Building on principal-agent theory, public administration research has thus far focused on agencies’ responses to top-down pressures by elected politicians. By comparison, agencies’ responses to bottom-up public pressures, and the micro mechanisms that underlie variation in their response, received less attention. This study contributes to current literature by analyzing the extent to which organizations’ direct response to bottom-up public pressures is moderated by their subjection to political control. Based on current literature, we hypothesize two distinct micro mechanisms through which political control moderates organizations’ direct response to bottom-up public pressures. On the one hand, building on principal-agent theory, we expect politically-controlled organizations to be more attentive to changes in public opinion, because they have stronger incentives to satisfy their political principals who are reliant on public support (the principal-agent mechanism). On the other hand, building on the socio-institutional literature on non-majoritarian institutions’ legitimacy deficit, we expect more autonomous public agencies to mitigate their diminished legitimacy through direct communication with the public (the legitimacy-deficit mechanism). Moreover, building on extant public-management literature, we expect political control to have an effect on organizations’ response to public pressures, even beyond the public sector. Empirically, we analyze the responses of 36 public agencies and 23 NGOs to the unprecedented mass social protests that took place in Israel in 2011. We focus on organizations’ symbolic responses via advertising campaigns. Our analysis shows that the more the organizations were politically controlled, the more they were inclined to increase their advertising and public visibility in response to the social protests, supporting the principal agent mechanism.

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Introduction

A large body of public-administration literature focuses on bureaucratic agencies' responses to pressures by elected politicians. Building on principal-agent theory, this literature questions how and to what extent are democratically-elected governments able to shape bureaucracies to fit their political preferences (e.g. Wood and Waterman 1991; West and Raso 2013; Moe 1984; Huber et al. 2001; Epstein and o’Halloran 1999). Yet, public agencies in modern democratic societies are exposed not only to top-down political demands, but increasingly also to direct bottom-up public pressures, in the form of public opinion, media coverage and various protest movements (see Carpenter 2002). The direct responses of public agencies to these bottom-up public pressures and the mechanisms that underlie their responses have to date received limited theoretical and empirical attention. The small body of literature that analyzed agencies' direct responses to public pressures focuses on organizations' distinct reputation as the factor that guides and moderates their response (Carpenter 2002, 2004; Maor and Sulitzeanu-Kenan 2013; Moffitt 2010; Maor 2011; Gilad et al. 2013; Maor et al. 2013). However, an important factor that has been studied thus far with regard to the relations between agencies and politicians, yet is highly relevant also to relations between agencies and the public is agencies’ subjection to (or independence from) political control. Connecting these spheres of agency-political and agency-public relations, this study aims to analyze the extent to which political control conditions organizations' direct responses to bottom-up public pressures. That is, are more politically-controlled organizations more or less attentive to salient signals from the public?

Organizations' responses to external pressures can take many forms, which can be crudely divided into substantive responses (such as material changes in budgets, personnel, outputs and performance) and symbolic responses which are not necessarily linked with material changes (such as verbal responses and declarations, strategic enhancement of the public/media visibility of an organization and its decisions, enhancing organizations' transparency and the deployment of deliberation and public participation in decision making). While organizations' symbolic responses are occasionally regarded as "cheap talk" or as merely “presentational”, they may, in the long run, enhance substantive responsiveness to changes in public opinion, because they expose decision makers to greater scrutiny and external influence (Moffitt 2010). Additionally, symbolic interaction between an organization and the public is important to the extent that it shapes the knowledge, perceptions and preferences of public citizens about the organization and its agenda, as well as about major policy issues (Maor 2011). This study focuses on such symbolic responses, and
specifically on organizations' inclination to increase or decrease their public visibility via advertising campaigns. As we explain, in addition to providing the public with information, public campaigns further enhance the visibility of agencies and their social contribution.

Based on current literature, we hypothesize two distinct micro mechanisms through which political control moderates organizations' direct response to bottom-up public pressures. On the one hand, building on principal-agent theory, we expect politically-controlled organizations to be more attentive to changes in public opinion, because they have stronger incentives to satisfy their political principals who are reliant on public support (the principal-agent mechanism). On the other hand, building on the literature on non-majoritarian institutions' legitimacy deficit (Majone 1999, 1997; Gilardi 2008; Majone 1998), we expect more autonomous public agencies to mitigate their diminished legitimacy through direct communication with the public (the legitimacy-deficit mechanism) (Neshkova 2014; Puppis et al. 2013; Yeung 2009; Maggetti 2012; Black 2008). We first explore the extent to which these two distinct mechanisms shape the response of public agencies. Further to that, we extend our analysis beyond public agencies and include private NGOs so as to account for the effect of political control over a wider set of organizations. This extension of the analysis beyond the public sector builds on a broader conceptualization of political control as employed in the public management literature on 'publicness'. Employing this broader conceptualization is significant given the blurring lines between the public and the private sectors, and specifically the increasing participation of NGOs and private companies in the provision of public services.

Specifically, we focus on bottom-up public pressures in the form of mass social protest, and on a particular case study: the 2011 mass social protests in Israel. The Israeli 2011 social protests make a good case for our analysis, insofar as they were a salient signal of the public’s dissatisfaction with the operation of the Israeli government and market. They involved hundreds of thousands of protesters, mainly of the young middle class, demanding central and local governments to engage in fundamental reforms with regard to numerous policy issues, such as housing, foods prices, education, welfare services, finance and transportation. At the same time they also condemned the oligopolistic behavior of private corporations (such as banks, foods and construction companies) and coerced them to lower prices via consumer boycotts and demonstrations. Moreover, the protesters attracted favorable media coverage and wide public support which amplified and legitimimized the social protest movement.
To account for organizations’ symbolic responses to the Israeli 2011 social protest, we analyze changes in the intensity of their monthly expenditure on media advertising campaigns before and after the social protests. In order to account for the extent to which organizations’ response was conditioned by political control, we use a diversified sample of 59 agencies from the public sector, supplemented by 24 nonprofit nongovernmental organizations (NGOs).

Our analysis shows that the more the organizations were politically controlled, the more they were inclined to increase their advertising and public visibility in response to the social protests. While our empirical analysis is restricted to organizations’ expenditure on advertising, in response to social protest, we expect these findings and their theoretical underpinnings to be generalizable to other forms of symbolic responses to bottom-up public pressures. Thus, our analysis suggests a positive linear relationship between political control and organizations’ inclination to enhance their visibility in response to bottom-up public pressures. These findings are in line with the expectation that we derive from principal-agent theory, and contrary to the expectation that independent agencies are more attentive to public discontent due to their legitimacy deficit.

**Political control as a moderator of agencies’ response to bottom-up public pressures**

Principal-agent theory, and its focus on the ex-ante and ex-post means of control via which politicians (the principals) shape bureaucracies’ (the agents) performance, has long been the dominant paradigm in public-administration research. Studies within this tradition suggest that more politically-controlled agencies are more responsive to the changing preferences of democratically-elected politicians (Moe 1984; Wood and Waterman 1991). Yet, inherent to principal-agent theory is the assumption that politically-controlled organizations are responsive not only to top-down political control, but also directly to bottom-up public pressures. Given the assumption that agencies are controlled by politicians who are themselves accountable to voters, one should expect agencies to anticipate that salient changes in public opinion will translate into political control, and to therefore respond directly to these changes in public opinion. Congruently, politically-controlled agencies are expected to respond directly to bottom-up public pressures, over and above their response to top-down political pressures. We refer to this basic mechanism as the principal-agent mechanism.
Recently, Gilad and Alon-Barkat (2014) provided some support for the consequences of political control for organizations’ direct response to public pressures. That study compares public agencies versus private organizations’ direct symbolic responses to mass social protest. Their empirical analysis indicates that when facing salient public demands, public agencies seek to enhance their public visibility, whereas private organizations are inclined to decrease their visibility so as to keep a low public profile. Gilad and Alon-Barkat theorized that public agencies’ dependence on government funding and support induces them to respond to bottom-up public pressures, such as social protest, so as to exploit the political opportunities that they provide. By responding to these bottom-up public pressures, agencies enhance their likelihood to gain extra budgets, expand their scope of authority and enhance their distinct reputation, while lack of response to these pressures might jeopardize their status. However, because they only compare public agencies and private organizations, their study disregards the variation in political control among public agencies – of which some are intensively controlled by politicians while others are relatively autonomous. To sum up, building on and extending principal-agent theory, we expect:

\[ H_1: \text{The more politically controlled is an agency, the more inclined it is to directly respond to bottom-up public pressures.} \]

Whereas principal-agent theory would expect politically-controlled organizations to respond to bottom-up public pressures, new institutional theory would expect independent agencies (that are not subjected to formal means of political control) to signal their submission to public pressures. This expectation is rooted in organizations’ pursuit of public legitimacy as opposed to their attempt to preempt political intervention. It builds on numerous studies that theorized that independent agencies, which gained increasing popularity among economically-developed states over the past decades (Levi-Faur 2006a, 2005; Gilardi 2008; Levi-Faur 2006b), nonetheless suffer from fragile and unstable public legitimacy (Majone 1999, 1997; Gilardi 2008; Majone 1998; Lodge 2004). Consequently, they seek to mitigate their inherent legitimacy deficit by displaying their direct accountability to the public through enhanced transparency, encouragement of public participation and public communications (Puppis et al. 2013; Maggetti 2012; Yeung 2009; Black 2008; Majone 1999). We refer to this effect as the legitimacy deficit mechanism.

The claim that independent agencies tend to deploy intensive communications with the public, so as to compensate for their legitimacy deficit mechanism, is supported by two recent
studies. Yeung (2009) documents the UK and Australian independent competition and consumer agencies’ intensive deployment of presentational techniques, which are targeted at the general public, in pursuit of enhancing their legitimacy. For instance, she documents the UK office of Fair Trading (OFT)’s engagement in media campaigns, involving national celebrities, with whom the public identifies. Puppis et al. (2013) analyze the strategic communication activities of financial services, telecommunication and broadcasting regulatory agencies in the UK, Germany, Ireland and Switzerland. Congruently with Yeung, they show how agencies intensively engage in communication management that aims at informing the public at large about regulatory decisions, actions and positions. Moreover, they show that a vast majority of agencies’ media releases contain justifications for their actions. These findings indicate that independent agencies use communications as a means to increase their accountability and legitimacy. Yet, they are restricted to independent regulatory agencies (IRA’s), thereby overlooking other institutional forms of politically-independent agencies. Moreover, they do not compare the communication responses and activities of IRAs with those of more politically controlled agencies, so as to rigorously test the effect of autonomy on responses to public pressures.

An additional study by Neshkova (2014) does account for the variation in agencies’ subjection to political control and its effect on their symbolic responses to public pressures. Neshkova analyzes the effect of 78 US transportation and environment departments’ budgetary autonomy on their engagement in ‘participatory budgeting’, namely public participation in decisions over budget allocation. Organizations’ engagement in participatory budgeting as well as in other practices of public participation and deliberation, does not necessarily entail significant material changes in organizations’ activity, therefore as we explained in our introduction, it can be regarded as a form of symbolic response. Her analysis indicates that agencies that are characterized by more budgetary autonomy are relatively inclined to engage in ‘participatory budgeting’ so as to increase the legitimacy of their actions, a finding which is largely consistent with the legitimacy deficit mechanism. However, her study is restricted on one aspect of political control, namely budgetary autonomy, and is restricted to regulatory agencies. To sum up, based on new institutional theory and its stress on autonomous agencies’ legitimacy deficit, we expect that:

\[ H_2: \text{Autonomous public agencies are relatively inclined to directly respond to bottom-up public pressures.} \]
The above hypotheses entail two distinct effects of political control and its absence. Yet, these effects are not necessarily contradictory, and may jointly influence the response of different agencies. Congruently, it may be the case that in response to vigorous bottom-up public pressures more politically-controlled agencies will seek to display their attentiveness because they anticipate political intervention, while more autonomous agencies will display their attentiveness because they wish to mitigate their democratic legitimacy deficit.

**Extending political control beyond public-sector organizations**

Thus far, our expectations regarding the effect of political control on organizations' responses to bottom-up pressures were restricted to public-sector organizations. Yet, some public-management scholars suggest that privately owned businesses and NGOs may nonetheless be subjected to some degree of control by elected politicians. These scholars suggest that organizations' relative subjection to political control defines their 'publicness'\(^1\) (Bozeman 1984, 1987; Bozeman and Bretschneider 1994; Rainey and Bozeman 2000; Moulton 2009; Rainey 2009; Andrews et al. 2011; Bozeman and Moulton 2011; Miller and Moulton 2013).

An important implication of this conceptualization is that political control may moderate not only public agencies’, but also privately-owned organizations’ responses to public pressures. This extension is significant given the blurring between the sectors, which makes the dichotomous distinction between the two sectors oversimplified and inaccurate (Rainey 2009; Bozeman and Bretschneider 1994). More specifically, the extension of our research beyond the public sector is important insofar as many traditional public services are contracted out to NGOs, businesses and public-private partnerships (Grimshaw et al. 2002; Brown et al. 2006; Salamon 1987; Osborne 2000).\(^2\) Although these NGOs and businesses are owned by private shareholders (rather than by governments), they are politically controlled to the extent that they have more interactions with government and are influenced by it whether financially through contacts and subsidies or via legal regulation. Therefore, as with public agencies, we expect private organizations to directly respond to bottom-up public pressures, depending on the intensity of the political control that is exerted over them. Accordingly, we expect political control to positively affect the response of both publically- and privately-owned organizations, thus:

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\(^1\) More accurately, according to the conceptualization of Barry Bozeman (1987) organizations' relative publicness is defined by the mixture of organizations' subjection to political control and economic market control.

H$_3$: More politically controlled organizations (whether publically or privately owned) are more inclined to directly respond to bottom-up public pressures.

As to H$_2$, the extent to which privately-owned organizations are likely to experience a democratic legitimacy deficit is less certain. One the one hand, privately-owned organizations that provide public services, suffer from a democratic legitimacy deficit to an event greater extent than independent agencies. This is so insofar as they enjoy relative independence from political influence, while receiving taxpayers' money for the execution of activities that the public perceives as the responsibility of the state. One the other hand, some privately-owned organizations, such as higher-education and cultural institutions, derive their public legitimacy from their independence of political control. Moreover, the operations of many private corporations involve activities that are perceived by the public as outside the legitimate scope of state intervention. Therefore, the extent to which private organizations experience a legitimacy deficit, due to the absence of political control, varies from one private organization to another, and is entirely irrelevant in some instances. Thus, we are unable to delineate a general hypothesis that will apply to all privately owned organizations.

Case background: the Israeli 2011 mass social protests

The Israeli 2011 mass social protests provided us with an extreme case of bottom-up public pressures. Targeted at both the public and private spheres in various policy issues, the Israeli social-protest movement erupted and quickly gained the support of a vast majority of the general public, economic and intellectual elites as well as the recognition of political parties. This consensus was unprecedented in Israeli politics, which are traditionally divided by stable multiple socio-political cleavages (Horowitz and Lissak 1989). The protest movement's leaders, mostly of the young educated middle class and without any previous political experience, enjoyed favorable media coverage, and their message dominated the media agenda over a relatively long period (Rosenhek and Shalev 2013; Ram and Filk 2013). Furthermore, unlike simultaneous protests in the US, Spain and Greece, the Israeli protests sparked despite a low unemployment rate and relatively stable macro-economic performance (Rosenhek and Shalev 2013), and therefore the government was able to response to the public demands in terms of budgets. Therefore, one can hardly think of a more salient direct signal from the public, which could not have escaped the attention of any public or private organization, demanding their immediate and thorough response.
The protests set off in the mid of June 2011 with a successful boycott campaign, instigated in Facebook, against a major dairy producer, condemning its steady raising of cottage cheese prices since the government’s lift of price controls few years earlier. Thereafter, in July, a group of activists organized a protest tent camp in Tel Aviv, to express their discontent with the excessive price of housing rents. Similar tent encampments mushroomed in other parts of Tel Aviv and quickly spread to almost all cities across the country. Alongside the expansion of these tent cities, and in a similar vein to other mass social protests around the globe, the framing of protesters’ grievances shifted from an initial focus on housing and dairy foods to encompass a wide array of policy issues such as early-years education, public health services, banking regulation, public transportation, contract workers’ employment and more. The slogan of the protests – “the people want social justice” – encapsulated this all-encompassing and rapidly expanding agenda. Accordingly, businesses, especially in the foods and banking sectors, were publicly condemned (and some were also boycotted) while at the same time the government was blamed for failing its duties. The protest leaders, joined by the National Student Union, organized weekly rallies in all large cities. The largest of these demonstrations, in September 2011, attracted over 400,000 participants across the country in one evening, which amounts to 5% of the Israeli population. These mass demonstrations were accompanied with multiple strikes and labor conflicts by many workers of the public sector: public hospitals' doctors, inter and nurses, welfare social workers, police officers and junior academic staff. All along, favorable media coverage amplified and legitimized the social protest and its leaders, reaching its peak in August 2011 (Mann and Lev-On 2012).

In August 2011, the Prime Minister, in response to the protests, established a public committee headed by Professor Manuel Trajtenberg, to solicit the public’s views and to delineate recommendations for reduction in the costs of living. The committee handed its report at the end of September of the same year, and some of its recommendations, such as extending free early-years education to the age of three, were eventually adopted by the government. The last of the tent encampments was evacuated in October 2011, yet the impacts of the social protest on the political and media agenda, while attenuated, continued until mid-2012. On June-July 2012, after a few unsuccessful attempts to reproduce the previous summer’s mass popular demonstrations,

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3 To put this number in context: at around the same time an Occupy Wall Street demonstration in New York attracted around 5000 people (http://abcnews.go.com/blogs/headlines/2011/09/wall-st-protesters-say-theyre-settled-in), and the massive 1-million demonstration in Brazil, in June 2013, involved 0.005% of the population. http://www.reuters.com/article/2013/06/21/us-brazil-protests-idUSBRE95I1S020130621
some of which escalated to violent clashes with the police, the favorable media was first replaced by negative coverage that framed the protests as violent demonstrations by radical youngsters (e.g. Zarhia 2012; Cohen and Kobovic 2012). Alongside the change in media coverage, popular support in the social protest movement decreased (Weissberg 2012), and thus the social protest movement slowly diminished.

Yet, the social protest left a mark on the Israeli political and societal reality in various respects. Its significant influence was expressed in the general elections of January 2013 that led to the replacement of nearly half of the incumbent parliament members by new ones (among them some of the protests’ leaders) and to the election of a new mainstream central party representing the young middle class (“Yesh Atid”). Moreover, almost all parties adopted the social protests’ agenda and symbols in their elections campaigns (Talshir 2013).

Methodology

To analyze our above hypotheses regarding the effect of political control on organizations’ responses to bottom-up public pressures, here in the form of the 2011 Israeli mass social protest, we have constructed a unique dataset of 36 public agencies’ and 23 NGOs’ monthly investment in advertising campaigns between January 2010 and June 2012. That is, a year and a half before the social protest, and a year into the social protest and until its decline. We focus on changes to organizations’ expenditure on advertising as a form of symbolic response. Media advertising inherently involve enhancement of organizations’ public visibility as well as indirect message of their contribution to the public good. This postulation suggests that even information provision, which is the formal aim of public agencies’ and NGOs’ advertising campaigns, involves some enhancement of their visibility and an indirect message of the positive value of their operations. Moreover, in some cases public agencies’ employ explicit branding techniques in their ads, and often imitate the commercial genre of positive, upbeat, ambience, and the featuring of popular celebrities, which create a general good feel about an organization.

Organizations’ sample selection

This paper is a part a larger research project, which analyzes different aspects of organizations’ responses to the 2011 social protests in Israel as manifested in their volume and content of advertising. Therefore, our sample of 59 organizations is derived from the larger sample

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4 We further aim to extent our sample of public agencies up to 50.
5 See, for example, the Israeli Ministry of Transportation’s campaign for usage of public buses: http://www.youtube.com/watch?v=EgGazts1t8.
of 100 organizations that was used by Gilad and Alon-Barkat (2014). That sample is a highly diversified random sample of public sector and private sector organizations that use advertising as a regular means of communication. The organizations were randomly sampled from among six policy sectors, of which some were at the center and some were peripheral to the social-protest agenda (education, finance, housing, foods, transportation and tourism). The sample is derived from the comprehensive database that we purchased from 'IFAT Business Information' (hereafter IFAT), which compiles information about the advertising expenditure of more than 16,000 organizations. The construction of this sample population of organizations is elaborated in the Methodological Appendix.

For the sake of the current paper we excluded businesses corporations that were part of the original sample of 100 organizations, and consequently our current sample includes public agencies and NGOs. We excluded businesses for two main reasons: first, because we were technically unable to get sufficient data regarding businesses’ dependency on government funding, which as explained below is an important measure of political control. Second, because this restriction of our analysis to non-for-profit organizations, whether governmental or non-governmental, allows for a cleaner test of the effect of political control.

**Operationalization of variables**

Our **Dependent variable** is organizations’ aggregated monthly expenditure on advertising (in US dollars) across different channels of communication, between January 2010 and June 2012. Consequently, the dataset consists of 30 data-points of expenditure on advertising for each of the 59 organizations, and therefore an overall population of 1770 organization-monthly observations. The data for organizations’ advertising expenditure was purchased from IFAT, Israel’s leading market-research company, which provides comprehensive information about all Israeli organizations’ daily investment in advertising across 120 media sources (including TV channels, national and local newspapers, radio channels, internet websites, cinema chains and billboards). IFAT’s measure is an estimate based on the media channel (e.g. the broadsheet Yedioth), the exact location and size of the ad (e.g. 3rd page, medium size, color add) and the cost according to the media provider’s price list.

Even though our sample of organizations is restricted to organizations that use advertising as a regular means of their communications, it is extremely diversified to the extent that it includes

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6 We further excluded 3 public agencies which we weren’t able to receive sufficient data with regard to their funding from public budget, as detailed below.
7 The provided data does not account for price reductions to individual advertisers.
public agencies from state and local levels and NGOs, of different sizes which moreover vary in their regular advertising trends. Some of them advertise all year long and at relatively consistent levels, whereas others fluctuate between zero, low and high levels of advertising. Therefore, in order to be able to compare between these varied advertising trends (so as to account for changes in advertising amidst the social protest) we transformed these advertising expenditures (in US$) into organization-specific Z-scores. That is, the dependent-variable scores represent organizations' deviation from their own estimate mean divided by their own estimate standard deviation. In other words, the observations represent the extent to which monthly advertising expenditure is typical or atypical given each organization's advertising trends.

Our two independent variables are pre- and post-protest periods, and the subjection of organizations to political control. Our operationalization of the research hypotheses is based on the interaction between these two variables, as described below.

Pre- and post-protest periods (PROTEST). While an early manifestation of the protests begun in June 2011 and gained traction as of July of that year, we operationalize the post protest period as commencing in August 2011 assuming that organizations did not react immediately and ending in June 2012, given the dramatic decrease in public support for the social protest in July 2012 and the change in media coverage and tone. Thus, we use a dummy variable to distinguish between the pre-protest period (January 2010 to July 2011) and the post protest period (August 2011 to June 2012).

Political control.

Our operationalization of political control builds on, integrates and extends two distinct scholarly traditions: the first tradition is the empirical public-administration literature on bureaucratic autonomy/independence (Bach et al. 2014; Yesilkagit and van Thiel 2012; Van Thiel 2012; Gilardi and Maggetti 2011; Yesilkagit and Christensen 2010; Boin et al. 2010; Yesilkagit and Van Thiel 2008; Verhoest et al. 2004; Gilardi 2002). The second tradition is the above mentioned public-management literature on organizations' publicness, which extend the operationalization of political control to privately owned businesses and NGOs (Bozeman 1984, 1987; Bozeman and Bretschneider 1994; Rainey and Bozeman 2000; Moulton 2009; Rainey 2009; Andrews et al. 2011; Bozeman and Moulton 2011; Miller and Moulton 2013). While neither of these two traditions offers

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8 For example, assume that the monthly advertising expenditure estimate mean of organization 'a' is 100,000$ and that its standard deviation is 50,000$. If organization 'a' spent on August 2010 100,000$ whereas on August 2011 it spent 150,000$, therefore its measure of DV will increase from 0 \[\frac{100,000 - 100,000}{50,000}\] to 1 \[\frac{150,000 - 100,000}{50,000}\] (an increase of 1 standard deviation).
a conventional measurement for political control, two dimensions of political control are central to their conceptualization of autonomy and of publicness: the first aspect is organizations' economic reliance on states’ budgets; the second is organizations' structural design and legal personality, which determine politicians’ formal authority to appoint their heads and to intervene in their decision making. Therefore, our operationalization of political control focuses on these two aspects, and aggregates them into a compound index. The construction of this compound index of political control is summarized in figure 1.

First, to account for organizations' economic dependence on state budget, we calculated their annual revenues from taxation, state budget and municipal budget, as a fraction of their total annual revenues. All data was collected from official financial reports.9

Second, to account for organizations' structural autonomy we constructed an ordinal scale which consists of 5 categories of organizations – the first three categories refer to public agencies, while the additional two categories refer to NGOs which, as explained below, enjoy greater structural autonomy. The first three categories are inspired by Van Thiel (2012) typology of public sector organizations, adjusted to the context of the Israeli public sector. These are: (a) government ministry. A unit of state or local government, which is directly subordinated to elected politicians and thereby has minimal formal autonomy; (b) semi-autonomous agency. Public agency that is separate from cabinet, yet without legal independence. Therefore it is endowed with some managerial autonomy, due to its separate legal personality; (c) legally independent agency. Public agency, which is formally independent from political and central-government control.

The Israeli state level public sector consists of 3 main groups of organizations: government ministries (including their functionally designated units), government owned companies and statutory bodies (Galnoor 2007, 33). In addition, local level organizations consist of municipalities, regional councils and municipally-owned companies. Government ministries, municipalities and regional councils are all headed and directed by elected politicians (whether ministers or mayors). Therefore they were all categorized as ‘government ministry’, by which we mean an entity subjected to a high degree of political control. Our sample contains 11 state government ministries (including 2 functionally designated units) and 15 municipalities and regional councils. Unlike

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9 For state level public agencies, data was collected from the government of Israel's financial annual reports, which are available on the Ministry of Finance's website, and from agencies' reports, which are available on the government companies' authority and from the websites of the agencies. For municipal level public agencies, data was collected from municipalities' financial annual reports, which are available on the Ministry of Interior's website and from the websites of the municipalities. Finally, information on NGOs was collected from organizations' financial annual report, which is available on the website of 'Guide Star Israel'.
ministries, government owned companies are separate from the cabinet, and they are formally insulated from ministers through boards of directors. However, the government owned companies act of 1975 empowers government ministers to appoint the companies’ CEOs and board members, as well as to intervene in their decision making. Therefore, government owned companies were regarded here as semi-autonomous and not as independent agencies (cf. Yesilkagit and Christensen 2010). The structural arrangement of municipally owned companies is quite similar to those of government owned companies, thus they are also categorized as semi-autonomous. Our sample contains 4 government owned companies and 2 municipally owned companies. Like government companies, statutory bodies are also separate from the cabinet, yet their structural autonomy varies. Therefore, they were regarded as legally independent agencies, if their legislative mandate formally states their independence, and prevents government from overturning their substantive decisions (cf. Gilardi 2002). Otherwise, statutory bodies were categorized as semiautonomous agencies in a similar vein to government-owned companies. Our sample contains 4 statutory bodies, of which 2 were categorized as independent agencies, while the other 2 were categorized as semiautonomous. [to add: control for state- versus local-level public agencies]

[figure 2 about here]

Given that NGOs have legal personality under private law and are privately owned, government ministers are not authorized to formally appoint their heads or to intervene in its decision making. Therefore, NGOs enjoy high levels of structural autonomy. Yet, some NGOs are nonetheless subjected to more political intervention than others. In this regard we distinguished between two categories of NGOs: (d) Regulated organization. These are privately owned organizations that are subjected to government licensing or accreditation to operate; (e) Independent organization. Privately owned organizations, which operate without any specific licensing or accreditation (other than regulations, such as labor law, which apply to all organizations). For this purpose, the first author searched NGOs annual financial reports for any references to government licensing or to authorities that are delegated to the organization and entail government regulation. Our sample contains 23 NGOs, of which 14 were categorized as regulated organization, and 9 were categorized as independent organization. All 14 regulated organizations in our sample are higher education bodies, which are authorized to grant academic degrees and are therefore regulated by the Council for Higher Education. The latter is headed by the Minister of Education. [to add: control on organizations that operate in the sector of education to deal with selection bias]
The above two measures (i.e. economic dependence on state budgets and structural autonomy) are aggregated, equally weighted, into a compound political-control index between 0 and 1. Accordingly, an index score of 0 stands for maximum independence from formal political control while a score of 1 stands for maximum subordination to political control. The index scores of our 36 public agencies varies from 0.34 to 1.00, and the scores of our 23 NGOs varies from 0 to 0.56. The internal consistency of the index variable according to Cronbach's alpha test is 0.77, which is considered sufficiently reliable.

Control variables

Specific targeting of an organization during the previous month (TARGET). Even though the Israeli social protest movement tended to blame the economic system and the government as a whole (congruently with its all-encompassing agenda), a few particular agencies and organizations were nonetheless specifically criticized (hereafter: targeted) by the protesters, most of which are government ministries. Our main hypotheses, in this paper, focus on the social protest as a bottom-up pressure, which due to its general content and salience affected all organizations. Still, we control for the additive effect of organizations’ response to criticism that was specifically targeted at them. It is important to control for the extent to which organizations were targeted so as to negate the possibility that politically controlled organizations responded more simply because they attracted more criticism. To identify specific criticisms, we asked research assistants to search the on-line searchable archive of 'TheMarker' – the daily economics section of Haaretz newspaper – for any mentions of each of the organizations in our sample over the entire social-protest period combined with a set of key words that are associated with the 2011 social protest and their linguistic variations (“protest,” “demonstration,” “boycott,” “cost of living” and “social justice”). TheMarker was chosen because it is associated, more than any other Israeli newspaper, with the protests and both reflected and amplified the voice of the activists. Hence, this indicator depicts monthly social-protest related negative coverage of an organization. It is set to zero for all organizations between January 2010 and May 2011 (i.e. prior to the summer of 2011 protests), and equals one for any level of monthly social-protest related scrutiny that an organization experienced between June 2011 and June 2012. Importantly, this index entails that the same organization may be coded as “targeted” on month t₀ and as “non-targeted” on month t₁. We test this dummy control variable

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10 For analysis of the effect of specific targeting on organizations’ response see Gilad and Alon-Barkat 2014.
11 The assistants further read each individual article, and coded only those articles in which the relevant organizations were scrutinized in relation to the social protests. The first author thereafter conducted the exact same media search and content analysis for five targeted organizations, over a period of three months, resulting in 87% inter-coder agreement (Krippendorff’s alpha = 0.71)
employing a one-month lag. Overall, out of 1770 observations, there are only 81 monthly observations of specifically-targeted organizations, of which 78 monthly observations are of 12 different public agencies and the other 3 are of 3 NGOs.

We further control for organizations’ (log) annual income (INCOME) to account for the variation in organizations’ size, and for objective change in their financial capacity to advertise. Additionally, to account for the panel structure of the data we include a set of lagged dependent variables for the previous three months (i.e. organizations’ expenditure on advertising in t-1 month, t-2 months and t-3 months: DVlag1, DVlag2 and DVlag3) and a set of dummy variables for each calendar month of the year (minus one). We also include a continuous monthly time-trend variable for January 2010 to July 2012 (TIMETREND), to account for the possibility that changes in advertising in the post-protest period reflect a trend that began in the pre-protest period. Furthermore, because monthly observations are nested within organizations, the coefficients’ p-values are calculated on the basis of clustered standard-errors. We are unable to add fixed effects for each of the 59 organizations in our sample, because this would result in multicollinearity with organizations’ annual political-control index and INCOME (cf. Beck 2001: 285). Still, controlling for the lagged dependent variable and fixed effects for organizations are to an extent alternative techniques to account for unobserved omitted factors (Angrist and Pischke 2008: chapter 5).

Table 1 provides descriptive statistics regarding the distribution of the variables.

[Table 1 about here]

**Results**

As a preliminary, descriptive, observation, figure 2 shows a simple scatterplot for the correlation between the 59 organizations’ aggregated political-control index score (at the X axis) and their averaged change in advertising (organization-specific Z. scores) after the burst of the social protest (at the Y axis). To calculate the change in advertising amidst the protest, we took the delta between each organization's averaged monthly expenditures after the protest (August 2011 – June 2012) and before the protest (January 2010 – July 2011). Accordingly, a score of zero means that organization's expenditure has not changed; negative score means that the organization has decreased its advertising; positive score means that the organization has increased its advertising.

---

12 For the collection of the data for organizations' incomes, see the above description about the data regarding the dependence in state budgets.

13 Organizations' political control score was measured on an annual basis (although the changes between the three years are minor), therefore we averaged organizations' political control scores.
amidst the protest. This preliminary analysis suggests, in line with our H1 that there is a linear positive correlation between political control and increase in advertising expenditures in response to the social protest. This trend seems to apply to both public agencies and NGOs, with the exception that NGOs with the highest level of autonomy from political influence did not decrease their average advertising. Additionally, the variance among organizations in the high end of the political-control index score is relatively high.

Table 2 presents a set of OLS regression models for the sampled organizations’ over-time advertising (again using organization-specific Z scores) between January 2010 and June 2010. Model 1a analyzes the 36 public agencies’ monthly expenditures (n=1080) on advertising, based on the two independent variable (political control index; PROTEST) and controls (TARGET; INCOME; advertising (Z scr.) in T-1, T-2 and T-3; fixed-effects for calendar months; TIMETREND). Model 1b adds the interaction term political-control index*PROTEST. Thereafter, models 1c and 1d extend the analysis in models 1a and 1b respectively so as to include all 59 organizations (36 public agencies and 23 NGOs, n=1770).

Starting from our control variables, the coefficient for advertising in T-1 is positive and significant in all four models, yet advertising in T-2 and in T-3 are not significant in any of the models. This may indicate that advertising campaigns are relatively short-term and usually do not last more than two months. TARGET is negative yet insignificant in all models, indicating that the change in the intensity of advertising in response to the protests is not explained by the specific criticism towards organizations. INCOME is not significant in any of the models. This may be related to the fact that our measurement of organizations’ income is measured on an annual basis, whereas our advertising data is monthly, and/or because the Z-score measure for the dependent variable already accounts for the variation in organizations’ size.

Moving to our expectations regarding the moderating effect of political control on organizations’ response to social protest, we find that the coefficients for political control and for PROTEST are negative and significant in models 1b and 1d. At the same time, in agreement with H1 and H3, the interaction terms between political control and PROTEST are positive and significant in models 1b and 1d. This suggests that when controlling for organizations’ size, their subjection to specific criticism and seasonal trends, the more politically controlled are agencies, the more inclined they are to increase their advertising in response to the social protests. Moreover,
this effect is significant with regard to the sample of public agencies (in model 1b) and to the larger sample of organizations that further includes NGOs (in model 1d).

Table 2.2 depicts the simple effect of PROTEST (i.e. the change in advertising after the protest) with regarding to varying political-control index scores according to model 1d. The left column shows the effects in Z scores while the right column converts these Z scores back to US dollars so as to illustrate these changes\(^\text{14}\). Accordingly, the expenditure of organizations that are most politically controlled (for instance, government ministries which derive 100% of their funding from taxes and state budgets) is expected to increase by an average of 0.09 standard deviations, or by $37,838. Organizations with a political-control index of 0.8 (e.g. ministries which derive 60% of their funding from state budgets; semiautonomous agencies that derive 85% of their funding from state budgets) are expected to increase their advertising by an average of only 0.02 standard deviations or $6,835. Organizations with a political-control index of 0.6 (e.g. semiautonomous agencies that derive 55% of their funding from state budgets; independent agencies that derive 70% of their funding from state budgets; regulated NGOs which derive 95% of their budgets from state budgets) are expected to decrease their advertising by an average of 0.06 standard deviations or $37,838. The increase in politically-controlled agencies’ advertising is not significant in 95% confidence level, yet the high significance of the interaction term in both models indicate that the moderating effect of political control is significantly positive.

The R\(^2\) of models 1b and 1d is relatively low (0.06-0.08). This seems to be related to our use of organization-specific Z scores, which measure each organization’s deviation from its own mean, given its unique standard deviation. Still, given the diversity of our sample, we believe that using organization-specific Z scores produces more reliable results. We do not detect any problem of heteroscedasticity or high levels of multicollinearity (the mean VIF in model 1d is 2.03, and all variables’ VIF are below 5\(^\text{15}\)). Models 1b and 1d are statistically significant (p<0.01). Overall, these results suggest that we can confidently reject the null hypotheses in relation to H\(_1\) and H\(_3\), and ascertain that organizations’ change in advertising after the burst of the social protest (during August 2011 to June 2012) is moderated by their relative subjection to political control. The more an organization is subjected to political control, the more it is inclined to increase its advertising in response to social protest. Moreover, this effect is significant with regard to the restricted sample of

\(^{14}\) The conversion was calculated by setting the mean expenditure standard deviation – 406,868.4$.

\(^{15}\) VIF was calculated when centering the political control index.
public agencies (i.e. model 1b) and to the extended sample that further includes NGOs (i.e. model 1d). [to complete: residual and outlier analysis]

As for our H2, if the predicted effect of PROTEST, in model 1b, on independent agencies was positive, yet lower compared to its predicted effect on politically-controlled agencies, it would have been logical to say that the legitimacy deficit mechanism is in operation, even though its effect is weaker than the effect of the principal-agent mechanism. However, the simple effect of PROTEST on organizations with political-control index below 0.7 is not significant. Consequently, we cannot reject the null hypotheses in relation to H2.

Further to that, to test the robustness of these findings, we ran regression models in which the dependent variable is the delta between each organization’s advertising in a particular month in the post-protest period and its advertising in the same calendar month during the previous year (i.e. advertising in t – advertising in t-12). We believe that this is a more rigorous test that takes into consideration the seasonal distribution of advertising across the year. According to this measurement, there are 11 observations (Aug 2011 – June 2012) for each organization (that is – 396 observations for the first analysis of the 36 public agencies – 2a, and 649 observations for the second analysis of 59 agencies and NGOs – 2b). The results of this robust analysis are presented in Table 2.3. In addition to control variables of TARGET and INCOME, we controlled for lagged dependent variable, the deltas between advertising in t and in t-1, t-2 and t-3 so as to account to the panel structure of the data. We also added fixed effect for calendar months.

[Table 2.3 about here]

In accordance with the above models 1b and 1d, in models 2a and 2b the coefficient of the lagged dependent variable is also positive and significant and INCOME is not significant. In both models TARGET is negative and marginally significant (p<0.1), and the deltas between advertising in t and t-1 and t-2 are significant. The delta between advertising in t and in t-3 is significant only in model 2a. Most importantly, the coefficients of the political-control index are positive and significant in both models, confirming that relative subjection to political control is positively correlated with organizations’ increase in advertising in the post-protest period, in line with H1 and H3. The model is significant (F(17,58)=22.73, p<0.001) and the R² of the model 2b is 0.36.

Discussion and Conclusions
This study analyzed the effect of political control on organizations’ symbolic responses to bottom-up public pressures. Empirically, we analyzed the changes in 59 public agencies’ and NGOs’ expenditure on advertising campaigns in response to the 2011 mass social protest in Israel. Our analysis showed that the more the public agencies were politically controlled, the more they were inclined to increase their expenditures on advertising campaigns in response to the social protests. Moreover, the same effect was evident when the analysis was extended to organizations beyond the public sector. These results are robust – they hold while controlling for changes in organizations’ annual incomes, for specific criticism towards specific agencies and for alternative model specifications. These findings are in line with the hypothesis that politically-controlled organizations are more attentive to changes in public opinion, because they have stronger incentives to satisfy their political principals who are reliant on public support. Conversely, we did not find support for the hypothesis that independent agencies directly respond to public pressures so as to compensate for their legitimacy deficit. We argue that these findings can be theoretically generalized to other forms of bottom-up public pressures as well as for other forms of symbolic responses. Accordingly, we expect that all other things being equal politically controlled agencies will be more attentive to salient signals from the public and the media, and will be more inclined to response to these signals through symbolic interactions with the public.

This study contributes to current public-administration theory by enhancing the understanding of agencies’ responses to public pressures. It shows that agencies’ responses to public pressures may be moderated not only by their distinct reputations (Carpenter 2002, 2004; Maor and Sulitzeanu-Kenan 2013; Moffitt 2010; Maor 2011; Gilad et al. 2013; Maor et al. 2013), but also by their subjection to political control. This stress an important implication for public administration reforms: enhancing organizations’ autonomy is likely to result in decreasing their attention to societal pressures.

In addition, this study suggests theoretical and methodological integration between two distinct traditions: the public administration literature on bureaucratic autonomy and the public management literature on organizations’ publicness which is driven by the comparison between public and private organizations. Even though they have different perspectives, the concept of political control is central to both traditions. Therefore, we believe that there is a place for theoretical integration, which may benefit scholars of both traditions. On the one hand, studies on the effects of political control should extend their gaze to organizations beyond the public sector, as we do here. On the other hand, studies that compare organizations’ level of publicness should
pay more attention to the nuanced conceptualizations and measures of political control as the ones developed by public administration scholars.

This study has few limitations that we and others may seek to address in future studies. First, while our study has high external validity given the random and relatively diversified sample of organizations, it nonetheless focuses on one form of public pressure, namely social protest. This raises concerns that organizations' responses to social protests are different of other forms of bottom-up public pressures, such as media scrutiny or public opinion. Moreover, this study focuses on one specific case of social protest: the 2011 social protests in Israel. It might be the case that our results were contingent upon the specific nature of this protest. However, our data consists of a highly diverse sample with organizations of different policy sectors and of both state-level and local-level. Second, this study focuses on one means of symbolic response to public pressures, namely changes in advertising campaigns. Thus, with regard to these two limitations, future studies of other cases of public pressures as well as other means of symbolic responses will put the validity of our results to further test. Third, our sample of organizations excludes private corporations, and only analyzes public agencies and NGOs. However, the changes in advertising of NGOs and private corporations in response to the 2011 social protests were not significantly different (Gilad and Alon-Barkat 2014). Therefore we believe that if businesses were included in our analysis, it would have shown the same general effect.

We further suggest that future studies on the effect of political control on organizations' symbolic responses to bottom-up pressures will consider including two additional mediating/intervening explanations. The first is organizations' goal ambiguity, which is an attribute of public organizations (Chun and Rainey 2005; Lee et al. 2009; Rainey 2009; Rainey and Bozeman 2000), and which, as stressed by Gilad and Alon-Barkat (2014), may facilitate the responses of an organization to public criticism. The second is the commitment among organization's managers for normative 'public values' or the 'public good'. Accordingly, one can argue that politically controlled organizations are more attentive to public demands because their managers are more committed to public values, rather than because of rational choice. These two factors can be measured through questioners filled out by organizations' managers and employees.


Delegation in the regulatory state: independent regulatory agencies in Western Europe: Edward Elgar Publishing.


Figure 1: Operationalization of political-control Index variable

Table 1: Descriptive Statistics of the Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising (in US$)</td>
<td>166,385.45</td>
<td>406,864.96</td>
<td>0</td>
<td>4,905,595.70</td>
</tr>
<tr>
<td>DV – Advertising (Z scores among organization)</td>
<td>0.00</td>
<td>0.983</td>
<td>-1.613</td>
<td>5.268</td>
</tr>
<tr>
<td>PROTEST</td>
<td>0.37</td>
<td>0.482</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Political control Index</td>
<td>0.600</td>
<td>0.332</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>TARGET</td>
<td>0.04</td>
<td>0.194</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>INCOME</td>
<td>8.322</td>
<td>1.043</td>
<td>5.71</td>
<td>10.66</td>
</tr>
</tbody>
</table>
Figure 2: correlation between political control and change in the intensity of advertising after the social protest

*observations are the sampled 59 organizations.

** The Y axis stands for the delta between each organization's averaged monthly expenditures (transformed to organization-specific Z scores) after the protest (August 2011 – June 2012) and before the protest (January 2010 – July 2011).
Table 2.1: Effect of Political control on organizations’ intensiveness of advertising
(Non-standardized coefficients; robust standard errors in parentheses)

<table>
<thead>
<tr>
<th>DV= advertising (Z scr.)</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>1d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Control Index</td>
<td>-0.025</td>
<td>-0.255*</td>
<td>-0.135</td>
<td>-0.276**</td>
</tr>
<tr>
<td></td>
<td>(.147)</td>
<td>(.137)</td>
<td>(.110)</td>
<td>(.125)</td>
</tr>
<tr>
<td>PROTEST</td>
<td>-0.029</td>
<td>-0.553**</td>
<td>-0.065</td>
<td>-0.288**</td>
</tr>
<tr>
<td></td>
<td>(.113)</td>
<td>(.263)</td>
<td>(.090)</td>
<td>(.134)</td>
</tr>
<tr>
<td>Political control Index *</td>
<td>-</td>
<td>0.631**</td>
<td>-</td>
<td>0.381***</td>
</tr>
<tr>
<td>PROTEST</td>
<td></td>
<td>(.274)</td>
<td></td>
<td>(.140)</td>
</tr>
</tbody>
</table>

| TARGET                   | -0.114     | -0.092     | -0.057     | -0.105     |
|                          | (.161)     | (.167)     | (.150)     | (.148)     |
| INCOME                   | 0.023      | 0.022      | 0.041      | 0.042      |
|                          | (.039)     | (.039)     | (.032)     | (.033)     |
| Advertising (Z scr.) in t-1| 0.206***  | 0.204**    | 0.180***   | 0.176***   |
|                          | (.038)     | (.039)     | (.029)     | (.029)     |
| Advertising (Z scr.) in t-2| 0.032      | 0.031      | 0.030      | 0.027      |
|                          | (.031)     | (.031)     | (.024)     | (.024)     |
| Advertising (Z scr.) in t-3| 0.028      | 0.027      | 0.029      | 0.026      |
|                          | (.029)     | (.029)     | (.196)     | (.020)     |
| Fixed-effects for months (Jan to Dec) | Yes | Yes | Yes | yes |
| TIMETREND                | 0.010      | 0.010      | 0.007      | 0.007      |
|                          | (.007)     | (.007)     | (.005)     | (.005)     |
| Constant                 | -0.356     | -0.157     | -0.372     | -0.305     |
|                          | (.379)     | (.387)     | (.249)     | (.250)     |
| N organizations          | 36         | 36         | 59         | 59         |
| N observations           | 1080       | 1080       | 1770       | 1770       |
| R²                       | .074       | .076       | .057       | .060       |

Notes: Table entries are non-standardized OLS-regression coefficients with robust standard errors, clustered at the level of organizations.
* p < 0.1 ** p < .05 ***p < .01 (two tailed)
Table 2.3: Simple effect of protest for variedly politically-controlled organizations

<table>
<thead>
<tr>
<th>Political control Index score</th>
<th>Expected change in expenditure on advertising after protest (Z scores)</th>
<th>Lower 95% confidence interval</th>
<th>Higher 95% confidence interval</th>
<th>expected change after protest (converted to US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-0.288</td>
<td>-.555</td>
<td>-.021</td>
<td>-117,176.8</td>
</tr>
<tr>
<td>0.2</td>
<td>-0.212</td>
<td>-.440</td>
<td>.016</td>
<td>-86,173.8</td>
</tr>
<tr>
<td>0.4</td>
<td>-0.136</td>
<td>-.333</td>
<td>.061</td>
<td>-55,170.8</td>
</tr>
<tr>
<td>0.6</td>
<td>-0.059</td>
<td>-.239</td>
<td>.120</td>
<td>-24,167.7</td>
</tr>
<tr>
<td>0.8</td>
<td>0.017</td>
<td>-.162</td>
<td>.194</td>
<td>6,835.3</td>
</tr>
<tr>
<td>1</td>
<td>0.093</td>
<td>-.015</td>
<td>.286</td>
<td>37,838.4</td>
</tr>
</tbody>
</table>

Table 2.3: Robust models
(Non-standardized coefficients; robust standard errors in parentheses)

<table>
<thead>
<tr>
<th>DV= advertising (Z scr. in T) – (Z scr. in T-12)</th>
<th>2a</th>
<th>2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Control Index</td>
<td>0.648** (.274)</td>
<td>0.486*** (.144)</td>
</tr>
<tr>
<td>TARGET</td>
<td>-0.218* (.128)</td>
<td>-0.227* (.116)</td>
</tr>
<tr>
<td>INCOME</td>
<td>-0.061 (.057)</td>
<td>-0.066 (.049)</td>
</tr>
<tr>
<td>Lagged DV</td>
<td>0.245*** (.067)</td>
<td>0.231*** (.052)</td>
</tr>
<tr>
<td>(Z scr. in T) – (Z scr. in T-1)</td>
<td>0.438*** (.062)</td>
<td>0.369*** (.053)</td>
</tr>
<tr>
<td>(Z scr. in T) – (Z scr. in T-2)</td>
<td>0.106*** (.047)</td>
<td>0.200*** (.048)</td>
</tr>
<tr>
<td>(Z scr. in T) – (Z scr. in T-3)</td>
<td>0.027** (.029)</td>
<td>0.104 (.035)</td>
</tr>
<tr>
<td>Fixed-effects for months (Jan to Dec)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Constant</td>
<td>0.093 (.584)</td>
<td>0.192 (.417)</td>
</tr>
<tr>
<td>N organizations</td>
<td>36</td>
<td>59</td>
</tr>
<tr>
<td>N observations</td>
<td>396</td>
<td>649</td>
</tr>
<tr>
<td>R²</td>
<td>.4211</td>
<td>.358</td>
</tr>
</tbody>
</table>

Notes: Table entries are non-standardized OLS-regression coefficients with robust standard errors, clustered at the level of organizations.
METHODOLICAL APPENDIX

Of the database’s 16,000 organizations, we sampled 40 state level and municipal level public agencies (hereafter: “public”) and 60 non-governmental organizations (hereafter “private,” of which 38 are for-profit businesses and 22 are NGOs). We restricted our sample to 100 organizations in order to make the coding and collection of additional information (e.g. on organizations’ incomes, the targeting of organizations by protesters etc.) manageable and reliable. These organizations were selected, employing a stratified-random sampling strategy, from within the two groups of organizations – i.e. public and private, provided that they use advertising as a regular means of communication (at least 12 months between January 2010 and December 2012).

Our stratified sampling strategy involved two stages. At the outset, we asked a research assistant to randomly select articles that mentioned the phrase “The social protest” from the on-line searchable archive of ‘TheMarker’ – the daily economics section of Haaretz newspaper - between June 2011 (the outset of the protests) and May 2012 (a year into the social protest). TheMarker was chosen because it is associated, more than any other Israeli newspaper, with the protests and both reflected and amplified the voice of the activists. This initial search yielded 129 articles, which were found to be relevant to the social protest. The first author coded the names of organizations and/or sectors that were criticized either by the protest leaders or by TheMarker’s journalists in relation to the protests. This coding yielded a list of 49 organizations, which were criticized by the protesters or journalists at least once (hereafter also: “targeted organizations”), and an initial analysis of more/less criticized business and service sectors. Table 1A of the appendix documents the distribution of protest-related criticism across sectors. Following this initial survey of the media, we decided to focus on organizations that operate (as producers, distributors, regulators/overseers) in six sectors: four sectors that received relatively high attention (foods, education, housing, finance) and two that received less attention (transportation, tourism).

Of the above list of 49 targeted organizations, which were identified in our initial media analysis, 19 organizations (of which 10 are public and 9 are private) operate in one or more of the six selected sectors and were therefore included in the sample.\footnote{An additional “targeted” organization had to be excluded from the dataset due to missing data regarding its annual income.} We then matched this initial list of 19 targeted organizations by randomly sampling from IFAT’s dataset 30 public agencies and 51
private organizations, which operate within the six relevant sectors. For each of the above sampled organizations, whether public or private, we checked whether information on annual income is available from public sources (see below). If information about an organization’s annual income could not be made available, we removed the relevant organization and continued our random sampling. Of these randomly-selected 81 organizations, ten were later found to have been targeted in relation to the social protests (see the operationalization of targeted in the methodological section). Hence our final sample of 100 organizations consists of 40 public organizations and 60 private organizations, of which 13 and 15, respectively, were targeted at some point between June 2011 and July 2012.

**Organizations’ Classification into Public/Private and into Sectors**

Our classification of organizations as “private” - businesses and NGOs – and their allocation to sectors was primarily based on IFAT’s detailed categorization of organizations into sectors and sub-sectors (see Table 2A below for IFAT’s categorization of sub sectors, which fall under our six selected sectors). We further reduced this sampling population to those organizations that advertised during at least one-third (12 months) of a period of 36 months between January 2010 and December 2012 (hereafter: the 36-months period). This processes yielded an initial sampling population of 1093 private organizations.

A more complicated task involved identifying all public agencies, and then classifying them into sectors in order to create a matched public/private sample. Public agencies were categorized by IFAT as either “governmental,” “municipal” or “organizations” – as for the first two categories, we immediately allocated them to a separate sampling population of “public agencies.” We then had to sift IFAT’s category of “organizations” into public versus NGOs. This we did based on existing lists of government companies (available from the Governmental Companies Authority), of statutory corporations (from the Accountant General 2010 financial report) and of municipal companies (based on an index published by the Union of Municipal Corporations). This sifting process was conducted for those “organizations” that advertised during 12 months or more of the 36 months period. Out of the 152 “organizations,” which advertised over 12 months or more, we reclassified 28 as “public,” and added them to our population of public organizations, and 124 were categorized as “private” NGOs and added to the sampling population of private organizations.

At the end of this process, we had a full population of 150 public organizations, which included all observations that were categorized by IFAT as “governmental” or “municipal”, the above 28
organizations that we classified as public from within IFAT’s category of “organizations,” and any other observations regarding government companies, statutory corporations and municipal companies based on the abovementioned lists. Then, based on the relevant 150 public agencies description of their mandates/aims in their websites, we classified their operations as related/unrelated to one or more of the six sectors. To do so, both authors coded each organization, and we discussed any disagreements. Overall, out of the 150 public organizations, the operations of 109 (73%) was found to be related to one or more of the six sectors. From within this population of 109 public organizations we randomly sampled 30 organizations to match the 10 public targeted organizations.

Employing a similar process, of the above 124 NGOs, which we categorized as private, 42 (34%) were classified as relevant to one or more of the six sectors. We added these 42 organizations to all observations of businesses and NGOs, which were classified by IFAT into one of the six sectors, creating an overall sampling population of 1217 private organizations that operate within the relevant six sectors and advertised over at least 12 months. We estimate that between 15 to 20% of this population were NGOs, whereas the rest were for-profit businesses. From within this population we randomly sampled 51 organizations to match the sample of 9 private targeted organizations.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of articles in which sector was mentioned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>67</td>
<td>51.9%</td>
</tr>
<tr>
<td>Education</td>
<td>48</td>
<td>37.2%</td>
</tr>
<tr>
<td>labor market</td>
<td>35</td>
<td>27.1%</td>
</tr>
<tr>
<td>Welfare services</td>
<td>33</td>
<td>25.6%</td>
</tr>
<tr>
<td>Foods</td>
<td>33</td>
<td>25.6%</td>
</tr>
<tr>
<td>Health</td>
<td>28</td>
<td>21.7%</td>
</tr>
<tr>
<td>Finance</td>
<td>21</td>
<td>16.3%</td>
</tr>
<tr>
<td>Energy and water</td>
<td>21</td>
<td>16.3%</td>
</tr>
<tr>
<td>Defense and security</td>
<td>17</td>
<td>13.2%</td>
</tr>
<tr>
<td>Media and Communications</td>
<td>11</td>
<td>8.5%</td>
</tr>
<tr>
<td>Transportation</td>
<td>10</td>
<td>7.8%</td>
</tr>
<tr>
<td>Tourism</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 2A: Relevant Categories for the 6 Sectors in IFAT’s Dataset

<table>
<thead>
<tr>
<th>Sector</th>
<th>Main Category</th>
<th>Sub-Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>Construction</td>
<td>Housing; real estate</td>
</tr>
<tr>
<td>Education</td>
<td>Education/studies</td>
<td>Universities; elementary schools and high schools; Yeshivas and Ulpana’s; language studies; studies (general); colleges and seminars, training for psychometric exams and matriculation exams.</td>
</tr>
<tr>
<td>Foods</td>
<td>Food</td>
<td>Meat/chicken; cheese; ice cream; fish; cereals; cereals snacks; salty snacks; sweet snacks; tuna fish; pastries; dairy; soy products; pets food; food (general); oils; natural food; Convenience food; baby food; spread food; chewing gums; restaurants/cafe; instant soup; candy; salads; pasta; pralines; ketchup; creams; ice; fast food chains; chocolate. water and beverages</td>
</tr>
<tr>
<td>Finance</td>
<td>finance</td>
<td>Banks, investments; trading rooms, finance (general); credit cards, mortgages, pension; provident funds, funds; Exchange-traded notes. insurance</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Motorcycles; renting; leasing; car sale; accessories; commercial vehicles / trucks; private vehicles; SUV; transportation (general).</td>
</tr>
<tr>
<td>Tourism</td>
<td>Tourism</td>
<td>Tourism sites; hotels/guesthouses; travel agencies; tourism (general); flights.</td>
</tr>
</tbody>
</table>