# Do Campaign Rallies Matter?

Evidence from the Five Star Movement's 'Tsunami Tour' in the 2013 Italian Parliamentary Election

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#### Abstract

This thesis employs an instrumental variable design to establish whether the mass rallies held by the Five Star Movement (M5S) in the run-up to the 2013 Italian parliamentary election, known collectively as the 'Tsunami Tour', had a causal effect on a series of political outcomes. Exploiting temperature at the time of the rally as an exogenous predictor of rally attendance, I use two-stage least squares models to estimate the effect of attendance on municipality-level performance of M5S in the 2013 election, turnout, and M5S performance in subsequent elections. I find that each additional degree Celsius at the time of the event increased participation by an average of 6%, and for each 10 additional participants to the rally, M5S gained between 7 and 8 extra votes in 2013 and between 4 and 5 in the European election one year later. Conversely, rally attendance has no effect on turnout in 2013 or on M5S share in the 2018 parliamentary election. These estimates are robust to alternative specifications of the attendance variable and the controls, as well as the introduction of an additional instrument - rainfall at the time of the rally. Alongside conventional robustness checks, I present the results of a placebo test that reproduces the analysis on pre-treatment 'pseudo-outcomes' (other parties' vote share in previous elections) and the analysis of individual-level cross-sectional survey data to corroborate the results. The estimated effect of rallies is one order of magnitude larger than the difference between M5S and the second most voted party in the national vote count for the Chamber of Deputies, suggesting that without the 'Tsunami Tour' M5S would not have come first. Moreover, the results suggest that even a markedly 'pre-modern' type of campaign activity such as public rallies can have significant and durable effects on voters' behaviour in an electoral context characterised by low levels of party loyalty and asymmetric campaign strategies.

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# Introduction

'Piazze piene, urne vuote' ('packed squares, empty ballot boxes') is something of an axiom in Italian politics. The phrase, coined by socialist leader Pietro Nenni after the left-wing electoral alliance's defeat in 1948, has since been reiterated in the political commentary every time parties' electoral performance fell short of the high expectations set by the crowds they turned out in their campaign rallies. In particular, in recent decades Nenni's quip has hung as a curse on the Italian Left, in view of the apparent impotence of 'traditional' campaign activities such as public rallies and demonstrations vis-à-vis the media firepower of their main opponent, television mogul Silvio Berlusconi (Genga, Lauriano and Ruggiero, 2009; Bosetti, 2013). However, in the 2013 parliamentary election an anti-establishment newcomer to the Italian party system, the Five Star Movement (M5S), seemed to have spectacularly defeated this piece of conventional wisdom. Banning its candidates from appearing on television, M5S ran an 'old-style' campaign consisting primarily of large-scale public gatherings – known collectively as the 'Tsunami Tour' – which galvanised citizens into an exceptional level of participation. Not only did these campaign events draw consistently crowds in the thousands (and occasionally tens of thousands) to public squares across Italy, but over the course of the Tsunami Tour support for M5S skyrocketed. At its onset on 15 January 2013, the party was polling around 15%; on the day of the election six weeks later, it gained over 25% of the vote (Barbieri, 2014).

The Tsunami Tour comprised 78 public rallies held over a period of 38 days, centred on the rousing monologues of Beppe Grillo, the leader of M5S and one of the most popular comedians in the country. 'Unprecedented' is an adjective routinely associated with the crowds of the Tsunami Tour in the local media coverage of these events, and when comparisons are drawn they hark back to the heyday of mass parties. For instance, in the right-wing stronghold of Lecce, the turnout for Grillo's rally is likened by the local press to the crowds of Giorgio Almirante, the post-war leader of the neo-fascist right, while in traditionally left-wing Savona Grillo's 10,000-strong crowd is compared to those of the rallies of historic communist leader Enrico Berlinguer (De Giorgi, 2013; Panavello, 2013). What is more, M5S's success in the public squares was matched by success at the ballot box, as M5S turned out to be the largest party

in both municipalities. The puzzle that this thesis intends to tackle is whether these two phenomena were causally related. Did the popularity of the Tsunami Tour rallies *cause* an increase in M5S's share of the vote, or did underlying shifts in public opinion and favourable demographics result in *both* high attendance to the rallies *and* electoral success? In other words, *do campaign rallies matter*?

This question speaks to the more general research agenda that investigates whether and under which conditions electoral campaigns are effective in shifting political preferences and driving electoral choices (Jacobson, 2015). Specifically, it intends to contribute to it by addressing two limitations of the existing literature. First, while this scholarship is heavily dominated by case studies on American presidential elections, I focus on a very different and somewhat sui generis case: M5S's campaign in the Italian parliamentary election of 2013. In fact, if US parties can rely on established brands, political machines and electoral constituencies, M5S contested its first national election in 2013 in the context of a party system in flux, appearing on the political scene seemingly out of nowhere. The nature of the 2013 election suggests that this may be a 'most likely' case to document direct effect of campaign activities, as M5S was still an 'unknown quantity' to many voters at the time of the campaign and it pursued a markedly distinct campaign strategy from other parties. Secondly, while campaign studies have evolved in parallel with socio-technological changes to focus on the media and the internet as key loci of persuasion and mobilisation, this thesis revisits a distinctively 'pre-modern' (Norris, 2000: 137-161) form of electioneering that has been largely overlooked by quantitatively oriented contemporary scholarship: rallies. The choice of studying this seemingly outdated campaign activity may nonetheless be surprisingly topical. Indeed, as a political practice with clear affinities with 'populist' communicative styles and political messaging, leader-centred mass political rallies have made something of a comeback in recent years. Consider for instance, their central role in Bernie Sanders' and Donald Trump's runs in the 2016 electoral cycle, or in the campaign of Labour Party leader Jeremy Corbyn in the 2017 British general election (Wendland, 2017; Goes, 2018).

The key empirical challenge in establishing causality in the relationship between rally attendance and M5S electoral performance in the places where rallies took place is the endogeneity of the independent variable. That is, rallies will be more successful in places where there are more M5S supporters – and thus the party is likely to perform well locally anyway. The solution I adopt to tackle this issue adapts to this case study the inferential strategy of the 2013 paper 'Do Political Protests Matter?' by Madestam, Shoag, Veuger and Yanazigawa-Drott, which analyses the effect of the 2009 'Tax Day' protests by the American Tea Party on the movement's subsequent political influence (Madestam et al., 2013). The 'revised' methodology involves two steps. First, I use a conventional ordinary least squares (OLS) regression with a raft of socio-economic controls and regional fixed effects for the entire population of over 8,000 municipalities, to decompose the dependent variable – M5S share of the vote in 2013 at municipality level – into a predicted and idiosyncratic component. Subsequently, I use the values of the idiosyncratic

component for the subsample of municipalities in which a rally was held as the dependent variable of a two-stage least squares (2SLS) model, which exploits variations in rally attendance due to temperature as the independent predictor. As a series of geographic variables are controlled for in the first step, temperature can be assumed to be an exogenous factor affecting rally attendance but uncorrelated with other possible drivers of M5S's electoral performance. I repeat this procedure for three other outcome variables: voter turnout in 2013, M5S performance in the European Parliament election of 2014, and M5S performance in the parliamentary election of 2018.

Instrumenting rally attendance with temperature, I am able to estimate the effects of an exogenous variation in rally attendance on a series of post-rally outcome variables. The results of my main model indicate that, holding the timing of the rally over the course of the campaign constant, an increase of one degree Celsius in temperature at the time of the rally corresponds approximately to a 6% increase in rally attendance as a share of municipality population, and each 10 additional participants increase M5S's performance in 2013 by around 7-8 votes. For a sample average municipality, this means that each degree Celsius increases participation by approximately 300-380 attendees, and this exogenous variation translates into 240-270 additional votes for M5S in the following election. These results are significant for four different estimations of rally attendance, drawn from data collected from three distinct sources. I find a smaller but statistically significant effect in the same direction for M5S vote share in the 2014 European Parliament election, indicating that for each 10 additional participants to the 2013 rallies, M5S received about 4 or 5 additional votes in 2014. Moreover, I find that rallies have no impact on turnout in 2013 or M5S performance in the parliamentary election of 2018. Overall, the results suggest that the rallies had substantial persuasive effects in 'rally' municipalities, which was strongest in the short term and gradually faded over the course of the 2013-2018 parliament.

Additionally, I corroborate the validity of these conclusions in three ways. First, I present conventional robustness checks, which show that the results are robust to alternative specifications of the control variables, as well as changes of the sample of the first-step OLS regression and the introduction of rainfall as an additional instrument. Secondly, I test the validity of the design via a placebo test, re-running the same analysis on other parties' vote shares in previous election. As expected, these models with pre-treatment placebo outcome variables return a null result. The third validation strategy consists in the cross-validation of my main model's results through the analysis of a completely distinct data source ('data source triangulation'). In this case, I complement the aggregate-level analysis with individual-level data from the 2013 Italian pre-election survey conducted by ITANES over the course of the campaign. I create a 'rally city' dummy for respondents from municipalities in which the rally was held, and a 'post-rally' dummy for respondents who are from 'rally municipalities' and were interviewed after the rally took place. Then, I regress reported self-reported propensity to vote for M5S on the 'post-rally' variable, controlling for the 'rally city' dummy, the timing of the interview and a series of socio-economic variables.

This model returns a positive effect of the 'post-rally' dummy, indicating an increase in support for M5S as a result of a rally being held, independent of the specific characteristic of rally municipalities and of temporal shifts in political attitudes over the course of the campaign. Moreover, I find that this effect was stronger and more significant for respondents with low levels of self-reported political interest: the most likely 'persuadable voters' in an electoral campaign.

The thesis is organised as follows. In Chapter 1, I contextualise my thesis in the existing comparative scholarship on campaign effects and campaign rallies, as well as the methodological work that has established weather instruments as a useful inferential tool in quantitative social science. Chapter 2 presents a short summary of M5S's rise, the party's characteristics, their 2013 electoral campaign, and subsequent developments. Chapter 3 introduces a short theoretical framework that distinguishes between three mechanisms through which rallies can be expected to affect parties' subsequent performance – behavioural effects, organisational effects and media effects. Moreover, I justify the choice of the Tsunami Tour both as a 'most likely' case study to document local effects of rallies, and as an object of study of significance in its own right in order to understand the role of offline communication practices in the success of an ostensibly web-centred party such as M5S. In Chapter 4, I set out four main hypotheses, explain the instrumental variable approach adopted in the empirical section, and discuss the data sources and variables used in the core analysis. In Chapter 5, I present the results of the core analysis, and in Chapter 6 I corroborate them via the three validation strategies outlined above. In Chapter 7, I provide an interpretation of my findings: first, the results indicate the presence of small but sizeable short- and medium-term 'behavioural effects' of rallies. Secondly, they suggest that the effect may have operated primarily through the *persuasion* of likely voters rather than the *mobilisation* of potential non-voters. I conclude by outlining possible directions of further research and by assessing the implications of my findings for the specialist literature on M5S and the broader scholarship on electoral campaign. First, the findings call for a partial reassessment of M5S as not just an 'internet-fuelled' party, but rather as a movement that made extensive and effective use of offline, in-person communicative practices at a critical phase of its rise. Moreover, they show that in contemporary information environments party contact remains an important driver of electoral behaviour. Finally, they hint at the possibility that the success of new 'insurgent' parties across Western polities in recent years might be partly attributed to their ability to use a repertoire of party-voter interactions that contemporary mainstream parties are unable to draw on but were typical of the 'mass parties' of the past.

# Chapter 1

# Related Literature

#### 1.1 Campaign Effects

To political insiders, electoral campaigns are an all-important spell in the political calendar: parties invest substantial resources in them, candidates spend a great deal of time on the campaign trail, activists volunteer their efforts to help out their party, and the media keenly cover every (mis)step of the campaign in the run-up to the vote (Farrell and Schmitt-Beck, 2003). Indeed, parties' electoral performance is routinely interpreted in retrospect in the public debate as a result of the candidates' communicative effectiveness, the strategic focus of the campaign, and the quality of their 'ground game'. Political scientists, on the other hand, have traditionally regarded this focus on short-term electioneering with a healthy dose of scepticism. Early work by the 'Columbia School' (Berelson, Lazarsfeld and Gaudet, 1948; Berelson, Lazarsfeld and McPhee, 1954) on US presidential elections found that political communication served primarily the purpose of "preserving prior decisions instead of initiating new decisions" (Berelson, Lazarsfeld and Gaudet, 1948: 87). The argument behind this conclusion, which is generally referred to as the 'minimal effects' hypothesis, is relatively straightforward. First, voters' level of involvement and interest in party politics is generally quite low, and high-information voters tend to be more partisan, and thus less likely to be influenced by campaigns anyway (Campbell et al., 1960; Converse, 1964). Secondly, parties normally face similar strategic conditions and have comparable communication toolkits, so that their efforts 'even each other out' over the course of the campaign (Bartels, 1992: 267; Hill, Rodriquez, and Wooden, 2010: 248).

Contemporary campaigns take place in a different context from the 1940 and 1948 US presidential contests analysed in the pioneering 'Columbia' studies in at least two important respects. First, *electorates* 

have changed: if partisanship and established social identities used to be key components the 'fundamentals' that decided elections before campaigns took off, the partisan dealignment that has been observed in many Western countries provides parties with a larger reservoir of voters more sensitive to short-term cues (Franklin, Mackie and Valen, 1992; Dalton and Wattenberg, 2000). This is particularly the case in Italy, where socio-ideological identities have lost ground to personalised attachment to charismatic leaders as drivers of electoral choice (Garzia, 2011; Bellucci and Heath, 2012; Musella, 2015). Moreover, the declining embeddedness of parties in society has been associated with stronger incentives for a personalisation of political communication and weaker capacity of parties to mobilise an activist base (Whiteley and Seyd, 1998; Garzia, 2013). Secondly, campaigns themselves have changed. A classical typology (Norris, 2000: 137-161; Plasser and Plasser, 2002; Strömbäck and Kiousis, 2014) distinguishes between a pre-modern phase, where communication between parties and voters is primarily interpersonal and place-based, a modern phase, characterised by the professionalisation of campaigns and the pre-eminence of the 'air war' on television, and a post-modern phase, in which channels of political communication multiply and fragment and the internet emerges as a key battleground.

Nonetheless, the 'minimal effects' hypothesis remained influential in subsequent scholarship (Brady, Johnston and Sides, 2006; Kalla and Broockman, 2018). For instance, a new wave of American scholarship on electoral campaigns in the 1980s and 1990s confirmed that "campaigns only minimally influence the outcome of elections" (Salmore and Salmore 1989, 4) and that election outcomes can "predicted with great accuracy on the basis of the electorate's pre-campaign attitudes" (Finkel, 1993: 18). More recently, Bennett and Iyengar (2008) have argued that the conclusions of the 'minimal effects' paradigm may still apply to political communication in the internet era, although social and technological change have altered the mechanisms through which campaigns reinforce pre-existing political preferences. In terms of generalisability, the conclusions of this literature have found some support in advanced democracies other than the US, such as Germany (Finkel and Schrott, 1995; Lachat, 2007: Preissinger and Schoen, 2016), South Korea (Min and Gurian, 2017), Spain (Mellizo-Soto, 2000) and Italy (Lisi, 2011).

There is however a growing body of observational, experimental and quasi-experimental research that challenges the 'minimal effects' consensus, or at least provides only qualified support for it. Contemporary approaches to campaign studies have made use of innovative empirical designs to open the 'black box' of minimal aggregate effects and uncover a rich variety of micro-level attitudinal shifts. What these studies have in common is a tendency towards disaggregation of campaign effects (Brox and Shaw, 2006: 151): they zoom in on the effect of specific campaign practices, distinguish between persuasion and mobilisation, differentiate between electoral subgroups, broaden the scope of research to various types of elections, or adopt a combination of these strategies. These new perspectives tend to find significant effects of campaign conditional on the type of party-voter interaction ('what works'), the type of effect ('for what'), the type of target audience ('for whom'), and the context of the election ('where and when') (Jacobson, 2015).

Television advertisements, for instance, have usually been found to have noticeable persuasive effects, increasing in magnitude as the election nears (Shaw, 1999; Huber and Arceneaux, 2007; Spenkuch and Toniatti, 2018). Green and Gerber (2008) focus on the *mobilising* effects of campaigns, as opposed to persuasion, marshalling an impressive array of data that indicates that door-to-door canvassing, in-person phone calls and election-day festivals are among the most effective get-out-the-vote practices. As far as contextual factors are concerned, campaign effects tend to be sizeable in referendums (Hobolt and Brouard, 2011; Vowles, 2013; Laycock, 2013; Rogers and Middleton, 2015; Reidy and Suiter, 2015), in elections at sub-national level (Franklin, 1991; Jacobson, 2013; Put, Maddens and Smulders, 2014), in party primaries (Wendland, 2017) and in young democracies, where partisan attachments are underdeveloped (White, Rose and McAllister, 1996; Greene, 2011). Finally, there is an increasing attention in the literature to the heterogeneous effects of campaign messaging on different social groups (Wielhouwer, 2011; Enos, Fowler and Vavreck, 2013), and campaigns seem to be more successful when they invest heavily in the identification of persuadable voters (Kalla and Broockmann, 2018). In particular, the likelihood of persuasion during the campaign seems to be inversely correlated to an individual's level of political sophistication, interest and partisanship (Zaller: 1992, 266-267; Shaw, 2008: 93-97; Vavreck, 2009: 155-158).

#### 1.2 Campaign Rallies

Research on the specific type of campaign event under consideration – campaign rallies – is fragmentary and fairly limited in geographical scope. There is a small literature on electoral practices in developing countries, which tends to highlight that rallies are used strategically not only to enthuse supporters and convince swing voters (Rauschenbach, 2015), but also to monitor local clientelistic networks (Szwarcberg, 2012, 2014), display the scale of support for challengers in areas prone to electoral fraud (Vittal, 2000), and signal candidates' viability as resourceful patrons (Muñoz, 2014). However, once again the bulk of the literature on the effects of rallies on voters' attitudes and behaviour comes from the United States. Early studies used pre-rally and follow-up surveys of the audience to gauge motivations and attitudinal consequences of rally attendance. Brooks (1967) finds that Barry Goldwater's and Lyndon Johnson's gatherings held in Pittsburgh a week before the 1964 presidential election improved evaluation of the candidates among their respective audiences. Kaid and Hirsch (1973) document positive shifts in the image of Democratic primary candidate Edmund Muskie after a rally in Southern Illinois and show that these effects persisted over time. Sanders and Kaid (1981) find that a significant number of those who attended speeches by Gerald Ford, Jimmy Carter, George Wallace and Fred Harris prior to the Illinois primaries in 1976 reported that these events influenced their voting decision, their perception of the candidate, and their willingness to contribute or campaign on behalf of the candidates.

More recently, spatial ecological studies, which employ aggregate vote shares in the geographical locations of candidate visits as the dependent variables, have become the prominent strategy to gauge the electoral consequences of campaign events. However, this literature rarely distinguishes between rallies and smaller-scale activities such as town hall-style meetings and campaign stops. Jones (1998) finds that campaign visits in the presidential elections of 1980, 1984 and 1988 increased voter turnout and partisan vote share, using geographical media markets as the unit of analysis. Shaw (1999) finds similar evidence at state level for the 1988, 1992 and 1996 elections. Herr (2002) documents positive effects of Clinton's (but not Dole's or Perot's) visits in 1996, and finds that they were particularly significant in the last month of the campaign. Shaw and Gimpel (2012) randomised the schedule of Rick Perry's campaign appearances over 3 days in the campaign for the 2006 Texas gubernatorial election and find that they contributed to increases in local support for Perry, campaign contributions and volunteering. Hill, Rodriquez and Wooden (2010) find small effects of presidential and vice-presidential candidate visits in the 2000, 2004 and 2008 US presidential election, which however vary as a function of the political leanings of the state and on the candidates themselves. Studies on the 2012 and 2016 elections, however, find much smaller or non-significant effects of campaign visits (Wood, 2016; Devine, 2018). Middleton (2015) finds that campaign appearances by the leaders of the Conservatives and Liberal Democrats in the 2010 British general election increased the share of constituency votes, but appearances by the Labour leader had no effect; furthermore, he finds no effect of constituency visits on turnout. While there are methodological tensions underlying the different findings in this literature, the consensus view is that the presence and magnitude of campaign effects is conditional on a series of contextual factors, not least the candidates themselves: "not all politicians are equally effective in connecting with voters during their visits." (Heersink and Peterson, 2017: 50)

In keeping with the increasing engagement of the social sciences with historical research in recent years (Klein, 2017), other authors have chosen to revisit historical electoral campaigns with modern methodological tools, in order to address the 'conventional wisdom' that attributes electoral upsets to the campaign styles of charismatic candidates. For instance, Holbrook (2002) finds significant local effects on voting choice of Truman's 'whistle stop' campaign in 1948 and, through a counterfactual simulation which models voting behaviour as if Truman had campaigned in the same locations as Dewey, he argues that Truman would have lost the electoral college without that campaign strategy. Similarly, Heersink and Peterson (2017) find that Truman's (but not Dewey's) visits increased his share of the vote by more than 3% in the counties he visited, and that these visits likely won him the pivotal state of Ohio. Finally, Selb and Munzer (2018) use a semi-parametric difference-in-difference design to analyse the relationship between the location of Hitler's speeches and the NSDAP's performance in the five German elections prior to the dictatorship, and find no effect for all contests except the 1932 presidential runoff, which took place in the context of a particularly short, asymmetric and intense campaign.

#### 1.3 Weather Instruments in Quantitative Social Science

From a methodological standpoint, this thesis builds on a series of empirical works that have established the use of weather instruments as powerful strategy to infer causality in quantitative social science, as they can help introducing randomness or exogeneity in the study of human behaviour. This methodological approach is particularly well-established in development economics, due to the obvious relationship between weather and returns to agricultural activity. For instance, Miguel, Satyanath and Sergenti (2004; see also Miguel and Satyanath, 2011) use weather-induced variations in growth in African countries to investigate the causal nature of the relationship between economic growth and civil conflict. Fichera and Savage (2015) instrument household income with temperature and rainfall to study income effects on health outcomes in Tanzania. Bang, Mitra and Wunnava (2016) employ rainfall shocks as an instrumental variable that affects migration out of rural areas to investigate the relationship between remittances to the countryside and inequality. Feng, Krueger and Oppenheimer (2010) use temperature and precipitation as instruments for crop yields, and are able to establish the causal nature of the link between crop yields and migration from Mexico to the US.

Political scientists have only recently started to apply this inferential strategy to the study of political participation and its consequences. One notable application of this research design is Madestam and his collaborators' paper on the Tea Party's 15 April 2009 'Tax Day' protests, to which this thesis is most directly inspired. They exploit variation in rainfall on the day of the protest to estimate the impact of these events on the growth of the anti-tax insurgent movement and in the success of the GOP in the 2010 US midterm election (Madestam et al., 2013). As rainfall provides an exogenous source of variation in protest size, they are able to estimate that any additional protester leads to higher GOP vote, higher turnout, larger Tea Party membership, conservative shifts in voting pattern of the local member of congress, higher donations to the Tea Party and increased media coverage of the movement. Another remarkable example of the potentials of this approach is provided by Lind's (2014) analysis of the effects of municipal council composition on education spending, which exploits election-day weather as an exogenous predictor of party performance. He finds that fair weather on election day increases turnout, hurting disproportionally the performance of left-wing parties, and the resulting variation in council composition correlates with shifts in council spending from childcare to education. Finally, Huet-Vaughn (2013) uses rainfall and temperature as predictors of violence in French demonstrations to estimate the causal linkage between violent protest and policy concessions.

# Chapter 2

# Background on the Five Star Movement

#### 2.1 From a Blog to a Party: Origins and Characteristics of M5S

The development of M5S cannot be understood without reference to the political actor who, virtually single-handedly, brought it into being. Beppe Grillo has an unconventional curriculum for a party leader: he rose to fame in the 1970s and 1980s as a comedian and presenter on Italy's public television. While his early popularity was built on observational comedy, it was one of his forays into political satire – a joke on corruption within the ruling Socialist Party - that led to him being effectively banned from state TV in 1986. Thereafter, Grillo developed an increasingly politicised and scathing repertoire in his live shows, touching on topics ranging from capitalism and corruption to biotechnology and environmentalism. By the early 2000s, Grillo's comedy had evolved into a form of muckraking aimed at uncovering mischiefs of the powers that be: most notably, the denunciation of the financial wrongdoings that led to the collapse of food multinational Parmalat in 2003 (Vignati, 2016: 12-16). A key turning point in this phase was the encounter with digital entrepreneur Gianroberto Casaleggio, who convinced Grillo - who up to that point had made clear his suspicion of digital technology by smashing a computer at the end of each of his live shows – of the potential of the web to bring about political change (Bailo, 2017: 133-134). This digital conversion, marked by the creation of the blog beppequillo.it in January 2005, established Grillo as the leading opinion-maker on Italy's nascent online public sphere, to the extent that in the space of a few years his blog was being cited among the most influential in the world by international media such as The Observer (Aldred et al., 2008) and The Time (McNichol, 2007). In July 2005 he encouraged blog

readers to create online meetups on the *beppegrillo.meetup.com* platform, which consisted in groups of activists organised territorially and were aimed at facilitating discussions on local issues and campaigns to be taken up by Grillo's blog. The meetups "can be seen as the moment when M5S was born as an organisation" (Tronconi and Lanzone, 2016: 55).

If from an agential perspective the pre-history of M5S is essentially a chapter in a comedian's biography, the development of Grillo's blog and its meetups into a successful political movement was enabled by the opportunity structures of Italy's crisis-ridden Second Republic. The term refers to the institutional and party political configuration that emerged in the early 1990s, as a result of the reform of the electoral system in a majoritarian direction in 1993 and the collapse of the major parties of the post-war era (the 'First Republic') following the major corruption scandal Clean Hands. On the surface, the Italian party system underwent a phase of bipolarisation, with the First Republic's model of a dominant-party system giving way to a bipolar configuration with two big-tent coalitions of the centre-Left and the centre-Right. However, the institutionalisation of the bipolar party system remained shallow, as the composition of the two main camps remained fluid and their internal politics unmanageable (Bull, 2012). This led to dysfunctional patterns of governance that proved unable to tackle (and arguably aggravated) the economic stagnation and corruption that had caused party system change in the early 1990s. Moreover, the polarisation of the party system trickled down to public opinion, due to the controversial figure that dominated Italian politics in this phase: Silvio Berlusconi. By calling voters to defend the country against what he denounced as an unreformed communist Left and attracting the scorn of the oppositions for what they saw as his use of power for personal interests, Berlusconi "polarised for and against him" (Donovan, 2015: 15) much more than on traditional issue divides.

It is exactly in the 'cultures of opposition' (Albertazzi et al., 2009) to Berlusconi and 'Berlusconism' that Grillo found his initial activist base. The blog's first initiatives were indeed on issues that were the staple of the anti-Berlusconist Left: opposition to the government's flagship infrastructure projects, the 'Clean Up Parliament' initiative against MPs with criminal convictions, the 'Out of Iraq!' campaign against the Berlusconi government's support for the second Gulf war, and the 'Modern Slaves' project against the government's proposals for labour law reforms (Vignati, 2009; Biorcio, 2014). If Grillo had been a critical 'travel companion' of the Left up to this point and even endorsed the centre-Left coalition as the lesser evil in the 2006 election, after the centre-Left took power in 2006 he grew confrontational towards the entire political spectrum. The event that marked this shift was the V-Day – V as in vaffanculo ('bugger off') directed at all politicians. Held on 8 September 2007, it was a day of mobilisation in 200 locations to gather signatures for referenda on a ban on convicts from serving in Parliament, term limits for MPs and electoral reform (Vignati, 2016: 21-23). With more than 350,000 signatures gathered, the V-Day was a resounding success. It was on this occasion that, in a column on Il Corriere della Sera, political scientist Giovanni Sartori first used the metaphor of the 'tsunami', later adopted by Grillo himself, to

describe the potential of the nascent movement to "sweep away the miasmas of the rotting swamp that is the Second Republic" (Sartori, 2007). A month after the *V-Day*, Grillo provided the guidelines for local meetups to run in local elections under the banner of civic lists named 'Friends of Beppe Grillo'. In October 2009, these lists were finally brought under the umbrella of a single party, the Five Star Movement (*MoVimento Cinque Stelle*).

M5S ran in a handful of regional elections and around 100 municipal elections between 2009 and 2011. If in this phase the party's results were still modest – invariably in the low single digits – it was in this crucial phase that M5S developed an organisational and programmatic identity (Bordignon and Ceccarini, 2013: 430-431). At this stage, M5S consisted of a web of small-scale activist meetups fairly autonomous from each other, linked directly to Grillo's blog without any formal meso-structures. Registered members could choose their local candidates through online votes, and decide freely on issues of local politics. However Grillo, aided by Casaleggio and the team managing the blog, exerted considerable power on these groups in two ways. First, the blog set national-level policy and launched national campaigns; secondly, as the M5S trademark is registered in the name of Grillo himself, he could unilaterally revoke groups' affiliation and expel individual members (Saebø, Braccini and Federici, 2015). As Bordignon and Ceccarini (2013, 438) put it,

It is a structure resembling a stratarchical organisation, where the parts at both a horizontal and vertical level have varying degrees of reciprocal autonomy [...] Through the mobilisation of the meetups, various independent initiatives are pursued in the local context. At the same time, however, there is also a rather particular relationship with the higher level. The 'proprietary' and top-down management of the Five Stars symbol makes elected members subordinate to non-appealable sanctions (expulsions) from the central node of the membership network, which is in Grillo's hands.

From an ideological perspective, it is difficult to assign M5S to any party family or conventional political philosophy. However, it is possible to disaggregate the thrust of its programmatic message into three broad areas:

The 'Old' Issues. Many of the core policy stances of Grillo's lifetime advocacy transferred directly to M5S's programmatic identity (Bordignon and Ceccarini, 2013: 432). These are conventionally associated with the 'post-materialist' and ecologist Left, and include the five issues to which the 'five stars' of the party's name and symbol refer: public water, sustainable transport, sustainable development, environmentalism and clean energy (MoVimento Cinque Stelle, 2009). Additionally, M5S's key welfare policy – a guaranteed minimum income for all citizens – became just as prominent as the focus shifted from local to national politics. Overall, M5S's economic and ecological paradigm traces its intellectual roots in the anti-productivist and anti-consumerist ideas of 'degrowth' thinkers such as Serge Latouche (Pirro, 2018: 447).

- Populism. Criticism of politicians and the media, seen as a conjoined corrupt elite, emerged as the central frame in M5S's political discourse. In this phase, this focus strongly influenced party policy (abolition of public funding for parties and newspapers, regulation of politicians' private incomes) and internal rules (ban on those who had previously been member of a party from joining M5S and on M5S candidates from appearing on television). Most importantly, the defeat of the party-media complex was framed as the immediate purpose of M5S, beyond any specific policy objectives. One of Grillo's blog posts, titled 'Parties Are Dead', encapsulates this powerful message: "Italians and the parties are a house divided. The only communication between the citizen and parties is the sycophantic one of the media, which keep the dead alive. On newspapers and on TV, it's the day of the dead all year long [...] an ancient punishment consisted in a corpse being shackled to a living man. This is our reality. We have to sever the ropes as soon as possible." (Grillo, 2011)
- Direct Digital Democracy. The relentless condemnation of the existing political system is complemented by a positive vision of democratic renewal, whereby representative government will be ultimately supplanted by a bottom-up form of democracy enabled by digital technologies (Natale and Ballatore, 2014). In Casaleggio's words, "the web changes politics by introducing a new relationship between citizens and politicians: direct democracy" (2001, re-published in Casaleggio, 2015: 41). In this 'cyber-utopianist' (Morozov, 2011; Floridia and Vignati, 2014) perspective, government policy will be set by online referenda, crowd-funded politics will enable radical transparency eliminate corruption, the 'gift economy' of the web will free individuals from the constraints of financial capital, and the internet's democratisation of information will do away with 'establishment' media (Casaleggio and Grillo, 2011; Natale and Ballatore, 2014). While this vision never took the form of an electoral programme in the more radical form envisaged by Grillo and Casaleggio, the internet is integral to M5S's identity and sense of distinction from other parties: "we are at war and we will win it. The Web is on our side" (Casaleggio and Grillo, 2011: iii).

# 2.2 The Breakthrough: Crisis Politics, the Tsunami Tour and Beyond

In 2012, twenty year after the fall of the First Republic, the Italian party system seemed once again set for a major overhaul. In the three years prior, Prime Minister Berlusconi's ruling *Popolo della Libertà* (PdL) and its coalition partner *Lega Nord* had been rocked by a raft of sexual, judicial and financial scandals, and breakaways of 'dissident' factions from PdL left the government with a slim and unstable majority. By the end of 2011, the recession initiated by the 2008 financial crunch and aggravated by the Eurozone crisis entered a second acute phase, which led to Berlusconi resigning in November 2011 under

pressure from EU institutions. Subsequently, the President of the Republic facilitated the formation of a technocratic government headed by former European Commissioner Mario Monti, supported by the major parties of the centre-Left and centre-Right and tasked with implementing austerity measures. (Bobba and McDonnell, 2015) The support for welfare cuts and market reforms introduced by the Monti government contributed to weaken the credibility of the centre-Left in the eyes of voters, as well as tarnishing the institutional neutrality of the President of the Republic. Amid economic distress, high salience of political corruption and generalised blame attribution, the mood of the country was ripe for an anti-establishment breakthrough (Bellucci, 2014).

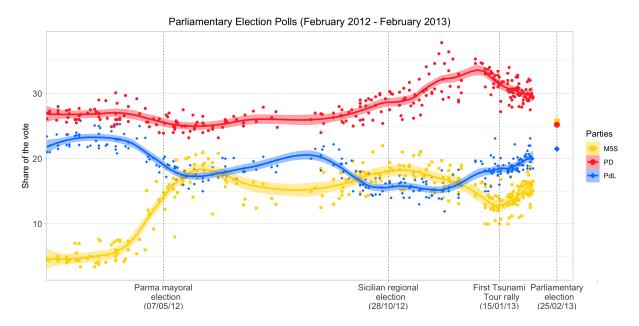


Figure 1

Data for the Five Star Movement (M5S), and the two major parties  $Partito\ Democratico$  (PD) and  $Popolo\ della\ Libert\grave{a}$  (PdL) from 19 polling companies aggregated by Hirsch and Reschenhofer (2019), LOESS smoothing (span = 0.2). Note that the publication of polling data is banned in Italy in the three weeks preceding a parliamentary election, hence the 'gap' in February 2013.

Second-order elections provided M5S with the opportunity to ride the wave of dissatisfaction. On 7 May 2012, M5S achieved its best results to date in the mayoral elections in Genoa (14%) and Parma (19%), with its candidate Federico Pizzarotti coming second in the latter municipality and thus acceding to the runoff against the centre-Left candidate, who had won 39% of the vote. In the second round, Pizzarotti won over 60% of the vote, attracting the majority of his support from Parma's centre-right voters and thus becoming the first M5S mayor of a major town. (Natale, 2014: 22-23) M5S repeated this feat in Sicily's regional election on 28 October, winning 15% of the party list vote – the largest share for any single party in the highly fragmented regional party system – and 18% for its candidate to the

regional presidency. The Sicilian electoral campaign can be considered in retrospect as the trial run for the Tsunami Tour. The campaign started with the spectacular stunt of 64 year-old Grillo swimming across the 2-mile strait between Italy's mainland and Sicily, and from then on the comedian took the centre stage of the campaign, relegating candidates to the Regional Parliament to a supporting role in the dozens of rallies he held across the region. As shown in figure 1, these local upsets gave M5S a national profile, which was immediately reflected in its polling figures. Most notably, while not long before the May mayoral election M5S's polling numbers were stuck in single digits, after the upset in Parma the party polled consistently above 10%. The regional election in Sicily coincided with a smaller but still noticeable boost for M5S, which reached the high teens in the polls, contending with the centre-Right PdL for the spot of second largest party (Natale, 2014).

Therefore, M5S went into 2013 with some considerable momentum. By this time, it had also become clear who would be M5S's main competitors. Pierluigi Bersani, the leader of PD, won the hotly contested primaries of the centre-Left coalition on 2 December 2012 and was widely expected to win the election; the centre-Right annulled their primaries when Berlusconi decided to stand once again as coalition leader four days later; finally, Prime Minister Monti decided on 28 December to run with his own new party Scelta Civica as leader of a 'centrist' coalition. On 15 January 2013, M5S's electoral campaign started off from the town of Pistoia, in front of a crowd of around 1,500 people, and ended with its largest rally Rome on 22 February, with an audience in the hundreds of thousands, totalling 78 campaign stops in 39 days. All rallies followed a similar script. Grillo would approach the square on his camper van, walk through the crowd assembled around the stage, and start his one-hour impromptu monologue attacking M5S's usual targets: politicians, the media, the banks, the European Union and trade unions. He would then touch on issues of local politics, usually related to cases of corruption in local government or unpopular infrastructure projects, outline M5S's key policies – the guaranteed minimum income, the regulation of politicians' incomes, the simplification of the tax code, free internet etc. – and conclude by briefly introducing the party candidates for the regional lists.

Existing literature on the Tsunami Tour highlights two aspects of Grillo's rhetoric in the rallies: the language of humour and the language of difference. Grillo's monologues took the form of a comedic 'rant', filled with sarcasm, profanity and one-liners – ultimately aimed at taking down M5S's rhetorical targets and reframe them as absurd and ridiculous (Barbieri, 2014; Mu, 2018). For instance, opponents were referred to by nicknames Grillo coined to mock their physical appearance or public demeanour: Berlusconi as the 'psycho-dwarf', Monti as 'rigor montis', former Prime Minister Romano Prodi as 'mortadella', Bersani as 'Gargamel' (the villain of the Smurfs). There is obviously a strategic point to the blurring of the boundaries between politics and stand-up comedy: offering for free the kind of spectacle for which normally people must buy a ticket, Grillo was able to attract sizeable group of attendees who might have joined the events for their entertainment value but could nonetheless be primed with M5S's core messages

(Aguggini, 2016). Indeed, a survey conducted at the very last rally in Rome confirms that even then there were still nontrivial minorities of attendees who sympathised with M5S but had not decided whether to vote for it yet (16%) and uncommitted voters (15%) (CENSIS, 2013).

The second aspect, the language of difference, refers to the typical populist dichotomy between pure people – the ordinary men and women running for M5S – and the corrupt elite – the professional politicians – framed as irreconcilable moral opposites. This us-versus-them antagonistic narrative (Stanley, 2008) is oriented both in a temporal dimension, whereby the 'old' is pitted against the 'new', and in a spatial one, whereby the 'genuine' crowds of the Tsunami tour are compared to the 'artificial' enclosed spaces of television (Barbieri, 2014; Mu, 2018: 99-100). As Grillo (2013a) put it in one of the rallies, in Sondrio:

Politicians don't come to the public squares. They go on television to spout bullshit because they can't be contradicted. They want a debate with me? I don't speak with dead people. If they want a debate, let them come here, in front of you, not in front of journalists.

And similarly, in Bergamo (Grillo, 2013b):

We are not just a movement anymore, we are a community. And we want Italy to become a community too. There is an uncontainable anger against all these smartasses on television, telling us how to exit the crisis, the very same people who got us into it in the first place. Enough is enough now, we are sending them all back home.

The format of the Tsunami Tour was chosen explicitly to embody the distinction between a movement 'embedded' in the real-life social fabric and the other parties, portrayed as existing only on the inauthentic (and toxic) sphere of political talk shows. Moreover, as Nizzoli (2014) points out, this choice had also a strategic value, in that a completely off-air campaign effectively shielded M5S from media scrutiny and allowed Grillo to monopolise the party's message.

The 2013 election, held over two days on 24 and 25 February, was a tremendous success for M5S, to the extent that it is generally thought to mark the end of the Second Republic and the beginning of a new 'tri-polar' phase in Italian politics (D'Alimonte, 2013). The party obtained 8.7 million votes for the Chamber of Deputies – 25.6% of the vote and more than any other party in the country – as well as 7.3 million votes for the Senate, corresponding to a 23.8% share of valid votes. Italy's complex electoral system awarded M5S 108 MPs in the Chamber of Deputies and 54 senators: approximately 17% of the seats in both chambers. M5S did particularly well among young voters, men, the unemployed, blue

<sup>&</sup>lt;sup>1</sup>The two chambers have different minimum voting age thresholds (18 years for the Chamber of Deputies and 25 for the Senate), yielding a slightly worse performance for M5S in the Senate vote. Moreover, as overseas votes count towards distinct constituencies and M5S underperformed among residents abroad, when these votes were added to the total, PD edged slightly ahead of M5S in the lower chamber as well. Nonetheless, M5S's claim of being the 'largest party in the country' became a successful way for Grillo and the newly elected MPs to frame the election results, and was widely repeated in the post-electoral commentary.

collar and self-employed workers; conversely, the party's vote was spread roughly evenly on the left-right spectrum and homogenously across the country – with the only exception of Sicily, where it registered a particularly good performance (Bordignon and Ceccarini, 2014). M5S's success meant that no 'natural' government coalition could command a majority in the Senate, forcing parts of the centre-Left and of the centre-Right to agree to a Grand Coalition after prolonged talks, with M5S as the main opposition party. While a detailed description of M5S's development after 2013 is beyond the scope of this thesis, it is worth noting that M5S's shift from a grassroots movement to a parliamentary force was not seamless. Indeed, over the course of the parliament (2013-2018), M5S changed significantly to adapt to the new circumstances, with the 'party in public office' taking a more central role vis-á-vis the membership and Grillo himself (who was not a candidate and thus did not enter Parliament) (Corbetta, 2017). This process of adaptation corresponded to a U-shaped trajectory of M5S support in the polls: in the first two years after the election, the party went through a phase of decline as the centre-Left regained momentum under the leadership of Matteo Renzi; from 2015 onwards, it entered a second phase of growth, seizing the mayoralties of Rome and Turin and defeating resoundingly the government in the 2016 constitutional referendum. The two national contests that took place in this period reflect this trend: in the May 2014 European parliament, M5S's share of the vote shrank to 21.2%; but in the 2018 parliamentary election, M5S won 32.7% of the vote and went on to form a coalition government with the right-wing party Lega Nord (re-branded as simply Lega).

## Chapter 3

# Theory and Case Selection

Before proceeding to establish a possible causal effect of the Tsunami Tour rallies on M5S's electoral performance, we may want to take a step back and ask ourselves why parties hold rallies in the first place. These are, after all, costly enterprises that come with reputational risks (the party may be embarrassed by a low turnout) and opportunity costs (candidates' time could be better spent in other campaign activities). Moreover, it is worth setting out why the study of M5S's campaign in the 2013 election is a case of interest from a comparative perspective and how it relates to existing specialist scholarship on the party itself. This chapter deals briefly with these two questions in turn.

#### 3.1 Why Should Rallies Matter?

We can distinguish three types of mechanisms through which campaign rallies may benefit a party: behavioural effects, organisational effects and media effects. The first refers to changes in citizens' electoral choices due to the very fact that the event took place. At the most basic level, these correspond to the consequences of party contact: the mobilisation of party supporters and the persuasion of undecided voters in the audience. Rallies allow party representatives to provide potential voters with information that either triggers new considerations of some relevance to political choice or heightens existing considerations of such nature. As the rally allows party representatives to communicate in a fairly unchallenged format, this information can be deployed strategically to activate considerations that make citizens more likely to vote for the party (Petty and Cacioppo, 1986; Popkin, 1991). Moreover, the specific context of party contact in rallies may be particularly conducive to changes in voting behaviour. Indeed, social identity theory of crowd behaviour suggests that collective action fosters group identification, which in turn in-

creases likelihood of political participation (voting) and conformity to group behaviour (voting for the party holding the rally) through psychological mechanisms such as commitment and collective empowerment (Blumer, 1946; Drury and Reicher, 2000; Drury et al., 2005). Commitment refers to the process whereby individuals' investment of time and effort in one instance of group action decreases the costs of compliance with group norms in following instances (Freedman and Fraser, 1966; Louis, 2009). Collective empowerment refers to the increased perception of control and self-efficacy that stems from the awareness of a common cause and shared grievances (the sort of motivation that comes from the perception of 'strength in numbers') (Finkel, Muller and Opp, 1989; Kelly and Breinlinger, 1995). These psychological driver of political participation are particularly effective when collective action fosters emotions such as moral outrage and anger (Louis, 2009).

As political information and group identification are not only consequences of political participation but also antecedents to it, the *direct* effects of rally attendance on electoral choice are likely to be trivial. That is, most participants to a party rally would have supported the party regardless of the fact they took part in it. However, increased political information and group identification may motivate rally attendants to mobilise and persuade other voters in their personal networks, acting as 'opinion leaders' in their immediate social environment. This phenomenon is known in the literature as 'two-step flow of political communication' (Katz and Lazarsfeld, 1955; Katz, 1957), 'behavioural contagion' (Huckfeldt, 1983) or 'indirect mobilisation' (Rosenstone and Hansen, 1993; McClurg, 2004).<sup>2</sup> As Rosenstone and Hansen (1993, 27) put it, "the impact of political mobilization [...] extends far beyond the effect it has on the limited number of people who are contacted directly [...] Social networks, that is, convert direct mobilization into indirect mobilization. Political leaders mobilize citizens for political action through social networks." This perspective emphasises the importance of personal networks as loci of preference and habit formation and considers conversation within such networks as a central deliberative device in elections (Zuckerman, 2005; Pan et al., 2006). As personal networks are by and large place-bound, it follows that campaign activities shape the content of political conversations disproportionally in locales where they are held. Hill, Rodriquez and Wooden (2010: 249) summarise effectively this argument with a metaphor: "campaign appearances are similar to a rock being thrown into a pond. There is the initial splash as the rock hits the water, and then ripples spread out to all edges of the pond."

An additional reason why parties may want to hold rallies concerns the opportunity for *recruitment* of activists and the mobilisation of their resources – time and donations – that these events offers. As Huckfeld and Sprague (1992, 81) put it, "voting in an election is only one form of electoral involvement

<sup>&</sup>lt;sup>2</sup>There is a small distinction between the three concepts. Katz and Lazarsfeld emphasise the informational aspect of the phenomenon, individuating *interpersonal communication* as the main mechanism of persuasion. Huckfeldt's 'behavioural contagion' focuses primarily on mechanisms of *imitation* in homogenous networks, which do not necessarily require explicit persuasion: for instance, behavioural and attitudinal shifts due to the perception of the behaviour and attitudes 'people like me' exhibit. Indirect mobilisation, at least in McClurg's conceptualisation, encompasses both aspects – for the purposes of this analysis, I employ the concept in this broader sense.

that is susceptible to the influence of party mobilization efforts." Rallies, particularly at the early stages of a party's existence, may thus serve as aggregators of potential recruits, leading to stronger party organisation and local presence beyond short-term electoral mobilisation – what I define as 'organisational effects'. Following Han's (2014) typology of modes of advocacy organisations' engagement strategies, this perspective stresses the 'organising' function of campaign activities over their 'mobilising' function. As the commitment threshold for formal activism is higher than for low-intensity forms of participation such as voting, it follows that the motivational effects of a party rally may make more of a difference in terms of recruitment of members than mobilisation of voters, as the audience is likely to be composed mainly of party sympathisers but not necessarily of party activists (Finkel and Opp, 1989). Rallies may also provide opportunities for party representatives to gather contact details of participants and sign them up to newsletters, facilitating future participation and bypassing the overreliance on online meetup platforms typical of the early stages of M5S's development. Moreover, they provide a real-life moment of aggregation for people already active in the party online but who did not interact with the local members' assembly beforehand. All these factors can be expected to lead to more numerous and more networked local party groups; the obvious implication is that campaign rallies should matter more for local party performance in future elections than in the immediate context of the campaign. In other words, new party recruits are unlikely to provide a considerable boost in the quality of campaigning in the few days between the moment they join and the election, but the resulting strengthening of local party organisations may lead to a more effective local presence over the medium- and long-term. However, just as with behavioural effect, these effects can be expected to be mostly local.

Finally, it is important to take into account the role of campaign events in shaping public opinion through media coverage: "a great part of the reality that voters know is a second-hand reality, not directly experienced except through the media." (Bobba et al., 2013: 353) In this perspective, the real purpose of rallies is not so much persuading or mobilising the audience, but rather "dominating the news agenda, entering the news cycle [...] and repeatedly re-entering it, with stories and initiatives so that subsequent news coverage is set on your terms." (Gould, 1998: 294) Specifically, media coverage of campaign events can be conceived as serving both informative and signalling purposes. First, as newsworthy events in which candidates outline their platforms, address the issues of the day or rebuke opponents, rallies convey information to media audiences about a party's claims and policies. This is particularly useful to 'insurgent' parties, as this publicity can expose mainstream publics to new rhetorical frames. Crucially, the format of political rallies allows political actors to gain this sort of exposure whilst avoiding scrutiny from the media or contradictory from other parties. Secondly, the presence of large crowds – whether broadcast in news segments or reported in newspaper reports – serves as a signalling device to media audiences of the party's popularity (Vliegenthart and Walgrave, 2012: 396). Once again, this can be expected to be particularly important for an insurgent political force attempting to establish

#### 3.2 Why Study the Tsunami Tour?

The specific circumstances of the 2013 electoral campaign make the Tsunami Tour a most-likely case to find behavioural and organisational effects of campaign rallies. In the case of behavioural effects, there are three reasons to suspect as much. First – due to M5S's 'newness', its heterodox political identity and the leadership's ban on candidates' appearances on television – at the time of the campaign the party was still an 'unknown quantity' to a significant portion of the electorate. Therefore, information about the party's beliefs and preferences disclosed at M5S rallies is more likely to be genuinely new to voters than it would be the case for parties with long-standing political identities and established core constituencies. Secondly, Grillo's popularity and the entertainment value of his appearances suggest that the audiences of the Tsunami tour may have been somewhat different from those of a typical party rally. Instead of simply 'preaching to the converted', the comedian may have been able to reach beyond the party faithful and attract low-information voters to a greater extent than any conventional politician could (Barbieri, 2014). Thirdly, the nature of party strategies during the campaign made the contest significantly asymmetric. As other political leaders relied almost exclusively on television appearances and small-scale meetings with significant media presence, the local effects of Tsunami Tour rallies can be assumed to be unaffected by other similar campaign efforts by other parties (Legnante et al., 2013). If, as Iyengar and Simon (2000: 151) argue, "observable effects should [...] be limited to campaigns in which one candidate has a significant resource or skills advantage," the lack of competition to M5S in the public squares and Grillo's exceptional appeal as a public speaker created exactly the type of imbalances that would imply the presence of measurable campaign effects.

As far as organisational effects are concerned, it is key to note that the Tsunami Tour took place at a very early stage in M5S's development as a nationally competitive party. Bailo's (2017: 137-138) work on M5S meetups documents a significant spike in membership coinciding with the 2013 electoral campaign:

Based on the data before the V-Day an average of 7.8 people registered every day with one of the groups and 11.7 between the V-Day and the local elections in 2012. After the local elections of 2012, membership of groups increased dramatically with an average of 57 new people every daythat is, almost five times the growth rate of the previous period – although not linearly, since during 30 days before the general election, the growth more than doubled with an average of 125 new people per day.

Qualitative work has indeed repeatedly found that 'Tsunami tour' events were often the point of entry for activists into the M5S (Boffi, 2016: 33; Capria, 2016: 99). Therefore, differential patterns of activist

recruitment due to the fact that rallies were held in certain municipality and not in others or that they were better attended in some municipalities than in others may have given a substantial edge to certain local groups in their ability to campaign locally. The Tsunami Tour thus appears an analytically important case for the study of two types of campaign effects that are often assumed away in campaign studies. In fact, much of the contemporary literature presumes a central role of the media as a conduit between campaign activities and the average voter (Shaw, 1999). However, in this case not only did Grillo willingly eschew media appearances, but there is evidence that the national media coverage largely neglected M5S's campaign until the very last week before the election, focusing rather on the contest between Bersani, Berlusconi and Monti (Legnante et al., 2013; Legnante, 2014). For instance, Biondo and Canestrari (2017: 204) describe the Tsunami Tour as "an event that almost the entirety of Italian media ignored."

A secondary reason why I have chosen to study the Tsunami Tour is the substantive interest in the role of offline practices in the development and electoral success of M5S. This angle stands in contrast to the bulk of the existing literature, which focuses on the key role of the web in the party's communication (Hartleb, 2013; Bordignon and Ceccarini, 2013; Saebø, Braccini and Federici, 2015; Lanzone and Woods, 2015; Natale and Ballatore, 2014). While the internet is undeniably central to M5S's identity and organisation, as reflected in the high rates of internet usage among its members, an exclusive focus on online communication fails to capture effectively the drivers of M5S's electoral success, as the majority of its voters get the political information elsewhere.<sup>3</sup> As Mosca, Vaccari and Valeriani (2016, 148) note, "although there is certainly much truth to the idea that M5S has built part of its success on the ability to engage its voters through the internet [...] the electoral success of the M5S is not rooted simply in an effective Internet strategy, but rather in the skilful use made of a diversified repertoire of integrated media." However, the 'offline' dimension of the party's communication has been overlooked in the scholarship on M5S,<sup>4</sup> to the extent that existing work on the Tsunami Tour is very scarce and exclusively descriptive (Barbieri, 2014; Aguggini, 2016). Therefore, alongside contributing with a case study of theoretical significance to the comparative literature on campaign effects, this thesis also endeavours to address a gap in the specialist literature on M5S. That is, it proposes to estimate the effect of 'traditional' electoral practices at a crucial juncture in the party's ascent. The timing of this strategic choice makes this analysis all more relevant to understand fully the changing nature of contemporary Italian politics, as the 2013 campaign resulted in a truly 'critical election', producing "abrupt, significant and durable realignments in the electorate with major consequences for a long term party order" (Evans and Norris, 1999: xxxi).

<sup>&</sup>lt;sup>3</sup>Lanzone's (2015) survey of activists reveals that 81% uses the M5S's blog as their main source of political news and 72% uses internet every day, while Mosca, Vaccari and Valeriani (2016) find that only 33% of M5S voters cite the internet as one of the two most important sources of political information.

<sup>&</sup>lt;sup>4</sup>With the notable exception of Vezzoni and Mancosu (2016).

## Chapter 4

# **Empirical Framework**

#### 4.1 Hypotheses

On the basis of the theoretical considerations of the previous chapter, it is possible to derive theoretical expectations on the relationship between rally attendance and political outcomes in locales where a rally took place, according to the various possible effects of rallies hypothesised. The 'behavioural effects' framework would predict that

**H. 1:** Higher attendance to the Tsunami Tour rallies during the 2013 election campaign causes an increase in the local share of vote for M5S in the 2013 election.

The relationship is intuitive: the more attendants, the more persuadable voters and potential 'opinion leaders' that can be motivated by the rallies to convince others in their personal networks. Moreover, if the main mechanism of change in voter behaviour is one of mobilisation of citizens who would not have voted otherwise rather than persuasion of those who would have voted for other parties, it is possible to hypothesise that

**H. 2:** Higher attendance to the Tsunami Tour rallies during the 2013 election campaign causes an increase in local turnout in the 2013 election.

If H.1 is found to be true, it is possible to derive expectations from the behavioural effects model regarding the effect of rallies conditional on their timing over the course of the campaign. If party performance is driven by changes in the local opinion climate and interpersonal interactions, we may expect that, for a rally held earlier in the campaign, there would be more time for these dynamics to

develop. Conversely, the effects of a rally held just a couple of days before election day would not reach much beyond the immediate audience. Moreover, as the share of undecided voters decreases as election day approaches, an earlier rally would set in dynamics of persuasion and mobilisation at a more advantageous time. Thus, I hypothesise that

**H. 3:** The effect of rally attendance on M5S share of the vote in 2013 is stronger for rallies held earlier on in the campaign than for rallies held later in the campaign.

The 'organisational effects' model also implies local effects of rallies, but posits that these should emerge or strengthen over the long or medium term. This is due to the fact that higher attendance leads to stronger local organisations, and this in turn enables the party to campaign more effectively in following electoral contests. Therefore, the expectation is that

**H. 4:** Higher attendance to the Tsunami Tour rallies during the 2013 election campaign causes an increase in the local share of vote for M5S in following elections.

Unlike behavioural and organisational effects, the 'media effects' framework predicts that the effects of rallies will be not circumscribed to the geographic unit of analysis (in this case, the municipality) if they operate through the national media, or more gernerally through outlets with markets larger than municipalities. Therefore, in this case, we would expect no local effects. However, if rallies affect political outcomes via the increased publicity they get from *local* media, and we posit that better attended rallies get more coverage, the model yields the same expectations as the behavioural model.

#### 4.2 Methodology

The propositions of H.1, H.2 and H.4 can be modelled by positing that a political outcome of interest Y – be it M5S performance or turnout – is a function of rally attendance A:

$$Y_i = f(A_i) (4.1)$$

where i indexes municipalities, restricting the function to those municipalities that belong to the subset S of municipalities where a rally was held, so that  $i \in S$ . However, a simple regression model such as

$$Y_i = \alpha_0 + \beta_0 A_i + \epsilon_{0i} \tag{4.2}$$

would tell us little about the *causal* nature of the relationship between rally attendance and political outcomes. This is because (unobserved) factors that drive citizens to participate to rallies at a higher

rates in some places than in others may also underpin variation in those very same outcomes. For instance, suppose that Y is M5S performance: a municipality where there are many M5S supporters, and thus a rally would attract a large crowd, is also a municipality where M5S will do well at the ballot box, regardless of whether the rally takes place. Thus the fact that many people took part to the rally cannot be said with certainty to have caused the outcome. In econometric terms, this means that the independent variable is likely to be endogenous to the dependent variable. Therefore, the naive regression of equation 4.2 would result in a biased coefficient, as the independent variable would be correlated with the error term, violating OLS assumptions.

A well-established method for addressing such issues of endogeneity is by using an instrumental variable design. This technique allows to substitute the 'problematic' independent variable with a proxy uncontaminated by issues of endogeneity, derived by isolating the component of the independent variable that changes due to exogenous factors. To do so, we need an instrumental variable, or instrument, which satisfies the following four conditions (Angrist and Pischke, 2015; Lousdal, 2018):

- 1. Relevance Assumption. The instrument should have a strong causal effect on the endogenous variable
- 2. Exclusion Restriction. The instrument should affect the outcome variables only via its effect on the endogenous variable.
- 3. Independence. The instrument should not be correlated with unobserved factors that affect the outcome variable.
- 4. No Defiers or Monotonicity Assumption. The instrument should not have heterogeneous effects on the endogenous variable for different observations or for different values of the instrument.

Once individuated such an instrument Z, it is possible to estimate the causal effect of A on Y through a two-stage least squares estimation, whereby in the first stage attendance is regressed on the instrument:

$$A_i = \alpha_1 + \beta Z_i + \epsilon_{1i} \tag{4.3}$$

From this regression, I can obtain the fitted values  $\hat{A}_i \equiv \hat{\alpha_1} + \hat{\beta_1} Z_i$ , which is to say the predicted value of rally attendance due to variation on the instrument, uncontaminated by 'problematic' the error term  $\epsilon_1$ . In the second stage, I regress the outcome Y on  $\hat{A}_i$ , the 'unproblematic' proxy:

$$Y_i = \alpha_2 + \gamma \hat{A}_i + \epsilon_{2i} \tag{4.4}$$

to obtain estimate  $\gamma$ , denoting the effect of an exogenous variation in rally attendance on the outcome variable.

The instrument I choose is temperature at the time of the rally.<sup>5</sup> Intuitively, people are more likely to participate to a political rally in an open space if the weather is fair than when it is poor. As the 2013 campaign took place in January and February, with a maximum recorded temperature at the time of the rally of 17 °C and a minimum of -2 °C, it can be safely assumed that it was never 'too hot' to turn up to rallies, but sometimes it might have been 'too cold' to spend a couple of hours outdoors in freezing temperatures. Therefore, holding everything else constant, increases in temperature should be monotonically associated with increases in rally attendance, satisfying the no defiers assumption (in this case, 'defiers' would be places where people would attend in greater numbers when it is cold and would attend in smaller numbers when it is warm). The test statistics for the first-stage results (see Chapter 5) support this intuition, and return a strong and significant correlation, thus the relevance assumption is also satisfied. The exclusion restriction assumption is also quite plausible, as in all likelihood the only way through which bad weather at the time of the rally affects directly party vote share and turnout is via their effect on rally attendance. One possible objection is that poor weather may affect circumstantial factors such the mood of attendees or the quality of the speakers' delivery, and thus make citizens less enthusiastic or well-informed about the party afterwards; but these mechanisms seem to me trivial enough to assume them away.

<sup>&</sup>lt;sup>5</sup>In my main model, I use only temperature as an instrument, as the alternative – rainfall – poses some problems with the relevance assumption; i.e. it may be a weak instrument. I have thus chosen to drop it from the main model, but in the robustness checks section (Chapter 6), I present the model with both temperature and rainfall as instruments, including additional estimates that address concerns related to instrument strength. The results are substantially identical.

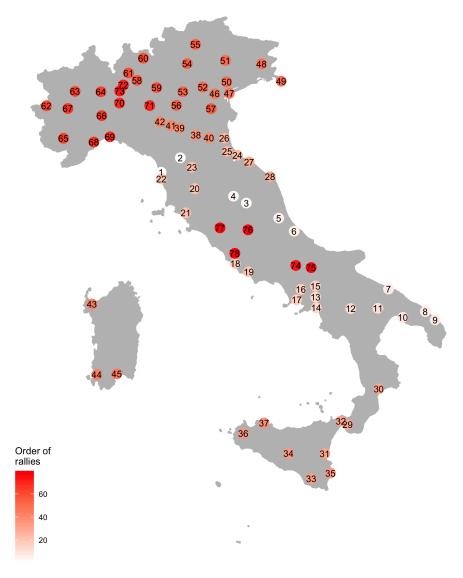


Figure 2

The *independence* condition is more problematic, for two reasons. First, the *sequencing* of rallies is potentially correlated with both the instrument and the outcome variable. On the one hand, the sequencing of rallies may be correlated to weather due to seasonal changes in temperature over the course of the campaign or, as shown in figure 2, due to the fact that the Tsunami tour generally touched on (warmer) Southern municipalities in its earlier phase and (colder) Northern locations towards its end. On the other hand, earlier rallies may have a stronger effect on an outcome variable such as M5S vote share, as they take place at a time when there are more undecided voters and they allow more time until the election for indirect mobilisation. Moreover, the sequencing of rallies may also have an independent impact on the endogenous variable: later rallies may be better attended, as the public's interest in the campaign

increases as the election nears. The second problem concerns the correlation between temperature and geography: as shown in figure 3, while within macro-region there is substantial variation, temperature for rallies in the South was systematically warmer than for rallies in the North. These territorial variations in temperature may be correlated with socio-demographic composition of the municipality, which in turn may be related to variation in turnout and party performance. For instance, in Southern regions or in heavily urban areas, which tend to be warmer, M5S may do better because there are more young people or more unemployed.

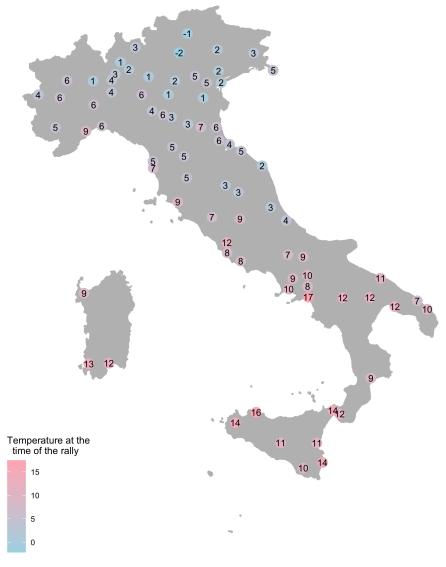


Figure 3

Ideally, I would want to control for *all* these factors in the 2SLS model; however, the small sample of 74 'rally' municipalities does not allow to do so without overfitting the regression. I thus address these

two issues in two different ways. As for the sequencing issue, I introduce a control variable in both the first and the second stage of the 2SLS model. This control is expressed in terms of 'days from the date of the rally to the election', thus with higher values for earlier rallies and lower values for later rallies. For all other potential confounders, I manipulate the outcome variables, leveraging the geographic, electoral and socio-demographic data available for the entire population of municipalities (described in the following section). Specifically, I run an OLS regression in the entire population, where Y is regressed on a series of relevant municipality-level controls with added fixed effects for each of Italy's 20 regions. Then I extract the residuals  $\tilde{Y}$  for the rally municipalities, and run the 2SLS model on this outcome variable. In this way, the dependent variable in the 2SLS model becomes a series of values capturing the unexplained or idiosyncratic variation in the outcome, rather than the 'raw' observed variation. For instance, I do not use M5S share of the vote, but the portion of the share of the vote by which M5S over-performed or under-performed the share it was 'expected' to get on account of the municipality's characteristics and its location. These two adjustments satisfy the *independence* condition, provided that I controlled for enough potential confounders correlated to both temperature and the outcomes. Moreover, this solution has the added benefit of reducing unexplained variance on the dependent variable, thus yielding a more precise estimate of the effect of interest.

Once these adjustments have been made, we have a satisfactory model. Noting as  $\mathbf{X}$  a vector of all relevant control variables and indexing as r the region of the municipality i, I fit for the entire population of municipalities:

$$Y_i = \alpha_{r[i]} + \zeta_0 \mathbf{X} + \epsilon_{0i} \tag{4.5}$$

where  $\alpha_{r[i]}$  denotes the different intercepts for each region. Then I extract the residuals, defined as the difference between the actual value and the predicted variable, that is

$$\tilde{Y} \equiv Y_i - (\alpha_{r[i]} + \zeta_0 \mathbf{X}) \tag{4.6}$$

Then I fit the 2SLS model with the temperature instrument T and the 'days to election' control D, which has as first stage:

$$A_i = \alpha_1 + \beta_0 T_i + \beta_1 D_i + \epsilon_{1i} \tag{4.7}$$

And as second stage

$$\tilde{Y} = \alpha_2 + \gamma_0 \hat{A}_i + \gamma_1 D_1 + e_2 i \tag{4.8}$$

The sample for the two-stage least squares is obviously restricted to rally municipalities, so for  $i \in S$  (clearly, there is no 'attendance' or 'days to election' value for municipalities where rallies did not take place). For H.1 I use M5S share in the 2013 parliamentary election as the outcome variable, for H.2 I use

turnout in the same election, for H.4 I use M5S share in the 2014 European Parliament election and in the 2018 parliamentary election. To verify H.3 – concerning the variation in rally effect on party performance conditional on the date of the rally – I repeat the same procedure for H.1, restricting the sample to 25-day subsets of rallies, so that the first model would be for rallies held from day 1 of the campaign until day 24, the second from day 2 to day 25, and so on.

#### 4.3 Data

I collected data on electoral, socio-demographic and geographic characteristics of each of Italy's 8,092 municipalities (comuni) from a variety of sources:

- 1. Electoral Results. I compiled a dataset of party share of the valid vote at municipality level for M5S in the 2013 and 2018 parliamentary elections, as well as the 2014 European Parliament election. Moreover, I matched these with the share of the vote for other parties in the 2006 and 2008 parliamentary elections using the Italian Ministry of Interior's databank (Governo Italiano, 2019).<sup>6</sup> Finally, I recorded municipality-level turnout in 2008 and 2013, defined as the share of valid votes over the total number of registered voters, from the same source.
- 2. Socio-demographic data. Data for resident population at 1 January 2013 were drawn from the website of Italy's statistics authority ISTAT (https://www.istat.it/en/); this variable was subsequently coded as a 10-group categorical. I operationalised municipality levels of education using 2011 census data made available by ISTAT, as share of residents with no more than primary education or no qualifications and share of residents with a university degree. From the same 2011 census data, I obtained unemployment rate data (computed as the number of unemployed divided by number of residents in the labour force) and share of residents over the age of 65. Average Income was recorded as the municipality-level total taxable income (reddito imponibile) as a share of the taxpaying residents, using data from the Italian Ministry of Finance (Ministero dell'Economia e delle Finanze, 2014).
- 3. Geographic data. I used data made available by geospatial mapping company Nordai Srl (2017) to record two variables: municipality type and degree of urbanisation. The former utilises a categorisation devised by the Italian Department for Development and Economic Cohesion, which sorts municipalities according to the estimated time-distance from basic public services such as upper secondary schools, major hospitals and major railway station (Lucatelli and Carlucci, 2013).

<sup>&</sup>lt;sup>6</sup>Data for the 2006, 2008, 2014 and 2018 elections were aggregated directly from governmental sources. I am very grateful to Dr Francesco Bailo for sharing readymade datasets (Bailo, 2019) with municipality-level M5S share matched with labour market and education data.

Municipalities are assigned to six categories, which I translated as 'core city' (polo di attrazione urbana), 'core town' (polo di attrazione intercomunale), 'suburb' (area di cintura), 'intermediate' (area intermedia), 'peripherical' (area periferica), 'ultra-peripheral' (area ultra-periferica). The degree of urbanisation variable is composed three categories – high, medium and low – and is derived following the Eurostat (2011) methodology, which captures population density and number of municipality residents in one-kilometre square grids. Moreover, I computed a continuous population density variable using ISTAT data on municipality area and 2013 population.

]	Descriptive	e Statistics			
	Mean	Max	Min	S.D	N
M5S Share in 2013	0.227	0.564	0.001	0.069	8,092
M5S Share in 2014	0.181	0.616	0	0.061	8,034
M5S Share in 2018	0.275	0.701	0	0.109	7,869
Turnout in 2013	0.75	1	0.207	0.076	8,092
Turnout in 2008	0.812	1	0.178	0.063	8,089
Population (continuous)	7376	2,638,842	33	40,003	8,092
Share Primary Education or less	0.326	0.711	0.105	0.054	8,092
Share University Degree	0.072	0.265	0	0.027	8,092
Share Over 65 year-olds	0.227	0.614	0.055	0.058	8,092
Unemployment rate	0.069	0.293	0	0.037	8,092
Average Income (in '000s of €)	17.215	56.612	6.621	3.869	8,031
Density (residents per km <sup>2</sup> )	270.752	12,116.77	0.789	624.37	8,092
Rally-adjacent dummy	0.1004	1	0	0.301	8,092
Population (categorical)					
>250,000 residents	_	_	_	_	12~(0.1%)
100,000-250,000	_	_	_	_	34 (0.4%)
60,000-100,000	_	_	_	_	56 (0.6%)
40,000-60,000	-	_	-	-	95 (1.1%)
20,000-40,000	-	_	-	-	313 (3.9%)
10,000-20,000	-	_	-	-	699 (5.4%)
7,500-10,000	-	_	-	-	439 15.2%)
4,000-7,500	-	_	-	-	$1228 \ (15.1\%$
2,500-4,000	-	_	-	-	1116 (13.8%
<2,500 residents	-	_	-	-	4100 (50.7%
Type of Municipality					`
Core City	-	_	-	-	218 (2.7%)
Core Town	-	_	-	-	104 (1.3%)
Suburb	-	_	-	-	3454 (43.5%
Intermediate	-	_	-	-	2322 (29.3%
Peripheral	-	_	-	-	1494 (18.8%
Ultra-peripheral	_	-	_	-	344 (4.3%)
Degree of Urbanisation					, ,
High	-	_	-	-	895 (11.2%)
Medium	-	_	-	-	4034 (50.8%
Low	_	_	_	_	3010 (37.9%

Table 1

Finally, I created a *rally-adjacent dummy* which takes the value of 1 for 'non-rally' municipalities sharing a border with 'rally' municipalities, using a contiguity matrix available on ISTAT's website.

Note that not all of these variables were used in my main models, but some alternative operationalisations of the same measurements have been collected only for the purpose of checking the results with alternative specifications, and other parties' vote shares were collected for the purposes of the placebo test (see Chapter 6). Table 1 provides descriptive statistics for the main variables of interest; a few data points for data from years other than 2013 are missing due to administrative changes in the intervening years (splits and mergers of municipalities).

In addition to the aggregation and matching of these data at municipality level, I created a novel dataset of Tsunami Tour rallies, recording their timing (expressed in *days to election*),<sup>7</sup> location, information on rally attendance and weather at the time of the rally. Descriptive statistics are presented in Table 2, and the maps in figures 2, 3 (in the previous subsection) and 4 represent the sequencing, temperature, rainfall and scaled average attendance for each rally.

- 1. Rally Attendance. Information on the number of participants to the rallies was collected from three sources. I gathered attendance estimates that appeared on local newspapers, local editions of national newspapers or, in a few cases, were reported by local television stations. Moreover, I contacted provincial police stations (questure) to obtain the official estimate in their reports of the events held in their jurisdictions. Finally, I contacted local M5S branches to obtain an estimate of the organisers. At times the police estimate was reported by newspapers, in which case I added it to the questure column; in case different local papers provided different estimates, I recorded an average of the two. I obtained at least one estimate for all but three municipalities (Taranto, Ragusa and Verona), and computed four different rally attendance series: an average estimate of the available figures, the minimum, the maximum and a newspapers-only estimate (as this is the most complete series, with data for 71 rallies). I then scaled the raw attendance estimates by the total municipality population, as to obtain four 'attendance as share of the population' variables. The final rally in Rome on 22 February was excluded from the analysis for both practical and substantive reasons. First, estimates for the rally vary widely, ranging from 50,000-80,000 according to some media organisations to 800,000 according to the organisers; secondly, the rally was much publicised by M5S activists, who even organised coaches from all over the country to take part, and there is indeed evidence that an unusual number of participants were not from Rome (CENSIS, 2013).
- 2. Weather data. Information on the temperature and rainfall at the time of the rally was collected using the Dark Sky application. Dark Sky's time machine feature provides observed historical

<sup>&</sup>lt;sup>7</sup>On average, Grillo campaigned in two municipalities per day, with the first rally generally taking place at 17 pm, and the second one at 20:30 pm.

weather data at granular level, relying on a variety of national and international weather service databases.<sup>8</sup> Temperature was recorded as a continuous variable in degree Celsius, rainfall as a dummy taking the value of one if it rained (or snowed) at any time during the rally.

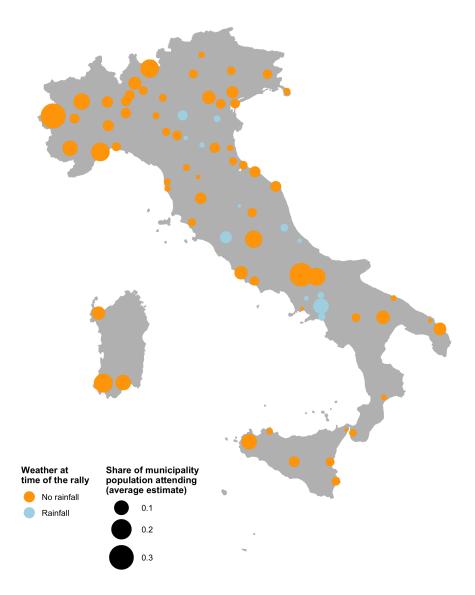


Figure 4

Alongside municipality and rally data, I utilise a third type of data – rolling cross-sectional survey data from ITANES's National Election Survey – for additional analysis at the individual level. However, as these data are not used in the core analysis but only for the purposes of validation of its results, I provide a breakdown of the variables used in the relevant section of Chapter 6.

<sup>&</sup>lt;sup>8</sup>See https://darksky.net/dev/docs for details.

Descriptive Statistics							
	Mean	Max	Min	S.D	N		
Attendance (average)	5,361.04	51,666.67	300	7,343.91	74		
Attendance (minimum)	4,683.11	35,000	300	5,722.25	74		
Attendance (maximum)	6,081.08	80,000	300	10,318.61	74		
Attendance (newpapers)	$5,\!153.17$	40,000	300	$6,\!312.74$	71		
Attendance share (average)	0.054	0.308	0.003	0.057	74		
Attendance share (minimum)	0.049	0.308	0.003	0.056	74		
Attendance share (maximum)	0.056	0.308	0.003	0.058	74		
Attendance share (newpapers)	0.049	0.308	0.003	0.051	71		
Temperature	6.405	17	-2	4.088	74		
Rainfall dummy	0.156	1	0	0.365	74		
Days to election	21.64	40	3	11.077	74		

Table 2

### Chapter 5

# Results

### 5.1 First Step: Residuals Regressions

I first derive the idiosyncratic variance for M5S vote share in 2013 by regressing the observed values of M5S performance on population (as categorical), major centre-left (PD) and centre-right (PdL) party share in 2008, unemployment, share of residents over 65, share of residents with primary education or less, average income and type of municipality with regional fixed effects (model 1):

$$M5S2013_{i} = \alpha_{r[i]} + \zeta_{0}Population_{i} + \zeta_{1}PD2008_{i} + \zeta_{2}PdL2008_{i} + \zeta_{3}Unemployment_{i}$$

$$+ \zeta_{4}ShareOver65_{i} + \zeta_{5}SharePrimary_{i} + \zeta_{6}AverageIncome_{i} + \zeta_{7}MunicipalityType_{i} + \epsilon_{i}$$

$$(5.1)$$

In absence of data on M5S's prior electoral performance in national elections, I use the share of the vote for the two main parties in 2008 (PD and PdL) to capture local political culture and nature of local competition. For turnout, I employ the following specifications (model 2):

$$Turnout2013_{i} = \alpha_{r[i]} + \zeta_{0}Population_{i} + \zeta_{1}Turnout2008_{i} + \zeta_{2}Unemployment_{i}$$

$$+ \zeta_{3}ShareOver65_{i} + \zeta_{4}SharePrimary_{i} + \zeta_{5}AverageIncome_{i} + \zeta_{6}MunicipalityType_{i} + \epsilon_{i}$$

$$(5.2)$$

I use the same specifications as model 1 to obtain residuals for M5S vote share in 2014 (model 3) and in 2018 (model 4). In the main models for 2014 and 2018 I do not control for M5S's previous performance, as obviously this is already hypothesised to depend on rally attendance.

The results of these regressions are presented in Tables 3-6. The models explain approximately between 50% and 75% of the territorial variance in the outcome variables, thus yielding significantly less

'noisy' residuals than raw party share values. Models 1, 3 and 4 also shed some light on the factors that explain municipality-level variation in M5S support over time. In 2013, M5S performs relatively better in mid-sized cities and large towns, while in 2014 and 2018 it progressively consolidates in major cities. Similarly, M5S tends to do somewhat better in municipalities just outside major centres – 'suburbs' and 'intermediate' – across all elections. M5S performs better in 2018 than in 2013 in 'centre-left' municipalities (where PD did better in 2008) in correspondence to a decline of the centre-left during PD's stint at the helm of the coalition government in that period. Conversely, the coefficient for the PdL variable weakens over time, possibly due to the upsurge of a right-populist competitor to M5S in the intervening years, Lega, which was more successful in traditionally rightist locales. The age and education dimensions are consistent with individual-level findings: M5S underperforms in 'older' and 'less educated' places, although the education dimension is much weaker in 2018 than in the two previous contests. Average municipality income is negatively associated with M5S vote share, but this effect is small. Regional fixed effects on their own account for 36% of the territorial variance in 2013, 31% in 2014, and 50% in 2018. This finding illustrates the 'territorialisation' of M5S in the intervening years, as M5S evolves from being the party with the most homogenous geographic distribution of the vote in 2013 to a distinctively Southern party five years later (Colloca and Marangoni, 2017; Chiaramonte et al., 2018). The turnout model is somewhat less interesting, as regional fixed effects and turnout in the previous election explain almost the entirety of variation, although it suggests that turnout in 2013 may have shrunk disproportionally in places that are older, poorer, less educated and with higher unemployment rate.

### OLS Linear Regression with Regional Fixed Effects

 ${\rm Model}\ 1$ 

	D 1 / W : 11 MEC CI			
	Dependent Variable: M5S Share			
	(House of Deputies, 2013)			
	<b>.</b>	C F		
<b>T</b>	Estimate	S.E.	p	
Intercept	0.227***	0.012	< 0.001	
Population [a]				
Over 250,000	0.02	0.015	0.184	
100,000-250,000	0.021*	0.01	0.033	
60,000-100,000	0.045***	0.008	< 0.001	
40,000-60,000	0.032***	0.006	< 0.001	
20,000-40,000	0.022***	0.003	< 0.001	
10,000-20,000	0.013***	0.002	< 0.001	
7,500-10,000	0.012***	0.003	< 0.001	
4,000-7,500	0.009***	0.002	< 0.001	
2,500-4,000	0.005**	0.002	0.003	
Share PD 2008	0.153***	0.009	< 0.001	
Share PdL 2008	0.103***	0.008	< 0.001	
Unemployment rate	0.163***	0.023	< 0.001	
Share Over 65	-0.192***	0.015	< 0.001	
Share primary education or less	-0.181***	0.017	< 0.001	
Average Income ('000s of $\leq$ )	-0.001**	0.000	0.004	
Type of Municipality <sup>[b]</sup>				
Suburb	0.028***	0.005	< 0.001	
Intermediate	0.023***	0.005	< 0.001	
Peripheral	0.014**	0.005	0.007	
Ultra-peripheral	-0.003	0.005	0.632	
Core town	0.004	0.006	0.458	
Multiple R-Squared		0.515		
Adjusted R-Squared		0.512		
N		7853		
	-			

<sup>[</sup>a] reference category: under 2,500 residents

Table 3

<sup>[</sup>b] reference category: core city

Significance codes: \*\*\* p <0.001, \*\* p <0.01, \* p <0.05

Fixed effects not shown.

#### OLS Linear Regression with Regional Fixed Effects

 ${\rm Model}\ 2$ 

	Dependent Variable: Electoral Turnout (House of Deputies, 2013)			
Intercent	Estimate 0.291***	S.E. 0.012	p <0.001	
Intercept	0.291			
Turnout 2008	0.580	0.010	< 0.001	
Population [a]	0.096*	0.019	0.025	
Over 250,000	-0.026*	0.012	0.035	
100,000-250,000	-0.015 -0.020**	0.007	0.052 $0.001$	
60,000-100,000		0.005		
40,000-60,000 20,000-40,000	-0.009 -0.006*	$0.005 \\ 0.003$	$0.066 \\ 0.018$	
10,000-20,000	0.000	0.003 $0.002$	0.018 $0.776$	
7,500-10,000	0.001	0.002 $0.002$	0.776	
4,000-7,500	0.003*	0.002 $0.001$	0.003 $0.037$	
2,500-4,000	0.003*	0.001 $0.001$	0.037	
Unemployment rate	-0.073***	0.001 $0.019$	< 0.003	
Share Over 65	-0.073	0.019 $0.012$	< 0.001	
Share primary education or less	-0.154	0.012 $0.014$	< 0.001	
Average Income ('000s of €)	0.003***	0.014 $0.000$	< 0.001	
Type of Municipality <sup>[b]</sup>	0.003	0.000	<0.001	
Suburb	-0.003	0.004	0.438	
Intermediate	-0.003	0.004	0.438	
Peripheral	-0.021***	0.004	< 0.001	
Ultra-peripheral	-0.021	0.004	< 0.001	
Core town	-0.010*	0.004 $0.005$	0.048	
Core town	-0.010	0.005	0.048	
Multiple R-Squared		0.740		
Adjusted R-Squared		0.739		
N		7933		

 $<sup>[\</sup>mathbf{a}]$  reference category: under 2,500 residents

Table 4

<sup>[</sup>b] reference category: core city

Significance codes: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05

Fixed effects not shown.

### $\operatorname{OLS}$ Linear Regression with Regional Fixed Effects

 ${\rm Model}\ 3$ 

Dependent Variable: M5S Share
(European Parliament election, 2014)

	Estimate	S.E.	p
Intercept	0.234***	0.011	< 0.001
Population [a]			
Over 250,000	0.042**	0.014	0.002
100,000-250,000	0.029**	0.009	0.001
60,000-100,000	0.047***	0.007	< 0.001
40,000-60,000	0.036***	0.005	< 0.001
20,000-40,000	0.024***	0.003	< 0.001
10,000-20,000	0.016***	0.002	< 0.001
7,500-10,000	0.013***	0.002	< 0.001
4,000-7,500	0.010***	0.002	< 0.001
2,500-4,000	0.006***	0.002	< 0.001
Share PD 2008	0.118***	0.008	< 0.001
Share PdL 2008	0.094***	0.007	< 0.001
Unemployment rate	0.221***	0.021	< 0.001
Share Over 65	-0.182***	0.014	< 0.001
Share primary education or less	-0.152***	0.016	< 0.001
Average Income ('000s of €)	-0.001***	0.000	0.009
Type of Municipality <sup>[b]</sup>			
Suburb	0.028***	0.004	< 0.001
Intermediate	0.024***	0.004	< 0.001
Peripheral	0.013**	0.005	0.006
Ultra-peripheral	0.001	0.005	0.839
Core town	0.017**	0.006	0.001
Multiple R-Squared		0.492	
Adjusted R-Squared		0.489	
N		7853	

 $<sup>[\</sup>mathrm{a}]$  reference category: under 2,500 residents

Table 5

 $<sup>[\</sup>mathbf{b}]$  reference category: core city

Significance codes: \*\*\*  $p < \! 0.001,$  \*\*  $p < \! 0.01,$  \*  $p < \! 0.05$ 

Fixed effects not shown.

### $\operatorname{OLS}$ Linear Regression with Regional Fixed Effects

 ${\rm Model}\ 4$ 

	Dependent Variable: M5S Share (House of Deputies, 2018)			
	Estimate	S.E.	p	
Intercept	0.315***	0.015	< 0.001	
Population <sup>[a]</sup>				
Over 250,000	0.076***	0.018	< 0.001	
100,000-250,000	0.039**	0.012	0.005	
60,000-100,000	0.058***	0.009	< 0.001	
40,000-60,000	0.043***	0.007	< 0.001	
20,000-40,000	0.034***	0.004	< 0.001	
10,000-20,000	0.020***	0.003	< 0.001	
7,500-10,000	0.015***	0.003	< 0.001	
4,000-7,500	0.012***	0.002	< 0.001	
2,500-4,000	0.008***	0.002	< 0.001	
Share PD 2008	0.243***	0.010	< 0.001	
Share PdL 2008	0.029**	0.010	0.004	
Unemployment rate	0.282***	0.029	< 0.001	
Share Over 65	-0.289***	0.018	< 0.001	
Share primary education or less	-0.033	0.021	0.118	
Average Income ('000s of $\in$ )	-0.001***	0.000	< 0.001	
Type of Municipality <sup>[b]</sup>				
Suburb	0.038***	0.006	< 0.001	
Intermediate	0.029***	0.006	< 0.001	
Peripheral	0.017**	0.006	0.007	
Ultra-peripheral	0.004	0.007	0.534	
Core town	0.040***	0.008	< 0.001	
Multiple R-Squared		0.712		
Adjusted R-Squared		0.711		
N		7779		

 $<sup>[{\</sup>rm a}]$  reference category: under 2,500 residents

Table 6

<sup>[</sup>b] reference category: core city

Significance codes: \*\*\* p <0.001, \*\* p <0.01, \* p <0.05

Fixed effects not shown.

### 5.2 Second Step: Two-Stage Least Squares

We can now proceed to derive the variation in crowd attendance associated with changes in temperature, by running the first stage of 2SLS:

$$Attendance_i = \alpha_1 + \beta_0 Temperature + \beta_1 Days To Election_i + e_{1i}$$
(5.3)

	Deper	ndent Vari	able: Attenda	ance
	as a sha	re of mun	icipality popu	lation
	Mode	1 A	Model B	
	Average est	timate of	Max estir	nate of
	rally attendance		rally atte	ndance
	Estimate	S.E.	Estimate	S.E.
Intercept	0.088***	0.014	0.093***	0.014
Temperature	0.003*	0.001	0.004*	0.002
Days to Election	-0.002***	0.001	-0.002***	0.001
F-Statistic	11.56		12.96	
Weak instrument test	0.028	8*	0.023*	
			25.1	
	Mode		Mode	
	Min estimate of rally attendance		Papers-only estimate of rally attendance	
	Estimate	S.E.	Estimate	S.E.
Intercept	0.085***	0.014	0.080***	0.013
Temperature	0.003*	0.001	0.003*	0.001
Days to Election	-0.003***	0.001	-0.002***	0.001
F-Statistic	12.3	88	10.67	
Weak instrument test	0.038	8*	0.034	<b>1</b> *

Table 7

The results, reported in table 7, show that an increase of one degree in temperature is associated with a 0.003-0.004 increase in the share of the municipality residents attending the rally, which is significant across the models. This means that for a sample average estimate of attendance share of 0.054, each degree

in temperature increases participation by around 6%. For an average rally (5,361 attendees in the average estimate series), this corresponds to a number of attendees comprised approximately between 300 and 380, depending on the data series used. Specifically, the estimated increases in attendance correspond to 337 participants for the average estimate of rally attendance, 298 for the minimum, 383 for the maximum and 311 for the newspapers-only series. It is also possible to observe that predicted rally attendance is smaller for rallies held earlier, suggesting that there was an increase in attention to campaign activities as the election drew nearer.

The weak instrument test and the F-statistic reported in table 7 were computed with the ivreg R package: they refer solely to the instrument and they confirm that the instrument is sufficiently strong (i.e. it meets the relevance criterion). It is worth explaining what we mean by sufficient instrument strength. If  $\beta_0$  were close to zero in the first stage, then most of the variation in the fitted values of the attendance variable, which is going to be employed as independent variable in the second stage, would be due to randomness in the attendance variable itself. This would be problematic, as attendance has been identified as endogenous to the outcome. In this case, the 2SLS sampling distribution will be close to the probability limit of OLS, and thus the 2SLS estimate will be biased towards OLS (Angrist and Pischke, 2009: 205-207). According to a common 'rule of thumb' criterion to assess instrument strength, an F-statistic above the value of 10 for an instrumental variable model with one instrument and one endogenous value is sufficient to discount issues of instrument weakness (Staiger and Stock, 1997). A more rigorous criterion relies on Stock and Yogo's (2005) definition of instrument strength in terms of worst-case bias towards OLS of the 2SLS estimates. That is, an instrument is said to be strong if there is less than 5% probability that the maximum bias towards OLS is a certain acceptable value of the bias b. Stock and Yogo's (2005) and Skeels and Windmeijer (2018) have computed tables of 'critical values' of F-statistics, which allow to identify the minimum value of F to be confident that instruments are strong given a maximum acceptable bias, the number of instruments and the number of endogenous variables. In this case, all models are consistent with the assumption that there is less than 5% probability that the maximum bias is 10%, the conventional acceptable value of b.

Having derived the residuals for the aggregate-level dependent variables and the predicted attendance values associated with changes in temperature, I can finally proceed to estimate the effect of exogenous variation in temperature on unexplained variance on the outcome variables. For clarity, I note first-stage models with a letter, residuals models with a number, and second-stage models with a combination of the two – so that model 1.A, for instance, regresses the residuals of model 1 on the predicted attendance values of model A. Therefore, to test H.1, I run the second stage of the 2SLS:

$$M5\widetilde{S20}13_i = \alpha_2 + \gamma_0 Attendance_i + \gamma_1 DaysToElection_i + \epsilon_{2i}$$
 (5.4)

2SLS Second Stage: Effects of Attendance on M5S share of the vote (House of Deputies, 2013)

	Dependent Variable: Residuals of Model 1					
	Model	1.A	Model 1.B			
	Average e	stimate	Max estin	mate of		
	of rally attendance		rally attendance			
	Estimate	S.E.	Estimate	S.E.		
Intercept	-0.135*	0.058	-0.138*	0.056		
Attendance	1.285*	0.541	1.237*	0.504		
Days to Election	0.003*	0.001	0.003*	0.001		
Wu-Hausman test	0.002	**	0.002**			
N	74		74			
	Model	1.C	Model 1.D			
	Min esti	imate	Papers-only estimate			
	of rally att	endance	of rally attendance			
	Estimate	S.E.	Estimate	S.E.		
Intercept	-0.142*	0.062	-0.143*	0.060		
Attendance	1.398*	0.608	1.500*	0.631		
Days to Election	0.004*	0.002	0.003*	0.001		
Wu-Hausman test	$0.001^{\circ}$	***	0.00	2*		
N	74		71			

Significance codes: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05. See Table 7 for first stage estimates.

Table 8

Second-stage estimates show that a variation in attendance equivalent to 1% of the share of municipality population leads to an increase in (unexplained) M5S share of the vote between 1.2 and 1.5 percentage points, and that this effect is statistically significant within a 95% confidence interval. In other words, this means that in an average rally municipality, for each 10 participants to the rally, M5S obtained between 7 and 8 additional votes in 2013, depending on the estimate series. This can be easily computed as  $\frac{10}{\bar{p}} \times \bar{v} \times \gamma_0$  where  $\bar{p}$  and  $\bar{v}$  are, respectively, average rally municipality population and average rally municipality valid votes. The increase in participation due a one-degree increase in temperature corresponds

 $<sup>^9</sup>$ Second-stage outputs are obtained with ivreg, and thus the standard errors take into account that the attendance variable is an estimated regressor.

to 337 additional rally participants and 250 additional votes in the average attendance estimate series, to 383 additional participants and 274 votes in the maximum series, to 298 participants and 241 votes in the minimum series, and to 311 participants and 270 votes in the newspapers-only series. I also present the Wu-Hausman test, which compares 2SLS with a simple OLS estimate under the null hypothesis that the two do not differ significantly (Davidson and McKinnon, 1993: 237-242). As the null is rejected in all models, we can be sure that the 'attendance' variable is indeed endogenous, as hypothesised, and thus it makes sense to use 2SLS over OLS.

2SLS Second S	Stage: Effects of Attendance
on Turnout (	(House of Deputies, 2013)

	Dependent Variable: Residuals of Model 2					
	Model	2.A	Model	Model 2.B		
	Average e	stimate	Max estimate of rally attendance			
	of rally att	endance				
	Estimate	S.E.	Estimate	S.E.		
Intercept	0.027	0.022	0.027	0.022		
Attendance	-0.257	0.212	-0.247	0.200		
Days to Election	0.000	0.001	0.000	0.001		
Wu-Hausman test	0.09	7	0.107			
N	74		74			
	Model	2.C	Model 2.D			
	Min esti	mate	Papers-only estimate			
	of rally att	endance	of rally attendance			
	Estimate	S.E.	Estimate	S.E.		
Intercept	0.028	0.024	0.029	0.024		
Attendance	-0.280	0.236	-0.292	0.259		
Days to Election	-0.001	0.001	-0.001	0.001		
Wu-Hausman test	0.09	5	0.05	58		
N	74		71			

Significance codes: \*\*\* p <0.001, \*\* p <0.01, \* p <0.05. See Table 7 for first stage estimates

Table 9

To test H.2, I repeat the same procedure with the residuals of model 2 (table 9):

$$\widetilde{Turnout_i} = \alpha_2 + \gamma_0 Attendance_i + \gamma_1 Days To Election_i + \epsilon_{2i}$$
 (5.5)

Models 2.A-D return small and non-significant and negative coefficients for the effect of instrumented rally attendance on turnout, contrary to what hypothesised in H.2. Moreover, the estimates come with very large standard errors and the values of the Wu-Hausman test statistics above 0.05 suggest that rally attendance is very weakly endogenous to the dependent variable. Thus, H.2 is rejected: rally attendance does not cause a significant increase in turnout.

I test H.4 with data from the 2014 and 2018 elections with the now familiar two-step estimation technique. Table 10 reports the results for the following second-stage regression:

$$M5\widetilde{S20}14_i = \alpha_2 + \gamma_0 Attendance_i + \gamma_1 DaysToElection_i + \epsilon_{2i}$$
 (5.6)

The estimated effect is positive and significant, but smaller in magnitude than that for the 2013 election. For comparison, the estimate suggests that for each 10 additional participants to the 2013 rallies, M5S gained between 4 and 5 additional votes in the 2014 European Parliament election. Alternatively, we can estimate that a one-degree increase in temperature at the time of the rally associated with 300-380 additional participants to the 2013 rallies corresponds to between 140 and 160 additional votes a year later, depending on the attendance data series used. Clearly, it is impossible to adjudicate with the data available whether the diminished effect at one year of distance is due to the partial permanence of attitudinal changes brought about by the Tsunami Tour or by the fact that the Tsunami Tour resulted in more effective and visible activism in those locales. Indeed, it could easily have been a combination of the two mechanisms.

Repeating the same procedure for

$$M\widetilde{5S2018}_i = \alpha_2 + \gamma_0 Attendance_i + \gamma_1 DaysToElection_i + \epsilon_{2i}$$
 (5.7)

returns non-significant effects across all models (Table 11), implying that the 2013 rallies had no significant effect on M5S performance in 2018. The Wu-Hausman test does not reject the null – indeed its value is even higher than for the turnout model – which suggests that the attendance variable is so irrelevant to the outcome variable that it can be considered exogenous. Therefore, although H.4 is technically partly supported – I find a positive effect for the 2014 election – the results of models 3 and

4 point at a weakening of rally effects over time, to the extent that they have faded completely by 2018. This finding casts doubts on the importance of rallies in building a strong party organisation to rely on in future campaigns (organisational effects). While I do not have M5S membership figures to estimate the effects of rallies on local party strength and the differential development this variable over time between more and less well-attended rallies, it is possible to conclude that even if rallies *did* boost activist groups in the places they were held, this boost did not translate into additional votes five years later.

2SLS Second Stage: Effects of Attendance on M5S share of the vote (European Parliament election, 2014)

	Dependent	Variable:	Residuals of	f Model 3
	Model 3.A Average estimate of rally attendance		Model 3.B Max estimate of rally attendance	
	Estimate	S.E.	Estimate	S.E.
Intercept Attendance Days to Election	-0.113* 0.931* 0.003*	0.045 0.426 0.001	-0.115* 0.896* 0.003*	0.045 0.398 0.001
Wu-Hausman test N	0.006		0.008*	
	Model 3.C Min estimate of rally attendance		Model 3.D Papers-only estimate of rally attendance	
	Estimate	S.E.	Estimate	S.E.
Intercept Attendance Days to Election	-0.118* 1.012* 0.003*	0.049 0.476 0.001	-0.125* 1.153* 0.003*	0.049 0.510 0.001
Wu-Hausman test N	0.015*		0.00 71	7*

Table 10

Significance codes: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05.

See Table 7 for first stage estimates

2SLS Second Stage: Effects of Attendance on M5S Share (House of Deputies, 2018)

	Dependent Variable: Residuals of Model 4					
	Model 4.A		Model	Model 4.B		
	Average e	stimate	Max estir	nate of		
	of rally att	endance	rally atte	rally attendance		
	Estimate	S.E.	Estimate	S.E.		
Intercept	-0.032	0.039	-0.032	0.039		
Attendance	0.121	0.363	0.117	0.349		
Days to Election	0.001	0.001	0.001	0.001		
Wu-Hausman test	0.98	3	0.991			
N	74		74			
	Model 4.C		Model 4.D			
	Min estin	nate of	Papers-only estimate			
	rally atte	ndance	of rally attendance			
	Estimate	S.E.	Estimate	S.E.		
Intercept	-0.032	0.040	-0.038	0.039		
Attendance	0.132	0.390	0.203	0.414		
Days to Election	0.001	0.001	0.010	0.001		
Wu-Hausman test	0.92	7	0.995			
N	74		71			

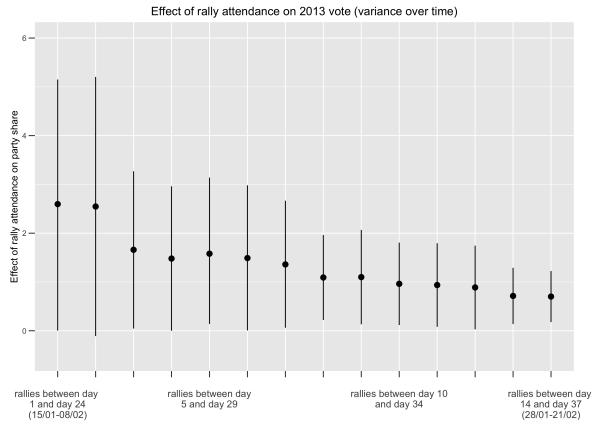
Significance codes: \*\*\* p <0.001, \*\* p <0.01, \* p <0.05.

See Table 7 for first stage estimates

Table 11

The findings of the 2SLS for the 2018 parliamentary election may raise the concern that the null result of this fit is simply due to the better explanatory power of model 4 in comparison to models 1 and 3 (which have an  $R^2$  value of around 0.50). In this case, the absence of a correlation would simply reflect the fact that I can control more efficiently for the territorial distribution of M5S vote in 2018 than in 2013 and 2014, and thus I may have incurred in type I errors in the analysis of the latter cases. This possible objection can be addressed by regressing the residuals for the difference between M5S vote share in 2013 and 2018 as in equation (5.1) and then re-running the regression of equation (5.7) with the new fitted values. The model retains the high  $R^2$  of model 4 (0.743) and yields a negative estimate for attendance, with values of the attendance estimate ranging from -1.11 and -1.25 and p values ranging from 0.02 to

0.04. Similarly, introducing 2013 M5S vote share as a party control in the OLS regression of model 4, I obtain high  $R^2$  (0.788) and negative 2SLS estimates for the instrumented attendance variables, ranging from -0.92 to -1.04 with p values between 0.04 and 0.07, depending on the estimate series used. This means that a higher attendance to the Tsunami Tour rallies in 2013 corresponds to an *underperformance* of the party in 2018 relative to five years earlier. This finding only makes sense only if we concede that the 2013 performance was *positively* affected by the rallies, and that effect then regressed to the mean over time.



25-day subsets of rallies over time

Figure 5

Finally, I address H.3 – concerning the variation in rally effect on 2013 vote conditional on their timing – by repeating the same procedure used for model 1.A, but restricting the sample of rally municipalities to rallies held over different periods of time. Specifically, I use 25-day periods of rallies, thus starting from the 49 rallies held between day 1 of campaign (15 January) to day 24 (8 February) and ending with the 47 rallies held between day 14 (28 January) and day 37 (21 February). Figure 5 reports the estimates of  $\gamma_0$  and 95% confidence intervals for these restricted-sample models. Clearly, these small-sample models

come with too large standard errors to obtain differences between estimates that are significant within conventional thresholds of significance. However, it is still notable that the effect for the earliest subsample is twice the whole-sample effect, and three times the effect for the last subsample, suggesting a variation in the impact of the rally over the course of the campaign in the direction hypothesised in H.3. This finding suggests that there is a trade-off between effectiveness and attendance: earlier rallies have higher electoral returns to attendee, but later rallies draw larger crowds (as shown in table 7).

## Chapter 6

### Validation of the Results

In this chapter, I corroborate the findings of Chapter 5 using three different validation strategies. The first of these consists in a series of robustness checks aimed at verifying the validity of the measurements employed. As alternative estimates for the endogenous variable have already been presented in the main model, in this section I focus on alternative specifications for the controls and the instrument, as well as varying the sample of the OLS model. The second validation strategy, the placebo test, intends to address issues of design validity. The logic of the placebo test is straightforward: it "replicates the primary analysis with the outcome replaced by a pseudo-outcome that is known not to be affected by the treatment" (Athey and Imbens, 2017: 17), expecting to find null results. In this case I use a pre-treatment pseudo-outcome, which therefore could not possibly be affected by the rallies: share of the vote for 19 other parties in previous elections. Finally, I provide supplementary analysis aimed at testing the validity of the hypothesised causal mechanisms by drawing on a different source and type of data, which are expected to bear trace of the effect under investigation. Specifically, this 'data source triangulation' (Mathison, 1988) strategy makes use of an individual-level, large-N cross-sectional survey conducted over the course of the 2013 election campaign.

#### 6.1 Robustness Checks

Tables 12-14 present a series of models where the control variables of the OLS regressions used to derive the dependent variables have been omitted or altered. I present descriptive statistics of the OLS regressions and second-stage results, obtained with the average estimate of rally attendance data series. Model 5 serves as a 'baseline': it excludes all controls, resulting in all dependent variables returning a significant

estimate for the effect of interest in the second stage of the 2SLS. Indeed, the estimates for turnout and M5S share in 2018 are the largest, reproducing the marked North-South distribution of these variables. However, these very sizeable effects completely disappear as I introduce fixed effects in model 6, whilst the two 'positive' cases – M5S share in 2013 and 2014 – are robust to these controls. Model 7-10 tweak the controls employed in the OLS regression. Model 7 substitutes linear and squared values of the 'population' variable to the categorical variable presented in the main model. Model 8 uses an alternative estimate of municipality-level educational qualifications: 'share of residents with a university degree' instead of 'share of resident with primary education or less'. Model 9 and 10 use alternative specifications for the 'type of municipality' control: respectively, a three-category 'degree of urbanisation' variable, and a continuous 'population density' variable. All these return a significant coefficient for M5S share in 2013 and 2014, and a non-significant coefficient for turnout and M5S share in 2018.

Tables 15 and 16 present a series of models where the sample of the OLS regression has been altered to probe the robustness of the results to the exclusion of potentially confounding observations. In models 11 and 12, I exclude municipalities with, respectively, fewer than 500 and fewer than 1000 residents, to verify whether the residuals are significantly affected by outlier observations of small substantial significance. The results are not substantially different from the main model. In model 13, I propose a very simple way of detecting estimate bias due to spatial spillover effects. As rallies may affect the local climate of opinion not only in the municipality in which they are held but also in locations that are spatially proximate, it may be difficult to distinguish treatment from non-treatment units (LeSage, 2014). This may be due, for instance, to people from areas surrounding a rally municipality attending the event, to individuals' social networks extending beyond administrative boundaries, or to media outlets providing coverage at a territorial level that is intermediate between the municipality (which is the unit) and the region (for which I can adjust). Therefore, if there is spatial correlation in the outcome variable between rally municipalities and some non-rally municipalities, the use of the latter as controls may yield biased estimates, due to the violation of the stable unit-treatment value assumption (Selb and Munzert, 2018: 1052). In this case, this bias can be expected to be a conservative bias: that is, an effect of the treatment on non-treatment units that are spatially proximate to treatment units in the same direction as the treatment effect will depress the estimate of this effect once the affected non-treatment units are used as controls. Thus, the main worry is a type II error in the models that return a null result, rather than a type I error in the models that return a significant result. I address this possibility by excluding from the OLS regressions all municipalities that share a border with rally municipalities – i.e. the most likely to be subject to this 'diffusion' effect. The results of model 13 show that, consistently with my expectations, the effect of rallies on M5S share in 2013 and 2014 increases, albeit very slightly. Reassuringly, the turnout estimate and the 2018 estimate remain non-significant.

Robustness Che	cks: Residua	ls regressions stat	istics and 2SLS	second stage			
	Model 5						
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018			
$OLS\ statistics$							
Adjusted $\mathbb{R}^2$	-	-	-	-			
N	-	-	-	-			
2SLS second-sta	age estimates						
Intercept	0.031	1.090***	-0.051	-0.314			
Attendance	2.086*	-3.045*	2.238*	5.158*			
Days to election	0.005*	-0.008*	0.006**	0.008*			
Specifications		model without coaverage attendance					
	Model 6						
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018			
$OLS\ statistics$							
Adjusted R <sup>2</sup>	0.368	0.478	0.313	0.633			
N	8092	8092	8034	7869			
2SLS second-sta	ge estimates						
Intercept	-0.149*	0.005	-0.127*	-0.042			
Attendance	1.599*	0.019	1.285*	0.44			
Days to election	0.004*	0.000	0.004*	0.001			

Table 12

Significance codes: \*\*\* p <0.001, \*\* p <0.01, \* p <0.05

Specifications

Main model with fixed effects only,

average attendance share estimates

	Robus	$_{ m tness}$	Checks:	Residua	ls regressions	statistics	and	2SLS	second	stage
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		Model 7						
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018				
$OLS\ statistics$								
Adjusted R <sup>2</sup>	0.485	0.628	0.482	0.708				
N	7853	7933	7853	7779				
2SLS second-sta	age estimates							
Intercept	-0.136*	0.057	-0.108*	-0.021				
Attendance	1.286*	-0.387	0.857*	-0.074				
Days to election	0.003*	-0.001	0.003*	0.001				
Specifications	Main	model with popu to polynomial (li		_				
Specifications		average attendance share estimates						
		Mod	lel 8					
	M5S 2013	Turnout 2013	$M5S\ 2014$	$M5S\ 2018$				
$OLS\ statistics$								
Adjusted R <sup>2</sup>	0.506	0.632	0.484	0.712				
N	7853	7933	7853	7779				
2SLS second-sta	age estimates							
Intercept	-0.142*	0.045	-0.116*	-0.019				
Attendance	1.410*	-0.376	1.000*	-0.161				
Days to election	0.004*	-0.001	0.003*	0.001				
	Main	model with educa	tion control cha	anged to				
Specifications	share of residents with university degree,							
		average attendance		-				
		-						
Significance code	s: *** p <0.00	01, ** p < 0.01, * p	< 0.05					

Table 13

		Model 9						
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018				
$OLS\ statistics$								
Adjusted R <sup>2</sup>	0.503	0.628	0.48	0.699				
N	7853	7933	7853	7779				
2SLS second-sta	age estimates							
Intercept	-0.159*	0.057	-0.139*	-0.067				
Attendance	1.505*	-0.387	1.156*	0.384				
Days to election	0.004*	-0.001	0.003*	0.002				
Specifications	Main model with municipality type variable changed to degree of urbanisation, average attendance estimates							
	Model 10							
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018				
$OLS\ statistics$								
Adjusted R <sup>2</sup>	0.502	0.617	0.482	0.711				
N	7948	8028	7948	7783				
2SLS second-sta	ige estimates							
Intercept	-0.162*	0.052	-0.140*	-0.064				
Attendance	1.523*	-0.411	1.154*	0.33				
Days to election	0.004*	-0.001	0.004*	0.002				
	Mair	n model with mun	nicipality type v	rariable				
	changed to population density (linear $+$							
Specifications			squared), average attendance estimates					

Table 14

Robustness Checks:	Residuals regressions statistics and 2SLS second stage

		Model 11					
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018			
$OLS\ statistics$							
Adjusted R <sup>2</sup>	0.548	0.771	0.526	0.732			
N	7061	7114	7061	7005			
2SLS second-sta	ige estimates						
Intercept	-0.128*	0.019	-0.105*	-0.022			
Attendance	1.225*	-0.192	0.865*	0.044			
Days to election	0.003	-0.000	0.003*	0.001			
Specifications		Main model, excludes municipalities with fewer than 500 residents, average attendance share estimates					
	Model 12						
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018			
$OLS\ statistics$							
Adjusted R <sup>2</sup>	0.565	0.801	0.561	0.759			
N	5984	6022	5984	5941			
2SLS second-sta	ige estimates						
Intercept	-0.119*	0.012	-0.095*	-0.011			
Attendance	1.126*	-0.132	0.767*	-0.059			
Days to election	0.003*	-0.000	0.002*	0.000			

Table 15

Robustness	Checks	Residuals	regressions	statistics	and 2SLS	second stage
Tronnentiese	OHCCES.	ricorduais	Tegressions	SUBUISIUS	and abub	second stage

		Model 13					
	M5S 2013	Turnout 2013	M5S 2014	M5S 2018			
$OLS\ statistics$							
Adjusted R <sup>2</sup>	0.501	0.616	0.47	0.698			
N	7053	7133	7053	6984			
2SLS second-sta	ge estimates -0.151*	0.034	-0.128*	-0.045			
Attendance	1.437*	-0.318	1.085*	0.244			
Days to election	0.004*	-0.001	0.003*	0.001			
Specifications	Main model, excludes rally-adjacent municipalities from OLS regression, average attendance estimate share						
Significance codes	s: *** p <0.00	01, ** p <0.01, * p	< 0.05				

Table 16

Let us now turn to the robustness of the 2SLS. If temperature can be expected to reduce systematically rally attendance, by the same token other weather factors should provide exogenous sources of variation in rally attendance. I thus reproduce the analysis adding a 'rainfall' dummy that takes the value of 1 if it rained at the time of the rally to the 2SLS model (model 14 in table 17) with the same OLS controls as the main model for each outcome variable:

$$Attendance_i = \alpha_1 + \beta_0 Temperature + \beta_1 Rainfall Dummy + \beta_2 Days To Election_i + e_{1i}$$
 (6.1)

$$\widetilde{Y}_i = \alpha_2 + \gamma_0 Attendance_i + \gamma_1 Days To Election_i + \epsilon_{2i}$$
 (6.2)

The results of model 14 show that temperature remains positively correlated with rally attendance, and rainfall is negatively but non-significantly correlated with rally attendance. The estimate for the rainfall dummy is however sizeable: holding temperature constant, rainfall reduces rally participation by 24%, or 1260 attendees in a sample average municipality. The 2SLS estimates of the second stage confirm the direction and magnitude of the relationship identified in the just-identified models with a single instrument. The Wu-Hausman test rejects the null for the two positive cases, and the Sargan test for multiple-instrument models confirms that the model is not over-identified.

 $Model \ 14$ 

First Stage: Effects of Temperature and Rainfall on Rally Attendance

	DV: Average estimate of rally attendance				
	Estimate	S.E.			
Intercept	0.0892***	0.014			
Temperature	0.003*	0.001			
Rainfall dummy	-0.013	0.016			
Days to Election	-0.002***	0.001			
F-Statistic	7.86	;			
Weak instrument test	0.068	8			

Second Stage: Effects of rally attendance on the outcome variables

	M5S	2013	Turnout 2013		
	Estimate	S.E.	Estimate	S.E.	
Intercept	-0.128*	0.052	0.024	0.020	
Attendance (2SLS)	1.213*	0.487	-0.23	0.193	
Days to Election  LIML Estimate	0.003*	0.001	0.000	0.001	
Attendance (LIML)	1.244*	0.506	-0.238	0.199	
Wu-Hausman test	0.002**		0.113		
Sargan test	0.0	662	0.68		
N	74		74		

	M5S	2014	$M5S\ 2018$		
	Estimate	S.E.	Estimate	S.E.	
Intercept	-0.108*	0.041	-0.051	0.037	
Attendance (2SLS)	0.879*	0.385	0.031	0.353	
Days to Election	0.003*	0.001	0.001	0.001	
$LIML\ Estimate$					
Attendance (LIML)	0.849*	0.391	0.073	0.46	
Wu-Hausman test	0.007*		0.551		
Sargan test	0.693		0.108		
N	74		74		

Significance codes: \*\*\* p <0.001, \*\* p <0.01, \* p <0.05

Table 17

The F-statistic is potentially more problematic. As the 'critical value' for a maximum bias of 10% in a two-instrument 2SLS fit is 7.85 (Skeels and Windmeijer, 2018: 6), second-stage estimates may be less reliable than those of the temperature-only model. Indeed, the weak instrument test returns a p value slightly above the conventional threshold of 0.05. Following the recommendations of Stock and Yogo (2005: 106) and Angrist and Pischke (2009: 209-213), I investigate further the possible bias by checking the second-stage estimate with an alternative estimation technique: limited information maximum likelihood (LIML).<sup>10</sup> LIML belongs to a family of instrumental variable model estimators known as k-class estimators, which yield bias reduction via the adjustment of 2SLS second-stage estimate by a coefficient k that accounts for finite sample bias (see Greene, 1993: 375-377 for details). It is less frequently used than 2SLS, because it tends to be less precise, but its estimates are more tolerant to low F-statistic values in the first stage, and it is generally considered to perform better in presence of weak instruments and with small samples (Bascle, 2008: 298-299). Therefore, if estimate bias were an issue, the LIML estimate should be significantly different from 2SLS. In this case, the two estimates are actually very similar, suggesting that the modest performance of the first stage is more due to the size of the sample than to low levels of correlation between the weather instruments' set and attendance. In other words, due to the small number of rally municipalities and the even smaller cell count for 'rainy' rallies (12), the new instrumental variable only slightly improves the F-statistic for the joint significance of first-stage regressions, while the corresponding loss in degrees of freedom reduces its value more dramatically. Thus, a just-identified model with a single instrument is preferable but the introduction of an additional weather variable essentially confirms the findings of the main model, even though rainfall is a weak instrument on its own.

### 6.2 Placebo Test

I use other parties' municipality-level performance in the two previous parliamentary elections (2006 and 2008) as 'pseudo-outcomes' of a placebo test, in order to verify whether the two-step design is sufficiently capable of isolating campaign effects. As these are pre-treatment observations, there is no risk that 2013 rallies had an influence on them. I repeat the exact same procedure used in model 1.A: first I compute the residuals with a fixed-effect OLS regression as in equation (5.1), and then I run the 2SLS with average attendance estimates as in equation (5.3). I excluded parties with less than 1% of the national share to have sufficient variation on the dependent variable; for PD and PdL in 2008, I use major centre-left and centre-right share in the previous election (respectively, L'Ulivo and Forza Italia in 2006), to avoid perfect collinearity. Table 18 summarises essential information on the parties, including the share of the variance explained by the OLS model, and the estimated second-stage 'pseudo-effect' of rally attendance (average estimate) on party performance with their standard errors.

<sup>&</sup>lt;sup>10</sup>LIML estimates were computed with the R package ivmodel.

Descriptive Statistics						
Party	Election year	Average municipality share	OLS $\mathbb{R}^2$	2SLS estimate	2SLS S.E.	
Five Star Movement (M5S)	2014	0.181	0.504	0.930	0.426	
Five Star Movement (M5S)	2013	0.227	0.512	1.285	0.542	
Movimento per l'Autonomia (MPA)	2008	0.030	0.303	0.644	1.050	
Sinistra Arcobaleno (SA)	2008	0.023	0.042	0.013	0.009	
Popolo della Libertà (PdL)	2008	0.338	0.744	-0.028	0.262	
Italia dei Valori (IDV)	2008	0.039	0.657	-0.050	0.118	
La Destra (LD)	2008	0.023	0.239	-0.088	0.067	
Partito Democratico (PD)	2008	0.290	0.854	-0.152	0.204	
Lega Nord	2008	0.177	0.738	-0.436	0.581	
Unione di Centro (UDC)	2008	0.059	0.246	-0.479	0.250	
Forza Italia (FI)	2006	0.229	0.701	0.411	0.257	
Lega Nord (LN)	2006	0.065	0.746	0.396	0.241	
Rosa nel Pugno (RnP)	2006	0.024	0.110	0.053	0.070	
Rifondazione Comunista (RC)	2006	0.051	0.350	0.008	0.099	
Italia dei Valori (IDV)	2006	0.020	0.182	0.026	0.087	
Partito dei Comunisti Italiani (PdCI)	2006	0.021	0.228	-0.020	0.040	
Federazione dei Verdi (FdV)	2006	0.017	0.137	-0.021	0.128	
Alleanza Nazionale (AN)	2006	0.109	0.494	-0.049	0.170	
Udeur	2006	0.017	0.289	-0.183	0.169	
L'Ulivo	2006	0.281	0.815	-0.190	0.198	
Unione di Centro (UDC)	2006	0.069	0.161	-0.253	0.172	

Table 18

Figure 6 shows plots of the attendance estimates with 95% confidence interval for the two 'positive' cases in the main analysis and the 19 placebos. All placebo estimates return a smaller absolute value than the estimates for M5S in 2013 and in 2014. Moreover, none of the second-stage estimates are statistically significant at the 95% confidence level, as they either return very small values of  $\gamma_0$  or come with larger confidence intervals than the main model. The placebos return null results for both major and minor parties, and regardless of the 'noisiness' of residuals – captured by the  $R^2$  of the residuals regressions. A coefficient with particularly 'noisy' residuals (UDC 2008,  $R^2 = 0.246$ ) does however come close to statistical significance, implying that if the first step does not weed out sufficient variance the 2SLS estimates may be imprecise. With this key qualification, it is nonetheless possible to conclude that the test broadly supports of the validity of the design, as it suggests that it is unlikely that the significant coefficients for the 'positive' cases were simply down to chance.

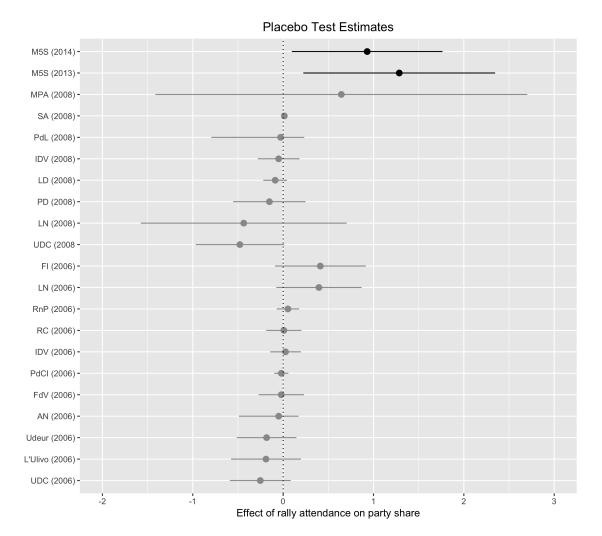


Figure 6

### 6.3 Data Source Triangulation

If rallies produced changes in the 'opinion climate' locally, as the core analysis suggests, attitudinal shifts may be identifiable from survey data. During the campaign, the Italian National Election Study (ITANES) conducted a rolling cross-sectional survey via computer-assisted web interviewing, contacting around 8,700 adults from 5 January to 23 February 2013, for an average of 200 interviewees per day over the course of 43 days (seven weeks excluding Sundays). As outcome variable, I use respondents' answers on a 0-10 point scale to the 'M5S' item in the question (Q40.6):

All parties would want to have your vote in the future. Regardless of how you are planning to vote in the next election, how likely it is that you may vote for the following parties in the future?

This 'propensity variable' has two advantages: first, it is fine-grained enough to be sensitive to small

attitudinal shifts, such as those that can be expected to be associated with rallies, even in a context of voter uncertainty; secondly, it reduces non-response rate significantly from 22.7% in the conventional 'voting intention' item to just 7.1%.

	Des	scriptive	Statistic	cs			
			Mean	Max	Min	S.D	N
Propensity to vote for M		0.353	10	0	3.589	8051	
Rally City dummy			0.394	1	0	0.488	8673
Post-rally dummy			0.137	1	0	0.344	8673
Age			47.65	89	18	15.74	8673
Days to election			25.25	50	1	14.494	8673
	N	Share				N	Share
Gender			Municipality population				
Male	4425	0.51	250,000+			1898	0.219
Female	4248	0.489	100,000-250,000		1198	0.139	
Total	8673	1	60,000-250,000 40,000-60,000		838	0.097	
					679	0.079	
Area			20,000-40,000		1148	0.133	
			10,000-20,000		1074	0.124	
North	4263	0.492	<10,000		1812	0.21	
Centre	1783	0.206	Total		8647	1	
South	2627	0.303					
Total	8673	1	Education				
Occupation			Prin	Primary or Less		193	0.022
				Lower Secondary		1373	0.158
Housewife/husband	888	0.102	Upper Secondary		4814	0.555	
Manager/entrepreneur	1103	0.127	Degree		2293	0.264	
Self-employed	378	0.044	Total		8673	1	
Pensioner	1674	0.194					
Student	622	0.072	Interest in Politics			s	
Blue Collar	386	0.045					
White Collar	2454	0.283	High		6601	0.771	
Unemployed	991	0.115				1958	0.229
Total	8469	1	Total 8559			1	

Table 19

As the data provides the day when the respondent was interviewed, I recode the timing of the interviews in two ways: as weeks to election and days to election. I record whether the respondent resides in a municipality where a rally took place, to obtain a rally city dummy. Moreover, I create a post-rally dummy that takes the value of 1 for those who reside in a rally municipality and were interviewed after the rally took place in such municipality, and 0 for everyone else. When both these dummy variables are introduced in a regression model jointly with a variable that captures trends in M5S support over time, the post-rally variable should indicate the effect of being interviewed after a rally took place, controlling

for temporal trends observed across the sample and adjusting for unobserved differences between rally and non-rally municipalities. In other words, it captures the difference in predicted propensity to vote for M5S between post- and pre-rally interviewees that is not explained by the 'natural' evolution in support observed across all municipalities. Finally, to account for other possible compositional characteristics that differ across rally and non-rally municipalities as well as pre- and post-rally respondents, I use controls for gender, occupation, education, age, size of the municipality of residence, and geographic macro-area. The descriptive statistics are reported in table 19.

Models 15 and 16 in table 20 report the results for the following OLS linear fit:

$$Propensity = \alpha_0 + \beta_0 PostRally + \beta_1 Rally City + \beta_2 Time Interview +$$

$$\beta_3 Gender + \beta_4 Education + \beta_5 Occupation + \beta_6 Aqe + \beta_7 Aqe^2 + \beta_8 Area + \epsilon_0$$

$$(6.3)$$

The timing of the interview relative to the election is operationalised as a 7-week categorical variable in model 15 and as a linear days to election regressor with its quadratic function in model 16.<sup>12</sup> As the sample is far from representative of the Italian electorate on several dimensions – which may in turn bias systematically the compositional differences between rally and non-rally municipalities – I use age, gender and education population weights provided by ITANES (Vezzoni, 2014b). ITANES cautions that some of these weights are rather large and that the sample is biased in other dimensions, such as political interest and political leanings, which are not captured by the population weights provided. Thus, due to the suboptimal sampling, the quality of the survey data remains an issue even after weighting.

The data show that support for M5S increased across the sample over the course of the campaign, spiking in three weeks just before election day. Most importantly, the regressions return a positive and borderline significant coefficient for the post-rally dummy, indicating that residents of rally municipalities who were interviewed after the rally reported to be somewhat more likely to vote for M5S relative to those interviewed prior to the rally, over and beyond the positive trend over time that exists across the sample of respondents. The other correlations found are consistent with the findings of other research conducted with the same 2013 rolling cross-sectional survey data from ITANES (Vezzoni and Mancosu, 2016: 13). However, the strength and direction of the effect of educational qualifications – a variable where the sample is particularly unrepresentative, with low cell counts for low-qualification respondents – are somewhat puzzling, confirming possible issues of data quality. With this caveat in mind, the coefficients of the post-rally dummy variable point at an average increase of a quarter of a point in self-reported propensity to for M5S that can be attributed directly to the Tsunami Tour rallies. The estimate is however significant only at the 90% confidence level.

<sup>&</sup>lt;sup>11</sup>For the exact wording of the questions, see Vezzoni (2014a).

<sup>&</sup>lt;sup>12</sup>Results for the variables of interest are virtually identical without the polynomial term.

#### OLS Regression

Dependent variable: Self-reported likelihood of voting for M5S (0-10 scale)

	Model 15		Model 16		
	Estimate (S.E.)	p	Estimate (S.E.)	$\overline{p}$	
Intercept	3.791***(0.470)	< 0.001	2.867***(0.471)	< 0.001	
Post-Rally dummy	$0.278 \ (0.152)$	0.067	$0.289 \ (0.152)$	0.059	
Rally City dummy	-0.179 (0.182)	0.325	-0.182 (0.183)	0.316	
Time of the interview <sup>[a]</sup>					
6 weeks before the election	-0.195 (0.151)	0.193			
5 weeks	0.112(0.154)	0.465			
4 weeks	0.268(0.148)	0.071			
3 weeks	0.620***(0.155)	< 0.001			
2 weeks	0.656***(0.150)	< 0.001			
Week before the election	0.764***(0.152)	< 0.001			
Days to election	,		-0.021 (0.011)	0.056	
Days to election squared			-0.000 (0.000)	0.957	
Gender (male)	0.803***(0.088)	< 0.001	$0.811\ (0.087)$	< 0.001	
Education <sup>[b]</sup>					
Upper Secondary	0.555***	< 0.001	0.522***(0.109)	< 0.001	
Lower Secondary	0.727****(130)	< 0.001	0.715*** (0.130)	< 0.001	
Primary or Less	1.802*** (0.175)	< 0.001	1.809*** (0.174)	< 0.001	
Occupation <sup>[c]</sup>	,		,		
Blue Collar	0.283 (0.201)	0.159	0.279(0.201)	0.166	
Housewife/husband	-0.250 (0.180)	0.166	-0.263 (0.180)	0.144	
Manager or entrepreneur	-0.292 (0.169)	0.084	-0.306 (0.169)	0.070	
Self-employed	$0.194 \ (0.214)$	0.364	$0.166 \ (0.213)$	0.438	
Pensioner	-0.761*** (0.189)	< 0.001	-0.797*** (0.188)	< 0.001	
Student	-0.615** (0.208)	0.003	-0.625** (0.209)	0.003	
White Collar	-0.044 (0.140)	0.749	-0.058 (0.140)	0.677	
$Area^{[d]}$	, ,		, ,		
Centre	0.351** (0.111)	0.002	0.350**(0.111)	0.002	
South	0.428***(0.095)	< 0.001	0.426***(0.095)	< 0.001	
Age	0.069*** (0.017)	< 0.001	0.069***(0.017)	< 0.001	
Age squared	-0.001*** (0.000)	< 0.001	-0.001*** (0.000)	< 0.001	
Municipality population <sup>[e]</sup>	, ,		, ,		
100,000-250,000	-0.297* (0.145)	0.040	-0.309* (0.145)	0.033	
60,000-100,000	-0.474* (0.187)	0.011	-0.483** (0.186)	0.009	
40,000-60,000	-0.385 (0.220)	0.080	-0.404 (0.220)	0.066	
20,000-40,000	$0.034 \ (0.219)$	0.877	$0.031\ (0.219)$	0.885	
10,000-20,000	-0.364 (0.224)	0.105	-0.364 (0.223)	0.104	
<10,000	0.002 (0.214)	0.992	-0.005 (0.214)	0.980	
Adjusted R <sup>2</sup>	0.071		0.067		
N	7845		7845		
	-		-		

<sup>[</sup>a] Reference category: seven weeks before the election. [b] Reference category: Unemployed.

<sup>[</sup>c] Reference category: degree. [d] Reference category: North. [e] Reference category: city with over 250,000 residents. Significance codes: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05

It is also possible to use the cross-sectional survey data to investigate whether the magnitude of attitudinal shifts brought about by the rallies was conditional on the level of political interest of the respondent. As mentioned in Chapter 1, campaign effect studies tend to find that voters with low levels of political sophistication are more easily persuadable through campaign activity: "if a person has little prior information and little access to alternative communication flows, information reaching him from a dominant campaign will have a large effect" (Zaller, 1992: 267). Thus, as the Tsunami Tour is hypothesised to have initiated a 'contagion effect' at municipality level that was not countervailed by similar efforts by other parties – i.e. it was a 'dominant' campaign – the campaign effects captured by the post-rally dummy should be stronger for low-interest voters. To verify whether this is the case, I introduce a simple measure of political interest, obtained by recoding respondents' answers to the question "in general, how interested are you in politics?" (Q20) as 'high interest' (if they answered 'a lot' or 'quite interested') and 'low interest' (if they replied 'a little' or 'not at all'). Moreover, I introduce a post-rally dummy × political interest interaction term to derive the conditional effect. Models 17 and 18 in table 21 thus report the results of the following fit:

$$Propensity = \alpha_0 + \beta_0 PostRally + \beta_1 Interest + \beta_2 PostRally \times Interest +$$

$$\beta_3 Rally City + \beta_4 Time Interview + \beta_5 Gender + \beta_6 Education +$$

$$\beta_7 Occupation + \beta_8 Age + \beta_9 Age^2 + \beta_1 0 Area + \epsilon_0$$

$$(6.4)$$

The results of model 17 and 18 show that the coefficient of post-rally variable is positive but non-significant for high-interest voters, and positive and significant for low-interest voters. Holding everything else constant, this finding indicates that for a low-interest voter from a rally municipality, the average effect of being interviewed after the rally corresponds to an increase in self-reported likelihood to vote for M5S of more than two thirds of a point. This finding strengthens the interpretation of the post-rally variable coefficient as an effect of M5S's campaign efforts, as it is stronger for the subgroup that is most likely to be swayed by those efforts.

 $<sup>^{13}</sup>$ When the *interest* variable is operationalised as a four-category nominal variable ('very interested', 'quite interested', 'a little interested', and 'not interested at all'), it emerges that the bulk of this effect is driven by those who say they are 'a little' interested in politics rather than those who are not interested at all (although the subsample for the latter is small, N=329). The coefficient for respondents who report to be 'a little interested' is 0.771 (reference category = very interested), with p=0.028. This makes sense in the framework of 'behavioural effects' of campaigns, as a minimum of political awareness is necessary for being meaningfully exposed to the attitudinal shifts caused by the rallies, but too much political interest reduces the extent to which an individual is persuadable during the campaign.

#### OLS Regression

Dependent variable: Self-reported likelihood of voting for M5S (0-10 scale)

	Model 17		Model 18		
	Estimate (S.E.)	p	Estimate (S.E.)	$\overline{p}$	
Intercept	2.663*** (0.513)	< 0.001	2.918*** (0.473)	< 0.001	
Post-Rally dummy	$0.115 \ (0.166)$	0.489	$0.125 \ (0.167)$	0.454	
Interest (low)	-0.026 (0.103)	0.800	-0.019 (0.103)	0.852	
Post-Rally × Interest (low)	0.583*(0.276)	0.035	0.579*(0.276)	0.036	
Rally City dummy	-0.178 (0.183)	0.333	-0.182 (0.183)	0.321	
Time of the interview <sup>[a]</sup>	, ,		, ,		
6 weeks before the election	-0.183 (0.151)	0.224			
5 weeks	$0.118\ (0.154)$	0.444			
4 weeks	$0.286\ (0.149)$	0.054			
3 weeks	0.630***(0.156)	< 0.001			
2 weeks	0.679*** (0.150)	< 0.001			
Week before the election	0.777***(0.153)	< 0.001			
Days to election	,		-0.021 (0.011)	0.059	
Days to election squared			-0.000 (0.000)	0.919	
Gender (male)	0.801***(0.089)	< 0.001	$0.810\ (0.089)$	< 0.001	
Education <sup>[b]</sup>	,		,		
Upper Secondary	0.539****(0.109)	< 0.001	0.536****(0.109)	< 0.001	
Lower Secondary	0.680*** (0.132)	< 0.001	0.669*** (0.131)	< 0.001	
Primary or Less	1.754***(0.177)	< 0.001	1.760*** (0.176)	< 0.001	
Occupation <sup>[c]</sup>	,		,		
Blue Collar	0.283 (0.202)	0.160	0.279(0.202)	0.167	
Housewife/husband	-0.251 (0.181)	0.166	-0.262 (0.181)	0.148	
Manager or entrepreneur	-0.289 (0.169)	0.088	-0.303 (0.169)	0.074	
Self-employed	$0.202\ (0.214)$	0.346	$0.174\ (0.213)$	0.415	
Pensioner	-0.791*** (0.189)	< 0.001	-0.825*** (0.189)	< 0.001	
Student	-0.617** (0.209)	0.003	-0.627** (0.209)	0.003	
White Collar	-0.043 (0.140)	0.759	-0.056 (0.140)	0.686	
$\mathrm{Zone}^{[\mathrm{d}]}$	,		,		
Centre	0.357**(0.111)	0.001	0.357**(0.111)	0.001	
South	0.431***(0.095)	< 0.001	0.430***(0.095)	< 0.001	
Age	0.067***(0.017)	< 0.001	0.067***(0.017)	< 0.001	
Age squared	-0.001*** (0.000)	< 0.001	-0.001*** (0.000)	< 0.001	
Municipality population <sup>[e]</sup>	, ,		` ,		
100,000-250,000	-0.284 (0.146)	0.051	-0.297* (0.146)	0.041	
60,000-100,000	-0.431* (0.187)	0.021	-0.442* (0.187)	0.018	
40,000-60,000	-0.394 (0.221)	0.074	-0.415 (0.220)	0.060	
20,000-40,000	$0.041\ (0.221)$	0.850	$0.036\ (0.221)$	0.870	
10,000-20,000	-0.360 (0.225)	0.110	-0.362 (0.225)	0.107	
<10,000	-0.001 (0.215)	0.996	-0.010 (0.215)	0.963	
Adjusted $R^2$	0.071		0.07		
N	7811		0.07 7811		
11	1011		1011		

<sup>[</sup>a] Reference category: seven weeks before the election. [b] Reference category: Unemployed.

<sup>[</sup>c] Reference category: degree. [d] Reference category: North. [e] Reference category: city with over 250,000 residents. Significance codes: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05

## Chapter 7

# Discussion

#### 7.1 Summary and Interpretation of the Results

To sum up, my analysis finds that higher attendance to the Tsunami Tour rallies caused an increase in the share of the vote for M5S in 2013 and that this effect partly endured in the European election one year later, as well as (weaker) evidence that the effect on 2013 vote share was stronger for earlier rallies than for later rallies. Moreover, I find no evidence of an effect on turnout in 2013 or on M5S share of the vote in the parliamentary elections of 2018. Thus, H.1 is supported, H.2 is rejected, H.3 is weakly supported, and H.4 is supported for 2014 but rejected for 2018. For a conservative total estimate of 500,000 attendees to all the Tsunami Tour rallies, the local effect of the campaign events can be quantified as a little less than 350,000 additional votes in the 2013 parliamentary election, assuming for simplicity constant electoral returns to attendee. On the one hand, it could be argued that this figure is still in the ballpark of 'minimal effects': 350,000 votes correspond approximately to an additional 1% of the total vote share (34 million) and less than 4% of the vote share in rally municipalities (9 million).<sup>14</sup> On the other hand, this estimate is one order of magnitude larger than the 60,000 votes that separated M5S from PD, the second most-voted party in the country, suggesting that M5S would not have come first in the election without the Tsunami Tour. 15 Furthermore, this figure is probably downwardly biased as it does not take into account the impact outside rally municipalities – that is, it excludes the effects of spatial spillover and national-level media effects. Indeed, non-local effects may be sizeable: as the individual-level analysis shows, there was a steep increase in respondents' propensity to vote M5S in last weeks of the campaign

 $<sup>^{14}</sup>$ For comparison, Vezzoni and Mancosu (2016) estimate that the total increase in M5S support over the last two months previous to the election corresponded to around 9% of the vote.

<sup>&</sup>lt;sup>15</sup>Party placement is not substantively important in terms of seats allocation, as the majority bonus in the Italian electoral system for the Chamber of Deputies (2006-2013) is assigned on the basis of coalition vote share rather than party share. However, coming first represented an important 'symbolic victory' for M5S.

across the sample, although with the data available it is not possible to quantify exactly the extent to which the rallies fed into that momentum.

While the empirical analysis can provide an unambiguously positive answer to the question of whether rallies mattered, the puzzle of how they mattered cannot be answered with the same confidence. Clearly, any inference of micro-foundational dynamics from aggregate data risks incurring in ecological fallacies, and as such the interpretation of municipality-level findings must rely on some degree of speculation. With this very important qualification, I would argue that overall the results, which highlight a stronger effect of campaign rally attendance on the most proximate election, are most consistent with the theoretical framework of 'behavioural effects'. In other words, rallies are likely to have provoked a shift in attitude among attendees, which in turn may have been amplified via the interaction of rally participants with other voters over the course of the campaign: thus, the more participants to the rallies, the more widespread the behavioural contagion. This interpretation is also in line with the finding that the effect of rallies is stronger for rallies held earlier in the campaign: in early-rally municipalities, the time available for rally participants to persuade others in their personal networks was longer, and the change in attitudes set in a time when relatively more citizens had not settled on a voting choice.

The hypothesis that rally attendance can be translated into votes via changes in the local opinion climate is confirmed by the individual-level findings, which reveal a slight increase in propensity to vote for M5S among respondents in rally municipalities interviewed after these events. This effect is stronger for those who have little interest in politics, suggesting that the rallies were particularly effective in persuading voters who may not have been fully aware of M5S's campaign message or of its viability as a major political force. Finally, the interpretation of the effects of the rallies as an example of behavioural effects, which emphasises the role of interpersonal persuasion, echoes Campus, Ceccarini and Vaccari's (2015: 597) findings on the role of political discussion in the 2013 election. They provide evidence that "the rise of a wave of protest during the 2013 election corresponded to a notable increase in political discussion" and that "a larger number of voters intensely engaged in political discussion than in the previous elections and were more likely to do so if they were part of homogeneous networks while also being critical of the political system."

The non-significant relationship between rally attendance and turnout is consistent with the consensus view in the literature, according to which the presence of populist parties does *not* produce an uptick in citizens' political participation, at least at aggregate level (Houle and Kenny, 2018). Indeed, the emergence of M5S as a new political option between 2008 and 2013 corresponded to a 5% decrease in turnout in Italy, from 80% to 75%. Moreover, the absence of an effect of rally attendance on turnout suggests that the main mechanism through which these campaign events activated local dynamics of support for M5S is likely to be one of *persuasion* rather than *mobilisation*. Obviously, it is difficult to distinguish

conceptually between the two mechanisms in the case of a new party without a well-established 'natural' electoral base such as M5S. Additionally, this interpretation requires the assumption that rallies could only have *encouraged* potential non-voters to vote. It is however possible that the null result is due to the fact that rallies mobilised some voters and de-mobilised others (for instance, people who would not have voted were convinced to vote for M5S because of the rallies and people who would have voted for other parties were intimidated into abstention by the rallies). As such, this interpretation may be prone to ecological fallacy: thus, as discussed, this conclusion should be treated as tentative.

The effect of rallies weakens after the 2013 election, remaining positive and significant for 2014 and disappearing in 2018; this suggests a limited impact of rallies on local performance via the strengthening of local activist networks. The fact that some effect is still identifiable in the 2014 election may be partly attributed to the organisational gains from campaign activities, which therefore cannot be excluded to have played a role in the medium term. Nonetheless, the positive effect of rallies on the 2014 election can still be interpreted in the context of the 'behavioural effects' framework, as being at least partly the result of a durable change in the local opinion climate. The literature on campaign studies tends to find that the situationally induced persuasive effects of campaign efforts on attitudes have a very limited half-life (Hill et al., 2013). However, when individuals' attitudinal changes are brought about by sizeable attitudinal shifts in their immediate social environment, the effect of persuasion can be self-reinforcing and remarkably durable. As Huckfeldt (1983: 940-942) put it,

The behavioural contagion model implies that individual durability depends upon aggregate durability; that is, the speed of an individual return toward equilibrium is constrained by the speed with which behaviour in the mass attains its equilibrium. [...] Individual behaviour is not only displaced from equilibrium by political events; it is also displaced by aggregate displacements from equilibrium. The behaviour of one individual is affected by the behaviour of other individuals and, like ripples in a pond, the displacements are self-perpetuating. At the same time that these displacements are self-perpetuating, however, they also diminish over time. Thus, the behavioural contagion process acts to produce recoveries toward equilibrium, but it also generates departures from equilibrium.

The analysis does not tell us much about the role of the media. Certainly, rallies may also have shaped the local climate of opinion via increased coverage of M5S on local outlets, but the extent to which rally attendance affected media coverage is not quantifiable with the data available. However, if the electoral returns to attendance found in the core analysis were mostly driven by increased visibility on local media, this would require the assumption that different outlets in different municipalities adjusted their editorial line very quickly during the campaign in response to the size of the crowd of the rally in their municipality relative to that other rallies. This is not wholly implausible, but it suggests caution

in attributing too much weight to local media. <sup>16</sup> Conversely, the 'echo' (Nizzoli, 2014) of Grillo's rallies on *national* media is likely to have played a role in the late spike in support highlighted by the ITANES survey. Indeed, the analysis of newspaper front pages and TV news segments by Legnante (2014) shows a slight increase in coverage of M5S over the course of the campaign, although even in the last week prior to the election the party and its leader still received less than half the attention given to PD, PdL, and even Monti's centrist party *Scelta Civica*. This effect would not however be geographically circumscribed, and as such it is not factored in the estimates of the core analysis.

In terms of generalisability of the findings, it is clear that the Tsunami Tour in the 2013 parliamentary election is hardly an example of an ordinary campaign. <sup>17</sup> M5S had been until a few months before a niche outsider, gaining viability and recognition as a mainstream option by the day. Moreover, the election took place in a political climate that was highly conductive to vote-switching, to the extent that more than 41% of voters changed party between 2008 and 2013 and 33% decided how to vote in the last three weeks of the campaign (Ceccarini, 2013). However, on both accounts, these conditions are increasingly common: party system innovation has clearly increased in recent decades across Western European countries (Emanuele and Chiaramonte, 2018: 483) and there is some evidence of an increase in the share of voters who either make their voting choice or change them late into electoral campaigns (Cautrès and Jadot, 2007; Lachat, 2007; Irwin and Van Holsteyn: 2008; Nir and Druckman, 2008; Box-Steffensmeier et al, 2015: 185; Oscarsson, 2016: 8;). What is perhaps more distinctive about the Italian context is that M5S was able to exploit a political space - the public square - that had been deserted by the political competition and where, in virtue of Grillo's 'star quality', the party had a clear edge. This suggests that similar evidence of significant campaign effects may be replicated in other similarly volatile contexts, provided that 'insurgent' parties are able to individuate an electioneering strategy that, just as the Tsunami Tour rallies, marks a clear distinction from other parties' campaigns.

## 7.2 Limitations

The limited number of observations is clearly an obstacle to strong inference. There are only so many possible source of variance that can be taken into account with a population of only 78 rallies, and the two-step procedure adopted to address issues of small sample size is sometimes suboptimal. To be sure, socio-demographic and geographic factors that correlate with rally attendance should not substantially affect the relationship individuated in the second stage of the 2SLS analysis because of the design of the

<sup>&</sup>lt;sup>16</sup>Anecdotally, in the survey of local media reports of M5S rallies I conducted to estimate rally attendance, I found that M5S received very little coverage on local media – certainly less than other parties, in line with the pattern that emerges in the analysis of national media coverage of the campaign.

<sup>&</sup>lt;sup>17</sup>Indeed, M5S itself never repeated the feat afterwards, gradually coming to terms with the necessity of engaging with traditional media over the course of the 2013-2018 parliament.

dependent variable. However, they may interact with first-stage regressors in ways that I am not able to observe without overfitting the model. The modest number of observations also means that the estimates yielded by the regression models also come with sizeable standard errors, and as such they may not be very precise or magnify possible measurement errors. This is of particular concern as far as the rally attendance estimates are concerned, as these rely on the averaging of data from secondary sources that may be systematically biased or imprecise. The use of different specifications for the attendance variables and the OLS controls does assuage this concern, but may not be fully satisfactory. Furthermore, as distance matrices between municipalities at national level were not available to me at the time of writing, it was not possible to account rigorously for spatial correlation between places where a rally was held and other locations. Thus, possible spillover effects are not estimated, although – as discussed – the bias resulting from this omission is likely to be in a conservative direction.

The data available did not allow to capture the consequences of the Tsunami Tour for anything other than electoral outcomes, making it thus difficult to pinpoint exactly how rally attendance translated into votes. Future research may reproduce the methodology proposed on municipality-level data on M5S meetup subscriptions, donations to the party, local media coverage and measures of user engagement on social network platforms before and after the rallies. Extending the analysis to a broader range of outcome variables, as in Madestam et al. (2013), may shed light on the mechanisms that drive campaign effectiveness and perhaps individuate side-benefits of the rallies that could not be identified with electoral performance data only. Finally, the selection of a 'most likely' case limits the external validity of a positive finding. The fact that campaign rallies seem to be causally related to party performance in the context of a high-volatility election where one party could rely on an asset such as Beppe Grillo tells us little as to whether they would be of any relevance in other contexts. Further comparative research on the subject is thus needed to investigate whether the impact of the Tsunami Tour constitutes an exceptional case or rather it is just at the top end of a phenomenon that occurs regularly in electoral campaigns that feature mass rallies.

## Conclusion

Writing in the Italian daily *La Repubblica* on 21 February 2013, just days prior to the election, writer and public intellectual Giancarlo Bosetti (2013) perceived the purpose and potential of the Tsunami Tour:

The function of rallies is clear. The voter is not an isolated individual exposed to the communication raining down from old and new media; they are always someone in a relationship with others, in the family, in the market, at the hairdresser [...]. Political mobilisation proceeds from the central office of a party through concentric circles, from members and most assiduous activists to casual volunteers, sympathisers, moderately favourable voters, up to the vast sea of the undecided. [...] The physical, mass contact in the public square is a shock that reshuffles the deck of cards; it has the power of self-validation, reinforcement, motivation, which gives activists more energy to exercise their influence in the wider circles.

The key finding of my analysis is broadly consistent with this assessment: a noticeable overperformance of M5S in 2013 in municipalities where the rallies attracted more participants, even if additional attendance was just due to the fact that the weather was more pleasant at the time. Therefore, Beppe Grillo proved Pietro Nenni wrong: filling up public squares can fill up ballot boxes as well.

In this perspective, at least part of M5S's success in 2013 (and beyond) can be attributed to the party's ability to repurpose traditional, localised communicative practices for a contemporary, de-aligned electorate. Thus, in terms of the relevance of the results for the specialist literature on M5S, this thesis calls for a partial reassessment of the 'web-centric' perspective that stresses "the role that ICT [information and communication technology] played in its transformation from a protest movement born outside the political system to a relevant political force" (Saebø, Braccini and Federici, 2015: 249). While not denying the importance of online activism in the rise of M5S, my analysis finds evidence that the party's success in the 'earthquake election' of 2013 was partly due to the strategic deployment of a markedly low-tech and pre-modern form of electioneering. Given the political repercussions of M5S's surprising performance in that contest – lasting party system change and five years of fragile *Grand Coalition*, which facilitated M5S's further rise – this choice of campaign strategy may have had far-reaching consequences for Italian

politics.

The broader implication of the evidence presented in this thesis is twofold. First, it suggests that in contemporary information environments where channels of political communication have become more diversified and fragmented, in-person offline party contact retains – or perhaps regains – a significant role in bringing about political change. In her work on the evolution of campaign practices, Norris' (2000: 149) sensed that, as broadcast and print media lose their monopoly on political communication, 'post-modern' campaigns open up opportunities for "a return to some of the more localised and interactive forms of communication that were present in the pre-modern period." M5S's campaign in the 2013 parliamentary election fits well with this prediction: a party that relied on online communication much more heavily than any of its competitors perhaps understood the *limitations* of the medium just as well, and resorted to a more traditional repertoire of campaign activities in a crucial phase of its rise. Secondly, the findings raise the possibility that part of the reason why non-mainstream political parties have been able to succeed in a variety of contexts in recent years may be attributed to their ability to use communicative and organisational forms typical of traditional 'mass parties'. While a research agenda on the survival of 'old' forms in 'new' parties exists with regards to party organisation and engagement of activists (Heinisch and Mazzoleni, 2016), further research is required to understand whether it is also thanks to their campaign practices that these political movements manage to buck the trend towards a progressive detachment between parties and voters.

As discussed, a positive finding in a 'most-likely' case is hardly a ground-breaking discovery. If anything, this thesis confirms the intuition that significant aggregate impact of campaigns are more likely in presence of instability in the party system and asymmetric campaign strategies (Iyengar and Simon, 2000: 151). At the same time, this analysis implicitly calls for a broadening of the scope of this research agenda. A more thorough engagement with political contexts other than the United States, where conditions conducive to strong campaign effects are not particularly likely, and a more explicit comparative perspective may provide a clearer picture of when and how campaigns can prove effective. For instance, to my knowledge, no systematic study on the determinants of variation in the incidence of campaigns over time and across countries exists. Even the intuitive relationship between campaign effects and party system innovation has not yet been tested on meaningfully large samples of elections. For better or for worse, the last few years have offered no shortage of high-volatility elections and non-mainstream parties rising to electoral success with impressive rapidity: in this perspective, the study of campaign practices may well provide an important 'missing piece of the puzzle' to understand more fully what drives contemporary patterns of political change.

## **Bibliography**

- Aguggini, G. (2016) 'Beppe Grillo: A Man, a Plan, a Van: The Tsunami Campaign and the National Election, 2013', in Harris, P. and Fleisher, C. (eds.) The SAGE Handbook of International Corporate and Public Affairs. Thousand Oaks (CA): SAGE Publications.
- Albertazzi, D., Brook, C., Ross, C. and Rothenberg, N. (2009) Resisting the Tide: Cultures of Opposition Under Berlusconi (2001-06). New York (NY): Bloomsbury Publishing USA.
- Aldred, J., Astell, A., Behr, R., Cochrane, L., Hind, J., Pickard, A., Potter, L. Wignall A., and Wiseman, E. (2008) 'The World's 50 Most Powerful Blogs', *The Observer*, 16 March 2008. Available at: https://www.theguardian.com/technology/2008/mar/09/blogs [accessed: 23/04/2019].
- Angrist, J. and Pischke, J. (2009) Mostly Harmless Econometrics: An Empiricist's Companion.
   Princeton (NJ): Princeton University Press.
- Angrist, J. and Pischke, J. (2015). The Path from Cause to Effect: Mastering 'Metrics. Princeton (NJ): Princeton University Press.
- Athey, S. and Imbens, G. (2017) 'The State of Applied Econometrics: Causality and Policy Evaluation', *Journal of Economic Perspectives*, 31(2), 3-32.
- Bailo, F. (2017) The Citizen-User and the Crowd-Mediated Politics of the Five Star Movement,
   Doctoral Thesis, University of Sydney.
- Bailo, F. (2019) Replication Data for: Bridging the Void: Distress, Participation and the Electoral Success of the Five Star Movement (2005-2018) (forthcoming, V1), Harvard Dataverse.
- Bang, J., Mitra, A. and Wunnava, P. (2016) 'Do Remittances Improve Income Inequality? An Instrumental Variable Quantile Analysis of the Kenyan Case', Economic Modelling, 58(1), 394-402.
- Barbieri, G. (2014) 'Lo Tsunami tour', Comunicazione politica, 14(1), 171-186.

- Bartels, L. (1992) 'The Impact of Electioneering in the United States', in Butler, D. and Ranney, A.
   (eds.) Electioneering: A Comparative Study of Continuity and Change. Oxford: Clarendon Press, 11-42.
- Bascle, G. (2008) 'Controlling for Endogeneity with Instrumental Variables in Strategic Management Research', Strategic Organization, 6(3), 285-327.
- Bellucci, P. (2014) 'The Political Consequences of Blame Attribution for the Economic Crisis in the
   2013 Italian National Election', Journal Of Elections, Public Opinion and Parties, 24(2), 243-263.
- Bellucci, P. and Heath, O. (2012) 'The Structure of Party-organization Linkages and the Electoral Strength of Cleavages in Italy, 1963-2008', British Journal of Political Science, 42(1), 107-135.
- Bennett, W. and Iyengar, S. (2008) 'A New Era of Minimal Effects? The Changing Foundations of Political Communication', Journal of Communication, 58(4), 707-731.
- Berelson, B., Lazarsfeld, P. and Gaudet, H. (1948). The People's Choice: How the Voter Makes Up
   His Mind in a Presidential Campaign. New York (NY): Columbia University Press.
- Berelson, B., Lazarsfeld, P. and McPhee, W. (1954) Voting: A Study of Opinion Formation in a Presidential Campaign. Chicago (IL): University of Chicago Press.
- Biondo, S. and Canestrari, N. Supernova. I Segreti, le Bugie e i Tradimenti del MoVimento Cinque Stelle. Milan: Adriano Salani Editore.
- Biorcio, R. (2014) 'The Reasons for the Success and Transformations of the 5 Star Movement', Contemporary Italian Politics, 6(1), 37-53.
- Blumer, H. (1946) 'Elementary Collective Behavior' in McClung Lee, A. (ed.) Principles of Sociology, New York (NY): Barnes New. 170-177.
- Bobba, G. and McDonnell, D. (2015) 'Italy A Strong and Enduring Market for Populism', in Kriesi,
   H., and Pappas, T. (eds.) European Populism in the Shadow of the Great Recession. Colchester:
   Ecpr Press. 163-179.
- Bobba, G., Legnante, G., Roncarolo, F. and Seddone, A. (2013) 'Candidates in a Negative Light.
   The 2013 Italian Election Campaign in the Media', Italian Political Science Review, 3(3), 353-380.
- Boffi, S. (2016) 'Gli Attivisti del Movimento Cinque Stelle a Milano' in Biorcio (ed.) Gli Attivisti
   del Movimento Cinque Stelle: Dal Web al Territorio. Milan: Franco Angeli Editore. 42-59.
- Bordignon, F. and Ceccarini, L. (2013) 'Five Stars and a Cricket. Beppe Grillo Shakes Italian
   Politics', South European Society And Politics, 18(4), 427-449.

- Bordignon, F. and Ceccarini, L. (2014) 'Ritratto Politico dell'Italia di Oggi', in Diamanti, I., Bordignon, F. and Ceccarini, L. (eds.) Un Salto nel Voto. Ritratto Politico dell'Italia di Oggi. Rome: Laterza. 4-22.
- Bosetti, G. (2013) 'La Rivincita della Piazza nell'Era dei Social Network', 21 February 2013, La Repubblica. Available at: https://ricerca.repubblica.it/repubblica/archivio/repubblica/2013/02/21/comizio-la-rivincita-della-piazza-nellera-dei.html [accessed: 24 April 2019].
- Box-Steffensmeier, J., Dillard, M., Kimball, D., and Massengill, W. (2015) 'The Long and Short of
   It: The Unpredictability of Late Deciding Voters', Electoral Studies, 39(1), 181-194.
- Brady, H., Johnston, R. and Sides, J. (2006) 'The Study of Political Campaigns', in Brady, H. and Johnston, R. (eds.) Capturing Campaign Effects. Ann Arbor (MI): University of Michigan Press.
   1-28.
- Brooks, W. (1967) 'A Field Study of the Johnson and Goldwater Campaign Speeches in Pittsburgh', The Southern Speech Journal, 32(4), 273-281.
- Brox, B. and Shaw D. (2006) 'Political Parties, American Campaigns, and Effects on Outcome', in Katz, R. and Crotty, W. (eds.) Handbook of Party Politics. London: Sage. 146-159.
- Bull, M. (2012) 'The Italian Transition that never was', Modern Italy, 17(1), 103-118.
- Campbell, A. (1960) 'Surge and Decline: A Study of Electoral Change', The Public Opinion Quarterly, 24(3), 397-418.
- Campus, D. Ceccarini, L. and Vaccari, C. (2015) 'What a Difference a Critical Election Makes: Social Networks and Political Discussion in Italy Between 2008 and 2013', *International Journal of Public Opinion Research*, 27(4) 588-601.
- Capria, F. (2016) 'Il Movimento Cinque Stelle e il Territorio: L'Esperienza del Gruppo di Base di Firenze in Biorcio (ed.) Gli Attivisti del Movimento Cinque Stelle: Dal Web al Territorio, Milan: Franco Angeli Editore. 97-110.
- Casaleggio, G. (2015) Veni, Vidi, Web. Milan: Adagio.
- Casaleggio, G. and Grillo, B. (2011) Siamo in Guerra. Per una Nuova Politica. La Rete Contro i Partiti. Milan: Chiarelettere.
- Cautrés, B. and Jadot, A. (2007) 'L'(In)Décision Électorale et la Temporalité du Vote: Le Moment du Choix pour le Premier Tour de l'Élection Présidentielle 2007', Revue Française de Science Politique, 57(3), 293-314.

- CENSIS (2013) 'La Piazza dei Cinque Stelle', *CENSIS*, 25 February 2013. Available at: http://www.censis.it/7?shadow\_comunicato\_stampa=120156 [accessed: 23 April 2019].
- Chiaramonte, A., Emanuele, V., Maggini, N. and Paparo, A. (2018) 'Populist Success in a Hung Parliament: The 2018 General Election in Italy', South European Society and Politics, 23(4), 479-501.
- Colloca, P. and Marangoni, F. (2017) 'L'Andamento Elettorale: Analisi della Natura Mutevole del Movimento 5 Stelle' in Corbetta, P. (ed.) Come Cambia il Partito di Grillo. Bologna: Il Mulino. 53-83.
- Converse, P. (1964). 'The Nature of Belief Systems in Mass Publics', in Apter, D. (ed.) Ideology and Discontent. New York: Free Press of Glencoe, 206-261.
- Corbetta, P. (2017) Come cambia il partito di Grillo. Bologna: Il Mulino.
- D'Alimonte, R. (2013). 'The Italian Elections of February 2013: the End of the Second Republic?',
   Contemporary Italian Politics, 5(2), 113-129.
- Dalton, R. and Wattenberg, M. (2000) Parties without Partisans. Oxford: Oxford University Press.
- Davidson, R. and MacKinnon, J. (1993) Estimation and Inference in Econometrics. Oxford: Oxford
   University Press.
- De Giorgi, G. (2013) 'Tsunami tour. Beppe Grillo Raddoppia la Posta: La Triplice Sindacale è Collusa', 19 January 2013, Lecce Prima. Available at: http://www.lecceprima.it/politica/elezioni/politiche-2013/beppe-grillo-tsunami-tour-lecce-19-gennaio-2013.html [accessed: 24 April 2019].
- Devine, C. (2018) 'What if Hillary Clinton Had Gone to Wisconsin? Presidential Campaign Visits and Vote Choice in the 2016 Election', The Forum, 16(2), 211-234.
- Donovan, M. (2015) 'Berlusconi's Impact and Legacy: Political Parties and The Party System',
   Modern Italy, 20(1), 11-24.
- Drury, J. and Reicher, S. (2000) 'Collective Action and Psychological Change: The Emergence of New Social Identities', British Journal Of Social Psychology, 39(4), 579-604.
- Drury, J., Cocking, C., Beale, J., Hanson, C. and Rapley, F. (2005), 'The Phenomenology of Empowerment in Collective Action', British Journal of Social Psychology, 44(3), 309-328.
- Enos, R., Fowler, A. and Vavreck, L. (2013) 'Increasing Inequality: The Effect of GOTV Mobilization
  on the Composition of The Electorate.' The Journal of Politics, 76(1), 273-288.

- EUROSTAT (2011) 'Updated Urban-Rural Typology: Integration of NUTS 2010 and the Latest Population Grid', Eurostat. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Urban-rural\_typology\_update [accessed: 23 April 2019].
- Evans, G. and Norris, P. (1999). Critical elections: British Parties and Voters in Long-Term Perspective. London: Sage.
- Farrell, D. and Schmitt-Beck, R. (2003) Do Political Campaigns Matter? Campaign Effects in Elections and Referendums. London: Routledge.
- Feng, S., Krueger, A., and Oppenheimer, M. (2010). Linkages among Climate Change, Crop Yields and Mexico-US Cross-border Migration, *Proceedings of the National Academy of Sciences*, 107(32), 14257-14262.
- Fichera, E. and Savage, D. (2015) 'Income and Health in Tanzania. An Instrumental Variable Approach', World Development, 66(1), 500-515.
- Finkel, S. (1993) 'Reexamining the "Minimal Effects" Model in Recent Presidential Campaigns',
   The Journal of Politics, 55(1), 1-21.
- Finkel, S. and Schrott, P. (1995) 'Campaign Effects on Voter Choice in the German Election of 1990', British Journal of Political Science, 25(3), 349-377.
- Finkel, S., Muller, E. and Opp, K. (1989) 'Personal Influence, Collective Rationality, and Mass Political Action', American Political Science Review, 83(3), 885-903.
- Floridia, A. and Vignati, R. (2014) 'Deliberativa, Diretta o Partecipativa? Le Sfide del Movimento
   5 stelle alla Democrazia Rappresentativa', Quaderni di Sociologia, 65(1), 51-74.
- Franklin, C. (1991) 'Eschewing Obfuscation? Campaigns and the Perception of US Senate Incumbents', American Political Science Review, 85(4), 1193-1214.
- Franklin, M., Mackie, T. and Valen, H. (1992). Electoral Change: Responses to Evolving Social and Attitudinal Structures in Western Countries. Cambridge: Cambridge University Press.
- Freedman, J. and Fraser, S. (1966) 'Compliance without Pressure: The Foot-In-The-Door Technique', Journal of Personality and Social Psychology, 4(2), 195-202.
- Garzia, D. (2011). 'The Personalization of Politics in Western Democracies: Causes and Consequences on Leader-follower Relationships', The Leadership Quarterly, 22(4), 697-709.
- Garzia, D. (2013). 'The 2013 Italian Parliamentary election: Changing Things so Everything Stays the Same', West European Politics, 36(5), 1095-1105.

- Genga, N., Lauriano, P and Ruggiero, C. (2009) 'Quanto è Servita la Comunicazione Politica?', in Morcellini, M. and Prospero, P. (eds.) Perché la Sinistra ha Perso le Elezioni? Rome: Ediesse. 119-132.
- Goes, E. (2018) 'Jez, We Can! Labour's Campaign: Defeat with a Taste of Victory', Parliamentary Affairs, 71(suppl. 1), 59-71.
- Gould, P. (1998) The Unfinished Revolution: How the Modernisers Saved the Labour Party. London:
   Little Brown.
- Governo Italiano (2019) 'Archivio Storico delle Elezioni', Dipartimento per gli Affari Interni e Territoriali. Available at: https://elezionistorico.interno.gov.it/[accessed: 23 April 2019].
- Green, D. and Gerber, A. (2008) Get Out the Vote: How to Increase Voter Turnout. Washington,
   D.C.: Brookings Institution Press.
- Greene, K. (2011) 'Campaign Persuasion and Nascent Partisanship in Mexico's New Democracy',
   American Journal of Political Science, 55(2), 398-416.
- Greene, W. (1993) Econometric Analysis (2nd ed.), Englewood Cliffs (NJ): Prentice-Hall.
- Grillo, B. (2011) 'I Partiti sono Morti', *Il Blog di Beppe Grillo*, 2 November 2011. Available at: http://www.beppegrillo.it/i-partiti-sono-morti/ [accessed: 23 April 2019].
- Grillo, B. (2013a) 'Speech at the Tsunami Tour Rally in Sondrio', 13 February 2013, Youtube. Available at: https://www.youtube.com/watch?v=XTCHFbeSJiU [accessed: 23 April 2019].
- Grillo, B. (2013b) 'Speech at the Tsunami Tour Rally in Bergamo', 12 February 2013, Youtube. Available at: https://www.youtube.com/watch?v=QOWG8nkPBxg [accessed: 23 April 2019].
- Han, H. (2014) How Organizations Develop Activists: Civic Associations and Leadership in the 21st
   Century. Oxford: Oxford University Press.
- Hartleb, F. (2013) 'Antielitist Cyber Parties?', Journal of Public Affairs, 13(4), 355-369.
- Heersink, B. and Peterson, B. (2017). 'Truman Defeats Dewey: The Effect of Campaign Visits on Election Outcomes', Electoral Studies, 49(1), 49-64.
- Heinisch, R. and Mazzoleni, O. (2016). Understanding Populist Party Organisation: The Radical Right in Western Europe. London: Springer.
- Herr, J. (2002) 'The Impact of Campaign Appearances in the 1996 Election', Journal of Politics, 64(3), 904-913.

- Hill, J., Rodriquez, E. and Wooden, A. (2010) 'Stump Speeches and Road Trips: The Impact of State
   Campaign Appearances in Presidential Elections', PS Political Science & Politics, 43(2), 243-254.
- Hill, S., Lo, J., Vavreck, L. and Zaller, J. (2013). 'How Quickly We Forget: The Duration of Persuasion Effects From Mass Communication', *Political Communication*, 30(4), 521-547.
- Hirsch, C. and Reschenhofer, P. (2019) 'Poll of Polls Italy', Poll of Polls. Available at: https://pollofpolls.eu/IT [accessed: 23 April 2019].
- Hobolt, S. and Brouard, S. (2011) 'Contesting the European Union? Why the Dutch and the French Rejected the European Constitution', Political Research Quarterly, 64(2), 309-322.
- Holbrook, T. (2002) 'Did the Whistle-stop Campaign Matter?' PS: Political Science & Politics, 35(1), 59-66.
- Huber, G. and Arceneaux, K. (2007), 'Identifying the Persuasive Effects of Presidential Advertising',
   American Journal of Political Science, 51(4), 957-977.
- Huckfeldt, R. (1983) 'The Social Context of Political Change: Durability, Volatility, and Social Influence', American Political Science Review, 77(4), 929-944.
- Huckfeldt, R. and Sprague, J. (1992) 'Political Parties and Electoral Mobilization: Political Structure, Social Structure, and the Party Canvass', American Political Science Review, 86(1), 70-86.
- Huet-Vaughn, E. (2013) 'Quiet Riot: The Causal Effect of Protest Violence', SSRN working paper.
   Available at: https://ssrn.com/abstract=2331520 [accessed: 23/04/2019].
- Irwin, G. and Van Holsteyn, J. (2008) 'What are they Waiting for? Strategic Information for Late
   Deciding Voters', International Journal of Public Opinion Research, 20(4), 483-493.
- Iyengar, S. and Simon, A. (2000) 'New Perspectives and Evidence on Political Communication and Campaign Effects', Annual Review of Psychology, 51(1), 149-169.
- Jacobson G. (2013) The Politics of Congressional Elections. New York (NY): Pearson.
- Jacobson, G. (2015) 'How Do Campaigns Matter?', Annual Review of Political Science, 18(1), 31-47.
- Jones, J. (1998) 'Does Bringing Out the Candidate Bring out the Votes? The Effects of Nominee
   Campaigning in Presidential Elections', American Politics Quarterly, 26(4), 395-419.
- Kaid, L. and Hirsch, R. (1973) 'Selective Exposure and Candidate Image: A Field Study over Time',
   Communication Studies, 24(1), 48-51.

- Kalla, J. and Broockman, D. (2018) 'The Minimal Persuasive Effects of Campaign Contact in General Elections: Evidence from 49 Field Experiments', American Political Science Review, 112(1), 148-166.
- Katz, E. (1957) 'The Two-Step Flow of Communication: An Up-To-Date Report on an Hypothesis',
   Public Opinion Quarterly, 21(1), 61-78.
- Katz, E. and Lazarsfeld, P. (1955) Personal Influence: The Part Played by People in the Flow of Mass Communications, Glencoe (IL): The Free Press.
- Kelly, C. and Breinlinger, S. (1995) 'Identity and Injustice: Exploring Women's Participation in Collective Action', Journal of Community & Applied Social Psychology, 5(1), 41-57.
- Klein, H. (2017) 'The "Historical Turn" in the Social Sciences', Journal of Interdisciplinary History, 48(3), 295-312.
- Lachat, R. (2007). A Heterogeneous Electorate. Political Sophistication, Predisposition Strength and the Voting Decision Process. Baden Baden: Nomos.
- Lanzone, L. and Woods, D. (2015). 'Riding the Populist Web: Contextualizing the Five Star Movement (M5S)', Italy, Politics and Governance, 3(2), 54-64.
- Lanzone, M. (2015) Il Movimento Cinque Stelle: Il Popolo di Grillo dal Web al Parlamento. Novi Ligure (Italy): Epoké.
- Lanzone, M. And Tronconi, F. (2016) 'Between Blog, Social Networks and Territory: Activists and Grassroots Organization in Tronconi, F. (ed.) Beppe Grillo's Five Star Movement. Organisation, Communication and Ideology. Farnham: Ashgate. 53-74
- Laycock, S. (2013) 'Is Referendum Voting Distinctive? Evidence from Three UK Cases', Electoral Studies, 32(2), 236-252.
- Legnante, G. (2014) 'La Campagna Elettorale tra Vecchi e Nuovi Media' in Chiaramonte, A. and
   De Sio, L. (eds.) Terremoto Elettorale: le Elezioni Politiche del 2013. Bologna: Il Mulino. 15-40.
- Legnante, G., Mancini, P., Mazzoleni, G. and Roncarolo, F. (2013) 'La Campagna Elettorale sui Media', in ITANES (ed.) Voto Amaro: Disincanto e Crisi Economica nelle Elezioni del 2013.
   Bologna: Il Mulino.
- LeSage, J. (2014) 'What Regional Scientists Need to Know about Spatial Econometrics', The Review of Regional Studies, 44(1), 13-32.
- Lind, J. (2014) 'Rainy Day Politics An Instrumental Variables Approach to the Effect of Parties
  on Political Outcomes', CESifo Working Paper Series No. 4911, 31 July 2014.

- Lisi, M. (2011) 'Campaign Effects in a Changing Environment: The 2006 Italian Legislative Elections', Journal of Political Marketing, 10(4), 328-349.
- Louis, W. (2009) 'Collective Action and then what?', Journal of Social Issues, 65(4), 727-748.
- Lousdal, M. (2018) 'An Introduction to Instrumental Variable Assumptions, Validation and Estimation', Emerging Themes in Epidemiology, 15(1), 1-7.
- Lucatelli, S. and Carlucci, C. (2013) 'Di Quali Territori Parliamo: Una Mappa delle Aree Interne',
   presented at Laboratorio 27 Le Aree Interne nella Nuova Programmazione dei Fondi Strutturali.
   Una Diversa Geografia dello Sviluppo Territoriale, 22 March 2013, Florence.
- Madestam, A., Shoag, D., Veuger, S. and Yanagizawa-Drott, D. (2013) 'Do Political Protests Matter?
   Evidence from the Tea Party Movement', The Quarterly Journal of Economics, 128 (4), 1633-1685.
- Mathison, S. (1988) 'Why Triangulate?', Educational Researcher, 17(2), 13-17.
- McClurg, S. (2004) 'Indirect Mobilization: The Social Consequences of Party Contacts in an Election Campaign', American Politics Research, 32(4), 406-443.
- McNichol, T. (2007) 'TIME.com's First Annual Blog Index', The Time, 7 April 2007. Available at: http://content.time.com/time/specials/2007/article/0,28804,1725323\_1725329\_1725342,00.html [accessed: 23 April 2019]
- Mellizo-Soto, M. (2000) Para Qué Sirven las Campañas Electorales? Los Efectos de la Campaña Electoral Española de 1993. Madrid: Centro de Estudios Avanzados en Ciencias Sociales.
- Middleton, A. (2015). 'The Effectiveness of Leader Visits during the 2010 British General Election
   Campaign', The British Journal of Politics and International Relations, 17(2), 244-259.
- Miguel, E. and Satyanath, S. (2011) 'Re-examining Economic Shocks and Civil Conflict', American Economic Journal: Applied Economics, 3(4), 228-32.
- Miguel, E., Satyanath, S. and Sergenti, E. (2004). Economic Shocks and Civil Conflict: An Instrumental Variables Approach, Journal of political Economy, 112(4), 725-753.
- Min, J. and Gurian, P. (2017) 'Do Campaigns Matter Outside the United States? Equilibrium and Enlightenment in Korean Presidential Elections', International Political Science Review, 38(1), 21-39.
- Ministero dell'Economia e delle Finanze (2014) 'Redditi e Principali Variabili Irpef su Base Comunale', Dipartimento delle Finanze. Available at: https://www1.finanze.gov.it/finanze3/analisi\_stat/index.php?search\_class\%5B0\%5D=cCOMUNE&opendata=yes [accessed: 23 April 2019].

- Mosca, L., Vaccari, C. and Valeriani A. (2016). 'An Internet-Fuelled Party? The Five Star Movement and the Web' in Tronconi, F. (ed.) Beppe Grillo's Five Star Movement. Organisation, Communication and Ideology. Farnham: Ashgate. 127-152.
- MoVimento Cinque Stelle (2009), Carta di Firenze. Available at: www.movimento5stelle.it/listeciviche/documenti/carta\_di\_firenze.pdf [accessed: 23 April 2019].
- Mu, D. (2018) L'Antipolitica come Arma Retorica: una Analisi Comparata tra Beppe Grillo, Matteo
   Renzi e Matteo Salvini, Doctoral Thesis, University of Florence.
- Muñoz, P. (2014) 'An Informational Theory of Campaign Clientelism: The Case of Peru', Comparative Politics, 47(1), 79-98.
- Musella, F. (2015) 'Personal Leaders and Party Change: Italy in Comparative Perspective', Italian
   Political Science Review, 45(3), 227-247.
- Natale, P. (2014) 'The Birth, Early History and Explosive Growth of the Five Star Movement', Contemporary Italian Politics, 6(1), 16-36.
- Natale, S., and Ballatore, A. (2014) 'The Web will Kill Them All: New Media, Digital Utopia, and
   Political Struggle in the Italian 5-Star Movement', Media, Culture and Society, 36(1), 105-121.
- Nir, L. and Druckman, J. (2008) 'Campaign Mixed-Message Flows and Timing of Vote Decision',
   International Journal of Public Opinion Research, 20(3), 326-346.
- Nizzoli, A. (2014) 'Tanta Televisione e Nessun Confronto.' in Diamanti, I., Bordignon, F. and Ceccarini, L. (eds.) Un Salto nel Voto. Ritratto Politico dell'Italia di Oggi. Rome: Laterza. 150-166.
- Norris, P. (2000) A Virtuous Cycle: Political Communications in Postindustrial Societies, Cambridge: Cambridge University Press.
- Oscarsson, H. (2016) Flytande väljare. Örebro: Statistiska centralbyrån.
- Pan, Z., Shen, L., Paek, H. and Sun, Y. (2006) 'Mobilizing Political Talk in a Presidential Campaign:
   An Examination of Campaign Effects in a Deliberative Framework', Communication Research, 33(5), 315-345.
- Panavello, R. (2013) 'Per Beppe Grillo una Folla Mai Vista', La Stampa, 18 February 2013. Available at: https://www.lastampa.it/2013/02/18/savona/per-beppe-grillo-una-folla-mai-vista-p2i9HsZCYudD2iK5dtQMpJ/pagina.html [accessed: 24 April 2019].
- Petty, R. and Cacioppo, J. (1986). Communication And Persuasion. Central and Peripheral Routes
   to Attitude Change. New York (NY): Springer.

- Pirro, A. (2018) 'The Polyvalent Populism of the 5 Star Movement', Journal Of Contemporary European Studies, 26(4), 443-458.
- Plasser, F. and Plasser, G. (2002) Global Political Campaigning: A Worldwide Analysis of Campaign Professionals and Their Practices. Westport (CT): Praeger Publishers.
- Popkin, S. (1991) The Reasoning Voter: Communication And Persuasion In Presidential Campaigns.
   Chicago (IL): University Of Chicago Press.
- Preissinger, M. and Schoen, H. (2016) 'It's not Always the Campaign Explaining Inter-election
   Switching in Germany, 2009-2013', Electoral Studies, 44(1), 109-119.
- Put, G., Maddens, B., and Smulders, J. (2015). 'Buying Local Votes: The Effect Of Individual Campaign Spending Under a Semi-Open PR System in the Belgian Local Elections', Local Government Studies, 41(1), 137-155.
- Rauschenbach, M. (2015). The Importance of Preaching to the Converted: The Strategic Use of Campaign Rallies, Campaign Promises, Clientelism, and Violence in African Elections, Doctoral Thesis, University of Mannheim.
- Reidy, T. and Suiter, J. (2015) 'New Directions in Referendums, Politics and Campaigns', Electoral Studies, 38(1), 137-138.
- Rogers, T. and Middleton, J. (2015) 'Are Ballot Initiative Outcomes Influenced by the Campaigns of Independent Groups? A Precinct-Randomized Field Experiment Showing that They are', *Political Behavior*, 37(3), 567-593.
- Rosenstone, S. and Hansen, J. (1993) Mobilization, Participation, and Democracy In America. New York (NY): Macmillan Publishing Company.
- Saebø, Ø., Braccini, A. and Federici, T. (2015) 'From the Blogosphere into Real Politics: The Use of ICT by the Five Star Movement' in Pennarola and Mola, L. (eds.) From Information to Smart Society. Heidelberg: Springer. 241-250.
- Salmore, B. and Salmore, S. (1989) Candidates, Parties, and Campaigns. Washington, DC: CQ
   Press.
- Sanders, K. and Kaid, L. (1981) 'Political Rallies: Their Uses and Effects', Communication Studies, 32(1), 1-11.
- Sartori, G. (2007) 'La Terra Trema Sotto la Casta', Il Corrière della Sera, 19 September 2007. Available at: https://www.corrière.it/Primo\_Piano/Editoriali/2007/09\_Settembre/19/sartori\_grillo\_attacca.shtml [accessed: 23 April 2019].

- Selb, P. and Munzert, S. (2018) 'Examining a Most Likely Case for Strong Campaign Effects: Hitler's Speeches and the Rise of the Nazi Party, 1927-1933', American Political Science Review, 112(4), 1050-1066.
- Shaw, D. (1999) 'The Effect of TV Ads and Candidate Appearances on Statewide Presidential Votes,
   1988-96', The American Political Science Review, 93(2), 345-361.
- Shaw, D. (2008) 'Swing Voting and U.S. Presidential Elections', in Meyer, W. (ed.) The Swing Voter in American Politics. Washington DC: The Brookings Institution. 75-101.
- Shaw, D. and Gimpel, J. (2012) 'What if We Randomize the Governor's Schedule? Evidence on Campaign Appearance Effects from a Texas Field Experiment', *Political Communication*, 29(2), 137-159.
- Skeels, C. and Windmeijer, F. (2018) 'On the Stock-Yogo Tables', Econometrics, 6(4), 44.
- Spenkuch, J. and Toniatti, D. (2018) 'Political Advertising and Election Results', The Quarterly Journal of Economics, 133(4), 1981-2036.
- Staiger, D. and Stock, J. (1997) 'Instrumental Variables Regression with Weak Instruments', Econometrica: Journal of the Econometric Society, 65(3), 557-586.
- Stanley, B. (2008) 'The Thin Ideology of Populism', Journal of Political Ideologies, 13:1, 95-110
- Stock, J. and Yogo, M. (2005) 'Testing for Weak Instruments in Linear IV Regression', in Stock, J. and Andrews, D. (eds.) Identification and Inference for Econometric Models. New York (NY): Cambridge University Press. 80-108.
- Strmbck, J. and Kiousis, S. (2014) 'Strategic Political Communication in Election Campaigns' in Reinemann, C. (ed.) Handbook of Communication Sciences Volume 18: Political Communication.
   Berlin: Mouton de Gruyter. 109-128.
- Szwarcberg, M. (2012). 'Uncertainty, Political Clientelism, and Voter Turnout in Latin America:
   Why Parties Conduct Rallies in Argentina', Comparative Politics, 45(1), 88-106.
- Szwarcberg, M. (2014). 'Political Parties and Rallies in Latin America', Party Politics, 20(3), 456-466.
- Vavreck, L. (2009) The Message Matters: The Economy and Presidential Campaigns. Princeton (NJ): Princeton University Press.
- Vezzoni, C. (2014a) 'Italian National Election Survey 2013: a Further Step in a Consolidating Tradition', Italian Political Science Review, 24(1), 81-108.

- Vezzoni, C. (2014b) 'ITANES 2013 Inchiesta Campionaria sulle Elezioni Politiche del 2013',
   ITANES. Available at: http://www.itanes.org/dati/[accessed: 23 April 2019].
- Vezzoni, C. and Mancosu, M. (2016) 'Diffusion Processes and Discussion Networks: an Analysis of the Propensity to Vote for the 5 Star Movement in the 2013 Italian Election', *Journal Of Elections*, Public Opinion & Parties, 26(1), 1-21.
- Vignati, R. (2016) 'Beppe Grillo and the Movimento 5 Stelle: A Brief History of a Leaderist Movement with a Leaderless Ideology' in Tronconi, F. (ed.) Beppe Grillo's Five Star Movement. Organisation, Communication and Ideology. Farnham: Ashgate. 9-28.
- Vittal, N. (2000) 'Piecing the Peace in Cambodia: Return of Politics', Economic and Political Weekly, 1283-1297.
- Vowles, J. (2013). 'Campaign Claims, Partisan Cues, and Media Effects in the 2011 British Electoral System Referendum', Electoral Studies, 32(2), 253-264.
- Walgrave, S. and Vliegenthart, R. (2012) 'The Complex Agenda-Setting Power of Protest: Demonstrations, Media, Parliament, Government, and Legislation in Belgium, 1993-2000', Mobilization:
   An International Quarterly, 17(2), 129-156.
- Wendland, J. (2017) Campaigns That Matter: The Importance of Candidate Visits in Presidential Nominating Contests. Lanham (MD): Lexington Books.
- White, S., Rose, R. and McAllister, I. (1996) How Russia Votes. Chatham (NJ): Chatham House, 1996.
- Whiteley, P. and Seyd, P. (1998) 'The Dynamics of Party Activism in Britain: A Spiral of Demobilisation?', British Journal of Political Science, 28(1), 113-38.
- Wielhouwer, P. (2011) 'Differential Effects of Personal Contact Campaigning', Western Political Science Association 2011 Annual Meeting Paper, 21-23 April 2011, San Antonio (TX).
- Wood, T. (2016) 'What the Heck are We Doing in Ottumwa, Anyway? Presidential Candidate Visits and their Political Consequence', The Annals of the American Academy of Political and Social Science, 667(1), 110-125.
- Zaller, J. (1992) The Nature and Origins of Mass Opinion. Cambridge: Cambridge University Press.
- Zuckerman, A. (2005) The Social Logic of Politics: Personal Networks as Contexts for Political Behavior. Philadelphia (PA): Temple University Press.