SECTARIAN POLITICS AND PARTY-PROVIDED WELFARE SERVICES: THE

CASE OF LEBANON

by

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0.   INTRODUCTION

The negative relationship between the provision of public goods (e.g. low crime, roads, clean drinking water) and ethnically fragmented societies[1] is one of the most powerful hypotheses in political economy (Banerjee, Iyer, & Somanathan, 2005). When state provision of public goods and social services are low, non-state social welfare can play a prominent role in the political mobilization strategies of ethnically organized political groups (Cammett & Issar, 2010). It is often assumed that ethnic or religious groups will tend to favour in-group members when distributing social benefits and place a higher value to public goods that accrue to their own. Nonetheless, the interaction between the provision of social welfare by ethnic alliances and the favouring of in-group members can vary under different politico-economic institutions (Corstange, 2008). In particular, ethnic coalitions may face different levels of intra-ethnic competition and thus differ in their willingness to reach out to out-group members.

The fragmentation between Christians and Muslims – and multiple sects within them – in Lebanon provides an appropriate case study on the allocation of social services by ethnic political parties. As sectarianism is institutionalized in all facets of the political system through Lebanon's semi-consociationalist regime[2], parties and interest groups are primarily aligned along sectarian lines, leading to ethnic competition over state resources. Nonetheless, in light of frequent political deadlock and macroeconomic policy instability,

[1] In ethnically fragmented societies, religion, ethnicity or other types of identity-based cleavages are politically salient and groups are organized politically. I use the terms 'ethnic' or 'sectarian' interchangeably throughout this paper.

[2] Whether Lebanon practices consociationalism in its purest form is debated. Nonetheless, its power-sharing regime emphasizes cooperation between confessional elites and invokes many consociationalist principles (i.e. grand coalition, mutual veto).

parties will often use their own (non-state) resources in order to garner electoral support both from in-group members and, to a varying extent, members outside of their own sect. Furthermore, Lebanon's electoral institutions seek to ensure that competition takes place between within, rather than between, sects. Hence the Lebanese case provides a glimpse of how intra-ethnic competition (or lack of) could affect an ethnic coalitions' distribution of public goods to in-group and out-group members.

Based on analysis of the spatial allocation of welfare institutions (e.g. schools, hospitals) affiliated with major political parties in Lebanon, the main thesis of this paper is that stronger intra-ethnic competition leads to a greater focus on in-group relative to out-group members by ethnic coalitions' provision of welfare services. Using a slightly modified dataset, the analysis extends that of Cammett (2014), discussed below, by linking the location of party-affiliated welfare institutions across Lebanon's 26 electoral districts to parliamentary seats, the district population share of the co-religious group, and the district's level of sectarian diversity, measured by its fractionalization index. The three parties of interest –the Future Movement (Sunni Muslim), Hezbollah (Shia Muslim) and Amal (Shia Muslim) – allow us to compare the sectarian political dynamics of welfare provision across two Muslim sects: Sunni (one dominant party) and Shia (two dominant parties).

The results show that Sunni and Shia parties behave differently in their provision of services to in- and out-group members – an expected result given the variations in intra-sect political competition between Sunnis and Shias. The number of welfare institutions associated with the Future party is more positively correlated with a district's sectarian diversity, in stark contrast to its Shia counterparts. Furthermore, the two Shia

parties seemingly more strongly react to the presence of Shia parliamentary seats relative to the Future party. Also, there is little evidence that any of the parties are primarily motivated by socioeconomic considerations in establishing their welfare networks – in contrary to their claims.

The outline of this paper is organized as follows. Section 1 reviews the political economy literature on ethnic diversity, political competition and provision of public goods; Section 2 will introduce a simple theoretical model and provide a background on Lebanon and party-provided welfare services, which will serve as a useful vehicle for the interpretation of the empirical results; Section 3 describes the data and methodology used for the empirical analysis; Section 4 presents the results; Section 5 discusses the results; and Section 6 concludes the paper and indicates areas for future research.

1. PREVIOUS LITERATURE

As the paper explores the interaction between sectarianism, public goods provision, and political competition in Lebanon, this section intends to briefly familiarize the reader to these sub-topics. The political economy literature has largely focused on public goods provision in ethnically diverse societies; the salience of ethnicity and the conditions under which ethnic coalitions emerge; the relationship between political competition, government responsiveness and economic performance; and, within the literature on Lebanon, government (in)efficiency and the economic impact of sectarianism. The final sub-section will summarize the overall findings and justify the contribution of this paper to the literature.

1.1 *Ethnic Diversity and Public Goods Provision*

A growing body of research in the political economy literature has found that a country's degree of ethnic diversity is a significant factor in determining economic outcomes and the provision of public goods (Alesina & Ferrara, 2005). In particular, increasing ethnic diversity lowers the provision of public goods due to the difficulty of cooperation stemming from increasingly heterogeneous preferences in society. The lower provision of productive goods, in terms of both quantity and quality, retards productivity growth and thereby inhibits economic development (Alesina, Baqir, & Easterly, 1999).

However, Alesina & Ferrara (2005) also find that, using cross-sectional data of localities across the US, the interaction between diversity and the income level of the community is positive, implying that ethnic diversity can be beneficial at higher levels of development. This finding could be due to advanced economies having developed institutions that allow them to better cope with potential conflict between ethnic groups; in other words, the institutional environment can influence both the formation and the expression of ethnic political behaviour and preferences (Kyriacou, 2004).

To see how sectarian polarization can lower the provision of public goods, consider briefly a simple model developed by Alesina et al. (1999). The population is normalized to 1, and we assume there is no entry or exit. Individuals with heterogeneous preferences must collectively decide, by majority rule, on a size and type of a *non-excludable* public good. Income y is exogenous and is equal for everyone, and all individuals face the same lump-sum tax t. Private consumption c is equal to disposable income $y - t$. An individual i's utility function is given by

$$U_i = g^\alpha (1 - l_i) + c \tag{1}$$

$$0 < \propto < 1,$$

where g is the public good and l_i is the preference distance between individual i's most preferred type of public good and the actual public good. Since consumption is equal to disposable income and the government's budget constraint is $g = t$, then we can rewrite (1) as

$$U_i = g^\propto (1 - l_i) + y - g \tag{2}$$

Individual i's preferred choice of public good is obtained by maximizing (2) with respect to g. Alluding to the median voter theorem[3] and further defining l_i^m as the median distance from the type most preferred by the median voter, the amount of public good provided in equilibrium is given by

$$g^* = [\propto (1 - l_i^m)]^{1/(1-\propto)} \tag{3}$$

From here, one can see that the equilibrium amount of public good is decreasing in l_i^m, the median distance from the median. Alesina et al. (1999) note that this median distance can be considered an indicator of polarization preferences. The greater l_i^m, the larger the share of the population who have preferences that are very far from the chosen type of public good; therefore, a polarized society with significantly varying preferences would desire lower taxes and devote more resources towards private consumption and away from public consumption.

It is important to note that the above model only considers a non-excludable public good, but public goods can also be targeted exclusively to certain groups – perhaps leading to patronage (e.g. appointment of co-ethnic members to public posts). Extending

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[3] The median voter theorem states that a majority vote will select the outcome (in the above application, the outcome is the type of public good) that is most preferred by the median voter (Holcombe, 2006).

the model above, Alesina et al. (1999) allow total spending g to be composed of $g_1 + g_2$, where g_1 represents patronage goods, and g_2 being non-excludable public goods that could only imperfectly target certain groups. In this case an increase in ethnic polarization would lead to an increase in the provision of patronage goods g_1 and a decrease in the share of non-excludable goods g_2 on total government spending.[4]

Other authors have used alternative models to reach conclusions consistent with those of Alesina et al. (1999).[5] Nonetheless, the empirical evidence also support the models' predictions. For example, using cross-sectional data over a large number of countries, both La Porta et al. (1999) and Alesina et al. (2003) show that ethnic diversity is negatively correlated with infrastructure quality, literacy and school attainment. Furthermore, in a case study in rural western Kenya, Miguel and Gugerty (2004) find that ethnic diversity is associated with lower primary school funding, lower quality school facilities, and poor water well maintenance. Similarly, Okonkwo and Okten (2004) use micro-level data in Indonesia on monetary and time contributions to local community organizations. They find that increased ethnic fragmentation in a community reduces both the quantity of such organizations and monetary contributions to them.

As Alesina et al. (2005) note, the empirical evidence in Indonesia and Kenya provides insight on the specific role of ethnic diversity on public goods provision in small, poor communities. Similar to the model sketched above from Alesina et al. (1999), Okonkwo and Okten (2004) propose that the negative relationship could be due to the divergent preferences between ethnic groups that make it difficult to find common

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[4] Alternatively, a decrease in $g_2 / (g_1 + g_2) = g_2 / g$.

[5] See, for example, Collier & Garg (1999) and Fearon (1999). For a thorough review of the theoretical literature on ethnic diversity and public goods, see Alesina & Ferrara (2005).

ground on policies, as well as an inherent bias towards favouring contribution to one's own group as opposed to the community as a whole. Miguel and Guerty (2004) argue that, in environments with weak legal enforcement that primarily rely on informal transactions and "social sanctions", it is easier to impose such sanctions *within* ethnic groups as opposed to between them. In either case, fundamentally these narratives demonstrate the influence of institutions – both directly (i.e. legal and political environment) and indirectly (i.e. through their impact on the socioeconomic environment) – on the relationship between ethnic diversity and the allocation of public resources in a community or country overall.

Nonetheless, the rather ahistorical, acontextual, yet statistically significant evidence found in regression analysis of ethnic diversity and the provision of some public good(s), particularly when using large cross-sectional data, explains little on how this effect works or their implications. As Alesina et al. (2005) acknowledge[6], measures of institutions – such as democracy – are likely not exogenous, and that "channelling diversity towards productive uses may require a particular set of 'rules of the game'" (Alesina & Ferrara, 2005, pp.15). Furthermore, underlying these models are the assumptions that ethnic groups generally have homogeneous preferences; that leaders will tend to only look after their co-ethnic constituents; and that the masses will tend to follow leaders who share the same ethnicity. Hence a crucial step – and a key objective of this paper – is to understand under what conditions those assumptions may fail.

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[6] Despite finding a positive and statistically significant relationship between ethnic diversity and economic development at higher levels of democracy

1.2 *The Leader and the Masses: Why an Ethnic Relationship?*

How do ethnic coalitions form? One narrative proposed by Esteban and Ray (2008) is that the salience of ethnic conflict stems from "the attempted takeover of 'budgets' or 'policies' that produce various public goods" (pp.2186). In order to seize these budgets, groups must form alliances along either class lines or ethnic lines, but not both. They show that, should conflict break out, there is a definite bias towards conflict along ethnic lines due to two main factors, namely 1) unlike class alliances, ethnic coalitions possess a superior specialization stemming from within-group income heterogeneity, whereby the elite contribute financial resources and the masses contribute cheap conflict labour; and 2) the elite, who are rich, will prefer to finance ethnic conflict in order to avoid a class unrest alternative.

Their model does not explain, however, how ethnic coalitions are formed in peaceful environments[7] – a common occurrence. Indeed, as Corstange (2008) notes, despite the empirical evidence cited above on favouritism and patronage behaviour across ethnic lines, a less discussed regularity is that benefits accrued to the masses are often quantitatively small – yet voters would still follow their co-ethnic leaders. It is also possible that leaders of ethnic coalitions provide benefits to out-group members, as will be explored empirically later in this paper. Both of these cases violate an ex ante assumption underlying much of the narratives in the literature discussed earlier: that leaders will only look after their own co-ethnic members.

Corstange (2008) attempts to explain these shortcomings by sketching the following model. First, politicians are indifferent with the particular composition of their

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[7] Nor does the model intend to do so.

coalitions, so long as it is a winning one. This is an important assumption, as the alternative of assuming ethnic favouritism initially does not explain why those loyalties along ethnic lines exist in the first place. Politicians, who wish to dispense rewards to supporters, face an uncertainty about their identities; the market for votes, therefore, suffers from information asymmetry. Voters hold private information about their support that politicians do not know, requiring politicians to use other informative signals to distinguish between supporters and non-supporters. What informative signals are available, however, further depends on the information environment within the market.

In this case, low-information environments would characterize what one observes in developing countries, namely suppressed, unorganized or un-institutionalized parties; weak or lack of non-state civil society organizations; or independent media either unavailable or unreliable (Chandra, 2007) (Corstange, 2008). As political information becomes scarce, the set of common interests becomes more difficult to coordinate on; voters may either not be aware of what those common interests are or if other voters share these interests as well. At this point, voters are compelled to resort to using ethnic categories, which are relatively more simple to identify between individuals, as a means to coordinate on political activity – hence the formation of an ethnic coalition (Corstange, 2008). It is important to stress that these coalitions need not have homogeneous preferences on various policy issues. Indeed, the coalition may be composed of a wide range of education, occupation, or income levels. Yet the policy dimensions that could divide the coalition are subdued due to the lack of coordination required to organize political activity and rally around a particular policy issue. Instead, members will simply rally around the common interest they are aware of: ethnicity.

Finally, unlike other categories, the probability of entry and exit in an ethnic group is low due to their ascriptive, descent-like membership rules (Corstange, 2008). Ethnic leaders, then, behave as oligopsonistic or monopsonistic buyers of their votes, as their support base are effectively captive to the ethnic category that binds them. This subsidized political support allow co-ethnic votes to be cheap, which is one explanation for the empirical observation of relatively low benefits to voters from their ethnic leaders.

Corstange (2008) models this narrative as follows.[8] Assume that the marginal cost of signalling support is lower for supporters than for non-supporters; that voters may be either co-ethnics E or non- co-ethnics N relative to the politician; and that co-ethnics are more likely to be supporters than are their counterparts. The cost of signalling, c, is a function of political support π and the strength of the signal s, such that $c = c\,(\pi, s)$. Political support is a function of the degree of ethnic similarity ϵ, or $\pi = \pi\,(\epsilon)$. Further assume that cost is decreasing in political support ($c_\pi < 0$) and political support is increasing in ethnic similarity ($\pi_\epsilon > 0$). Total differentiating c and π yields

$$dc = c_\pi d\pi + c_s ds \tag{4}$$

$$d\pi = \pi_\epsilon d\epsilon \tag{5}$$

Substituting (5) into (4), and taking the partial derivative with respect to ϵ, gives

$$\frac{dc}{d\epsilon} = c_\pi \pi_\epsilon \tag{6}$$

which is negative given the assumptions $c_\pi < 0$ and $\pi_\epsilon > 0$. Thus the cost of signalling support decreases as ethnic similarity increases; co-ethnic votes are cheap.

Graphically, this implies that the indifference curves of co-ethnics (I_E) will be flatter than non- co-ethnics (I_N); increasing the signal strength from s_1 to s_2 would require

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[8] Corstange (2008) borrows heavily from Spence (1974) job-market signalling model

a smaller reward to compensate co-ethnic voters for the costs of sending the signal relative to their counterparts, as depicted in Figure 1. Thus co-ethnics require less compensation from politicians for their political support than non- co-ethnics.
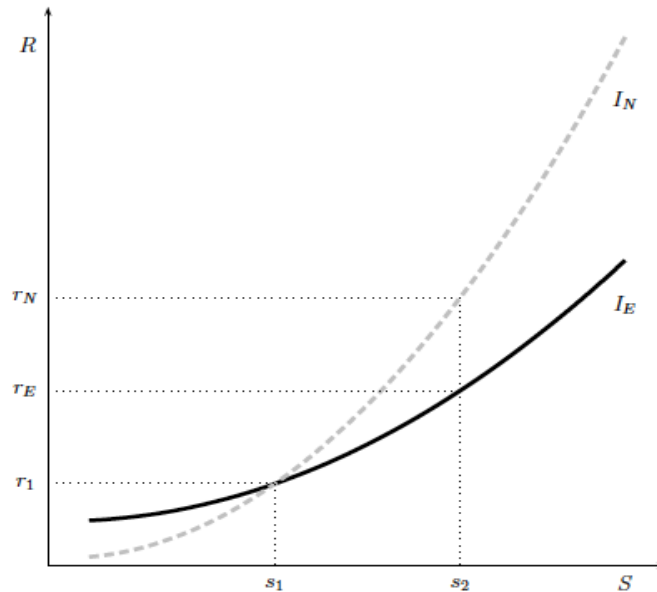
Figure 1.1: Indifference Curves of Signalling Political Support for Co-Ethnics and Non-Co-Ethnics (Corstange, 2008)

For the purpose of this paper, the main lesson to be drawn from the model in Corstange (2008) is that there is not an *inherent* favouritism from politicians towards their ethnic group. This favouritism only arises given a particular institutional environment that influences the way voters organize themselves politically. Nonetheless, even if parties are primarily divided along ethnic lines, formal electoral rules can induce ethnic coalitions to garner support from non- co-ethnic voters (Chandra, 2007) (Cammett & Issar, 2010).

1.3 *Government Responsiveness and Political Competition*

The previous section alludes to the importance of information flows in the political environment and its implications on political behaviour. Indeed, the extent to which the

electorate is informed of government behaviour can be a significant influence on government efficiency and responsiveness to citizen needs. Greater information flow can also contribute to intense political competition and hence impose stronger accountability and discipline on the incumbent leader. Though the intersection of this topic with ethnic diversity is virtually nonexistent in the literature, two papers are worth noting.

Besley and Burgess (2002) explore this issue by using data on public distribution of food and state government expenditures on calamity relief from sixteen major Indian states throughout 1958-1992. They find a strong and robust link between the development of mass media, political factors and government responsiveness (as proxied by public distribution of food and calamity relief). Furthermore, Besley, Persson and Sturm (2005) develop a model to explain why political competition enhances economic performance, and use data on the United States to test their model's hypotheses. In particular, they show how weak political competition can lead to low-quality political candidates that are more vulnerable to special interests. The authors use panel data on 48 continental states from 1929 onwards to show how stronger political competition, induced by the Voting Rights Act, raised long-run income in the average affected state by 25%, lowered state taxes and led to more business-friendly environments overall.

As explained by Corstange (2008), low-information environments can strengthen the salience of ethnicity in politics and marginalize other policy issues, perhaps leading to the stifling of political competition and debate on various policy topics (e.g. education, taxes, health care, etc.). Nonetheless, intra-ethnic competition, where sectarianism may be less pronounced, can induce stronger ethnic coalition responsiveness to in-group members – a focal topic of this paper.

1.4   *Literature on Lebanon*

As will be more thoroughly discussed in the next section, Lebanon's sectarian power-sharing political system has been repeatedly criticized for entrenching sectarianism in politics, forming clientelistic/patronage networks, and for being prone to political deadlock and immobile government. The country has lacked an effective social policy due to weak coordination and governance; a development aid allocation framework ridden by patronage; and lack of reliable data on both poverty and ex-post evaluations from prior interventions (Chaaban & Salti, 2010a). Herrera and Pang (2005) find that Lebanon uses close to 25 percent and 13 percent more public spending to produce the same health and education outcomes respectively than best-practice countries. Public goods related to health, education and security have also deteriorated in quality throughout the post-war era (i.e. after 1990), and public spending allocation is not proportionate to regional socioeconomic disparities (Chaaban & Salti, 2010a).

With respect to the literature, much of the concerns on religious diversity in Lebanon have emerged from qualitative approaches, but over the past decade some empirical evidence assessing the quantitative effects of sectarianism have surfaced from the economics discipline. For example, Makdisi and Marktanner (2008) look at all countries for which data was available[9] to construct a panel data set of 9 five-year averages from 1960 to 2004. From this data set, they employ a system of equations that link Muslim-Christian polarization and regional political tensions to development outcomes in order to extract elasticities. They apply these elasticities to Lebanon and find that the country's vulnerability to external factors – which is composed of both

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[9] The list of countries selected in their dataset is not included in their article.

Christian/Muslim polarization and a dummy controlling for regional tensions – has lowered income per capita, manufacturing exports and its Polity II score on democracy, and increased income inequality.

Though these results are intuitive and consistent with the broader literature, caution should be noted with regards to a methodology that likely suffers from severe model misspecification; for example, it is unclear why all countries would equally be affected (if at all) by Muslim-Christian polarization. Indeed, Lebanon's sectarian tensions alone lie beyond a Muslim-Christian rivalry, as lately the Sunni-Shiite divide has been equally – if not more – relevant. Furthermore, proxies for the regional geopolitical environment (i.e. region's fuel exports as a percentage of GDP) are, at best, vague and simplistic and, at worse, irrelevant for some countries/regions. Hence the simplicity and overgeneralization of their model largely obscures the complexity and dynamics in the relationship between sectarian tensions – not always along Muslim-Christian lines – and economic outcomes.

Other notable studies are two published by Chaaban and Salti (2010a, 2010b). Using mainly descriptive statistics of public spending on health and education, they find a weak association between spending and socioeconomic need, as well as a strong correlation between the demographic composition by sect and each sect's share of public spending (2010a). In a follow-up paper, the same authors further show that poverty pockets with a higher level of religious diversity were able to attract *more* public funds (Chaaban & Salti, 2010b). One may argue that this latter finding is in contrast to the theoretical and empirical literature on ethnic diversity and public goods provision, but the overall welfare regime in Lebanon still involves minimal state provision and regulation,

and private actors (often affiliated with major political parties) routinely supply basic social services; indeed, more than half of Lebanon's schools, hospitals and clinics are not directly administered by the public sector (Cammett & Issar, 2010). The results in Chaaban and Salti (2010b), therefore, only apply in the *limited* case of the Lebanese state providing public goods, and hence do not imply that provision of public goods in Lebanon are higher than what would otherwise be expected from theory.

Finally, a study by Cammett and Issar (2010), from which this paper seeks to extend, explores the relationship between the spatial locations of welfare institutions affiliated with Hezbollah (Shia Muslim) and the Future Movement (Sunni Muslim) and the neighbourhood's religious diversity. Using a multinomial logit model, they find that a 0.1 increase in a neighbourhood's fractionalization[10] will decrease the probability of having a Hezbollah-affiliated institution than a Future Movement institution by 33 percent, and 26.3 less likely to have a Hezbollah institution relative to other (i.e. Christian, Armenian, Druze) institutions. In contrast, no significant difference emerges when analyzing institutions affiliated with Future Movement or other, non-Shia parties.

Their results suggest that Hezbollah is less likely to place its social welfare institutions in heterogeneous areas compared to other parties. The authors argue that the extent to which political parties prioritize state-centric strategies largely explain the variations in the willingness to serve non- co-ethnic members. Indeed, an important lesson to be drawn from these results is that, though both parties are considered ethnic coalitions, they behave differently towards in- and out-group members due to their distinct historical, political and socioeconomic environment that determine their priorities

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[10] A measure of religious diversity; discussed in more detail in Section 2

and strategies. Hence it may not be appropriate to assume that all ethnic coalitions are equally motivated to exclusively serve their sect's interests.

1.5   *Discussion*

To summarize, both the theoretical and empirical evidence in the literature suggests a negative association between public goods provision and ethnic diversity. The larger a society's ethnic diversity, the wider its preferences become as each ethnic group places more value on a public good accruing to them than others, leading to a lower overall state provision of these goods. The role of institutions however play a significant role in influencing the salience of ethnicity in the political environment, and some institutions could work to channel this diversity towards more productive uses (Alesina & Ferrara, 2005). It is also the case that, as witnessed in Lebanon, ethnic coalitions may differ in their willingness to exclusively look after members of their own group.

This paper is expected to contribute to the literature through the following. The lower state provision of public goods in diverse societies is well documented, but in many such societies non-state actors, particularly ethnic coalitions, are active in offering such goods. Furthermore, political competition can also take place within ethnic groups, affecting the degree of responsiveness of ethnic coalitions to in-group members. Understanding the variations in the distribution of coalitions' provision of social welfare to in- and out-group communities would shed light on the impact from intra-ethnic political competition. Lebanon offers a natural case study on the interaction between intra-ethnic competition and the ethnic voter-politician relationship given that its political parties are primarily divided along sectarian lines; its sects have different degrees of

political competition from within; and its overall state-provided social welfare regime is relatively low compared to services provided by private actors, mostly affiliated with political parties.

2. BACKGROUND & THEORETICAL MODEL

In this section, a brief review on Lebanon's unique electoral system and party-affiliated welfare services is provided in order to facilitate the interpretation of our empirical results. I also develop a simple formal model where politicians demand votes from in-group and out-group members in exchange for rewards, and show that as intra-ethnic competition increases (decreases), in-group members will receive a larger (smaller) share of the politician's distribution of public goods relative to out-group members.

2.1 *Sectarian Politics in Lebanon: A Brief Review*

Lebanon's power-sharing political system aims to moderate sectarian tensions between its 18 officially recognized Muslim and Christian religious sects by allocating sectarian quotas to public posts across all levels of government. In particular, its President, Prime Minister, and Speaker of Parliament must be Maronite Christian, Sunni Muslim, and Shia Muslim respectively. The 128-member Lebanese Parliament is split evenly between Muslims and Christians, and is further sub-divided into four Muslim and seven Christian sects.

Though this arrangement ensures that no single religious group could impose its hegemony or ideology on others, it has been repeatedly criticized for entrenching sectarianism, forming clientelistic/patronage networks along sectarian lines, and for being

prone to political deadlock and immobile government.[11] Lebanon's modern history has been marked by recurring national crises and often times violent confrontations that challenged the delicate balance of power among Lebanon's confessional groups. Indeed, a 15-year civil war broke out from 1975 to 1990 that partitioned the country into sectarian militias, and Lebanon has since been gripped with occasional sectarian unrest. As of this writing, Lebanon is embarking on its 14th consecutive month without a President due to an inability by sectarian elites to agree on a consensual candidate.

Lebanon's 128-member Parliament is elected through a majoritarian party block system. There are 26 electoral districts (*kadaa)* in Lebanon, each with a predetermined number of seats reserved for candidates from different sects. All voters, regardless of sectarian identity, cast ballots for as many candidates across the number of seats available in their district. For example, in the *Aley* district, there are five seats: two reserved for Druze candidates, two for Maronites, and one for Greek Orthodox. Religious sects do not have seats in all districts, implying that voters cannot select a candidate from a sect who is not represented in that district (such as a Sunni Muslim or Shia Muslim candidate, in the case of *Aley*).

These electoral rules seek to ensure that competition for seats takes place within, and not between, sects. In the meantime, they also act as a disincentive for candidates to run on a sectarian platform, particularly in heterogeneous districts, since they must also solicit votes from out-group members. For example, in the *Baabda* district, where 2 out of 6 seats are reserved for Shia candidates, about half the electorate is Christian and 23%

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[11] For more on this topic, see Salamey (2009)

are Shia. Hence should Hezbollah field Shia candidates in that district, it must rely on the votes of Shias *and* Christians.

Nonetheless, despite the system's efforts to mitigate sectarianism, in practice political parties are largely aligned across sectarian lines, though intra-ethnic competition in some sects is still alive. The fiercest intra-sectarian political competition is within the Christian community. A majority of Christian seats are allocated across four Christian parties; in contrast, almost all Sunni seats (26/27) are captured by the Future Movement, while Shia seats are largely split between Amal and Hezbollah (International Foundation for Electoral Systems, 2011). As will be discussed in Section 3, one drawback of this paper is the lack of data on the much more politically competitive Christian welfare networks, as this would have provided a stronger glimpse of intra-ethnic competition and party distribution of goods to in- and out-group members.

2.2   *Party-Affiliated Welfare Institutions in Lebanon*

Minimal state provision and regulation of social services in Lebanon allows sectarian political parties – among other non-state actors – to act as key providers. Indeed, about half of Lebanon's health and education institutions are run by non-state organizations (Cammett, 2010). Nonetheless, the provisional and distributional behaviour of such services by parties is often not purely driven by humanitarian considerations and is usually consistent with the parties' overall political strategies.

The particular forms of social services vary, ranging from one-time cash handouts and food aid to the establishment of physical educational or health institutions. Parties decide on what services to provide and where they are to be allocated, generally aware of which particular sect will benefit most and how a type of service will be perceived.

Establishing physical structures – a project with relatively high fixed costs – arguably represents a longer-term commitment to the community and is thus generally better perceived by voters than mere one-time cash handouts or food aid. Also worth noting is that health institutions are usually more inclusive than educational ones; health services across sectarian groups vary little, but private education institutions' curriculums can often incorporate religious customs and norms of the particular sectarian party – limiting access to out-group members. Furthermore, given the variations in religious diversity across neighbourhoods in Lebanon, the location of these services may indicate whether a party tends to favour one particular sect more than others.

This paper will limit the scope of welfare institutions to those embodied in physical structures, namely health and educational institutions. The former consists of hospitals or primary care clinics that supply basic health services.[12] For example, the Future Movement's extensive networks of medical clinics in Beirut, established in 2000 by the Hariri Foundation[13], stretches across predominantly Christian neighbourhoods and are linked by a sophisticated digital medical records system (Cammett, 2010). Note that the relatively more inclusive features of health care allow this network to reach a broader clientele, including out-group members (i.e. non-Sunnis). Educational institutions consist of private subsidized and non-subsidized schools and, unlike health care, hold characteristics that limit access from out-group members (e.g. religious teachings, limited spots). Hezbollah's two major private school networks, the *Al-Mahdi* and *Al-Mustapha* schools, are strongly present in Shia-dominated districts and impose a strict set of Shia

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[12] Such as vaccination or the treatment of routine, non-chronic conditions.
[13] Former head of Future Movement and Prime Minister of Lebanon Rafiq Hariri, who was assassinated in 2005, founded the Hariri Foundation.

Islam-inspired rules; some require that girls must be veiled at age 9 and hold a school-wide veiling ceremony for all the girls collectively (Lynch, 2010).

Nonetheless, health institutions are not *always* more inclusive than education, and neither should health/education institutions provided by one particular party be treated equivalently to one provided by another. Some health institutions, particularly amongst the Shia parties, provide medical services at subsidized rates if the patient has demonstrated significant support to the party – a condition that is more likely to be satisfied by in-group members (Cammett, 2014). Furthermore, many educational institutions provided by the Future Movement are significantly different than ones affiliated with Hezbollah; the secular Kfar Falous Cultural and Medical Complex, established by the Future Movement's Hariri Foundation, is located in a district with a heavy Shia and Christian population and prides itself on its multi-confessional pool of students (Blanford, 2006).

Altogether, the degree of exclusivity of welfare institutions depends on the particular type of service provided and on the geographic distance to out-group members. Health centres are generally (though not always) less excludable than educational institutions. Also, the farther the geographic distance of institutions to out-group members, the more access to services is limited. Overall, the composition and location of welfare networks across the three parties of interest – Amal, Future and Hezbollah – vary, and understanding these differences is a key objective of this paper.

2.3   *Theoretical Model*

The main hypothesis of this paper is that intra-ethnic political competition can induce an ethnic leader to favour in-group members relatively more than out-group members in his

provision of public goods. Nonetheless, if the leader – due to exogenous factors – faces little political competition within his ethnic group, then he effectively acts as a monopsonistic buyer of his in-group members' votes.[14] In such a case, in-group members may receive a smaller share of the politician's distribution of public goods.

Formally, consider the following basic model of monopsony in a market for votes.[15] Assume that electoral competition only occurs within – and not between – ethnic groups, but both in-group and out-group members can vote. The total amount of rewards held by the ethnic leader is R, which is fixed and normalized to 1, and can be distributed to both in-group (r_I) and out-group (r_O) members in exchange for votes – hence $1 = r_I + r_O$. Let $r_I(v_I)$ denote the inverse voter supply for in-group voters. Let $S(v_I)$ be the politician's overall ethnic political support as a function of in-group votes, with $dS/dv_I > 0$. Then, in a monopsony, the politician's problem is

$$\max_{V_I} S(v_I) - r_I(v_I)v_I \tag{7}$$

where $r_I(v_I)v_I$ denotes the total costs faced by the politician to solicit votes from the electorate. The first-order condition is

$$0 = \frac{dS}{dv_I} - \left(r_I + \frac{dr_I}{dv_I}v_I \right) \tag{8}$$

From here, dS/dv_I and the expression in parentheses respectively represent the marginal benefit (MB) and the marginal cost of an extra vote from an in-group member. Their intersection determines the monopsonist reward to in-group voters $r_I^M = r_I(v_I^M)$, and likewise determines $r_O^M = 1 - r_I^M$. The first-order condition can also be rearranged to yield

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[14] Which is the case with the Future Movement and the overall Sunni community.
[15] The model borrows heavily from the simple static monopsony model in labor markets, as summarized by Boal and Ransom (1997).

$$\frac{MB - r_I^M}{r_I^M} = \varepsilon^{-1} \tag{9}$$

where ε is the elasticity of voter supply.[16] Note that zero monopsony power in this market would be characterized by a perfectly elastic voter supply (i.e. $\varepsilon = \infty$), and hence $MB = r_I$.

Consider now the oligopsonistic case where there are few ethnic leaders competing against one another. Each leader i's problem becomes

$$\max_{v_I^i} S^i(v_I^i) - r_I(v_I^i + v_I^{-i})v_I^i \tag{10}$$

Taking the first-order condition, rearranging and applying symmetry yields

$$\frac{MB^i - r_I^O}{r_I^O} = \frac{v_I^i}{v_I}\varepsilon^{-1} \tag{11}$$

Equilibrium determines the oligopsonist reward to in-group and out-group voters r_I^O and r_O^O. Comparing (9) and (11), it is clear that $r_I^O > r_I^M$ and likewise $r_O^M > r_O^O$, as the RHS gets larger when intra-ethnic political competition decreases.[17] Therefore, the distribution of rewards provided by ethnic leaders will increasingly favour in-group members as intra-ethnic competition increases.

In this model, goods are excludable: rewards are consumed by either in-group or out-group members. On the other hand, sectarian parties in Lebanon also provide non-excludable welfare services, such as health clinics. The model's prediction is manifested in practice through the parties' choices on the degree of exclusivity of their welfare

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[16] The LHS is analogous to the Lerner index often used to measure departures from a perfectly competitive market.

[17] In particular, as there are more and more buyers in the voters' market (i.e. greater intra-ethnic political competition), the share of in-group votes accruing to each politician (v_I^i/v_I) decreases. Furthermore, if higher competition induces a larger elasticity of voter supply then ε^{-1} decreases as well. In either case, overall the RHS will decrease, which implies a larger (lower) reward to in-group (out-group) members.

services. In particular, the model predicts that the greater (lower) intra-ethnic competition, the more (less) likely the party will place its institutions in in-group dominated districts, and the more (less) likely it will choose to provide a less inclusive type of service.

3.   DATA & METHODOLOGY

I test the model's predictions by comparing the relationships between the locations of party-affiliated welfare institutions and the district's share of the in-group population for all three parties. In particular, given that parties operate within a similar political and socioeconomic environment, the variations in the provision of welfare services to in-group members between the Sunni and Shia parties may be a consequence of the level of intra-sectarian competition. Indeed, Cammett and Issar's (2010) thorough discussion on the importance of electoral considerations within parties' outreach strategies is limited to a qualitative analysis of a few districts, as they do not include any proxy for electoral factors in their empirical model – a gap this study seeks to address.

Electoral incentives can induce ethnic coalitions to woo out-group voters, particularly if the party is contesting in a district where the out-group community make up a significant portion of the electorate (Chandra, 2007) (Cammett & Issar, 2010). Indeed, as mentioned earlier, in the Baabda district – where 2 out of 6 seats are reserved for Shia candidates – about half the electorate is Christian and 23% are Shia. Hence should Hezbollah field Shia candidates in that district, it would have to rely on the votes of Christians. Consistent with this narrative, it is worth noting that no other electoral district contains more Hezbollah-affiliated welfare institutions than Baabda. Likewise,

the locations of the aforementioned Future Movement's sophisticated health network – which runs through relatively prosperous and diverse neighbourhoods – also contains Sunni parliamentary seats, some of which depend crucially on the votes of out-group communities.

Examining the geographic location of parties' services, particularly those embodied in a physical institution (e.g. schools, hospitals), could thus be an indicator of a coalition's targeting strategy and their choices on the degree of exclusivity for their welfare services. As mentioned, the provision of such services is inherently different than merely handing out cash or food for the sole purpose of electoral clientelism and short-term political calculations. Establishing physical structures – a project with relatively high fixed costs – arguably represents a longer-term commitment to the community and is thus generally better perceived by voters (Cammett, 2014). All else equal, if one finds that a party is more likely to place its welfare institutions in more diverse districts, it is reasonable to induce that the party in question is more likely to serve out-group voters.

To measure this, the empirical approach is similar to Cammett (2014) – but with key departures. First, in contrast to Cammett and Issar (2010) and Cammett (2014), the unit of observation is the electoral district rather than the neighbourhood zone. In Lebanon, there are 1,633 zones across 26 electoral districts – though almost half are sparsely populated or in mountainous areas with little inhabitants and are thus excluded from the dataset. Unfortunately, comparing districts significantly reduces our sample size, namely from 752 observations in Cammett (2010) to 26 in this study. Nonetheless, since our purpose is to assess the willingness to provide services in diverse areas after

controlling for *electoral* incentives, choosing electoral districts as the unit of observation is more appropriate than neighbourhood zones.

A second departure is the restriction to three Muslim political parties, in contrast to Cammett (2014) who also examines the Christian Kataeb party. Indeed, aggregating our unit of observation to the electoral district leads to a significantly lower sample variation in the Kataeb variable, which indicates the number of Kataeb-affiliated welfare institutions per district. In particular, the Kataeb party has nine institutions across Lebanon, six of which are concentrated in one district (*El Metn*), rendering it difficult to draw any inferences on the determinants of Kataeb provision of welfare services.

Nonetheless, it is important to note that the non-representation of Christian parties is a disadvantage. Intra-Christian politics is significantly more competitive than their Shia and (especially) Sunni counterparts, which would have provided a better glimpse on how a more competitive environment within ethnic groups affects the propensity to serve co-ethnic members (Haddad, 2010). The Free Patriotic Movement – the biggest Christian bloc in Parliament – and the smaller Marada Movement rival the Kataeb party and the Lebanese Forces; in contrast, the Future Movement is the main political voice for Sunnis in Lebanon, while Hezbollah and Amal often speak in unison publically and are considered political allies. Further limiting the data on Christian welfare activities is that, between 2006 and 2008 – the period in which the data was collected – other prominent Christian parties (e.g. Free Patriotic Movement and Lebanese Forces) were still in the process of establishing or restoring their welfare networks, following a political hiatus throughout the Syrian occupation of Lebanon that lasted from 1990 to 2005.

3.1   *Explained Variables*

Data on all spatial locations of party-affiliated welfare institutions – namely hospitals, primary care centers and dispensaries, and private subsidized and non-subsidized schools – in Lebanon were obtained from Cammett's (2010) replication dataset, which was collected between 2006 and 2008. The dataset contains information on the institution's neighbourhood and district; whether it is public or non-state; and whether it is affiliated with any religious or political organization. This paper will focus on non-state institutions affiliated with the above-mentioned political organizations, namely Future Movement, Hezbollah and Amal. In this study the explained variable is the number of institutions per district affiliated with the party in question.[18] These institutions are considered "party-affiliated" if they were established and in large part funded by a political party or some third-party organization affiliated with the party (e.g. Hariri Foundation and the Future Movement).

The explained variable is the number of welfare institutions in a district affiliated with the party in question, which will thereby be linked to various explanatory variables (discussed below) – namely the district population share of the in-group community – through a series of regressions. It is important to note that the mere presence of an institution in a mixed district is not sufficient to conclude that the party is targeting out-group voters; the type of service provided also determines the level of exclusivity. If the institution in question were a school that incorporates religious teachings consistent with the party's sect, then access by nearby out-group communities would still be limited.

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[18] In contrast to Cammett (2014), whose dependent variable is dichotomous and takes on a value of 1 if the neighbourhood contains the party-affiliated institution and 0 otherwise

Unfortunately, the dataset only distinguishes between different types of health or educational institutions, which makes it difficult to infer whether the service provided by a particular institution, be it in health or education, is more likely to be accessed by the in-group community. Nonetheless, as a robustness check, I run regressions on the two types of institutions separately – education and health – to examine whether the general results still hold, with the assumption that health institutions are generally more inclusive than educational ones, as discussed in the previous section. Overall, Table 3.1 presents a classification of welfare institutions into primary care clinics, hospitals and private schools for all three parties.

Table 3.1: Breakdown of Party-Affiliated Welfare Institutions across Lebanon, by Party

Type of Institution	Future	Amal	Hezbollah
Hospitals	1	3	4
Primary Care Clinics	34	13	23
Private Schools (Subsidized and Non-Subsidized)	5	12	30

Source: Cammett (2010) Replication Dataset

3.2   *Explanatory Variables*

The variable of interest is the percentage share of the co-ethnic group in the district population. As discussed, if one finds that a party is more likely to place its welfare institutions in districts where the in-group community makes up a large share of the population, it is reasonable to induce that the party in question is more likely to focus on in-group members – which may reflect on the overall political targeting strategy of the party. Since Lebanon has not carried out an official census since 1932 due to sectarian sensitivities, I use data on the 2011 registered voting and religious composition records per district, recorded by the International Foundation for Electoral Systems (2011).

Another important variable is the fractionalization index[19], a measure of the religious diversity of a particular district. It is calculated as

$$Fractionalization_i = 1 - \sum_{k=1}^{n}(S_{ki})^2$$

where k represents the sectarian groups and S_{ki} is the share of the kth sectarian group in district i. Indeed, incorporating the heterogeneity of the district in which the party is active allows us to gauge the degree to which parties target mixed areas rather than more homogeneous ones dominated by their own sect. The index takes on a value between 0 and 1; a larger number represents a more religiously diverse district. I calculated the fractionalization index for each district by grouping Lebanon's 18 religious sects into the following: Sunni Muslim, Shia Muslim, Christian, Druze, Armenian and Aalawite.

Adding the fractionalization variable in the model allows us to measure how a given party reacts to religious diversity after holding the co-sectarian district population share constant. Indeed, it may be the case that the party responds differently to a district whose co-ethnic population makes up 20% of the population and also has a high fractionalization index than one with a lower level of diversity. Also, a higher level of religious diversity may indicate that out-group communities constitute an important voting block for parliamentary seats contested by the sectarian party in question – and hence provides an incentive for the party to woo out-group voters.

Relatedly, to account for electoral incentives, two variables are included: seats reserved per district for the party's sect as well as the political competitiveness of each district in the 2009 parliamentary elections. For the former, as discussed earlier districts

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[19] For a thorough reading on this measure, see Alesina et al. (2003)

where the party could contest for parliamentary seats may be an incentive to provide welfare services. Note that there are about 15 and 14 districts – more than half – that contain zero seats for Sunnis and Shias respectively. Of these, 9 districts do not contain both Sunnis and Shia seats. With respect to political competitiveness, if parties know in advance – perhaps based on historic rivalries or some controversial policy issue – that a particular district will encounter intense political competition, this may also serve as an incentive to for the party to be socially active with the electorate. Based on the 2009 parliamentary results collected by the International Foundation for Electoral Systems (2011), I construct a political competitiveness index, taking on a value between 0 and 1[20], for each district i based on the following formula:

$$Pol.Comp_i = 1 - \left(\frac{\# \ of \ uncontested \ seats \ in \ district \ i}{\# \ of \ seats \ in \ district \ i} \right)$$

Uncontested seats are those who had zero or very little opposition.[21] Indeed, despite formal electoral rules to encourage intra-ethnic competition and inter-ethnic cooperation, the realities of informal politics in Lebanon – whereby pre-electoral bargains among confessional elites are common – tend to significantly reduce competition in some districts. Parties will sometimes agree not to field candidates that would compete against incumbents in various districts in order to maximize their winnings. These elitist bargains tend to be more prevalent amongst Muslim seats than Christian ones; 31 percent of

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[20] Higher values indicate a more competitive political environment
[21] For example, in the Baalback-Hermel district that contains 5 Shiite seats, in 2009 Hezbollah encouraged the candidacy of people who had little political clout in order give the appearance of a competitive election (Haddad, 2010). The five winners had more than 100,000 votes; in contrast, the leading runner-ups (among many candidates) had only between 13,000-15,000 votes. Hence in this district there were 5 uncontested seats.

Christian seats were uncontested compared to 83 percent for Muslim and Druze ones.[22]

The discrepancy in political competitiveness further highlights the disadvantage of the

lack of available data on Christian welfare networks.

Similar to Cammett (2014), control variables include population density, district

urbanization, and socioeconomic level. Population density, measured as the percentage of

the national population residing in a given district is important to control for because

parties may seek to target denser areas in order to attract more actual or potential

supporters. The data was collected using registered voting records, as catalogued by the

International Foundation for Electoral Systems (2011). District urbanization, accessed

through Cammett's (2014) replication dataset[23], is an ordinal variable with the following

five categories: uninhabited and uncultivated areas (0), purely agricultural areas (1), rural

areas with some residential communities (2), less-developed towns and urban areas (3)

and mostly developed towns and urban areas (4). By the same reasoning as Cammett

(2014), the inclusion of some rural/urban measure is important given that rural areas tend

to be underserved.

Finally, incorporating a district's socioeconomic levels is important given that

welfare providers tend to cite socioeconomic factors as primary considerations in

determining the locations of welfare institutions. Cammett (2014) uses data on a

neighbourhood's telephone landline coverage to proxy for socioeconomic development,

arguing that low-income households rarely install relatively expensive fixed lines. Most

neighbourhoods in Lebanon, however, do have a high telephone landline coverage, which

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[22] Authors' calculations

[23] The Lebanese Council for Development and Reconstruction provided the data and it is accessible through the U.S. Agency for International Development (USAID) Geographic Information Support Team (GIST).

therefore masks the actual regional economic disparities observed throughout the country

(Chaaban & Salti, 2010). As an alternative and more straightforward measure, I use the

percentage of households per district with a "Low" or "Very Low" Living Conditions

Index (LCI) in 2004 as identified in the Mapping of Living Conditions in Lebanon, a

joint project between the Lebanese Ministry of Social Affairs and the United Nations

Development Programme (UNDP, 2008).[24] In particular, this composite index is based on

a number of indicators that measure the degree of satisfaction of basic needs for

households, namely housing, water and sewage quality, education and income-related

indicators.

Tables 3.2 and 3.3 present summary statistics on the dependent and independent

variables. Indeed, the former displays how party welfare networks vary significantly;

Hezbollah has 30 more institutions than Amal across Lebanon, for example. For the

latter, one can see how the fractionalization index also varies considerably across

districts. This is not a surprising result: due to historical contingency sects in Lebanon are

not evenly spread. Sunnis and Christians tend to live in more heterogeneous areas than

Shias (Cammett & Issar, 2010). It is also worth noting the variations in poverty levels

across districts, highlighted by the Low LCI variable, ranging from 0.09 to 0.62 per cent

of households.

Table 3.2: Descriptive Statistics of Dependent Variables (District Level)

Variable	Total number of agencies	Number of districts with agencies	Number of observations	Mean	S.D.	Min.	Max.
Future	40	16	26	1.54	1.73	0	6
Hezbollah	57	13	26	2.19	3.43	0	10
Amal	27	11	26	1.04	1.89	0	9

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[24] Some districts are merged and hence have equal values.

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Table 3.3: Descriptive Statistics of Independent Variables (District Level)

Variable	Number of Observations	Mean	S.D.	Min.	Max.
Fractionalization	26	0.40	0.20	0.02	0.732
Seats Sunni	26	1.04	1.54	0	5
Seats Shia	26	1.04	1.54	0	6
Political Competitiveness	26	0.45	0.49	0	1
Pct. Sunni/district	26	0.23	0.29	0	0.86
Pct. Shia/district	26	0.24	0.32	0	0.95
Population Density	26	0.04	0.02	0.01	0.08
Land-use	26	2.60	0.63	2	4
"Low" LCI (% of Households)	26	0.32	0.17	0.09	0.62

In sum, this paper seeks to compare the relationships between the locations of party-affiliated welfare institutions and the district's share of the in-group population for all three parties. The focus on the location of welfare institutions is due to its indication of an ethnic coalition's targeting strategy to in-group and out-group communities, as the establishment of physical structures – a project with relatively high fixed costs – are perceived by voters as a long-term commitment to the community. Three series of OLS regressions are estimated: the first relates the co-sectarian district population share and the control variables to the number of party-affiliated welfare institutions in the district, the second adds the fractionalization variable, and the third adds the electoral variables. For additional robustness, I also estimate the model on educational and health institutions separately. The next section presents a series of descriptive statistics and regression analysis in order to compare the variations in the targeting strategies of different parties.
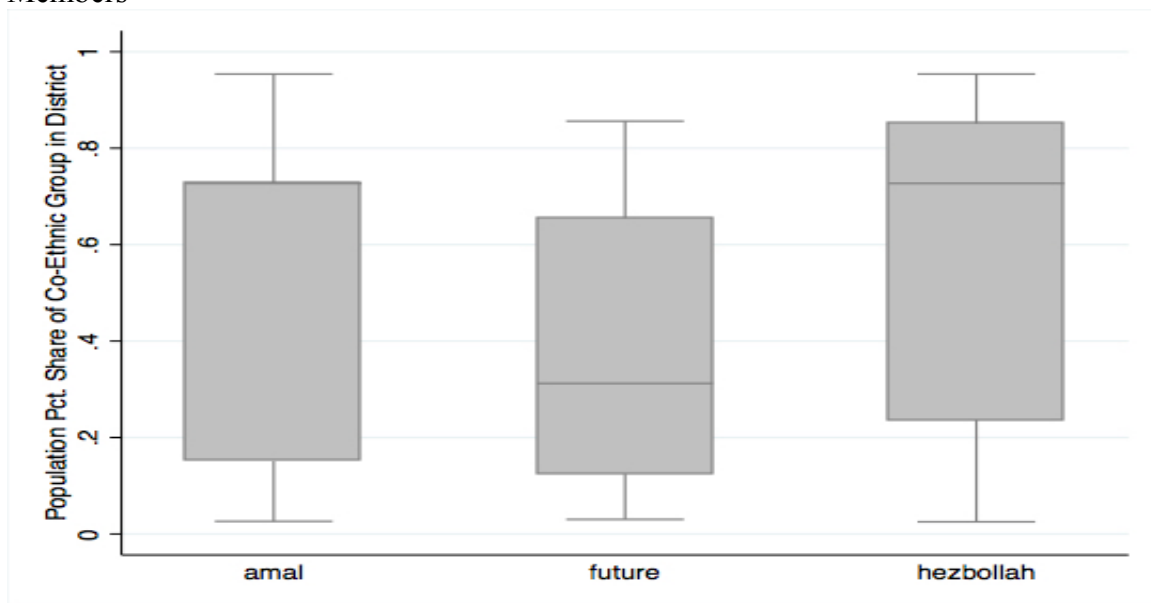
4. RESULTS

I first analyze graphically the spatial spread of party-affiliated welfare institutions and their relationships with the district population share of co-ethnic groups, fractionalization index and the Low LCI variable. Figures 4.1, 4.2 and 4.3 present the results.

Figures 4.1 and 4.2 show that parties tend to locate their welfare institutions with a range of co-ethnic and fractionalized populations, though the graphs do suggest that the Shia parties – Amal and Hezbollah – have a higher propensity to target in-group and more homogeneous districts relative to the Future Movement. Indeed, the median co-ethnic percentage share and fractionalization index district for both Amal- and Hezbollah-affiliated institutions is 0.73 and 0.44 respectively, while the corresponding figures for Future are 0.31 and 0.50. These results however do not control for the non-random demographic spread of Sunnis and Shias; due to historical factors, Sunnis are more likely to live in heterogeneous areas than Shias.

Figure 4.1: Variations in Propensity to Place Welfare Institutions near In-Group Members

Figure 4.2: Fractionalization Spread of Welfare Institutions' Districts

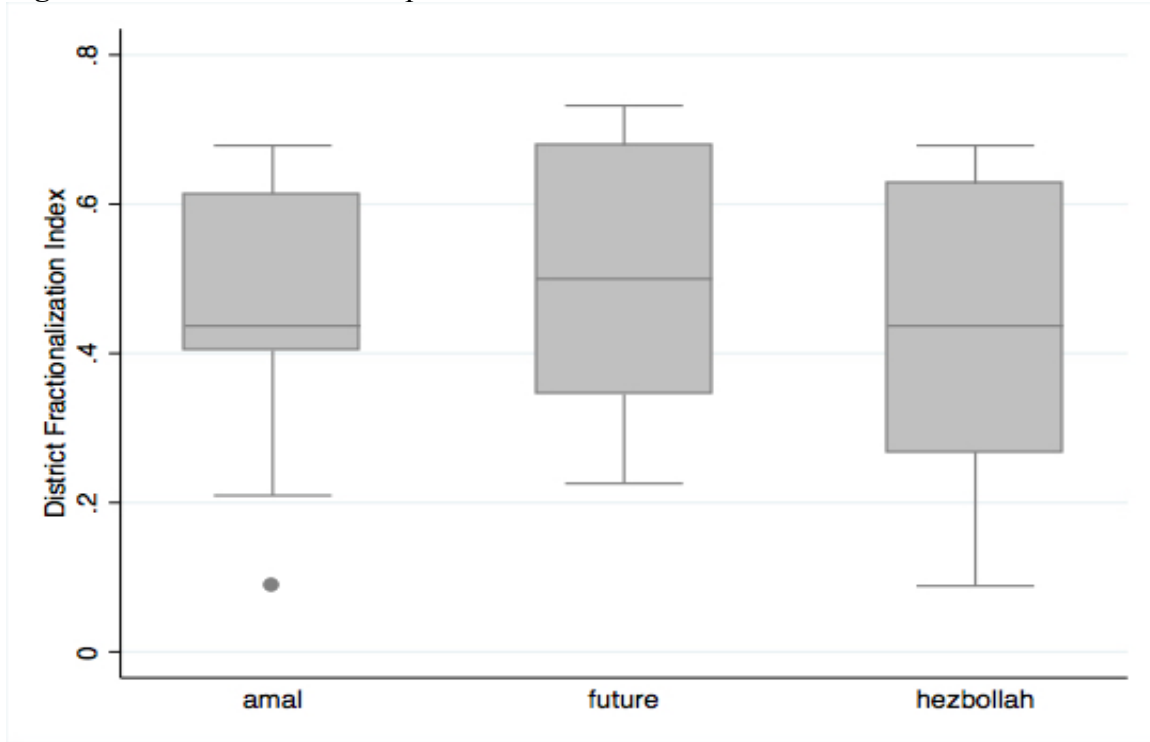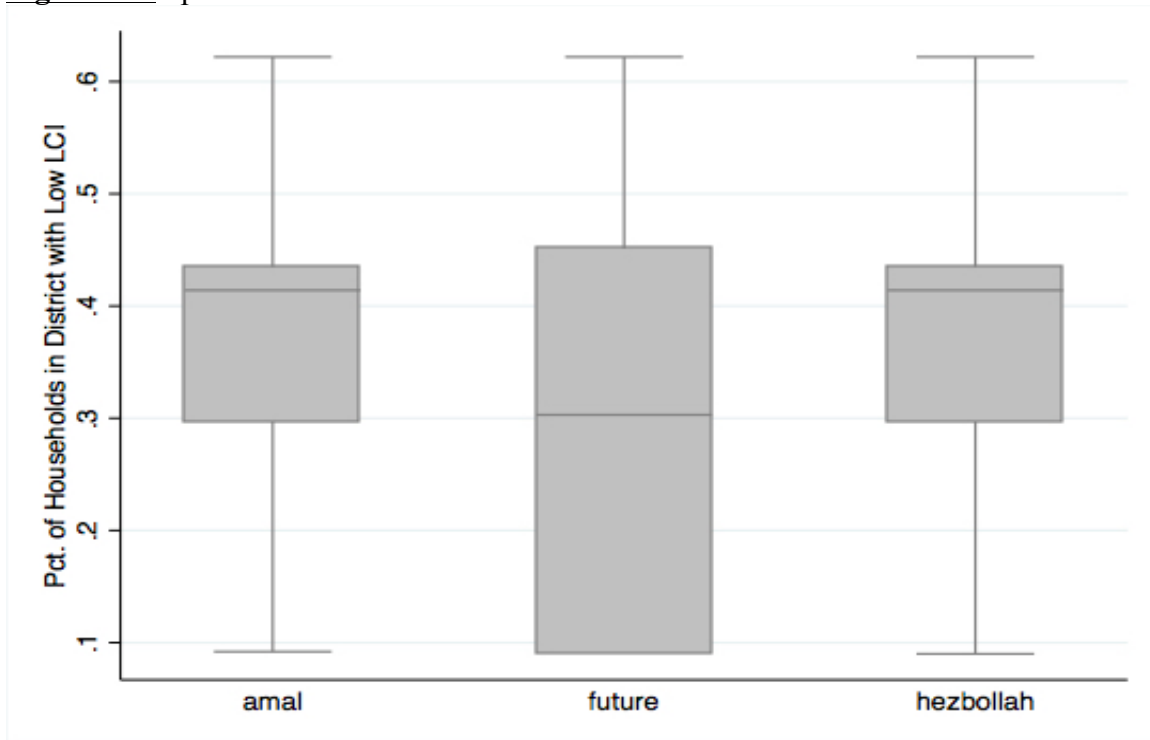**Figure 4.3:** Spread of Low LCI in Welfare Institutions' Districts

Furthermore, parties often cite socioeconomic factors as the primary determinants in deciding the locations of their welfare institutions. This claim is briefly explored by illustrating the spread of the Low LCI variable in districts where each welfare institutions reside, as shown in Figure 4.3. It is worth noting that on average 32% of households in a district have a "Low" LCI. Again, a clear gap emerges between the Sunni Future party and the two Shia parties. Hezbollah and Amal tend to concentrate their locations in poorer areas relative to the national average, whereas the Future Movement also has a significant presence of welfare institutions even in relatively well-off districts. [25] Nonetheless, Figure 4.3 does not take into account the sectarian endowments of districts within which welfare institutions reside; if the parties' sects happen to be disproportionately poorer relative to others, sectarian motives may still be the primary driver in determining the geographic targeting strategies of welfare institutions.

To control for other factors that determine parties' targeting strategies, I estimate three series of regressions for all three parties, as described in the previous section. The results for Future, Hezbollah and Amal are presented in Tables 4.1, 4.2 and 4.3 respectively.

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[25] These results are consistent with those in Cammett (2014).

RESULTS

Table 4.1: Determinants of Number of Welfare Institutions in District – Future

Variables – Future	(1)	(2)	(3)
Pct. Sunni	2.681**	2.543**	4.430**
	(1.027)	(0.922)	(2.106)
Population Density	-6.796	-20.406	-11.540
	(15.435)	(15.161)	(22.872)
Land-Use	1.492**	1.319***	1.055*
	(0.608)	(0.444)	(0.510)
"Low" LCI	1.175	1.514	-0.786
	(1.594)	(1.609)	(1.913)
Fractionalization		3.399***	3.649***
		(1.141)	(1.071)
Sunni Seat			-0.499
			(0.502)
Political Competitiveness			-1.039*
			(0.568)
Constant	-3.074**	-3.521***	-1.992
	(1.421)	(1.236)	(2.010)
Number of Observations	26	26	26
Adjusted R^2	0.472	0.600	0.630

Notes: Estimated with OLS. Values in parentheses represent robust standard errors. * indicates $p<0.1$; ** indicates $p<0.05$; *** indicates $p<0.01$

Table 4.2: Determinants of Number of Welfare Institutions in District – Hezbollah

Variables – Hezbollah	(1)	(2)	(3)
Pct. Shia	7.461***	7.570***	-0.355
	(0.910)	(1.020)	(2.848)
Population Density	38.926	34.629	-1.797
	(22.866)	(25.526)	(16.183)
Land-Use	-1.223*	-1.285*	0.506
	(0.616)	(0.683)	(0.701)
"Low" LCI	-3.502	-3.527	4.337
	(2.492)	(2.667)	(3.662)
Fractionalization		0.980	-0.455
		(2.860)	(1.949)
Shia Seat			2.042***
			(0.662)
Political Competitiveness			2.449**
			(1.161)
Constant	3.168*	3.089	-3.403
	(1.819)	(1.945)	(3.291)
Number of Observations	26	26	26
Adjusted R^2	0.512	0.491	0.553

Notes: Estimated with OLS. Values in parentheses represent robust standard errors. * indicates $p<0.1$; ** indicates $p<0.05$; *** indicates $p<0.01$

RESULTS

Table 4.3: Determinants of Number of Welfare Institutions in District – Amal

Variables – Amal	(1)	(2)	(3)
Pct. Shia	3.177**	3.256***	-3.322*
	(1.163)	(1.107)	(1.738)
Population Density	49.280*	46.188	7.420
	(27.906)	(30.766)	(11.326)
Land-Use	-1.099*	-1.144*	-0.310
	(0.558)	(0.567)	(0.350)
"Low" LCI	-2.883	-2.901	0.405
	(1.805)	(1.841)	(1.512)
Fractionalization		0.705	0.345
		(1.115)	(0.898)
Shia Seat			1.592***
			(0.431)
Political Competitiveness			0.358
			(0.349)
Constant	2.144*	2.087	0.286
	(1.220)	(1.228)	(1.254)
Number of Observations	26	26	26
Adjusted R^2	0.468	0.447	0.729

Notes: Estimated with OLS. Values in parentheses represent robust standard errors. * indicates $p<0.1$; ** indicates $p<0.05$; *** indicates $p<0.01$

Interestingly, in all models none of the "Low" LCI coefficients are statistically significant at the 10% level for the three parties, raising doubts on parties' claims that the location of welfare institutions is primarily driven by socioeconomic considerations. Also, the Shia parties (Amal and Hezbollah) tend to display similar signs and significance in their coefficients and are largely in contrast to those of the Future party, which suggests that the overall behaviour of parties are generally distinguished along sectarian lines.

The fractionalization index coefficient is positive and statistically significant at the 1% level for the Future party in both models, but no significant results emerge for the Shia parties – consistent with the preliminary findings from Figure 4.2. Thus, even after

controlling for the Sunni population share and seats, the Future party is more likely to place welfare institutions in a district as its religious diversity increases.

Differences between Model (1)/(2) and Model (3) most strikingly emerge in the coefficients for the Shia and Sunni population. Indeed, in Model (1)/(2), Shia parties have statistically significant and positive correlations between the district population share of Shias and the number of welfare institutions in the district – and significantly more so than the Future party. This implies that Hezbollah and Amal are more likely target districts with a higher population of Shias, and is consistent with Figure 3.1 as well as one of the main results in Cammett (2014).

However, when controlling for the number of Shia *seats* in the district in Model (3), the coefficient on the Shia population share is highly insignificant for Hezbollah and is even negative (yet significant at the 10% level) for Amal. Instead, the number of welfare institutions affiliated with both parties is now positively and significantly associated with the number of parliamentary seats in the district, implying that electoral considerations are perhaps the strongest driver for Amal and Hezbollah in their decisions to place welfare institutions in a given district. Yet again, this result only applies to the Shia parties and is not present when analyzing the Future party.

Also worth noting is that the political competitiveness coefficient is insignificant for the Shia parties and is mildly significant and negative for the Future party. Indeed, the political dynamics of electoral competition is usually the result of elite bargaining a few weeks before voting day and thus may not be known to parties at the time period in which they established an institution (Haddad, 2010). This is especially the case for Muslim parties, as discussed earlier, since their respective sects are not politically divided

(which is not the case with Christians) and thus face a relatively easier task of ensuring little intra-sectarian competition in elections.

As discussed, parties choose the degree of exclusivity of their welfare services, i.e. they choose the location of their institutions (whether to place them in mixed or homogeneous areas) and the type of service provided (e.g. education vs. health). In general, health institutions are more inclusive than educational ones; health services across sectarian groups vary little, but private education institutions' curriculums can often incorporate religious customs and norms of the particular sectarian party – limiting access to out-group members. Despite these inherently different features, in the above analysis there is no distinction between health and educational institutions, which sometimes may not be appropriate given that (for example) a religious school in a diverse district would still limit access to nearby out-group communities. To control for this, I run regressions on the two types of institutions separately to examine whether the overall results still hold.

Before proceeding, it is interesting to observe the spread of the co-sectarian group's population share in the district containing the welfare institution of two types: education and health. This allows us to check whether health institutions are more likely to be placed in mixed areas than educational ones. Results are presented in Figure 4.4. As expected, educational institutions tend to be placed in districts that have a higher share of the in-group relative to health institutions, though there is a wide variety. Nonetheless, the results may be driven by the fact that most educational institutions in our dataset are affiliated with the two Shia parties (as shown in Table 3.1), who have shown a greater tendency to place their institutions in more homogeneous areas.

Figure 4.4: Variations in Propensity for Parties to Place Welfare Institutions near In-Group Members – Education vs. Health
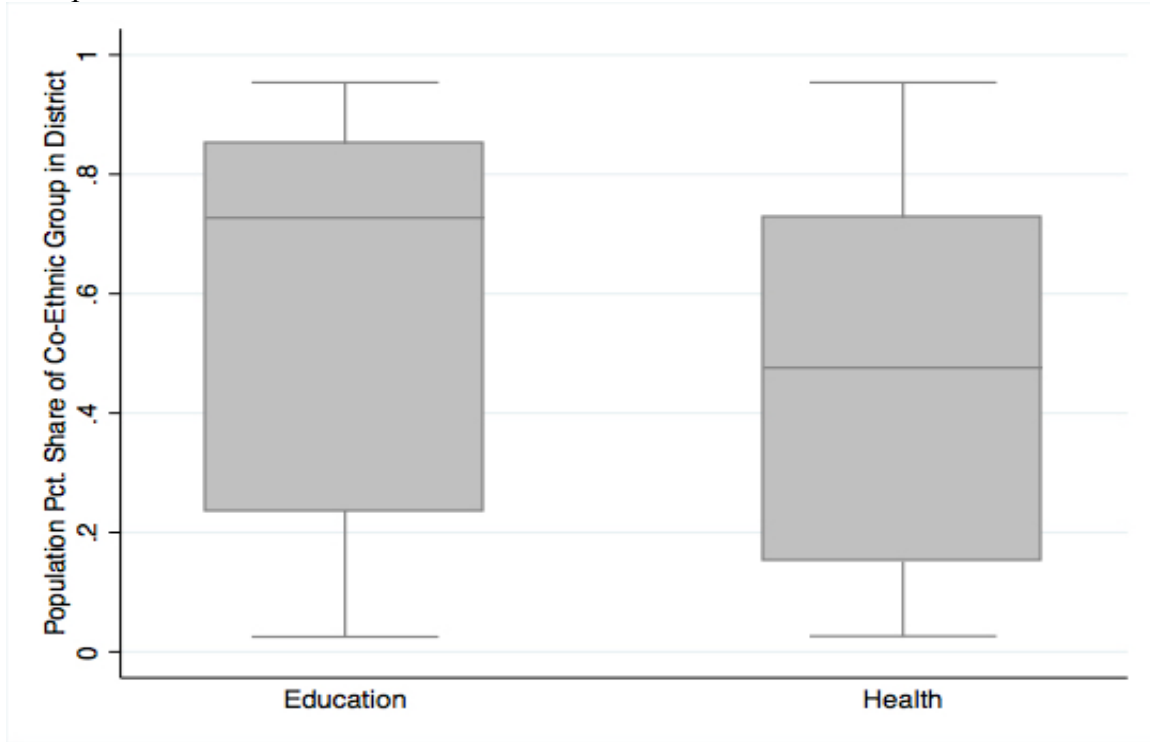
Tables 4.4 and 4.5 display regression models for all three parties on two sets of institutions, namely health and education respectively. For the former, the number of Shia seats is still statistically significant for the two Shia parties, yet the corresponding variable for the Future Party is still statistically insignificant. Likewise, the fractionalization variable is still strongly positive and statistically significant for the Future Party, which is again not the case with Hezbollah. Interestingly, this variable is positive yet mildly statistically significant for Amal. With respect to education institutions (Table 4.5), the two Shia parties again show positive and statistically significant coefficients for the number of Shia seats in a district, which is not the case with the Future Party. Some caution should be noted however on the results for Future, given that the party only has a relatively low five education institutions across Lebanon.

RESULTS

Table 4.4: Determinants of Number of Health Institutions in District

Variables	Future	Hezbollah	Amal
Pct. In-Group	2.513	1.066	-2.877*
	(2.396)	(1.636)	(1.391)
Population Density	-9.278	4.214	3.394
	(22.323)	(9.842)	(10.081)
Land-Use	0.652	-0.179	-0.364
	(0.505)	(0.359)	(0.369)
"Low" LCI	-0.134	-0.786	-0.016
	(2.109)	(1.721)	(1.402)
Fractionalization	3.555***	-0.345	1.527*
	(1.170)	(1.072)	(0.888)
Sect Seat	-0.183	0.726*	0.928**
	(0.589)	(0.354)	(0.346)
Political Competitiveness	-0.744	0.599	0.269
	(0.629)	(0.420)	(0.402)
Constant	-1.409	0.445	0.269
	(1.970)	(1.456)	(0.402)
Number of Observations	26	26	26
Adjusted R^2	0.458	0.573	0.476

Notes: Estimated with OLS. Values in parentheses represent robust standard errors. * indicates $p<0.1$; ** indicates $p<0.05$; *** indicates $p<0.01$

Table 4.5: Determinants of Number of Education Institutions in District

Variables	Future	Hezbollah	Amal
Pct. In-Group	1.917	-1.421	-0.445
	(1.133)	(1.799)	(0.480)
Population Density	-2.262	-6.011	4.026
	(5.288)	(10.838)	(3.931)
Land-Use	0.404***	0.685	0.055
	(0.138)	(0.625)	(0.173)
"Low" LCI	-0.651	5.122*	0.421
	(0.535)	(2.645)	(0.784)
Fractionalization	0.094	-0.110	-1.182**
	(0.307)	(1.262)	(0.422)
Sect Seat	-0.316	1.317***	0.664***
	(0.218)	(0.436)	(0.118)
Political Competitiveness	-0.295	1.851*	0.089
	(0.192)	(0.961)	(0.184)
Constant	-0.583	-3.848	-0.125
	(0.460)	(2.678)	(0.667)
Number of Observations	26	26	26
Adjusted R^2	0.520	0.582	0.892

Notes: Estimated with OLS. Values in parentheses represent robust standard errors. * indicates $p<0.1$; ** indicates $p<0.05$; *** indicates $p<0.01$

5.   DISCUSSION

Overall, there are four main results this paper seeks to emphasize, namely that 1) the Future party is more positively responsive to a district's fractionalization, yet there is no such evidence for the two Shia parties; 2) Amal and Hezbollah more positively react to the number of Shia parliamentary seats in a district, which is not the case with the Future party's behaviour; 3) despite their claims, there is little statistical evidence that any of the parties are primarily motivated by socioeconomic considerations when choosing a location for their welfare institutions; and 4) Sunni and Shia sectarian coalitions, despite operating under the same political institutions, behave differently in their provision of services to in- and out-group members – which is the most general result of this paper.

These four results can be rationalized through an understanding of the unique historical and political realities that the parties face. For example, the Future party, as the historically dominant and main political voice for Sunnis, can afford to extend benefits to out-group communities because they face less pressure from within to prove their sectarian loyalties (Cammett, 2014). This narrative could be reconciled with the model in Corstange (2008) and the theoretical model outlined in Section 2, whereby co-ethnic supporters subsidize the cost of political support and co-ethnic leaders behave as monopsonistic buyers of their supporters' votes. It is also consistent with the model's prediction that, the lower intra-ethnic competition, the less likely the party will place its institutions in in-group dominated districts.

On the other hand, Hezbollah emerged first as a militant organization in 1984 and only recently began to engage in national politics, and thus has historically relied on a core group of supporters based in regions in which it was militarily active – and where

large Shia populations reside. It has since surpassed Amal, which was founded a decade earlier, as the more dominant party in the Shia community (Salamey, 2009), and both parties – despite their present amicable relationship – still face a legacy of rivalry against one another stemming from their battles in the civil war. Hence the Shia community has not yet established a single, dominant political voice that matches the Future Movement and the Sunni community. The legacy of competition between Amal and Hezbollah, despite their alliance today, may suffice to serve as an incentive to more exclusively focus on in-group members and more strongly respond to electoral factors.

Furthermore, the seemingly lack of overt consideration for socioeconomic needs by all three parties' decisions to locate their welfare institutions is not surprising. Indeed, as Corstange (2008) describes, the low-information environment that allows these ethnic coalitions to form also entails the de-emphasis, if not complete absence, of a public policy dimension in party agendas. In these environments, members of coalitions unite on the lowest-common denominator interests: in the case of Lebanon, it is religious sect (Corstange, 2008).

Finally, to the extent that the contextual political environment of ethnic coalitions differs, so will their behaviour – perhaps manifested through their provision of services – towards in-group members. This has important implications on the overall literature on the provision of public goods in diverse societies. The Lebanese experience, at least for Muslim parties, demonstrates a case where the widespread assumption that ethnic coalitions behave identically – more particularly, that they *equally* value public goods accruing to their own sect – does not hold.

6.   CONCLUSION

This paper explores the variations between Sunni and Shia parties in Lebanon in their propensity to serve in-group members through the establishment of welfare institutions. Lebanon offers a natural case study given that its political parties are primarily divided along sectarian lines; its sects have different degrees of political competition from within; and its overall state-provided social welfare regime is relatively low compared to services provided by private actors, mostly affiliated with political parties. Using data on the spatial allocation of welfare institutions (e.g. schools, hospitals) affiliated with major political parties in Lebanon, the results show that the two Shia parties behave similarly and are less likely to target heterogeneous districts relative to the Future party. These results can largely be explained by the varying degrees of intra-sectarian political competition within the Sunni and Shia communities, and are consistent with the theoretical model's predictions outlined in Section 2.

The analysis of ethnic coalitions in the political economy literature tends to assume identical behaviour, but clearly intra-ethnic political competition can lead to significant divergences in the relationships between parties and in-group members. Extending this area of research to both Lebanese Christian parties as well as ethnic coalitions in other political environments would be a positive contribution to this nascent literature. Particularly in ethnically fragmented developing countries, where non-state social welfare provision often plays significant role, the intersection between ethnic diversity, political competition and provision of public goods can help explain the overall distribution of public goods across a country's ethnic groups – and ultimately assist policymakers in designing institutions that channel diversity to productive uses.

REFERENCE LIST

Alesina, A., & Ferrara, E. L. (2005). Ethnic Diversity and Economic Performance. *Journal of Economic Literature , 43* (3), 762-800.

Alesina, A., Baqir, R., & Easterly, W. (1999). Public Goods and Ethnic Divisions. *Quarterly Journal of Economics , 114* (4), 1243-1284.

Alesina, A., Devleeschauwer, A., Easterly, W., & Kurlat, S. (2003). Fractionalization. *Journal of Economic Growth , 8* (2), 155-194.

Banerjee, A., Iyer, L., & Somanathan, R. (2005). History, Social Divisions and Public Goods in Rural India. *Journal of the European Economic Association* (3), 639-647.

Besley, T., & Burgess, R. (2002). The Political Economy of Government Responsivess: Theory and Evidence from India. *Quarterly Journal of Economics , 117* (4), 1415-1451.

Besley, T., Persson, T., & Sturm, D. (2005). *Political Competition and Economic Performance: Theory and Evidence from the United States.* National Bureau of Economic Research.

Cammett, M. (2014). *Compassionate Communalism: Welfare and Sectarianism in Lebanon.* Ithaca: Cornell University Press.

Cammett, M., & Issar, S. (2010). Bricks and Mortar Clientelism: Sectarianism and the Logics of Welfare Allocation in Lebanon. *World Politics , 62* (3), 381-421.

Chaaban, J., & Gebara, K. (2007). Development in a Polarized Society: Looking at

Economic and Social Development in Lebanon Through a Different Lens.

Abaad , 11.

Chaaban, J., & Salti, N. (2010). The Political Economy of Attracting Public Funds: The

Case of Lebanon. *Economic Research Forum Working Paper Series* , 550.

Chaaban, J., & Salti, N. (2010). The Role of Sectarianism in the Allocation of Public

Expenditure in Postwar Lebanon. *International Journal of Middle East Studies*

, *42*, 637-655.

Chandra, K. (2007). *Why Ethnic Parties Succeed: Patronage and Ethnic Head Counts.*

New York: Cambridge University Press.

Collier, P., & Garg, A. (1999). On Kin Groups and Wages in the Ghanian Labour

Market. *Oxford Bulletin of Economics and Statistics* , *61* (2), 133-151.

Corstange, D. (2008). *Institutions and Ethnic Politics in Lebanon and Yemen.* PhD

Diss., University of Michigan.

Esteban, J., & Ray, D. (2008). On the Salience of Ethnic Conflict. *American Economic

Review* , *98* (5), 2185-2202.

Fearon, J. D. (1999). Why Ethnic Politics and "Pork" Tend to go Together. *Ethnic

Politics and Democratic Stability.* MacArthur Foundation.

International Foundation for Electoral Systems. (2011). *Electoral Districts in

Lebanon.* Report/Paper.

Haddad, S. (2010). The Political Consequences of Electoral Laws in Fragmented

Societies: Lebanon's 2009 Elections. *The Journal of Social, Political and

Economic Studies* , *35* (1), 45-78.

Herrera, S., & Pang, G. (2005). Efficiency in Public Spending in Developing Countries: An Efficiency Frontier Approach. *World Bank Policy Research Working Paper no. 3645* .

Holcombe, R. G. (2006). *Public Sector Economics.* Upper Saddle River: Pearson Prentice Hall.

Kyriacou, A. (2004). Rationality, Ethnicity and Institutions: A Survey of Issues and Results. *Journal of Economic Surveys , 19* (1), 23-42.

La Porta, R., Silanes, F., Shleifer, A., & Vishny, R. (1999). The Quality of Government. *Journal of Law, Economics and Organization , 15* (1), 222-279.

Makdisi, S., & Marktanner, M. (2008). Trapped by Consociationalism: The Case of Lebanon. *Lecture and Working Paper Series. 1*, pp. 1-36. Beirut: American University of Beirut, Institute of Financial Economics.

Miguel, E., & Gugerty, M. K. (2004). Ethnic Diversity, Social Sanctions, and Public Goods in Kenya. *Journal of Public Economics* .

Okten, C., & Okonkwo-Osili, U. (2004). Contributions in Heterogeneous Communities: Evidence from Indonesia. *Journal of Population Economics* .

Salamey, I. (2009). Failing Consociationalism in Lebanon and Integrative Options. *International Journal of Peace Studies , 14* (2), 83-105.

Spence, M. (1974). Job Market Signaling. *Quarterly Journal of Economics , 87* (3), 355-374.

United Nations Development Programme (UNDP). (2008). *Mapping of Human Poverty and Living Conditions 2004* .