with further analysis finding that the effect is most evident in defection from the party list.

VI. Conclusion

The results identify contextual factors beyond voters themselves acting strategically to influence ticket-splitting in Taiwan's 2016 election, namely cognizance of the electoral threshold for party list seats and whether or not a partisan's preferred party ran a district candidate. These findings are consistent with the importance of candidate-centered voting (e.g. Burden 2009) and knowledge of election laws in complex voting environments (e.g. Marsh and Plescia 2015). However, despite expectations that supporters of smaller parties would interact with the electoral system differently than those of larger parties, and that smaller party supporters are generally more cognizant of the electoral threshold, the results largely fail to confirm such a distinction between party size and knowledge of the threshold on ticket-splitting.

Several questions remain. Little research addresses when voters opt to split their ticket or if voters waver in regards to this decision as the election looms. In other words, to what extent do campaign factors shape committing to splitting one's ticket? While the findings here are largely consistent with expectations, the 2016 election, with the turmoil within the KMT and the entry of several smaller parties, may not be representative of Taiwanese ticket-splitting more broadly. Nor is it clear whether technical knowledge or the presence of a district candidate influences broader perceptions of the electoral system. For example, cursory evidence from this survey suggests that knowing the electoral threshold negatively correlates with perceiving the system as fair to small parties but no indication of its broader effects on satisfaction.¹⁴) Similarly, although previous works suggest that a running a district candidate and attaching a face to an otherwise distant party may increase party list votes, it remains unclear whether non-viable candidates encourage greater positive evaluations of the democratic process. Nevertheless, the findings here suggest caution in interpreting split-ticket voting as solely a rational act initiated by knowledgeable voters.

¹⁴⁾ The survey includes a question regarding whether the election outcome was fair to small parties. Of those knowledgeable of the threshold, 65.12% found the results fair or very fair, compared to 78.91% who could not identify the threshold (chi-square = .001).

References

- Alvarez, R. M. & Nagler, J. (2000). A new approach to modelling strategic voting in multiparty elections. *British Journal of Political Science*, 30(1), 57-75.
- Banducci, S., Karp, J., Vowles, J. & Donovan, T. (1999). Strategic voting in the 1996 New Zealand election: implications for a new mixed system. Working Paper, University of Waikato.
- Bawn, K. (1999). Voter responses to electoral complexity: ticket splitting, rational voters, and representation in the Federal Republic of Germany. *British Journal of Political Science*, 29, 487-505.
- Bean, C. S. & Wattenberg, M. P. (1998). Attitudes toward divided government and ticket-splitting in Australia and the United States. *Australian Journal of Political Science*, 33(1), 25-36.
- Benoit, K., Giannetti, D. & Laver, M. (2006). Voter strategies with restricted choice menus. *British Journal of Political Science*, 36(3), 459-485.
- Burden, B. C. (2009). Candidate-driven ticket splitting in the 2000 Japanese elections. *Electoral Studies*, 28(1), 33-40.
- Campbell, A. & Miller, W. E. (1957). The motivational basis of straight and split ticket voting. *American Political Science Review*, 51(2), 293-312.
- Cox, G. W. (1997). *Making votes count: strategic coordination in the world's electoral systems*. Cambridge: Cambridge University Press.
- Duverger, M. (1954). *Political parties: their organization and activity in the modern state.* London: Methuen & Company.
- Ferrara, F. Herron, E. S., & Nishikawa, M. (2005). *Mixed electoral systems: combination and its consequences*. New York: Palgrave.

Fiorina, M. P. (1992). Divided government. New York: Macmillan.

- Gschwend, T. (2007). Ticket splitting and strategic voting under mixed electoral rules: evidence from Germany. *European Journal of Political Research*, 46, 1-23.
- Gschwend, T. & van der Kolk. H. (2006). Split ticket voting in mixed member proportional systems: the hypothetical case of the Netherlands. *Acta Politica*, 41(2), 163-179.
- Han, S. I. (2013). Strategic voting of small parties supporters in two-vote mixed-member majoritarian system. *Korean Political Science Review*, 5(12), 235-254.
- Helmke, G. (2009). Ticket splitting as electoral insurance: the Mexico 2000 Elections. *Electoral Studies*, 28(1), 70-78.
- Herron, E. S. & Nishikwa, M. (2001). Contamination effects and the number of parties in mixed superposition electoral systems. *Electoral Studies*, 20(1), 63-86.
- Jacobson, G. (1992). *The politics of congressional elections*. New York: Harper Collins.
- Karp, J. A. (2006). Political knowledge about electoral rules: comparing mixed member proportional systems in Germany and New Zealand. *Electoral Studies*, 25(4), 714-730.
- Karp, J. A., Vowles, J. Banducci, S. & Donovan, T. (2002). Strategic voting, party activity and candidate effects: testing explanations for split voting in New Zealand's new mixed system. *Electoral Studies*, 12, 1-22.
- King, G. (1997). A solution to the ecological inference problem: reconstructing individual behavior from aggregate data. Princeton, NJ: Princeton University Press.

- Kohno, M. (1997). Voter turnout and strategic ticket-splitting under Japan's new electoral rules. *Asian Survey*, 37(5), 429-440.
- Ladd, E. C. (1990). Public opinion and the "Congress problem". *The Public Interest*, 100, 57-67.
- Lancaster, T. D. & Patterson, W. D. (1990). Comparative pork barrel politics: perceptions from the West German Bundestag. *Comparative Political Studies*, 22(4), 458-477.
- Lee, H. (2004). Political effect of introduction of party bloc vote. Paper presented at the Special Conference on the 17th National Assembly Election of the Korean Political Science Association.
- Lewis-Beck, M. & Nadeau, R. (2004). Split-ticket voting: the effects of cognitive Madisonianism. *Journal of Politics*, 66(1), 97-112.
- Marsh, M. & Plescia, C. (2016). Split-ticket voting in an STV system: choice in a non-strategic context. *Irish Political Studies*, 31(2), 163-181.
- Moser, R. G. & Scheiner, E. (2005). Strategic ticket splitting and the personal vote in mixed-member electoral systems. *Legislative Studies Quarterly*, 30, 259-276.
- Moser, R. G. & Scheiner, E. (2009). Strategic voting in established and new democracies: ticket splitting in mixed-member electoral systems. *Electoral Studies*, 28(1), 51-61.
- Park, C. W. & Ryu, J. (2009). Patterns of split-ticket voting in the 2008 Korean general election for the National Assembly. Presented at the annual meeting of the Southern Political Science Association. New Orleans, LA. January 9.
- Plescia, C. (2016). *Split-ticket voting in mixed-member electoral systems*. Colchester: ECPR Press.

- Rallings, C. & Thrasher, M. (2003). Explaining split-ticket voting at the 1979 and 1997 general and local elections in England. *Political Studies*, 51(3), 558-572.
- Rich, T. S. (2012). The timing of split-ticket voting decisions in mixed systems: evidence from South Korea. *Asian Journal of Political Science*, 20(2), 203-220.
- Rich, T. S. (2014). Understanding the rules of the game: evidence from Taiwan's mixed legislative system. *Asian Politics & Policy*, 6(1), 45-58.
- Wang, T. Y. & Cheng, S. F. (2015). Presidential approval in Taiwan: an analysis of survey data in the Ma Ying-jeou presidency. *Electoral Studies*, 40, 34-44.
- Wright, G. C. (1993). Errors in measuring vote choice in the National Election Studies, 1952-88. American Journal of Political Science, 37(1), 291-316.

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