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Democracy with group identity*

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Abstract

Group-based identity undermines democracy by impeding democratic change of government. A substantial literature has therefore studied how to make democracy consistent with group identity. We contribute to this literature by introducing the role of group decisiveness into voting incentives and mobilization of voters. In the elections that we study, for the same populations, accounting for income and other influences, group identity increased voter turnout on average by some 8 percentage points in local elections and decreased voter turnout by some 20 percentage points in national elections. We empirically investigate the effect of group identity on voter turnout and also evaluate whether group identity resulted in budgetary imbalance or replacement of local government because of disfunctionality. Our general contribution is to show how democracy can persist with group identity, although democracy in such instances differs from usual political competition.

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Voting turnout
Voter decisiveness
Expressive voting
Instrumental voting
Local government
Arab Spring

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1. Introduction

Whether identity is individualistic or group-based (see Inglehart, 2000) affects the feasibility of democracy. Individualistic voters decide through emotion (Westen, 2008) or reevaluation of candidates and policies (Lewis-Beck and Stegmaier, 2013) whether to retain or change their political preferences, so allowing democratic change of government to take place through the outcome of political competition (Ursprung, 1991). Group-based identity is, on the other hand, usually inconsistent with political competition and democracy (see for example Rabushka and Shepsle, 1972; Hillman, 2007). For there is no point to contesting elections when voting according to group identity results in repetition over time of the same electoral outcome. Or there is no point in being a 'loyal opposition' that awaits a turn in government when, because of group voting, such a turn will never come. With group identity impeding change of government through electoral competition, there has often been autocracy rather than democracy and change of government has been by non-democratic means.

There have been proposals for how transition from autocracy to democracy might be implemented when identity is group-based. A suggestion has been to ensure political inclusion of groups through proportional representation (see for example Lijphart, 1977; 2004). Another suggestion (for example, Horowitz 1985) has been to design political institutions so that candidates and parties can appeal to a broad base of voters encompassing different groups. Reilly (2001) observed that proportional

representation encourages candidates to appeal to group identity whereas preferential voting allows voters with group identity to give their first preference to the candidate of their group and then to proceed to vote for candidates of other groups. Birnir (2007) proposed that democracy could be implemented by including leaders of different groups in government.¹

Notwithstanding the various suggestions, democracy has often been elusive. A wide range of studies has found that democracy has in particular been absent from Muslim-majority societies (Lipset, 1994; Midlarsky, 1998; Barro, 1999; Fish, 2002; Karatnycky, 2002; Borooah and Paldam, 2007; Rowley and Smith, 2009; Facchini, 2010; Potrafke, 2012, 2013). Also, the 'Arab Spring', which had been predicted to introduce persisting democracy into Muslim-majority countries, ended with a general return to autocratic government.²

Sustained democracy with Muslim-majority populations is found in local-government jurisdictions in the state of Israel. Voter turnout in these

¹ Coexistence of democracy with group identity is of course not an issue if cultural assimilation makes differences in identity transitory (Young, 1976). In high-income democracies, group identity can make secession an issue (as in Québec, Scotland, Britany, and Catalonia). High incomes do not prevent identity-based conflict (see Abadie and Gardeazabal 2003 on the Basque country and Dubois 2013 on Corsica). Rather than minorities, ethnically-based political parties can represent majority groups (see Higashijima and Nakai 2011 on the Baltic countries). On democracy and group identity in low-income societies, see Chandra (2004) on India, Posner (2005) on Africa, and Kimenyi (2013) on Kenya.

² On expectations regarding the Arab Spring, see Weddady and Ahmari (2012), Amin et al. (2012), Crystal (2012), and Inbar (2013). On the brief period of democracy in Egypt, see Elsayyad and Hanafy (2014) on parliamentary elections and Al-Ississ and Atallah (2015) on the presidential election. Democratic elections took place in 2014 in Tunisia, where the Arab Spring began. On a political economic model of the Arab Spring see Hodler (2012).

jurisdictions is ostensibly the highest in the world in democratic elections with voluntary voting, approaching in some cases 100 percent.³ The high voter turnout includes men and women.⁴

Voter turnout has been high in Muslim Arab communities and also in the Druze and Christian populations. The latter three groups have together constituted some 20 percent of the population of the state of Israel (the time of elections that we shall study, in 2008, the Muslim population constituted 16.6 percent of the total population and the Druze and Christian populations both 1.3 percent).⁵ Although minorities in the total population (the majority population is Jewish), the Muslims, Druze, and Christian populations are often majorities in their local-government jurisdictions.⁶

Identity in the three minority groups tends to be group-based. The source of group identity can be religion. Religiously mixed jurisdictions are however uncommon (although we shall presently describe for illustrative

³ High “voter turnout” also occurs in single-candidate autocracies. In such cases, voting is not an act of choosing from among alternatives. See Yeret (1995).

⁴ Arab society has been traditionally patriarchal (see Joseph 1994, 1996). On gender aspects of Arab society, see also Donno and Russett (2004), Cooray and Potrafke (2011), Rahman (2012), Potrafke and Ursprung (2012), and Gutmann and Voigt (2015).

⁵ Central Bureau of Statistics, State of Israel (2009).

⁶ Christians in Israel include those of European (or Russian) origin living in Jewish-majority localities and also those whose ancestors lived in the region before the Arab invasion in the 7th century. The latter Christians are mostly associated with eastern churches. When we refer to ‘Christians’, the intention is eastern Christians and not European (or Russian-origin) Christians who live in Jewish majority areas. On the different Christian denominations and groups in Israel, see Hänzler (2010).

purposes a mixed jurisdiction). Most commonly, the source of group identity is the extended family or clan. Ben Bassat and Dahan (2012) matched family names of voters to family names of candidates using data from elections in 2003 to show that voting in local elections was based on extended-family identity (which they describe using the Arabic term 'hamula').⁷

The Jewish population in general does not tend to live in a structure of extended families and does have the opportunity to vote for a member of an extended family as a candidate for political office (or to vote for a candidate who extended families have agreed to support). We attribute individualistic identity to Jewish voters and draw on our own empirical results from elections in 2007/8/9 and the prior research of Ben Bassat and Dahan (2012) on elections in Israel in 2003 as background for studying voter behavior with group and individualistic identity.⁸

Section 2 considers voting incentives distinguishing between expressive and instrumental motives for voting (Fiorina, 1976; Hillman, 2010). Instrumental voting requires a prospect of material gain through decisiveness. Individual voters are usually not decisive but groups can be decisive. We also consider incentives for inclusiveness in government when voters have group

⁷ The research was facilitated by the extended family tending to live together in the same neighborhood and to vote at the same polling station.

⁸ The data for our study and also Ben Bassat and Dahan (2012) were for citizens of the state of Israel. The population under the auspices of the government of the Palestinian Authority was not part of our study.

identity. Group decisiveness requires mobilizing voters and overcoming the free-rider problem of group voter turnout.

In section 3 we describe the institutional background to voting in Israel, which is the source of our data. We also present a case of group inclusiveness in government and consequences when the prior sharing agreement is disrupted.

Section 4 reports empirical results on the relation between group identity and voter turnout in local-government and national elections (our results are consistent with the results of Ben Bassat and Dahan 2012 for the previous elections).

In section 5 we investigate empirically whether group identity is associated with local-government budgetary imbalance. Group identity has been proposed to be linked to cultural obligation of officials in government to cater to requests for privileged benefits from members of their own group (Lipset and Lenz, 2000). The sought privileged benefits include 'rent seeking from state coffers' (Park et al., 2005) and can result in budgetary imbalance. Local governments in Israel with budgetary imbalance are subject to regulation through financial rehabilitation budgets of the Ministry of the Interior of the central government. A local government with budgetary imbalance that does not, in a majority vote, agree to implement financial rehabilitation program effectively disbands itself, with local-government elections then not taking place until conditions consistent with fiscal viability are judged by the Ministry of the Interior to have been restored. A procedure

is thus in place for addressing the moral hazard problem of fiscal federalism that local governments may overspend in anticipation of 'soft budgets' from higher levels of government (Hillman, 2009, chapter 9). We examine whether group identity was associated with a local government being subject to a central government financial rehabilitation program and whether group identity affected the likelihood of central government administration.

The final section summarizes our conclusions in the broader context of requisites of sustained democracy.

2. Voting incentives

2.1 Expressive voting

Theories of voting have generally assumed non-decisive individualistic voters who are subject to the paradox of voting (Downs, 1957). That is, the personal costs of voting for a non-decisive voter exceed the expected material benefits, which are effectively zero because of non-decisiveness. The paradox of voting is resolved by recognizing expressive utility from displaying or confirming identity (Hillman, 2010). Although expressive utility cannot be observed directly, the utility must presumably be present, to compensate for the cost (albeit low - see Kirchgässner, 1992) of voting. The alternative to expressive

voting is that voters are delusional in believing that their individual vote is decisive.⁹

The voting decision can be influenced by income. High income implies a high value of time but higher income also tends to be associated with a greater likelihood of voting, which suggests great expressive utility from voting for high-income individuals.¹⁰

A prediction of a positive relation between income and voter turnout requires presence of issues conducive to 'expressiveness'. Such issues tend to be more prominent in national than local elections. Issues in national elections can, for example, include the appropriate role of the state in income

⁹ For overviews of the voting decision, see Geys (2006) and Smets and van Ham (2013). Non-decisive voting has been explained as adherence to a social norm (Amaro-de-Matos and Barros, 2004), as an autonomous response conditioned on repetition of past behavior (Bendor et al., 2011), or as implicitly conditional on others voting (Rolphe, 2012). Multi-causal explanations have accounted for social behavior in conjunction with personal motivation and institutional impediments to voting (Harder and Krosnick, 2008). Types of explanations that do not account for the expressive utility from voting bypass the paradox of voting by disregarding the personal cost-benefit calculation underlying the voting decision. If voting is regarded as an expression of altruism, then voting is expressive in being a means of displaying an identity (perhaps only of voters to themselves) of being an altruistic person. An altruistic person still has to choose who to vote for, and, given that a personal vote is non-decisive, the decision who to vote for is expressive. See Hillman (2010).

¹⁰ Glaeser et al. (2006) have suggested that high voter turnout by high-income persons is the consequence of a positive relation between education and income. Frey (1971) proposed that high-income people are more inclined to vote because they are better informed. Yet, whatever their education or level of income, individual voters are not decisive. Education and information therefore need not be involved in determining voter turnout. Voters may vote expressively and emotionally without seeking to be informed about parties' or candidates' policies (Caplan, 2007).

redistribution, social equality, ideology, and geopolitical questions. Issues in local elections can involve schools, local roads, parks, and cleanliness of the town or village, and the friendliness of the mayor. High-income people may find expressiveness through local issues not compelling and may choose not to express themselves – or not to vote – in local elections.¹¹

Expressive utility can more generally underlie a decision not to vote (Guttman et al., 1994; Brennan and Hamlin, 1998; Hillman, 2010). Voters may feel that they have ‘no one to vote for’. The very act of not voting can therefore be expressive: it is in principle possible that voters may, for example, feel no sense of identity with the state or jurisdiction in which they have the right to vote.

2.2. *Instrumental voting*

If voting expressively, an individual with group identity is *voluntarily* voting in support of the group for personal expressive benefit. If group members can be mobilized to vote, group voting introduces the possibility of group decisiveness and therefore of group instrumental voting.¹² Instrumental voting requires material (or non-expressive) benefit from controlling government. A vast literature describes political contestability of government

¹¹ When the same political parties contest national and local elections, voters may however expressively vote to support the same parties in both elections. See Martins and Veiga (2013).

¹² Expressive and instrumental voting can be simultaneous. The incentives of one type of voting do not disallow the presence of the other (Hillman, 2010).

for benefits or rents from political and bureaucratic discretion.¹³ A primary source of benefit from success in political competition is the ability to choose spending of government revenue, which in local government in general includes revenue transfers from central government. After the winners of political contests are decided, a 'common pool problem' (see Buchanan and Yoon, 2004; Habyarimana et al., 2009; Hillman, 2009, chapter 9) can therefore confronts groups excluded from government, whose preferences are not accounted for when the majority makes public-finance decisions. Because of the common pool problem, the outcome of control of public finance can be privileged private benefit (Tullock, 1959) or discrimination against groups through the types of publicly-financed public goods that are provided (Ursprung, 1990). Infrastructure projects may for example be located to provide targeted benefits. Benefits through government can take various other forms.¹⁴

Quite generally, in different countries, political discretion has been associated with privileged benefits (Tullock, 1989; Hillman, 2013; Congleton and Hillman, 2015). The theory of contests (Konrad, 2009) describes how the

¹³ For an overview of the literature, see Hillman (2009, chapter 2).

¹⁴ Not all benefits need be legal or meet ethical standards. There can be privilege in assignment of procurement contracts and in employment in a government bureaucracy. Politicians have been observed to hire family members using public funds (see Kauder and Potrafke 2015 for a case from Germany). Privileged benefits might be obtained through rezoning of land. Or 'ghosts' may exist in government bureaucracies (employees who receive salaries but who do not report for work or who work part-time). Baldacci et al. (2004) report on an empirical study of low-income countries in which reduced government spending increases economic growth, ostensibly because of a reduction in rent seeking.

benefits are contested. Contesting of benefits is socially costly because of resources unproductively used in contests. Losses for losers in the contests can be expressive as well as material. When identity is individualistic, an expressive loss may be no more than disappointment that a preferred political party is not in office. With group identity, expressive discontent from not winning can be more severe because of loss of pride and esteem (Brennan and Pettit, 2004) and feelings of personal affront, unfairness, and subjugation (Moisi, 2010).

An alternative to a contest with winners and losers is cooperation that avoids expressive content and allows sharing of material benefits from government or avoidance of adverse distribution consequences of the common pool problem. Such cooperation (or power sharing) does not in general take place when political competition is between political parties that can rotate in political office. Group identity can however preempt rotation in office. As we have noted, group identity is therefore in general inconsistent with sustained democracy. Cooperation may be chosen, however, be chosen over conflict. There are incentives for cooperation if the cost of exclusion of groups from government is high because excluded groups can impose losses on included groups or if the majority's cost of exclusion (for example, through repression) is high. An excluded group's expressive utility from 'resistance for the sake of resistance' can be high.

Adding avoidance of the expressive discontent that is less an influence in political competition between political parties that can rotate in political

office, groups can be better off by avoiding contests that give rise to winners and losers. With group identity, there are therefore incentives for inclusiveness or cooptation (Bertocchi and Spagat, 2001) in government. Expressive discontent from cooperation for religious or ideological reasons can nonetheless make successful inclusiveness or cooptation uncommon.

2.3 Attributes of democracy with group identity

When democracy coexists with group identity, there is a free-rider problem when group members are aware that their individual vote is insignificant for the group's total vote. The free-rider problem is resolved spontaneously when voting is a form of voluntary collective action (Guttman, 1991) and expressive utility from support for the group is sufficiently high (Hillman, 2010). If the free-rider problem is not resolved spontaneously, social pressure to vote can be applied (Schram and Van Winden, 1991; Gerber et al., 2008). The free-rider problem is resolved directly if voting by individual group members can be monitored.

Inclusion of a group that has resolved the free-rider problem in a governing coalition can be either formal or de facto. In either case, a group's voter turnout objectively signals the size of the group and thereby a 'fair' share for the group of benefits through government.

A small group that is instrumental in the formation of a majority coalition can, of course, benefit disproportionately. A small unimportant group can remain always excluded.

For smaller groups, vote buying is a means of group inclusion (see Buchanan and Lee, 1986). Groups that perceive that they may be excluded from post-election benefits from government can, in a pre-election agreement, sell their collective votes. Again, the group collective-action or free-riding problem needs to be resolved to ensure group voter turnout.

2.4 General incentives

We have described general incentives relating to voting that differ depending on whether identity is individualistic or group-based and incentives relating to contestability or cooperation that differ according to whether rotation in government office is feasible. As a prelude to our empirical investigations, we now describe the particular institutional background to voting in local and national elections in Israel, where the electorate includes individualistic voters as well as voters with group identity and where local government is subject to rules of political behavior and budgetary discipline of the central government.

3. Voting and identity in Israel: Background

3.1 Political institutions in Israel

The electoral system in Israel is proportional representation in both local and national elections. Minority groups therefore have opportunities for representation. In national elections a minimal vote share is required for a party to enter parliament. Representation is unicameral. In local elections, elections for the mayor and the local-government council take place

simultaneously. Local government can be at the level of a city or town, or village, or there may be regional local government with regional councils. We distinguish among these categories of local government in our empirical estimates.

Political parties representing the Muslim population and including Christians have been present in the national parliament.¹⁵ Druze members of parliament are elected on the party lists of the Jewish-majority political parties. The Druze population has no history of conflict with the Jewish population and exhibits loyalty to the state of Israel, including through voluntary participation of the Druze community in compulsory military service.

In minority localities, the tendency of extended families to live in the same neighborhood and hence tend to vote at the same polling station is conducive to mobilization of voters to address the free-rider problem in group voter turnout. An important observation is that extended-family groups that can be decisive on their own or in coalitions with other groups in local elections cannot be decisive in national elections. Hence the incentive to vote due to group decisiveness in local elections is absent in national elections. We therefore predict lower voter turnout of the populations with group identity in national than local elections. For Muslim and Christian populations, voter turnout may also decline in national elections for

¹⁵ For the 2015 national elections, the parties supported by Muslims and Christians combined to form a single party.

additional expressive reasons. Expressive non-voting would not, however, apply to the Druze population.

Local governments levy property and other taxes and receive allocations from the Ministry of interior of the central government, and are subject to regulation by the Ministry of the Interior. Because of regulation, the cost of expressing dissent by an excluded group is low (through complaint and legal means) and the cost to a majority of suppressing dissent is high (through illegality of the use of force). Power sharing and cooperation among groups are therefore expected.

Budgetary imbalance can result in the Ministry of the Interior proposing a financial rehabilitation program. If the program is not agreed to by the local-government council, local-government politicians are replaced by an administration appointed by the Ministry of the Interior of the central government.

3.2 Cooperation and inclusiveness

An example of power sharing and cooperation against the background of a local-government financial rehabilitation program is provided by the locality of Abu Snan. This locality is unusual in having significant representation of all three significant minority groups (55 percent Muslim, 27 percent Druze, and 17 percent Christian). In November 2004 the incumbent mayor resigned because of corruption. The status quo had been a Druze mayor and Christian

and Muslim deputy mayors. The replacement for the previous Druze major was the previous Christian deputy mayor (named Musa). The spokesman for the Druze community declared:

"Our problem with Musa is not with his (Christian) religion, but with the policy he represents...There are no Druze in the town council leadership. It's as if we're out of the game. Dr. Musa and his friends in the coalition now have to deal with the *economic recovery plan*. *That involves firing workers, most of whom are Druze.*" (Italics added)

We note that the complaint is not *expressive* dissatisfaction but concerns *material* loss through the financial rehabilitation program that imposed budgetary restrictions. The financial restructuring threatened the jobs of mostly Druze workers in the local-government bureaucracy. The Druze spokesman continued:

"We (Druze) are not against Christians or Muslims, but there is a status quo in Abu Snan that is good for the town. The dry [letter of the] law is unaware of the social problems in Abu Snan and what has been done is a recipe for a blow-up."¹⁶

The 'blow-up' is a reference to the possibility of the end of group cooperation. Data to which we refer in section 5 show that, in Abu Snan, local government was subsequently replaced by central administration.

¹⁶ Source: <http://www.haaretz.com/print-edition/news/new-abu-snan-mayor-says-his-christianity-is-a-problem-1.140704> (November 2004). Accessed October 22, 2014.

3.3 The source of group identity

In the case of Abu Snan, the source of group identity was religion. More usually, group divisions are based on the extended family. Consanguineous marriage can be the basis for group loyalty: particularized trust within the family and low generalized trust of strangers outside the extended family or tribe has traditionally led to consanguineous marriage. There are advantages of marrying inside the extended family because of the custom of absorption of the bride into the family of the husband (Joseph, 1994; 1996). Through consanguineous marriage, the daughter is not lost to the parents and the grandchildren will be close at hand. Most importantly, consanguineous marriage ensures that the daughter is not bearing sons who will strengthen the forces of an adversary group.

Table 1 shows data on consanguineous marriage from a study by Jaber and Halpern (2014). Muslim and Druze communities in Israel exhibit high rates of consanguineous marriage, with a lower rate for Christians (see also Vardi-Saliternik et al., 2002). The rate of consanguineous marriage for the Jewish population of Israel is low, very similar to the United States and Canada, Europe (excluding Spain) and Australia and New Zealand. The Druze do not permit intermarriage with other groups: evidence shows that the Druze gene pool has remained basically unchanged since the 11th century (Zidan et al., 2014).

The rates of consanguineous marriage for Jordan and the population of the Palestinian Authority exceed those of the Muslim population of Israel. In

Lebanon, the rate for the Muslim population is a little higher than the high range for Muslims in Israel and there is little difference in consanguineous marriage for Druze and Christians, confirming cultural rather than locational influences. The rate of consanguineous marriage is very high in the tribal areas of Western Iraq and in Saudi Arabia.

The lower rate of consanguineous marriage among the Christian population in Israel compared to Muslim and Druze populations suggests lower emphasis on voting in support of a candidate who is a relative through the extended family. The low rate of consanguineous marriage among the Jewish population suggests that it is unlikely that Jewish voters will have relatives to vote for and is consistent with behavior according to individualistic identity.¹⁷

4. Empirical study of voter turnout

4.1 Hypotheses

4.1.1 Group identity

Based on the data for consanguineous marriage and the evidence from Ben Bassat and Dahan (2012) that extended-family members vote for a candidate from their own extended-family, the prediction is that voter turnout increases with the share of Muslim and Druze populations in a local-government election. Voter turnout is predicted to be less sensitive to the share of the

¹⁷ See also Theocharis and Torgler (2013).

Christian population. In the Druze, Muslim, and Christian populations, expressive identification with either co-religionists or the extended-family (or both) can motivate voting. Decisiveness of a group (the group alone or in a coalition with other groups) introduces the instrumental motive for voting – and for signaling group size – that we have described.

4.1.2 Non-decisiveness and expressive motives for voting

Non-decisiveness suggests expressive motives for voting in the Jewish population in both local and national elections. Because expressive incentives appear less important in local elections, high income people may be less inclined to vote in local elections than in national elections. We cannot make a prediction about income as a proxy for utility from expressive voting in national elections (there are political parties that appeal to low-income voters and there are geo-political issues that affect the entire population).

4.1.3 Non-decisiveness and expressive abstention

Because the Druze and Muslim populations differ in expressive incentives not to vote in national elections, we can use voter turnout by the two populations to infer the extent to which not voting in the national election reflects absence of group decisiveness.

4.1.4 Other influences

The significant immigration from Russia, predominantly in the early 1990s, introduced new voters into elections in Israel. The new voters had experience with communist totalitarianism and not with democracy and may have behaved differently in voting decisions from the pre-present population. We include the presence of immigrants in our estimates. We also include age of voters (20-29 years) to account for the possibility that younger people may differ from the older population in voting behavior.

In local elections, whether the jurisdiction is a city or town or is governed by a regional council can influence incentives to vote through the prospect of group decisiveness. Population of a jurisdiction can also influence the prospect of group decisiveness. Representation (we use representatives per 1,000 inhabitants) can effect influence the decision whether to vote in local elections through voters' familiarity and identification with candidates.

4.2 Data and descriptive statistics

We use data for voter turnout in local government council and national elections for the corresponding population of voters in the local-government jurisdictions.¹⁸ Because elections in local-government areas with regional, local and city councils did not take place at the same date, we pool the data from the 2007/2008/2009 local elections (12.5% of local elections took place in

¹⁸ We use a near-complete sample of localities in Israel. The data is from the Israeli Central Bureau of Statistics. See also Ben Bassat and Dahan (2012) on the data for the 2003 elections.

2007, 78.2% in 2008 and 9.1% in 2009). For 41 of the 248 jurisdictions, there is no data on voter turnout in local elections.¹⁹ Data for religion is for the year 2007. Table 2 shows the descriptive statistics for the variables used in our estimates.

In local elections, voter turnout in the 46 localities with absolute Muslim majorities was on average 88 percent. In the 7 localities with absolute Druze majorities, voter turnout in local elections was 91.6 percent. In the 6 localities with absolute Christian majorities, voter turnout was 86.0 percent. In the 148 localities with absolute Jewish majorities, voter turnout was 62.3 percent.

In national elections, by contrast, voter turnout in the 61 localities with absolute Muslim majorities was on average 51.9 percent, in the 12 localities

¹⁹ Elections did not take place in 31 localities. In a further 10 jurisdictions that were regional councils, data was incomplete because elections did not take place in each sub-district of the regional council. Of the 31 localities without elections, 5 did not have elections because positions were uncontested with one candidate for each place on the local council, 3 Druze localities on the Golan Heights did not have elections, 2 localities (Abu Basma and Kisra Smia) are missing from the data for reasons related to being a new jurisdiction and amalgamation, and in 21 cases local government had been disbanded and the localities were under the supervision of the Ministry of Interior. We return in section 5 to regulation by the Ministry of the Interior and reasons for absence of elections. Absent from our data are the two largest Druze towns, Daliyat el-Carmel and Usfiya. The two towns are adjacent to one another. In 2003 the government of Israel, in a program of local-government amalgamation, proposed to combine the local governments of the towns. Resistance to the amalgamation resulted in administration by a council appointed by the Ministry of Interior until 2008, at which time the separate jurisdictions were reinstated. Special elections in 2009 were not in the same period as other local-government areas and are not included in the data. See Reingewertz (2012) for a study of the program of municipal amalgamations.

with absolute Druze majorities 53.9 percent, in the 6 localities with absolute Christian majorities 54.2 percent, and the in the 169 localities with absolute Jewish majorities 66.7 percent.

4.3 The econometric model

We estimate a basic econometric model of the form:

$$Voter\ turnout_{ij} = \sum_k \beta_{jk} Group\ Identity_{ik} + \sum_l \zeta_{jl} x_{il} + u_{ij} \quad (1)$$

with $i = 1, \dots, 207$ for local government elections and $i = 1, \dots, 248$ for national elections; $j=1,2$; $k=1, \dots, 3$; $l=1, \dots, 8$. The dependent variable $Voter\ turnout_{ij}$ describes voter turnout in the 2007/2008/2009 local elections and the 2009 national elections. We use the index j to distinguish between local and national elections. $Group\ Identity_{ik}$ includes three variables for the share of Muslims, Christians and Druze in the population of jurisdiction i . The proportion of the category of Jews and others (individualistic identity) in a jurisdiction is the reference category.²⁰ Control variables in the vector x_i include income (the logarithm of real monthly GDP per capita in authority i in the year 2006 measured in Israeli shekels), the proportion of immigrants in the population of the local-government area in 1990 measured in the year 2006, the share of 20-29 years old in population measured in the year 2006, and the share of council members per 1000 inhabitants measured over the legislative period 2005-2008. The vector x_i also includes variables on the status of the jurisdiction: city (reference category), local council or regional council. *Election*

²⁰ The category 'others' refers to non-Jews who are principally immigrants from Russia.

$year_{in}$ describes dummy variables for the different elections years (2008 is the reference category because 78.2% of the local elections took place in that year). We include the election year dummy variables because voter turnout in 2008 may have been different than in 2007 and 2009. For the estimates of voter turnout for the national elections, we exclude characteristics of a locality that are not expected to influence issues at the national level (share of council members per 1000 inhabitants, local authority status, election year dummies). We estimate the model with ordinary least squares (OLS) and robust standard errors.

4.4 Empirical results for voter turnout

4.4.1 Identity and local-government elections

Table 3 shows results for local-government elections. The Muslim-population share variable has a positive sign and is statistically significant at the 1% level. The results show that voter turnout increases by 0.0802 percentage points when the share of Muslims in the population increases by one percentage point. Voter turnout was thus some 8.02 percentage points higher in localities with a 100% Muslim majority as compared to localities with no Muslim population, accounting for income and other covariates (0.0802 times 100).

The Druze-population share variable has a positive sign and is statistically significant at the 1% level. Voter turnout was some 10.3 percentage points higher in localities with a 100% Druze majority compared to localities with no Druze population.

The Christian-population share variable has a positive sign and is statistically significant at the 1% level. Voter turnout was some 6.73 percentage points higher in localities with a 100% Christian majority compared to localities with no Christian population (column 5).

4.4.2 Identity and national elections

For the national elections in Table 4, neither groups nor individuals can be decisive. Group identity as measured by Muslim, Christian and Druze population-share variables has a negative sign. The Muslim variable is statistically significant at the 1% level. The Christian variable is statistically significant at the 10% level in column (1), at the 5 % level in columns (3) and (4), and lacks statistical significance in column (2). The Druze variable is statistically significant at the 1% level in columns (1), (3) and (4), and at the 10 % level in column (2). The results in column (4) indicate that voter turnout compared to localities with none of their group present is 21.6 percentage points lower in localities with a 100% Muslim population, 17.6 percentage points lower in localities with a 100% Christian population, 17.4 percentage points lower in localities with a 100% Druze population. Our results confirm previous results by Ben Bassat and Dahan (2012).

4.4.3 Income and expressive voting

The results for local-government elections in Table 3 show a negative relation between average income per capita in a locality and voter turnout. The coefficients of the logarithm of income per capita are statistically significant at the 1% level. The coefficients indicate that voter turnout was about 0.15 percentage points lower in local-government elections than in an otherwise similar jurisdiction with a one percent larger income per capita (column 5). The results are consistent with the expressive-voter interpretation that voters in higher income localities are less motivated to vote by local issues.

In Table 4, the coefficient of the logarithm of income per capita lacks statistical significance. If income proxies for 'susceptibility to expressiveness', no significant difference is indicated in expressive voting in national elections.

4.4.4 Other influences

In both local (Table 3) and national elections (Table 4), the proportion of immigrants in a jurisdiction is significant in reducing voter turnout. In local elections, turnout was lower, the higher the share of younger people and the lower the number of council members per 1000 inhabitants (Table 3). In local elections (Table 3) the form of local government appears significant. Voter turnout increases with representation and increases if there is a local council compared to the reference category of city. The time of the election lacks significance.

5. Budgetary imbalance and group identity

Local government revenue in Israel is principally from central government grants and property taxes. With group identity associated with a cultural obligation of group members in government to cater to requests for privileged favors from their fellow group members, the consequence can be overspending and budgetary deficits.²¹

For the year 2009, we obtained data on local-government jurisdictions subject to a financial rehabilitation program of the Ministry of the Interior and also in which localities local government had been displaced by central administration.²²

There were 81 localities with a financial rehabilitation program. Of these, 56 had majority populations with group identity (43 had Muslim, 9 had Druze, and 4 had Christian absolute majorities). In 21 localities, local government had been replaced by a committee of the Ministry of the Interior. Of these, there were 14 with populations with group identity (13 with Muslim

²¹ Brender (2003) noted that tax collection in group-based localities was below revenue projected on the basis of full payments.

²² A local government is required to approve the annual budget within 3 months after the approval of the budget of the national government, although the Ministry of the Interior can extend the time for 6 months, after which, if the budget has not been approved, central administration replaces the local government. The Minister of Interior also intervenes if the number of council members is less than required (in this case, the minister can disassemble the council and appoint members on behalf of the ministry, but not necessary fire the mayor) or if the council and/or the mayor have been evaluated as not functioning adequately.

and one with Druze absolute majorities). Of the 21 localities, 4 did not yet have a financial rehabilitation program. In the 17 localities with a financial rehabilitation program and in which local government had been replaced by a committee of the Ministry of the Interior, 12 had populations with group identity (11 with Muslim and one with Druze absolute majorities). Localities with populations with group identity were therefore disproportionately represented among localities with a financial rehabilitation program and among localities in which local government had been disbanded.

We used probit estimation to ascertain the determinants of the probability that a local-government jurisdiction was subject to a financial rehabilitation program. Table 5 shows the results (coefficient estimates). In column (1) the Muslim, Christian and Druze variables have positive signs and are statistically significant at the 1% (Muslim and Druze) and 10% (Christians) level. In column (2), where income is included the Muslim, Christian and Druze variables have still positive signs and are statistically significant at the 1% (Muslim), 10% (Christian) and 5% (Druze) level. The income variable has a negative sign and is statistically significant at the 1% level. Localities with higher income per capita were less likely to be subject to a financial rehabilitation program.

With the inclusion of further explanatory variables in column (5), the Muslim, Christian and Druze variables lack statistical significance. In particular, localities with a regional rather than a city council were less likely to have a financial rehabilitation program (statistically significant at the 1%

level). A regional council complicates rent seeking through the budget because privileged assignment of benefits requires the approval of a larger group of political decision makers who are from the different localities included in the regional council.

We also estimated probit equations for determining the probability that a locality was under central government administration. Table 6 shows the results when the dependent variable assumes the value 1 for the 21 localities that were under central government administration. Inferences do not change when the dependent variable assumes the value 1 for the 17 localities that were both under central government administration and had the financial rehabilitation program. We cannot include the regional council dummy variable because all localities that were under central government administration had either local or city councils. The Christian and Druze variables lack statistical significance. By contrast, the Muslim variable has a positive sign and is statistically significant, indicating that localities with Muslim majorities were more likely to be under central government administration. The marginal effect of the Muslim variable (at the means of covariates) in column (5) is that the probability that a locality was under central government administration increased by about 0.08 percentage points when the share of Muslims increased by one percentage point. In other words, the probability that a locality was under central government administration was by about 8 percentage points higher in localities with a

100% Muslim population compared to localities with zero Muslim population.

6. Conclusions

6.1 The problem of sustainable democracy

We have studied the problem of sustainable democracy when identity of voters is group-based. There have been suggestions about how democracy with group-based identity might be achieved and sustained, but, in practice, because of the predictability of outcomes when voting takes place according to predetermined group identity, democracy has in general remained inconsistent with group identity. In particular, in the Arab world where group identity is prevalent, sustained democracy has not been observed – with the exception of the local-government jurisdictions in Israel that have been the background for our study.

6.2 Voter turnout and group identity in Israel

In the general absence of Arab democracy elsewhere, it may be viewed as a puzzle that voter turnout with group identity in Israel has been high or almost complete. We have proposed that group identity provides an incentive to mobilize voters to achieve high voter turnout because of the prospect of group decisiveness in sharing material benefits from inclusion in government, with voter turnout being an objective means of signaling the group's share of

benefits. Our empirical estimates (see also Ben Bassat and Dahan, 2012) confirm, after allowing for other influences, the role of group identity in increasing voter turnout but only in local elections in which groups can be decisive. In national elections in which groups cannot be decisive, turnout decreases with group identity. Using the change in voter turnout of the Druze population as a reference, the decline in group voter turnout between local and national elections suggests a response by all groups to absence of group decisiveness in national elections.²³

6.3 Expressive voting and material benefits

An individual's expressive utility from affirming group identity is a personal non-shareable or non-tradable benefit. If utility from voting were only expressive, there would therefore be no basis for sharing of benefits from government. Shared material gains provide the incentive for sustained democracy through group cooperation and inclusiveness in government.²⁴

²³ Our results do not support decline in voter turnout in national elections as substantially reflecting expressive discontent from voting.

²⁴ The kingdom of Jordan adjoins the state of Israel and voters have group identity. There has been a high rate of consanguineous marriage in Jordan (table 1). Conflict accompanying the 2013 local-government elections in Jordan was described as follows: "This most recent election day was characterized by low turnout and unofficial violations, such as vote-buying, the use of firearms in acts of violence, the burning of government institutions, and the closure of polling stations and the theft of ballot boxes by some candidates' supporters." Voter turnout was overall around 30%. In the capital city, Amman, voter turnout was less than 10.5%. See <http://www.al-monitor.com/pulse/politics/2013/08/jordan-elections-low->

6.4 The form of democracy

The form of democracy with group identity differs from the usual political competition with individualistic voters. As demonstrated by our example of Abu Snan, and consistently with our signaling hypothesis, the focus in participation of groups in government is on distribution rather than policy determination more generally. Moreover, usual political competition is absent or restrained.

6.5 External regulation

Sustained cooperation or power sharing in the presence of group identity has usually required external regulation.²⁵ With external regulation absent, inclusiveness and cooperation could be compromised by conflict based on group identity. In the case we have studied, in the vast majority of cases democracy was sustainable notwithstanding group identity although some jurisdictions were subject to a financial rehabilitation program.

6.6 Solutions for sustained democracy with group identity

Emulation can provide a solution for persistence of democracy with group identity. In the case of local jurisdictions in Israel, distances are in general small. Voters in jurisdictions with group-based identity can be influenced by

turnout.html##ixzz2qAbtyJ66 (accessed October 22, 2014). For another case of elections (in Kenya) with group identity and conflict, see Kimenyi (2013).

²⁵ See Tridimas (2011) on Northern Ireland.

democracy without discord in neighboring jurisdictions with individualistic identity – or with group identity.²⁶ Change in identity from group-based to individualistic is of course a solution, with a middle class concerned with self-expression through support for competence in government rather than self-expression through group identity. Economic development is conducive to change in identity from group-based to individualistic but high incomes reduce the importance of benefits obtained through government – and the benefits from being in government. The behavior of government is an influence on incomes.²⁷

6.7 Political economy with group identity

Our study contributes to general political economy. Groups in political economy have been studied as special interests that seek to influence policies through campaign contributions or by offering benefits to policy makers and political candidates. The background has been western political institutions and western individualistic culture (for example, Peltzman, 1976; Hillman, 1982; Grossman and Helpman, 1994; 2001; Potters and Sloof, 1996). Interest groups in western societies can also consist of voters that seek common

²⁶ Salmon (1987) proposed a ‘demonstration effect’ whereby voters in a local-government jurisdiction are influenced by political behavior and policies in neighboring jurisdictions.

²⁷ On government in Muslim-majority countries, see Kuran (2004) and Malik and Awadallah (2013).

policies (Uhlener, 1989). Gordon Tullock (2000; 2005 reprinted, p. 43) noted, against the background of the US political system, that:

“The politician who sells his decision in Congress for votes is not obviously in better moral shape than the politician who sells for cash. Nevertheless the first act is not strictly speaking illegal.”

Catering of politicians to voters in their constituency is a characteristic of representative democracy and, as Gordon Tullock suggested, voters may seek outcomes or policies not in the public interest. The assumption of representative democracy is, however, that voters do not have permanent group-based identities applicable to all issues and that groups have not permanently captured government through predetermined group-based majorities – and that other groups have correspondingly not been permanently excluded from government by majority voting. We have considered sustained democracy when individuals permanently subsume their identity in the identity of a group.

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References

- Abadie, A., & Gardeazabal, J., 2003. The economic costs of conflict: A case study of the Basque Country. *American Economic Review* 93, 113-132.
- Al-Ississ, M., & Atallah, S., 2015. Patronage and ideology in electoral behavior: Evidence from Egypt's first presidential elections. *European Journal of Political Economy* 37, 241-248.
- Amaro-de-Matos, J., & Barros, P., 2004. Social norms and the paradox of elections' turnout. *Public Choice* 121, 239-255.
- Amin, M., Assaad, R., al-Baharna, N., Dervis, K., Desai, R., Dhillon, N., Galal, A., Ghanem, H., & Graham, C., 2012. *After the Spring: Economic Transitions in the Arab world*. Oxford University Press, Oxford UK.
- Baldacci, E., Hillman, A.L., & Kojo, N., 2004. Growth, governance, and fiscal-policy transmission channels in low-income countries. *European Journal of Political Economy* 20, 517 – 549. Reprinted in: Sanjeev Gupta, Benedict Clements, and Gabriela Inchauste (Eds.), *Helping countries Develop: The Role of Fiscal Policy*, International Monetary Fund, Washington DC, 2004, pp. 67 – 104.
- Barro, R., 1999. Determinants of democracy. *Journal of Political Economy* 107, 158-183.
- Ben Bassat, A., & Dahan, M., 2012. Social identity and voting behavior. *Public Choice* 151, 193-214.
- Bendor, J., Diermeier, D., Siegel, D., & Ting, M., 2011. *A Behavioral Theory of Elections*. Princeton University Press, Princeton NJ.
- Bertocchi, G., & Spagat, M., 2001. The politics of co-optation. *Journal of Comparative Economics* 29, 591–607.
- Birnie, J. K., 2007. *Ethnicity and Electoral Politics*. Cambridge University Press, New York NY.
- Brennan, G., Hamlin, A., 1998. Expressive voting and electoral equilibrium. *Public Choice* 95, 149–175.
- Brennan, G., & Pettit, P., 2004. *The Economy of Esteem: An Essay on Civil and Political Society*. Oxford University Press, Oxford.
- Borooah, V. K., & Paldam, M., 2007. Why is the world short of democracy? A cross-country analysis of barriers to representative government. *European Journal of Political Economy* 23, 582-604.
- Brender, A., 2003. The effect of fiscal performance on local government election results in Israel: 1989-1998. *Journal of Public Economics* 87, 2187-2205.

- Brennan, G., & Hamlin, A., 2000. *Democratic Devices and Desires*. Cambridge University Press, Cambridge, UK.
- Brennan, G., & Brooks, M., 2013. Expressive voting. Reksulak, M., Razzolini, L., and Shughart, W.F. II (Eds.), *The Elgar Companion to Public Choice*. Second edition. Edward Elgar, Cheltenham, UK, 111-126.
- Buchanan, J. M., & Lee, D. R., 1986. Vote buying in a stylized setting. *Public Choice* 49, 3-15.
- Buchanan, J. M., & Yoon, Y., 2004. Majoritarian exploitation of the fiscal commons: general taxes-differential transfers. *European Journal of Political Economy* 20, 73-90.
- Caplan, B., 2007. *The Myth of the Rational Voter*. Princeton University Press, Princeton NJ.
- Central Bureau of Statistics State of Israel, 2009. *The Arab Population in Israel 2008*. Jerusalem, Israel. Available at:
http://www1.cbs.gov.il/www/statistical/arab_pop08e.pdf
- Chandra, K., 2004. *Why Ethnic Parties Succeed: Patronage and Ethnic Head Counts in India*. Cambridge University Press, New York NY.
- Congleton, R.D. & Hillman, A.L. (Eds.), 2015. *Companion to Political Economy of Rent Seeking*, Edward Elgar, Cheltenham UK and Northampton MA.
- Cooray, A., & Potrafke, N., 2011. Gender inequality in education: Political institutions or culture and religion? *European Journal of Political Economy* 27, 268-280.
- Crystal, J., 2012. Policing, polling booths, and public policy. In *Arab Uprisings: New Opportunities in Political Science*, 21-22.
www.ssrc.org/publications/docs/POMEPS_Conf12_Book_Web.pdf (accessed October 22, 2014).
- Donno, D., & Russett, B., 2004. Islam, authoritarianism, and female empowerment. *World Politics* 56, 582-607.
- Downs, A., 1957. *An Economic Theory of Democracy*. Harper and Row, New York NY.
- Dubois, E., 2013. *The role of the economy in the short-term dynamic of political violence: The case of Corsica*. Working paper, Sorbonne University of Paris I.
- Elsayyad, M., & Hanafy, S., 2014. Voting Islamist or voting secular? An empirical analysis of voting outcomes. *Public Choice* 160, 109-130.
- Facchini, F., 2010. Religion, law and development: Islam and Christianity – why is it in occident and not in the orient that man invented the institutions of freedom? *European Journal of Law and Economics* 29, 103-129.

- Fiorina, M.P., 1976. The voting decision: instrumental and expressive aspects. *Journal of Politics* 38, 390–413.
- Fish, M. S., 2002. Islam and authoritarianism. *World Politics* 55, 4-37.
- Frey, B. S., 1971. Why do high-income people participate more in politics? *Public Choice* 11, 101-105.
- Gerber, A. S., Green, D., & Larimer, C., 2008. Social pressure and voter turnout: Evidence from a large-scale field experiment. *American Political Science Review* 102, 33-48.
- Geys, B., 2006. 'Rational' theories of voter turnout: A review. *Political Studies Review* 4, 16 - 35.
- Glaeser, E. L., Ponzetto, G., & Shleifer, A., 2006. Why does democracy need education? *Journal of Economic Growth* 12, 77-99.
- Grossman, G.M., & Helpman, E., 1994. Protection for sale. *American Economic Review* 84, 833-850; reprinted in Congleton, R.D., Hillman, A.L., Konrad, K.A. (Eds.), 2008, *Forty Years of Research on Rent Seeking 2 – Applications: Rent Seeking in Practice*, Springer, Heidelberg, 131-148.
- Grossman, G. M., & Helpman, E., 2001. *Special Interest Politics*. MIT Press, Cambridge MA.
- Gutmann, J., & Voigt, S., 2015. The rule of law and constitutionalism in Muslim countries. *Public Choice*, forthcoming.
- Guttman, J.M., 1991. Voluntary collective action. In Hillman, A.L. (Ed.), *Markets and Politicians: Politicized Economic Choice*, Kluwer, Boston MA, pp. 27-41.
- Guttman, J.M., Hilger, N., & Shachmurove, Y., 1994. Voting as investment vs. voting as consumption: new evidence. *Kyklos* 47, 197–207.
- Habyarimana, J., Humphreys, M., Posner, D., & Weinstein, J., 2009. *Coethnicity: Diversity and the Dilemmas of Collective Action*. Russell Sage Foundation, New York.
- Hamlin, A., & Jennings, C., 2011. Expressive political behaviour: Foundations, scope and implications. *British Journal of Political Science* 41, 645 – 670.
- Hänzel, L., 2010. Christians in Israel. KAS International Reports 12, Konrad-Adenauer-Stiftung, Berlin, pp. 34-52. Available at: http://www.kas.de/wf/doc/kas_21321-1522-2-30.pdf?101208143454.
- Harder, J., & Krosnick, J., 2008. Why do people vote? A psychological analysis of the causes of voter turnout. *Journal of Social Issues* 64, 525-549.

- Higashijima, M., & Nakai, R., 2011. Elections, ethnic parties, and the salience of ethnic identity: Evidence from the Baltic States, 1993-2008. Presented at the 2011 Annual Meeting of the American Political Science Association, Seattle.
- Hillman, A.L., 1982. Declining industries and political-support protectionist motives. *American Economic Review* 72, 1180-1187; reprinted in Ethier, W. J., Hillman, A.L. (Eds.), *The WTO and the Political Economy of Trade Policy*, Cheltenham UK and Northampton MA: Edward Elgar, pp. 43-50.
- Hillman, A.L., 2007. Democracy and low-income countries. In Pardo, J.C., Schwartz, P. (Eds.), *Public Choice and Challenges of Democracy*, Edward Elgar Cheltenham UK and Northampton MA. pp. 277 - 294.
- Hillman, A. L., 2009. *Public Finance and Public Policy: Responsibilities and Limitations of Government* (2nd Edition) Cambridge University Press, New York NY.
- Hillman, A. L., 2010. Expressive behavior in economics and politics. *European Journal of Political Economy* 26, 403-418.
- Hillman, A.L., 2013. Rent seeking. In Reksulak, M., Razzolini R., Shughart, W.F., II (Eds.), *The Elgar Companion to Public Choice*, Second Edition, Cheltenham UK and Northampton MA: Edward Elgar, pp. 307-330.
- Hodler, R., 2012. The political economics of the Arab Spring. CESifo Working Paper 4023.
- Horowitz, D. L., 1985. *Ethnic Groups in Conflict*. University of California Press, Berkeley CA.
- Inbar, E. (Ed.), 2013. *The Arab Spring, Democracy, and Security*. Routledge, London.
- Inglehart, R., 2000. Culture and democracy. In: Harrison, Lawrence E., and Samuel P. Huntington (Eds.), *Culture Matters*, Basic Books, New York, 80-97.
- Jaber, L.A., & Halpern, G.P., 2014. Prevalence and epidemiology. In: Jaber, L.A., Halpern, G.P. (Eds.), *Consanguinity - its Impact, Consequences and Management*, Bentham Science Publishers, Oak Park IL, pp. 31-49.
- Joseph, S., 1994. Gender and family in the Arab world, in *Women in the Middle East: Images and Reality*, MERIP/Middle East Report, pp. 194-201. Available at <http://www.eden.rutgers.edu/~spath/385/Readings/Joseph%20-%20Gender%20and%20Family%20in%20Arab%20World.pdf> (accessed 19 December 2014).
- Joseph, S., 1996. Patriarchy and development in the Arab world. *Gender & Development* 4, 14-19.

- Karatnycky, A., 2002. Muslim countries and the democracy gap. *Journal of Democracy* 13, 99-112.
- Kauder, B., & Potrafke, N., 2015. Just hire your spouse! Evidence from a political scandal in Bavaria. *European Journal of Political Economy* 38, 42-54.
- Kimenyi, M.S., 2013. Kenya: A country redeemed after a peaceful election. Available at: <http://www.brookings.edu/blogs/up-front/posts/2013/04/02-kenya-peaceful-elections-kimenyi> (accessed 30 December 2014).
- Kirchgässner, G., 1992. Toward a theory of low-cost decisions. *European Journal of Political Economy* 8, 305-320.
- Konrad, K.A., 2009. *Strategy and Dynamics in Contests*. Oxford University Press, Oxford UK.
- Kuran, T., 2004. Why the Middle East is economically underdeveloped: historical mechanisms of institutional stagnation. *Journal of Economic Perspectives* 18, 71-90.
- Lewis-Beck, M. S., & Stegmaier, M., 2013. The VP-function revisited: A survey of the literature on vote and popularity functions after over 40 years. *Public Choice* 157, 367-385.
- Lijphart, A., 1977. *Democracy in Plural Societies*. Yale University Press, New Haven.
- Lijphart, A., 2004. Constitutional design for divided societies. *Journal of Democracy* 15, 96-109.
- Lipset, S. M., 1994. The social requisites of democracy revisited. *American Sociology Review* 59, 1-22.
- Lipset, S. M., & Lenz, G., 2000. Corruption, culture, and markets. In Harrison, Lawrence E., and Samuel P. Huntington (Eds.), *Culture Matters*, Basic Books, New York, 112-124.
- Malik, A., & Awadallah, B., 2013. The economics of the Arab Spring. *World Development* 45, 296-313.
- Martins, R., & Veiga, F., 2013. Economic performance and turnout at national and local elections. *Public Choice* 157, 429-448.
- Midlarsky, M. I., 1998. Democracy and Islam: Implications for civilizational conflict and the democratic peace. *International Studies Quarterly* 42, 485-511.
- Moisi, D., 2010. *The Geopolitics of Emotion: How Cultures of Fear, Humiliation, and Hope are Reshaping the World*. Random House, New York NY.
- Park, H., Philippopoulos, A., & Vassilatos, V., 2005. Choosing the size of the public sector under rent seeking from state coffers. *European Journal of Political Economy* 21, 830-850.

- Peltzman, S., 1976. Toward a more general theory of regulation. *Journal of Law and Economics* 19, 211–240.
- Posner, D. N., 2005. *Institutions and Ethnic Politics in Africa*. Cambridge University Press, New York.
- Potters, J., & Sloof, R., 1996. Interest groups: A survey of empirical models that try to assess their influence. *European Journal of Political Economy* 12, 403-442.
- Potrafke, N., 2012. Islam and democracy. *Public Choice* 151, 185-192.
- Potrafke, N., 2013. Democracy and countries with Muslim majorities: A reply and update. *Public Choice* 154, 323-332.
- Potrafke, N., & Ursprung, H.W. 2012. Globalization and gender equality in the course of development. *European Journal of Political Economy* 28, 399-413.
- Rabushka, A., & Shepsle, K., 1972. *Politics in plural societies: A theory of democratic instability*. Charles E. Merrill, Ohio.
- Rahman, F. Z., 2012. Gender equality in Muslim-majority states and Shari'a family law: Is there a link? *Australian Journal of Political Science* 47, 347-362.
- Reilly, B., 2001. *Democracy in Divided Societies: Electoral Engineering for Conflict Management*. Cambridge University Press, Cambridge U.K.
- Reingewertz, Y., 2012. Do municipal amalgamations work? Evidence from municipalities in Israel. *Journal of Urban Economics* 72, 240-251.
- Rolphe, M., 2012. *Voter Turnout: A Social Theory of Political Participation*. Cambridge University Press, Cambridge UK.
- Rowley, C. K., & Smith, N., 2009. Islam's democracy paradox: Muslims claim to like democracy, so why do they have so little? *Public Choice* 139, 273-299.
- Salmon, P., 1987. Decentralization as an incentive scheme. *Oxford Review of Economic Policy* 3, 24-43.
- Schram, A., & Van Winden, F., 1991. Why people vote: Free riding and the production and consumption of social pressure. *Journal of Economic Psychology* 12, 575–620.
- Smets, K., & Van Ham, C., 2013. The embarrassment of riches? A meta-analysis of individual-level research on voter turnout. *Electoral Studies* 32, 344-359.
- Theocharis, G. N., & Torgler, B., 2013. Religious identity, public goods, and centralization: Evidence from Russian and Israeli cities. CREMA Working Paper, Zürich.

- Tridimas, G., 2011. The political economy of power-sharing. *European Journal of Political Economy* 27, 328-342.
- Tullock, G., 1959. Problems of majority voting. *Journal of Political Economy* 67, 571-579; reprinted in: Arrow, K.J. and Scitovsky, T. (Eds.), 1969, *AEA Readings in Welfare Economics*, published for the American Economic Association by Irwin, Richard D. Inc., Homewood IL, pp. 169-178.
- Tullock, G., 1989. *The Economics of Special Privilege and Rent Seeking*. Kluwer Academic Publishers, Boston and Dordrecht.
- Tullock, G., 2000. People are people, in Tullock, G., Seldon, A., and Brady, G.L., *Whose Obedient Servant? A Primer in Public Choice*, Institute of Economic Affairs, London, pp. 3-18; reprinted in Rowley, C., (Ed.), 2005, *The Selected Works of Gordon Tullock*, volume 4, Liberty Fund, Indianapolis, IN, pp, 32-45.
- Uhlener, C.J., 1989. Rational turnout: The neglected role of groups. *American Journal of Political Science* 33, 390-422.
- Ursprung, H. W., 1990. Public goods, rent dissipation, and candidate competition. *Economics and Politics* 2, 115-132; reprinted in Roger D. Congleton, Arye L. Hillman and Kai A. Konrad (Eds.), 2008. *Forty Years of Research on Rent Seeking 1 - Theory of Rent Seeking*, Heidelberg: Springer, pp. 329-346.
- Ursprung, H.W., 1991. Economic policies and political competition. In Hillman, A.L. (Ed.), *Markets and Politicians: Politicized Economic Choice*, Boston MA: Kluwer, pp. 1-25.
- Vardi-Saliternik R., Friedlander Y., Cohen T., 2002. Consanguinity in a population sample of Israeli Muslim Arabs, Christian Arabs and Druze 29, 422-31.
- Weddady, N., & Ahmari, A., 2012. *Arab Spring Dreams: The Next Generation Speaks Out for Freedom and Justice from North Africa to Iran*. Palgrave Macmillan, New York NY.
- Westen, D., 2008. *The Political Brain: The Role of Emotion in Deciding the Fate of the Nation*. Public Affairs, New York NY.
- Yeret, E., 1995. Dictators, democracies, and voters: a comment on the right versus the obligation to vote. *Economics & Politics* 7, 263-270.
- Young, C., 1976. *The Politics of Cultural Pluralism*. University of Wisconsin Press, Madison WI.
- Zidan, J., Ben-Avraham, D., Carmi, S., Maray, T., Friedman, E., & Atzmon, G., 2014. Genotyping of geographically diverse Druze trios reveals substructure and a recent bottleneck. *European Journal of Human Genetics*, doi: 10.1038/ejhg.2014.218.

Table 1

Consanguineous marriage in communities in Israel

Muslims	Christians (1992)	Druze (1992)	Jews Israel (1992)
33% (1980-85)	22% (1990-92)	47%	2.3%
36% (1981-90)	32% (1992)		
42% (1992)			
44% (1992)			
33% (1991-98)			
26% (2000-04)			

Dates indicate year of the study

Consanguineous marriage in Muslim-majority countries

Jordan	Palestinian -Authority	Iraq Western areas	Saudi Arabia	Lebanon
51% (1992)	66% (1992) 45% (2004)	78% (2010)	56% (2004-5)	Muslim 46% Druze 46% Christian 20% (2008)

Dates indicate year of the study

Consanguineous marriage in western countries

United States	Canada	Europe*/Australia/ New Zealand
0.1-0.2 %	0.3-1.5%	> 1%

*Excluding Spain

Source: Jaber and Halpern (2014)

Table 2: Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max	Source
2007/2008 local elections						
Voter turnout 2007-2008	207	69.69	15.45	35.55	95.84	Israeli Ministry of Interior
Muslim share	207	23.38	39.52	0.00	100.00	Israeli Central Bureau of Statistics
Christian share	207	3.22	13.38	0.00	99.90	Israeli Central Bureau of Statistics
Druze share	207	3.44	16.74	0.00	100.00	Israeli Central Bureau of Statistics
Jews share	207	69.69	44.26	0.00	100.00	Israeli Central Bureau of Statistics
Income per capita (real)	203	2692.68	1167.92	761.63	8522.42	Israeli Central Bureau of Statistics
1990s immigrants (%)	207	8.91	10.92	0.00	55.40	Israeli Central Bureau of Statistics
20-29 years old in population (%)	207	15.78	2.36	9.02	25.41	Israeli Central Bureau of Statistics
Council members per 1,000 inhabitants (%)	206	1.36	1.15	0.04	6.67	Israeli Central Bureau of Statistics
Local council	207	0.47	0.50	0.00	1.00	Israeli Ministry of Interior
Regional council	207	0.20	0.40	0.00	1.00	Israeli Ministry of Interior
City	207	0.32	0.47	0.00	1.00	Israeli Ministry of Interior
Election in 2007	207	0.13	0.33	0.00	1.00	Israeli Ministry of Interior
Election in 2008	207	0.78	0.41	0.00	1.00	Israeli Ministry of Interior
Election in 2009	207	0.09	0.29	0.00	1.00	Israeli Ministry of Interior
2009 national elections						
Voter turnout 2009	248	62.17	12.89	20.88	86.96	Israeli Knesset
Financial rehabilitation program	248	0.33	0.47	0.00	1.00	Israeli Ministry of Interior
Central government administration	248	0.08	0.28	0.00	1.00	Israeli Ministry of Interior
Muslim	248	25.41	40.91	0.00	100.00	Israeli Central Bureau of Statistics
Christian	248	2.98	12.57	0.00	99.90	Israeli Central Bureau of Statistics
Druze	248	4.86	20.41	0.00	100.00	Israeli Central Bureau of Statistics
Jewish	248	66.44	45.66	0.00	100.00	Israeli Central Bureau of Statistics
Income per capita (real)	240	2576.66	1160.65	685.65	8522.42	Israeli Central Bureau of Statistics
Share of 1990s immigrants	248	8.38	10.78	0.00	55.40	Israeli Central Bureau of Statistics
20-29 years old in population (%)	248	15.85	2.34	9.02	25.41	Israeli Central Bureau of Statistics

Table 3: Regression results for 2007/2008/2009 local elections
 Dependent variable: Voter turnout 2007/2008/2009 local elections
 OLS with robust standard errors

	(1)	(2)	(3)	(4)	(5)
Muslim share	0.262*** (21.29)	0.204*** (8.78)	0.106*** (4.58)	0.118*** (5.63)	0.0802*** (3.28)
Christian share	0.206*** (7.15)	0.194*** (7.08)	0.133*** (5.18)	0.123*** (5.31)	0.0673*** (2.78)
Druze share	0.308*** (19.90)	0.250*** (9.66)	0.151*** (5.71)	0.163*** (6.13)	0.103*** (3.53)
log average income per capita		-7.791*** (-3.06)	-12.04*** (-5.74)	-13.72*** (-6.40)	-14.64*** (-6.53)
1990s immigrants (%)			-0.503*** (-5.96)	-0.364*** (-4.44)	-0.368*** (-4.45)
20-29 years old in population (%)				-0.787** (-2.29)	-0.743*** (-2.82)
Council members per 1,000 inhabitants (%)				2.666*** (2.62)	3.343*** (3.16)
Local council					5.389*** (2.98)
Regional council					-4.236 (-1.27)
Election in 2007					0.277 (0.09)
Election in 2009					-2.669 (-0.82)
Constant	61.84*** (63.55)	124.1*** (6.08)	164.6*** (9.68)	185.2*** (9.45)	190.6*** (9.38)
N	207	203	203	202	202
R-Squared	0.568	0.607	0.693	0.716	0.774

Notes: t-statistics in parentheses; ** significant at 5%; *** significant at 1%

Table 4: Regression results for the 2009 national election.
 Dependent variable: Voter turnout 2009 national election
 OLS with robust standard errors

	(1)	(2)	(3)	(4)
Muslim share	-0.156*** (-7.27)	-0.125*** (-3.88)	-0.211*** (-6.71)	-0.216*** (-6.79)
Christian share	-0.122* (-1.67)	-0.116 (-1.59)	-0.172** (-2.33)	-0.174** (-2.39)
Druze share	-0.129*** (-2.61)	-0.0986* (-1.80)	-0.184*** (-3.38)	-0.176*** (-3.15)
log average income per capita		4.177 (1.58)	0.890 (0.42)	-0.401 (-0.17)
1990 immigrants (%)			-0.471*** (-7.40)	-0.466*** (-7.52)
20-29 years old in population (%)				-0.621* (-1.68)
Constant	67.13*** (98.11)	33.83 (1.58)	66.10*** (3.82)	86.00*** (4.06)
N	248	240	240	240
R-Squared	0.283	0.297	0.401	0.411

Notes: t-statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

Table 5: Regression Results (coefficient estimates)

Probit with robust standard errors

Dependent Variable: Being subject to central government financial rehabilitation program

	(1)	(2)	(3)	(4)	(5)
Muslim share	0.0162*** (7.46)	0.00940*** (3.01)	0.00838** (2.36)	0.00681* (1.82)	0.00412 (1.00)
Christian share	0.0126* (1.94)	0.0120* (1.80)	0.0112* (1.66)	0.0119* (1.82)	0.00482 (0.71)
Druze share	0.0175*** (3.99)	0.0106** (2.14)	0.00960* (1.83)	0.0112* (1.86)	0.00693 (1.10)
log average income per capita		-1.023*** (-3.13)	-1.045*** (-3.18)	-1.141*** (-3.27)	-1.139*** (-3.23)
1990s immigrants (%)			-0.00655 (-0.67)	-0.0149 (-1.22)	-0.0249* (-1.91)
20-29 years old in population (%)				-0.0400 (-0.73)	-0.0531 (-0.96)
Council members per 1,000 inhabitants (%)				-0.211* (-1.66)	0.0191 (0.11)
Local council					0.0360 (0.12)
Regional council					-1.903*** (-3.07)
Constant	-1.069*** (-8.71)	7.015*** (2.70)	7.277*** (2.76)	9.020*** (2.86)	9.320*** (2.88)
N	248	240	240	237	237
Pseudo R-Squared	0.239	0.286	0.287	0.302	0.369

Notes: z-statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

Table 6: Regression Results (coefficient estimates)
 Probit with robust standard errors
 Dependent Variable: Being subject to central government administration

	(1)	(2)	(3)	(4)	(5)
Muslim share	0.00985*** (3.75)	0.00755* (1.95)	0.0182*** (3.43)	0.0174*** (3.03)	0.0172*** (2.71)
Christian share	0.000408 (0.05)	0.00125 (0.15)	0.0103 (1.16)	0.0115 (1.08)	0.0101 (0.89)
Druze share	0.00362 (0.60)	0.00139 (0.21)	0.0120 (1.61)	0.0146* (1.75)	0.0131 (1.49)
log average income per capita		-0.536* (-1.84)	-0.427 (-0.94)	-0.521 (-1.05)	-0.360 (-0.65)
1990s immigrants (%)			0.0483*** (3.88)	0.0437*** (3.36)	0.0486*** (3.22)
20-29 years old in population (%)				-0.0623 (-0.64)	-0.0522 (-0.56)
Council members per 1,000 inhabitants (%)				-0.270 (-1.35)	-0.470* (-1.76)
Local council					0.641 (1.58)
Constant	-1.761*** (-9.85)	2.342 (0.99)	0.500 (0.14)	2.512 (0.54)	0.915 (0.18)
N	248	240	240	237	237
Pseudo R-Squared	0.0987	0.140	0.204	0.214	0.234

Notes: z-statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%