Diverse but not divisive: Tribal diversity and public goods provision in Jordan

by

Eleanor X. Gao

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Doctoral Committee:

Professor Mark A. Tessler, Chair Professor Andrew J. Shryock Associate Professor Allen D. Hicken Associate Professor Robert W. Mickey © Eleanor X. Gao 2012

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Chapter I

Introduction

It was a warm, spring afternoon in Amman and between sips of strong, sweet Arabic coffee, I was chatting with Lana¹, an employee at a NGO working with Jordanian municipalities, about her experiences. I had a few ideas about why public service provision varied across municipalities but thought that it might be best to do some exploratory work by asking "experts" what they thought. Lana was one of those experts. In addition to her employment at the NGO, she had already spent many years working for the Ministry of Municipal Affairs in Jordan. Rather than present each of my individual hypotheses and asking for their opinion, I had decided it was best just to ask these experts why they thought municipal governance varied from place to place.

"So," I said to Lana and slowed my speech in anticipation of the question I had been building up to for the last half an hour, "Why do you think services vary across municipalities?" She hesitated for a few seconds in thought and then began rattling off the usual factors I had already been told many times: the socioeconomic situation of the municipality, its population, the leadership ability of the mayor and his motivation to actually serve his community rather than desiring to utilize the municipality to award his cronies, the education level of residents, topography of the landscape, whether the municipality was receiving assistance from other organizations, and finally--tribal diversity.

¹ This is not the actual name of the interviewee. All names of interviewees throughout the rest of the dissertation are pseudonyms.

I was frantically writing everything down. "Tribal diversity, ah yes," I said, looking down at my notepad as I scribbled it down quickly. "You said that's bad, right? Tribal diversity is not good for service provision?" She frowned at me, "No, no, I said, it's good. Having more than one tribe is good for municipal services."

This was new. And surprising. I was not an expert on social diversity and had not come to Jordan to study the impact of diversity on municipal services but I did remember somewhere in the back of my mind that many eons ago, in some graduate school seminar, someone had said that diversity was bad for public goods provision. But here Lana was saying the opposite. "Really," I said, "It's good? Why is tribal diversity good for municipal services?"

"Well, tribal diversity is good because it makes the society less tribal. When there are lots of tribes, people tend to work together and to support the most qualified candidate. They don't just vote for a member of their tribe in the municipal elections". She went on to say that in diverse places, residents were more likely to be innovative and to be more accepting of changes. Not everyone would have the same mentality as, in her opinion, is the case in homogeneous settings.

I was intrigued by what Lana said but as I had a list of other topics I wanted to speak to her about, I eventually moved on. Unbeknownst to me, that conversation on tribal diversity was to be the first of many discussed over sweet glasses of tea or diminutive cups of Arabic coffee about the role of tribal diversity on public goods provision in Jordan as other interviewees also echoed opinions similar to Lana's. I eventually decided not to write a dissertation about the impact of Islamist participation or civic organizations on municipal services as I originally intended. Captivated and puzzled by what many Jordanians saw to be a positive force but viewed by political

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science scholars as a negative one, I chose to focus on the impact of social structure on municipal service provision—namely the impact of tribal diversity.

This dissertation is the fruit of that work: the fruit of many conversations with people like Lana as well as the result of quantitative data gathered from various governmental institutions to test hypotheses inspired by these conversations. It explores the role of social diversity on local public goods provision and seeks to understand how the social composition of an area can impact the functioning of the municipality and the decisions of elected officials. Unlike much of the current literature on ethnic diversity that finds a negative relationship between diversity and public goods provision, I (like Lana) argue the opposite and note that diversity can encourage electoral competition, alleviate patronage, and contribute to local economic development.

The rest of the chapter elucidates this argument in greater detail. Section 1 presents my theoretical contribution to the body of literature on social diversity and public goods provision. In Section 2, I explain why Jordan is an excellent place to conduct a study on tribal diversity. I then offer a brief introduction on the contemporary role of tribes (Section 3) as well as on municipal governance in Jordan (Section 4). In Section 5, I explain why tribes and not political parties are salient with regard to municipal elections; and Section 6 concludes the chapter by outlining the methodology used for this research project and describing the topics covered in the remaining chapters of the dissertation.

1.1 Contribution to the Diversity and Public Goods Literature

Diversity has been blamed for a number of social and political ills. It is responsible for poor economic policies in Africa leading to its "growth tragedy" (Easterly and Levine 1997). Racially and ethnically diverse communities are associated with reduced spending on service items and lower rates of tax collection (Alesina, Baqir, and Easterly 1999). These same communities suffer from poor provision of public goods whether it is fewer paved roads, lack of school facilities, or poor maintenance of infrastructure (Miguel and Gugerty 2005; Kimenyi 2006). Heterogeneous communities are also more explosive, experiencing greater violence and civil conflict, leading to neglect of economic policies and outcomes (Fearon and Laitin 2003).

At the same time, recent research has shown that not all types of diversity are associated with poor service provision. In their study of 46 democratic countries Baldwin and Huber (2010) found that only when groups differed socioeconomically were public goods affected. They found that cultural diversity and ethnolinguistic fractionalization had no effect on service provision. A recent study of tribes in Yemen also found tribal diversity to be associated with higher levels of allocation in terms of education resources from the central government (Egel 2011). Areas with a greater number of tribes had higher numbers of teachers and classrooms per capita.

Why has diversity been associated with poor policies in some studies, exert no impact in others, and lead to positive outcomes in a third set of studies? Through focusing on the case study of Jordan where tribes have relations characterized by mutual respect, I argue in this dissertation that the relationship between the various groups as well as the relationship within the groups themselves are essential for understanding diversity's impact on service provision. The "diversity is bad for public goods" scholars have tended to focus on areas of the world where relations between different groups are tense, antagonistic, or distant. These poor interactions have made outcomes that require collective effort such public goods provision tricky to achieve. I also argue that group cohesion is important in understanding the impact of diversity on public goods provision—when tribes are cohesive, increasing diversity can positively impact service

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provision as it introduces greater electoral competition amongst candidates for the municipal council. Although members may hail from one tribe, they do not always act in concert on the electoral stage. By competing against one another, candidates from the same tribe provide residents, especially in homogenous areas where most of the population hails from the same tribe, more of a choice in the municipal elections rather than being forced to support one particular tribal candidate due to family allegiance.

Although some scholars also claim that social diversity worsens economic development, others actually note that it can enhance it as well. Jane Jacobs (1961) argues, for instance, that cities with their diverse populations are "engines" of economic growth because they attract innovation and creativity. Page finds that when heterogeneity introduces cognitive and behavioural variation, diverse teams become better problem-solvers and more productive (Page 2007). In Jordan, multitribal municipalities are friendlier toward businesses and more tolerant of new occupations. Residents in diverse municipalities are more willing to establish private ventures as it means they will not have to compete against family members who own similar types of businesses. Furthermore, these residents will also be more open to new occupations. With their diverging beliefs and values, at least some tribes will welcome these new opportunities. In turn, the establishment of private ventures, which must pay annual licensing fees to the municipality, and a higher percentage of employed residents produce a wealthier municipality, which can spend more on services.

1.2 Why Jordan?

Jordan is an excellent place to conduct a study on tribal diversity. The prominent role that tribes play with regard to social and political life there made it a sensible place to investigate their impact on local services. Unlike some countries where ethnicity or religion are the salient cleavage, tribal distinctions in Jordan have real and palpable consequences as to how residents act and treat one another there. Tribal solidarity can influence which candidate one supports in an election, which civic organizations one joins, and whether personal disputes are solved satisfactorily.

Furthermore, Jordanian municipalities vary immensely as to how diverse they are. Some municipalities are monotribal meaning that most residents belong mainly to one tribe while others have a "medium" number of tribes. A few municipalities are populated by residents from an enormous array of tribes and in these locations no particular tribe can be said to dominate demographically. Figure 1.1 shows the distribution in number of tribes across Jordan's municipalities. This variation in tribal diversity is important if we wish to understand whether homogenous or heterogeneous locations produce better services.



Figure 1.1 Number of Tribes across Jordan's Municipalities

Unlike some Arab countries where governance is completely centralized and local leaders are appointed by the Center, municipalities in Jordan elect their own leaders and are responsible for a number of services that are not supplied by the central government. This makes it possible to compare within-country differences without having to extend the study to several countries where controlling for confounding factors may be difficult. Because Jordanian municipalities operate within the same political structure and are bound by the same laws and regulations, we can be more confident that results are due to proposed explanatory factor—tribal diversity.

Although the study focuses on Jordan, results are potentially generalizable to a number of different locations. Tribes are not an entity unique to Jordan but are also prevalent in a number of Arab and non-Arab countries. Tribes or kinship networks are salient political groupings in Libya, Lebanon, Palestine, Yemen, and many of the Gulf countries. They are also present in Central Asian countries like Afghanistan, Kazakhstan, Tajikistan, and the Kyrgyz Republic. In rural and remote parts of Indonesia, tribes still serve as a major form of social organization and tribal and clan members live on specific plots of land reserved for their families. The focus of this research project is Jordan but the results are potentially applicable to a number of different settings.

1.3 Tribes in Jordan

A tribe (or *asheera* in Arabic)² is a "group of people distinguished from other groups by notions of shared descent, whether real or imagined" (Alon 2007). Members of tribes include those who are related by blood and by marriage as well as groups that have been co-opted over the years such as those historically allied to the tribe or former slaves. Not all of these groups have the same status within a tribe. Even today, sections of a tribe that are composed of former slaves or families who joined the tribe to obtain protection against raids may be considered inferior. Intermarriage between these groups and the rest of the tribe is discouraged (Layne 1984). Because everyone in Jordan is part

²Several Arabic terms are used interchangeably to refer to tribes. In addition to *asheera*, they are *qahila* (usually used to refer to confederations or larger tribes) and *hamula* (usually used to refer to small tribes). *Asheera* is the most commonly used term for tribe in Jordan. See Lars Wahlin. 1993. *Tribal society in northern Al-Bahva, Jordan: An historical geographical survey.* Department of Human Geography, Stockholm University Kulturgeografiskt Seminarium 9193, p4 and Peter Gubser. 1974. *Politics and change in Al-Karak, Jordan: A study of a small Arab town and its district.* New York: Oxford University Press, p50.

of a kinship network, it can be said that all Jordanians belong to a tribe³. This includes Jordanians of Palestinian descent whose tribes are often small and do not have the sprawling network of branches like those of nomadic tribes.

The largest tribe in Jordan, Beni Hassan has a population of over 250,000 members and 89 individual clans (Bin Mohammad 1999; Al Rawabdeh 2010). Such a large tribe like this one is a conglomeration of once-independent tribal groups which through a history of alliances developed a collective identity. Sizeable tribes like the Beni Hassan are first divided into branches which are subdivided into sections, which are partitioned into subsections, which are split into further sections and levels until the tribe reaches some level of organizational coherence. Not all members agree on the genealogical divisions of their tribe. They usually concur on the major divisions but may dispute the minor ones. Members of large tribes can also choose to identify at different levels of the tribe. Some identify with the overall tribe while others prefer to identify with a branch, section, or clan. Nor is the tribe a static entity. Clans within a tribe may develop their own separate identity if they gain prominence, a problem develops within the tribe, or if clan members reside far from the original tribe for a long period of time (Gubser 49). The opposite is also true. When members of many different tribes migrate to an area together, they may adopt a collective identity. Members of the Shawabkeh

³ Some scholars may disagree by noting that not all Jordanians have established or can depend upon family networks. Indeed some Jordanians are part of extended networks which are fairly organized as a social unit. These members can depend on their tribe should they encounter a financial or personal problem or should they run for office. In turn, their loyalty is also called upon when the tribe wishes to exert its influence. Not all Jordanians belong to such coherent networks. What I mean when I assert that all Jordanians belong to a tribe is that every Jordanian is part of some kinship group. They all have a family to which they belong to. I am not making an assertion about tribal solidarity or the type of network that each Jordanians belongs to. Nor am I asking to what extent members self-identify as part of a tribe. My measure of tribal diversity merely attempts to capture whether residents are from a number of different tribes, regardless of internally coherent these tribes are, can impact public goods provision. It is a study about tribal *diversity* and not about *solidarity*. Tribal solidarity or tribalism is the degree to which members of a tribe feel and act in a preferential manner toward other members of their tribe while tribal diversity is an attempt to capture the number of these networks. But is it possible to have tribal diversity without tribalism? While it is the existence of tribalism that makes tribes a relevant social unit in Jordan and tribal diversity, a meaningful factor to study there, the purpose of this dissertation is not to assess the strength of these networks or to understand why they vary from tribe to tribe.

tribe in Madaba have different genealogical roots but they all migrated from the Showbak area at the beginning of the 19th century (Al Rawabdeh 2010).

Tribal size is one indicator of a group's prominence. A large tribe offers substantial support during elections. In a dispute between individuals from different tribes, having a large number of relatives present strengthens each actor's position. Accusing a Jordanian of belonging to a small tribe is considered an insult as it implies his family is without influence. But it is not only size that dictates influence as tribal cohesion is also important. The Abbadi confederation is said to include 80,000 to 100,000 members but it is more fragmented than other tribes like the Adwan which is perhaps only one-tenth of its size. The paramount sheikhs of the Balqa region from the mid-1700s to the mid-1900s have all been Adwani (Shryock 1994). In modern-day Jordan, large tribes that nominate several candidates may not win many elected positions despite its extensive membership.

Tribes also vary according to their former livelihoods. Sedentary or farming tribes raised crops and tended to stay in one place while nomadic tribes travelled between places to graze animals, usually goats and camels. The term "Bedouin" is used to refer specifically to nomadic tribes that bred camels and spent most of the year in the desert (Lewis 1987). Tribes did not strictly focus on farming or on grazing animals and a number of them have been classified by scholars as semi-sedentary or semi-nomadic. Nowadays most members of nomadic tribes do not travel from place to place and if they do, the duration of travel is limited.

Historically, tribes provided protection against raids by arming its own men and were led by hereditary leaders known as *sheikhs*. Tribal populations also possessed their own system of customary law known as *'urf* or *'awaid* which was recognized by the Jordanian state until the 1970s. For instance, if a member of a tribe was found guilty for killing an individual from another tribe, he and the *khamsa* of his tribe would have to leave the territory. Khamsa, which literally means "five" in Arabic refers to the five generations of his tribe that would be exiled along with the killer. Marriage within the tribe was also favored with particular preference for marrying paternal cousins. Although this practice still occurs today, knowledge of the potential health problems in offspring has muted its frequency.

Even though marriage is no longer restricted to members of the same tribe, sheikhs no longer command absolute authority over their relatives⁴, and residents do not depend on their kinfolk for physical security, tribes still remain an important social and political force in Jordan. In the political arena, candidates rely on the support of their tribe, without which they would find it difficult to win elections. For voters, if there is a candidate from their tribe, they are under enormous pressure to support this individual. They are deluged with phone calls and visits from the candidate or from relatives representing the candidate, urging them to vote for him/her on election day. If a voter decided not to support the tribal candidate, s/he would likely not share this information with family members for fear of provoking their ire. Despite social pressure, the decision to vote for a candidate from the family is not just a matter of loyalty as a relative is also likely to prioritize members of his tribe in any municipal service that he provides.

Because of tribal solidarity, candidates cannot win elections on merit alone. An active and highly educated member of the community will lose to an inferior candidate if he does not have a sufficient tribal base. This means that individuals from small tribes or

⁴ Even though *zaman al-shuyukh* (or the time of the sheikhs) has passed, sheikhs are still overrepresented in government, the royal court (the institution that advises the King), and other forms of elite life in Jordan. Andrew Shryock (2000) also notes that new sheikhly families are emerging all of time. In an article in the Arab Studies Quarterly, he describes in parallel a sheikh whose modernist leanings leaves him with a distaste for anything tribal and a non-sheikh, desirous of noble bloodlines, and on his way to becoming a sheikh through his multiple elections to the Jordanian Parliament as well as his appearances in Jordanian media. My own conversations with Jordanians left me with the impression that the title of sheikh or belonging to a sheikhly family no longer commands voter support. This was true even among residents of previously nomadic tribes where such titles were utilized more often.

who migrated to the area will find winning elections problematic, regardless of their qualifications, and often do not run. In some municipalities where the ratio of migrants is high, candidates who are not "indigenous" to the area can achieve some degree of electoral success. Migrant candidates can draw on the support of other migrants, especially those from their same hometown or region. Even so, these candidates can only secure minor positions that require fewer votes such as a seat on the municipal council. They rarely win seats in parliament or the mayoral position.

Tribalism also extends to economic and social life. When searching for employment, new graduates contact family members so they can benefit from patronage. Residents can also turn to their tribes' associations when looking for involvement in a charitable organization or wishing to start a fitness regime at a sports club. Not all civic associations belong to a particular tribe, but there are a significant number of organizations in Jordan where this is true. Many tribes also possess a *diwan* or *madhafa*, a space for members of the tribe to gather for social occasions such as weddings or funerals. Indeed, spending time with family is priority for Jordanians. The 2005-2008 World Values Survey found that 96.8 percent of Jordanians rated family as "very important" in their life compared with 62.8 percent for friends and 20.6 percent for politics.

Tribes also play a role with regard to justice as customary law is still unofficially practiced. In cases of physical injury such as car accidents or shooting between individuals, many Jordanians prefer to solve the problem in a tribal way rather than resort to the government's courts. This method requires that a group of representatives from each side negotiate a deal favourable to both. If the punishment calls for the perpetrator to pay a large fine, his tribe will collect donations from its members in order to assist him. Because of tribalism, personal arguments between two individuals can also escalate into group brawls between their tribes. In recent years, there have been a number of fights between students of varying tribes at universities across Jordan (Bin Mohammad 1999).

1.4 Municipal Governance in Jordan

Jordan has two parallel forms of local governance. On the one hand, it is divided into 12 governorates, which are then subdivided into 93 different municipalities, which fall under the jurisdiction of the Ministry of Municipal Affairs (MOMA). On the other hand, the governorates are also subdivided into 51 districts, which are partitioned again into 89 subdistricts (Department of Statistics 2006). Governors, district and subdistrict directors are responsible for coordinating the work of the line ministries located in that area; and unlike municipalities, they are beholden to the Ministry of the Interior. Sometimes the geographical boundaries of the municipality match those of a district or subdistrict but not always. The purpose of this study though is to examine local service provision in Jordan's municipalities and not to focus on the performance of other units such as districts and subdistricts.

In Jordan, municipalities are responsible for a total of 26 tasks including responsibilities such as street paving and maintenance, streetlighting, street cleaning, garbage collection, health and sanitary inspections in public buildings and food outlets, monitoring zoning violations, landscaping of public areas, and public building projects. Municipalities, however, are not responsible for providing schools or its own police force. These tasks fall under the jurisdiction of the appropriate ministry.

Geographically speaking, municipalities resemble cities. In urban settings, the municipality is comprised of the city center and the surrounding metropolitan areas. In rural areas, the municipality is a collection of neighboring towns or villages. MOMA categorizes municipalities according to their population size and political importance. Currently four different categories exist. Category one municipalities are governorate centers or municipalities with populations exceeding 100,000; category two are district centers or municipalities with populations between 15,000 and 100,000; category three are subdistrict centers or municipalities with populations between 5,000 and 15,000; and category four municipalities are those not mentioned in any of the other categories (MOMA 2006). To be the center of a governorate, district, or subdistrict means to be the "capital" of that geographical division. There are currently 11 category one municipalities; 44 category two municipalities; 31 category three municipalities; and 7 category four municipalities.

The category of the municipality affects the amount municipalities can charge for fees, the monetary compensation that council members are paid for their attendance at meetings, and the required level of educational attainment for mayors. Larger municipalities can charge residents higher fees; their officials are paid more for each council meeting that they attend, but they must also have higher levels of education. Mayors of category one and two municipalities must have at least an university degree; those in category three must possess a secondary school certificate; and for category four, they must be able to read and write.

All municipalities with the exception of the Greater Amman Municipality (the capital), Wadi Musa and surrounding areas, and the Aqaba Special Economic Zone are under the jurisdiction of MOMA⁵. All three of these locations are governed by special local authorities, established for that particular area. For this reason, they are not

⁵ Approximately one-third (2 million out of 6 million) of all Jordanians live in the Greater Amman Municipality. An additional 81,000 live within the Aqaba Special Economic Zone and 24,000 in Wadi Musa and nearby areas. This means that 35 percent of the Jordanian population do not live in a municipality that is included in this study. One might question whether it is valid to study municipal governance in a country where such a large percentage of the population is excluded from the project. However, the focus of this study is the *municipality* and not the individual; and all locations in Jordan with the exception of these 3 have been included.

included in this study. The 13 Palestinian refugee camps in Jordan are also not under the jurisdiction of the Ministry of Municipal Affairs but UNRWA and the Department of Palestinian Affairs (DPA). Improving and maintaining the infrastructure of the camps as well as tasks like trash collection are the responsibility of the DPA⁶. In some camps, the DPA works with the municipality to perform these tasks.

There are also a number of regional development initiatives across Jordan. The Jordan Valley Authority, which manages water usage and irrigation in the Jordan Valley, the main agricultural area in the country, also has some municipal duties. A variety of different economic zones, offering low taxes or waiving them altogether in order to attract investment and employment, are distributed across the country. Unlike Amman, Aqaba, and Petra, however, these initiatives do not directly affect the provision of municipal services. All services are still provided by the municipality in these locations, with the exception of the Jordan Valley where local municipalities collaborate with the Authority.

As noted earlier, council members and mayors of the 93 "regular" municipalities are elected every four years. Some municipalities are divided into multiple electoral districts with one or more council members representing each district while others have only one district. The number of council members ranges from 4 for some of the least populated pieces to 23 for Irbid, one of the largest municipalities in Jordan. The mayor is chosen via the first-past-the-post or majoritarian system while the council members are selected using the single non-transferable vote (SNTV) system. This means that every voter has two votes: one to select the mayor and the second to select a council member.

⁶ There are 10 official and 3 unofficial refugee camps in Jordan. The unofficial camps are neighbourhoods which are considered camps by the Jordanian government but not by UNRWA. According to UNRWA, a camp is "a plot of land put under the disposal of UNRWA by the host government for accommodating Palestinian refugees and setting up facilities to cater for them". Areas which are not allocated for this specific purpose are not considered camps. However, UNRWA does maintain service facilities even in the unofficial camps. See UNRWA. UNRWA and refugee camps in Jordan. Available from UNRWA office in Amman, Jordan, p1-2.

The mayoral candidate who wins the most votes becomes mayor while the top n candidates with the most votes become council members, n being the number of seats on the council.



Figure 1.2 Number of Council Seats Across Jordan's Municipalities

Once council members have been elected, they choose someone amongst themselves to assume the position of the deputy mayor, who undertakes the responsibilities of the mayor when he is away. In 2007, the Jordanian government also decreed that 20 percent of all municipal council seats must be reserved for women. This means that female candidates who do not win through direct competition alone may be allocated a "quota" seat on the council if they win a higher percentage of the votes than their female competitors. Currently there is one female mayor in Jordan.

Municipalities are financed through grants from the central government as well as from its own collection of fees. The Center distributes to municipalities 6 percent of the taxes collected from the production or import of petroleum derivatives by the national refinery company, 40 percent of fees from driver's licenses, and all fines from traffic, law, and health violations. These fuel taxes and fines are collected by the central government and then redistributed to each municipality according to its population, contribution to the generation of that particular revenue, whether it is the center of a governorate, district, or subdistrict, and the extent to which the municipality must carry out additional responsibilities outside of its normal functions.

Until 2006, property taxes were also collected by the Center and redistributed but that has now changed so that each municipality is responsible for collecting its own property taxes. In general, funds from the Center represent a large proportion of a municipality's revenues, and on average 65 percent of a municipality's revenue are from the central government (CVDB 2007). Municipalities are also responsible for generating their own income through the collection of fees or fines. Fees are charged for services such as the granting of building and processional licenses and the opening of new roads and sidewalks while fines are levied on businesses for health and sanitation violations Mayors and municipal councils can stipulate the fee rate within a specified range decreed by the Ministry of Municipal Affairs.

1.5 What about the Role of Political Parties in Municipal Elections?

Strong electoral support for tribal candidates in Jordan is not due to the absence of political parties but rather because of their weakness. Jordan does have political parties, the most successful of which has been the Islamic Action Front (IAF), the political arm of the Muslim Brotherhood. In 1999, they managed to place 80 of their 100 candidates in council positions. Since then, their electoral performance has been bleak (Jordan Center for Survey Research 2007). In the most recent municipal elections in 2007, the IAF withdrew their candidates on the afternoon of election day, claiming that the regime was rigging the vote in their favor. They have recently boycotted the 2010 parliamentary and the 2003 municipal elections in protest that Jordanian laws treat political parties unfairly.

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The Jordanian regime, as in many Arab countries, has enfeebled political parties through a series of legal restrictions and illegal tactics. The 2007 political parties law, which required all parties to have a minimum of 500 founding members in at least 5 governorates and to disclose their accounts to the government, led to the dissolution of 24 out of 36 of Jordan's political parties (House of Commons Library 2010). Urban areas have less parliamentary seats per capita because the IAF is popular there. Also problematic is Jordan's one person, one vote law which favors tribal or independent candidates over members of political parties (Ryan 2010).

Until 2003, voters in municipal elections could vote for as many individuals as there were seats; and critics accuse the regime of moving to the one person, one vote system currently used in municipal elections in order to fractionalize the country and prevent collective action. With just one vote and weak political parties, voters prefer to support tribal candidates while in the past they could have chosen a tribal candidate *and* a party candidate. Rather than the election of party members across the country who can coordinate their actions in the parliament or in the municipal council, critics accuse Jordanian elections of producing officials who squabble over goods for their tribe.

The regime also manipulates votes when it feels election laws are not sufficient to guarantee the results they desire. The 2007 municipal elections were marked by a number of irregularities. Security forces applied pressure on certain candidates to withdraw in order to gain voter support for the regime's candidates. A number of voting abnormalities was also reported such as the dropping of names of registered voters from electors' lists, voting without identification, voting with identification that did not match details of the actual elector, the repetition of particular names on electors' lists, voting multiple times by women who changed their clothing in between votes, or forcing the representatives of certain candidates to leave the polling center when other

representatives were permitted to remain. The most flagrant of these violations was voting by members of the armed forces, who by Jordanian law must remain neutral in all elections. Soldiers were transported to the municipalities of Madaba, Zarqa, and Irbid, three of the most populous municipalities and all of which have had popular Islamist mayors in the past, where they voted openly (National Center for Human Rights 2007).

Nowadays the majority of candidates, whether for parliamentary or municipal elections, are not members of political parties. Of the members who were elected in 2007 to the Jordanian parliament, only 17 belong to political parties while 98 are tribal or independent representatives. Moreover, 16 of the 17 members of political parties are part of the pro-regime National Current Party (Jordan Times 2010). Many Jordanians also believe that in order for political parties to be effective they must be allied with tribal networks or that political parties are merely a vehicle for those without large tribes to exert influence. Even when Jordan offered each citizen several votes during elections, political parties including the Islamic Action Front would nominate candidates part of large tribal networks to represent the party.

1.6 Methodology and Layout of Dissertation

In order to investigate the relationship between tribal diversity and public goods provision, I gathered both quantitative and qualitative data. The quantitative data consisting of indicators of public goods, tribal diversity and a variety of social and economic variables such as unemployment rates, population size, and rate of migration were obtained from the Ministry of Municipal Affairs, the Cities and Villages Development Bank, the Department of Statistics, and the Local Governance Development Program (LGDP), a project funded by the American governmental agency, Millenium Challenge Corporation, to improve municipal governance in Jordan. However, all of the data from LGDP were originally provided to the program by one of the three entities already mentioned: the Ministry of Municipal Affairs, the Cities and Villages Development Bank, or the Department of Statistics.

In addition to the quantitative data I also travelled across Jordan, interviewing civic and tribal leaders, mayors and council members, municipal employees, and residents in a variety of different municipalities. The purpose of these interviews was to understand how tribal diversity affected local government as well as local life in general. These conversations helped to isolate the causal links that connect diversity to local service provision and how diversity's impact may be conditional upon other factors.

In total I spent time in 14 municipalities. For five of these fourteen municipalities, I spent extensive time there, returning daily over a period of at least two weeks to conduct interviews. These five municipalities were selected because they varied in tribal diversity. However, when choosing these municipalities, I also tried to be mindful of selecting places that varied according to the following characteristics: location in Jordan, governorate that it belonged to, whether there was a significant presence of Jordanians of Palestinian descent, population size, and level of migration.

In addition to these five case studies, I also visited nine municipalities where I interviewed either the mayor or the local program coordinator of a civic organization that promotes community development. Although its headquarters are in Amman, this organization has branches distributed across Jordan in order to work with various local communities. Not only have most of the local program coordinators lived in their respective municipalities for their entire life but they also have extensive knowledge of social relations and problems within the municipality because of their work with all sectors of society.

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The layout of the dissertation is as follows. In Chapter 2, I outline the theoretical relationship between tribal diversity, cohesion, and municipal services. I argue that diversity and cohesion have an interactive effect on service provision. In Chapter 3, I test this argument using quantitative data and find evidence of this interactive relationship while in Chapter 4, I examine various links in the causal chain binding together diversity, cohesion, and public goods provision. Namely, I explore the ability of diversity and cohesion to enhance electoral competition and reduce patronage and find evidence for both relationships. In Chapter 5, I examine an alternative mechanism connecting tribal diversity and public goods provision: economic development. I argue that tribal diversity improves economic development which in turn ameliorates service provision. I use both qualitative and quantitative data to investigate the theoretical claims I make here. Finally, Chapter 6 concludes the dissertation by summarizing all arguments and discussing the generalizability of the study.

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Chapter II

Why Diverse is not Divisive: Understanding the Relationship between Tribal Diversity, Cohesion, and Service Provision

Only about forty miles separates the Jordanian municipalities of Haif and Safur¹. Although both are located in southern Jordan and despite their close proximity to one another, the two municipalities couldn't be more different geographically, residentially, and with regard to the quality of local services. Haif is located in a desert-like landscape where the topography is flat and vegetation limited. Safur, on the other hand, is located high in elevation. It is cooler and snow is not uncommon in the winter. Residential gardens growing vegetables are popular and the area nearby is also home to a number of large orchards and fields. Residents in Haif are mostly of nomadic origins while in Safur, most claim ancestors who were peasants. Population levels are about the same with Haif having 9,122 residents and Safur, a population of 10,931.

Municipal services also vary greatly between the two municipalities. In Haif, the public trash receptacles are overflowing; roads are bumpy, and fees rarely collected. In Safur, the streets are clean, the roads smooth, and the municipality has even recently conducted a census of all residents within its borders.

During the last municipal elections in 2007, the mayor in Haif was only one of two candidates even though he hails from a large tribe with three branches and 23 sub-sections (Peake 1958). When I visited the municipality, he was seldom there and often in the capital

¹ These are not the actual names of the municipalities and all identifying information about interviewees have been changed as well.
where he has another home. Many residents complained that services were poor but those whose children had received employment opportunities in the municipality seemed satisfied. Gossip about the amount of municipal contracts the mayor had awarded to family members was persistent. A license to construct a new building also requires a small donation to a charity run by the mayor's mother. In Safur, on the other hand, the mayor was known for his transparency, his zero tolerance of patronage, and his managerial skills. He told me that no one in the municipality has been hired based on family connections but on their ability to perform the required tasks. Some applicants even have to take a relevant test when they arrive for their interview. These assertions were later confirmed by conversations with local residents.

When I asked the Safur mayor whether he wanted to reward his tribe for their support in the election, he stated that his tribe did not want him to run in the first place. He won despite their objection and does not feel that he owes them anything. In Haif though, most branches of the dominant tribe rallied around the current mayor. In discussions prior to the election, it was decided that all members should support him. When I asked the mayor in Safur if he could have easily won had his tribe endorsed him, he said no because there are too many tribes in the municipality and his tribe, albeit one of the larger ones, does not command enough votes. In Haif, however, the majority of the population belongs to the mayor's tribe; and as his tribe is also quite cohesive, this meant that the Haifan mayor faced little competition in the municipal elections. He was challenged by only one other competitor in the mayoral race and his municipality is monotribal for the most part. His counterpart, the mayor of Safur not only lives in a multitribal community but is a member of a fractionalized tribe. In addition to the second candidate from the mayor's tribe, there were three other candidates for the position of mayor. In other words, Haif, a monotribal municipality, experienced high levels of tribal cohesion during elections, low levels of competition, and suffered from poor public goods provision. On the other hand, municipal elections in Safur, a heterogeneous municipality not only saw candidates from several tribes competing but also multiple candidates from the *same* tribe participating. Residents in Safur praise the municipality for their provision of services and are proud of its innovative initiatives. While much of the literature on ethnic diversity finds a negative relationship between heterogeneity and service provision, the experiences of Haif and Safur suggest that diversity may also be able to improve services through its ability to heighten electoral competition. In this dissertation I explore the extent to which Safur and Haif exemplary of other municipalities in Jordan.

In order to answer this question, I begin by reviewing the current literature on ethnic diversity and public goods provision. I argue in Section 1 that the prevailing negative relationship found in the literature is due to poor relations between groups under study and that we should not expect tribal diversity necessarily to worsen public goods provision in Jordan. Rather, as I highlight in Section 2, tribally heterogeneous municipalities may even offer better services than homogenous communities because of diversity's ability to heighten electoral competition. I also note that homogenous areas. In addition to electoral competition levels as high as in heterogeneous areas. In addition to electoral competition, Section 3 presents a second mechanism linking tribal diversity and public goods provision: economic development. I outline in this section the ability of tribal diversity to promote development, which in turns improves service provision.

Throughout the chapter I argue that the positive impacts of tribal diversity on governance in Jordan challenges the conclusions of the ethnic diversity literature. But is ethnic diversity conceptually distinct from tribal diversity and can my findings challenge this body of work? In Section 4, I address this issue and offer several reasons as to why ethnic and tribal diversity are comparable. Finally in Section 5, I summarize the theoretical arguments I have presented in this chapter and lay out the empirical tests I conduct in later chapters.

2.1 Tribal Diversity and Public Goods Provision

Most studies that investigate the relationship between ethnic heterogeneity and public goods provision find it to be negative. In one of the first pieces to examine this relationship, William Easterly and Ross Levine (1997) argue that ethnic heterogeneity leads to poor economic policies that hinder growth. They explain that ethnic groups are likely to have differing preferences making it difficult to compromise and to coordinate government policy. As a result, officials pursue policies that specifically benefit their own group but not the entire country. They also argue that heterogeneous settings are more privy to patronage and corruption as each group may be allocated a region or ministry under its authority. Although Daniel Posner (2004) criticizes their measure of ethnic heterogeneity for including all groups instead of only those that engage in political competition and for their lack of analytical focus on Africa while purporting to explain Africa's "growth tragedy", he corroborates their findings with his own dataset that corrects for these problems. Later studies have found ethnic heterogeneity to be associated with infant mortality and lower levels of school attainment and literacy (La Porta et al. 1999) as well as decreased spending on primary to tertiary education (Addison and Rahman 2001) and health (Kujis 2000).

Despite these findings we need to be wary about whether social heterogeneity is truly associated with poor services. One weakness of this literature is that some of the studies have focused on locations where ethnic or racial relations are tense such as Africa, where ethnic groups often have hostile or aloof interactions with one another as a result of colonial history and wars of independence. Ethnic groups can also differ on several dimensions: language, culture, and religion and tend to live in segregated areas with members of their own group. Mwangi Kimenyi (2006) in a review of studies on this subject notes that ethnic groups in Africa tend to live in a particular area. These cleavages (especially if they are self-reinforcing) and their primary interaction with members of their same ethnic group may have caused each group to develop distinct preferences and distrust members of other groups as they have inadequate ability to police their actions. In fact in a recent study across nations, Alberto Alesina, who is well-known for his earlier work highlighting the negative relationship between ethnic diversity and public goods provision, and Ekaterina Zhuravskaya (2009) finds that by itself diversity does not have an impact on service provision or can even be a positive influence but that the *segregation* of ethnic groups within a country is associated with poor public goods.

In Jordan, certain tribes are also associated with a particular area. In each municipality there are a number of tribes that are "indigenous" to that area but tribal neighborhoods are rare in urban settings and even in more rural municipalities, one can find a variety of tribal groups living near the town center. It is only in remote villages that in contemporary Jordan, that one finds all residents belonging to the same tribe. In other words, there is little segregation but a lot of interaction within Jordanian municipalities. Members of different tribes not only live next to each other but they work together. Intermarriage is common between tribes, especially now that the health risks of producing offspring with relatives are widely known. When residents are asked how they decide where to send their children for school, which mosque to pray in, or which health center in which to register, they often reply that they simply choose the closest one in terms of distance. Stories of members of one tribe trying to avoid contact with members of another tribe are rare².

As a result of many years of consistent and constant interaction, the relationship between members of different tribes in Jordan is generally characterized by mutual respect; and some of the explanations offered for the negative relationship between ethnic diversity and public goods provision do not apply³. For instance, some of these scholars argue that cooperation between ethnic groups is problematic because one group cannot sanction members of another group for bad behavior. But as members of these tribes constantly interact, sanctions are used and enforced. In fact as noted in Chapter 2, Jordanian tribes have developed a set of customary laws specifically to deal with conflict between groups. When fights and disputes break out, tribal elders follow these historical guidelines to negotiate a truce that is favorable to both parties. During elections, tensions are heightened as candidates of different tribes compete against each other. Sometimes these tensions lead to physical clashes or even shootings between tribes but this tends to subside once elections have completed. It is only for a small percentage of tribes that bad relations have persisted over the years and where contact can provoke conflict⁴.

² Interviews #209, #239, #210

³ For a comprehensive discussion of these explanations and a test of their salience see James Habyarimana, Macartan Humphreys, Daniel N. Posner, and Jeremy M. Weinstein. 2007. Why does ethnic diversity undermine public goods provision? *American Political Science Review, 101* (4), 709-725. They present three mechanisms that potentially explain the negative relationship between ethnic heterogeneity and public goods provision. The first mechanism is a difference in preferences meaning that diverging ethnic groups may prefer differing goods or prefer only for their group to benefit from the good. The second mechanism is the ease of communication. Due to sharing a similar language, culture, and religious beliefs, co-ethnics may find it easier to communicate with one another. The third mechanism is behaviour. Members may act differently depending upon whether they are interacting with co-ethnics as the likelihood of social sanctioning may be greater should they behave badly toward a member of their own group.

⁴ For example, the Abbadi tribe and some of the tribes of Salt historically have had poor relations and in 2011, an argument between two students at Balqa Applied University escalated into a larger, tribe-level dispute (Jordan Times 2011). In the municipality of Taybeh, the Quraan and the Alowneh tribes also have had problematic relations for decades due to their similar membership sizes and desire to exert political dominance in the area (Interviews #141, 152, 147).

But if members of varying Jordanian tribes get along so well then why is it that local level studies of ethnic diversity have also found heterogeneity to worsen public goods provision (i.e. Bardhan 2000; Khwaja 2009; Miguel and Gugerty 2005)? Surely, these ethnic groups should also have formulated methods for collaboration by now? The important distinction between studies that find a negative relationship between heterogeneity and public goods provision and those that do not, I would argue, is not between local and national level studies but rather whether the study is focused on urban or rural areas. When various groups live in different parts of a locality, regardless of whether it is a province or a city, they have few opportunities to interact with one another. In rural areas, settlements are likely to be far apart with each group predominantly inhabiting a neighborhood or area.

For instance, Edward Miguel and Mary Kay Gugerty's (2005) work in Kenya is based primarily in rural areas; Asim Khwaja's (2009) 99 communities are located in the rural state of Baltistan in the Himalayan regions of India where "settlements are fairly distinct"; and Pranab Bardhan (2000) studies villages in the state of Tamil Nadu also in India. However, when studies have focused on urban areas where neighborhoods are mixed, results have varied. Posner (2005) found ethnic diversity to have no impact on public goods provision across a number of urban areas in Kampala, Uganda. Similarly, while Alberto Alesina, Reza Baqir, and William Easterly (1999) do find that ethnic heterogeneity is associated with lower spending on roads, sewerage and trash in American cities, they also note that it is correlated with greater tax collection.

But even if neighborhoods are mixed, do members of the same group find it easier to cooperate with one another given that they share a similar cultural toolbox? In their study of mechanisms driving the negative relationship between ethnic heterogeneity and public goods provision, James Habyarimana, Macartan Humphreys, Daniel Posner, and Jeremy Weinstein (2007) note that cooperation may be easier between members within an ethnic group rather than between those from different ethnic groups because they share a similar language or culture. However, different groups do not always diverge across multiple dimensions. For instance, all Jordanians speak the same language, Arabic, although local dialects vary from place to place. Even so, two individuals from far-ranging locations in Jordan have little difficulty understanding each other. Most Jordanians (93 percent) are also Sunni Muslims so religion is, therefore, not a salient cleavage between tribes. Only about 5 percent of Jordanians are Christian and an even smaller minority is Druze or Bahai (0.2 percent and 0.02 percent, respectively). In terms of ethnicity, 60 percent of Jordanians are ethnic Palestinians while 5 percent are of Armenian, Chechen, or Circassian descent (Minority Rights Group International). However, with the exception of Armenians who tend to be Christian, almost all ethnic Palestinians, Chechens, and Circassians are Sunni Muslim. Tribes also do not possess distinct socioeconomic statuses like castes in India; and members of one tribe can diverge widely in wealth and education, especially if the tribe is large.

Given that members of various tribes share a similar culture, interact positively on a frequent basis but can also "punish" other members for negative behaviour, we would expect that:

H1: Tribal diversity should *not* have a negative impact on service provision at the municipal level. In other words, it should have either a positive impact or no impact on the quality of municipal services.

2.2 Tribal Diversity and Electoral Competition

Rather than being a disadvantage, heterogeneous communities may actually be superior to their homogenous counterparts in some ways. Increasing the number of tribes may increase the level of electoral competition between candidates. In countries like Jordan where kinship ties are strong and political parties are weak, tribes often field their own candidates. Like political parties, tribes offer their own candidates for electoral contests, either after elders have chosen an individual or after a tribal "primary" has been held. Tribal support is promised to this particular candidate and voter support for other candidates is frowned upon.

While a tribe can coordinate how many candidates to run, one tribe does not have the authority to order another tribe not to offer candidates in the race. In heterogeneous areas, most politically salient tribes (as well as some that are non-politically salient) will nominate candidates. In contrast, in homogenous municipalities where almost all residents belong to one tribe, tribal elders have greater control over the number of candidates. A larger pool of candidates heightens competition for votes forcing candidates to appeal to a broader audience rather than relying solely on votes from members within the tribe. Unlike members who are bound to vote according to tribal allegiance, voters outside of the tribe are more likely to care about the qualifications, leadership ability, and past civic engagement of the candidate as they are not electorally tied to anyone. The election of qualified officials is likely to result in better service provision.

Some candidates, who require outside support to win, do form coalitions with other tribes. At other times a number of small tribes gather together and collectively support a candidate from amongst themselves. The right of nomination in these cases will rotate between tribes so that every tribe has an opportunity to field a candidate for an election. Even in these instances, the candidate must still make an effort to appeal to members of these different tribes. Coalition members, unlike family members, are not as loyal to the nominated candidate. Linda Layne (1989), for instance, gives the example of a sheikh who has promised the votes of his tribe not only to one candidate but to several candidates; but on the day of the election, he found that members supported whomever they like.

But why don't voters in multitribal municipalities support their own relatives in elections? In heterogeneous communities, candidates are from a number of tribes so how are voters free to select on merit? Are they not under the same pressure to support their tribal candidate? It is true that residents in multitribal communities also support their relatives if one of them is running for office but in a heterogeneous setting, there will always be a percentage of the population who will not have a tribal candidate. Small tribes often do not run candidates because they know the likelihood of winning is low. In monotribal municipalities, all residents will be related to the candidates and the nominee of closest relation is the candidate they must support.

Multitribal communities also weaken the monopoly of the tribe by furnishing electoral opportunities for candidates who were *not* nominated by their tribe. A large quantity of unpromised votes means that a candidate can win without the support of his own tribe. If this individual runs a successful campaign, he could triumph over the tribal candidate, to whom was promised the bloc of votes from all members of the tribe.

But does electoral competition matter? Does the presence of competition bring about better service provision? A number of earlier studies have highlighted the importance of electoral competition to positively impact public goods. In a study of antipoverty programs, Jonathan Hiskey (2003) found that multiparty electoral competition within Mexican local elections was associated with better provision of water, sewage, and electricity. Furthermore, the programs themselves had a greater substantive (and positive) impact on these services in locations with competition compared to locations where the dominant party, PRI was certain to win. Similarly, Douglas Hecock (2006) noted heightened electoral competition in either the legislative or gubernatorial elections led to greater education spending in Mexican states. Other studies have found competition to influence the characteristics of officials or their behavior. In China, villages holding elections were more likely to have officials who shared similar views on the role of the state in the economy to those of residents (Manion 1996). Furthermore, the more free and fair elections, the more likely village officials were to advocate on behalf of their residents (Birney 2007). A recent study by Timothy Besley and Marta Reynal-Querol (2011) also found that democracies are more likely to select better educated officials. Although they do not test the mechanisms that are responsible for this effect, Besley and Reynal-Querol argue that one possibility is that electoral competition leads to the selection of competent and honest officials while in autocracies, candidates are often chosen because of their loyalty, family connections, or ability to manipulate citizens.

Other studies have emphasized the ability of heterogeneity to heighten political competition. Arguing that social cleavages are often the basis of political preferences, Bingham Powell (1982) found that social heterogeneity increases the effective number of parties. In a study of Louisiana state elections, Mark Jones (1997) found a positive association between racial heterogeneity and the effective number of candidates. However, Ordeshook and Shvetsova (1994), Neto and Cox (1997), and Taagepera (1999) assert that heterogeneity does not have an additive effect but rather depends on district magnitude. When district magnitude is one, heterogeneity has virtually no impact on the effective number of parties but at high levels of district magnitude, diversity and the number of parties share a positive association. Heather Stoll (forthcoming) confirmed these findings in a recent study where she examined a variety of different sources of heterogeneity such as sex, foreign birth, geographic location, and socioeconomic background on political party

formation. Although she found that different sources of heterogeneity exert varying levels of impact on the effective number of parties, the relationship is always positive.

But if tribal diversity increases competition for votes and this in turn, increases the likelihood that qualified individuals will win electoral races then does this mean that candidates who win solely based on the votes of their tribe are inferior? Do tribes not select worthy candidates in the first place? Why should residents prefer a candidate who has broad support versus a competitor who won primarily with the support of his tribe? It would be wrong to assume that candidates who win primarily with family support are naturally poor officials once in office⁵. However, there are a few reasons as to why their performance is likely to be lacking. Firstly, if it is unnecessary to appeal to a broader audience, tribes are more likely to select candidates who fulfill tribal rather than electoral criteria. There may be a propensity to select tribal notables who have either inherited their position or earned it through their involvement in family affairs. Solving intra-family or inter-family disputes, while an important contribution to the tribe, does not necessarily prepare an official to deal with governing an entire municipality. Rotation of the right to nominate candidates between branches of a tribe also means that the most suitable nominee might be rejected in favor of someone from the appropriate branch. Furthermore, the candidate endorsed by one's tribe may not be the individual who is best qualified for the position but if the membership size is sufficiently large, that candidate will win anyhow. This is less likely to happen in heterogeneous settings where voters do not owe electoral allegiance to any one tribe.

More importantly, officials that win predominantly with the support of their tribe are more likely to deplete municipal coffers through poor fee collection and the employment of

⁵ Andrew Shryock (1994) and Linda Layne (1989) also note that tribal leaders often rise to the top after many generations of competition. In some ways high standing within a tribe is an example of collective merit.

family members in the municipality. Any official who wins will be overwhelmed with demands from residents to waive their fees and to employ their sons and daughters and many will do so, especially if they plan to enter future elections and will need voter support again. But the official whose tribal membership delivered electoral success will be under enormous social and familial pressure to comply, more so than the official who won with broad support. Both will receive demands; but as social customs dictate prioritizing family members above all others, the official with support primarily from his tribe will be less able to resist their demands.

The ability for electoral competition to reduce patronage has also been noted in other studies. In a review of the literature on clientelism, Allen Hicken (2011) outlined a number of studies demonstrating a negative association between competition and patronage. For instance, Anna Grzymala-Busse (2007) argues that competition in new democracies can encourage parties to establish institutions for oversight and regulation in order to curb clientelism as well as other forms of state exploitation. Knowing they may face defeat, incumbents will wish establish institutions that will prevent their permanent exclusion from power. In another book on the topic, Conor O'Dwyer (2004) notes that the presence of robust and institutionalized party competition prevents "runaway state-building" where patronage politics dominates. Barbara Geddes (1991) also finds that in Latin America, party competition can initiative administrative reforms such as professionalization of the bureaucracy and reduces levels of patronage.

2.2.1 Tribal Cohesion

However, in order for diversity to exert a positive force on service provision, tribes must be cohesive, unified, and disciplined. If voters do not support the candidate endorsed by their tribe than homogeneous communities experience as much electoral competition as heterogeneous locations. One of the main indicators of a cohesive tribe is whether its politically ambitious members are willing to sacrifice their own personal goals for the welfare of the entire tribe. Like political parties, tribes prefer to nominate the optimal number of candidates—enough to win all of the seats they contest but not so many that members split their vote and none of the candidates succeed. Some tribes display immense cohesion and only the approved candidates register for elections but other tribes are notoriously fractured and a number of renegade members enter, regardless of whether or not there is already a tribal candidate endorsed through a consensual process. These additional candidates can sometimes win even though their tribe has not endorsed them.

In locations where additional candidates from the same tribe run alongside endorsed candidates there will be greater reliance on votes from outside of the tribe. Again, voters outside the tribe are more likely to support candidates based on qualifications, regardless of whether these are educational, civic, or professional accomplishments or their personal relationship with the candidate. The presence of several candidates representing the same tribe may also provide a greater degree of freedom to members of these tribes. In these instances, members may vote for a tribal candidate that they believe is *best* qualified. If the tribe has endorsed a candidate who was selected for his service to the tribe rather than more appropriate qualifications, then members can support the non-endorsed candidate(s) if they feel that these individuals would make better officials. The degree to which members can select their preferred tribal candidate rather than just the candidate of closest family relation depends on the organization of the tribe and on the degree of tribal discipline. Some of the larger, nomadic or semi-nomadic tribes are divided into branches and sub-branches where proximity of family relation is easily discernible and members may feel pressure to support

the candidate of closest kinship. For other tribes, these divisions may not exist or matter and the presence of several candidates allows members to vote for the tribal candidate of their choice.

But what explains tribal cohesion during elections? A number of different factors may account for whether tribes are more or less electorally fractionalized such as size of tribe, type of tribe, geographic distribution of members, education level of members, and nominating procedures. Smaller tribes are more likely to be cohesive because it is easier to agree upon and coordinate goals with fewer individuals. Previously nomadic tribes, although quite large in size, also have cohesive memberships because of their history of living alone as a tribe in the desert and being dependent on one another to provide safety and protection. The geographic distribution of members across several electoral districts or municipalities, on the other hand, fractionalizes the tribe because it is harder for tribal leaders to exert social control and infrequent contact can erode group solidarity. Tribes where a high percentage of members are educated may also be more fractionalized as members become less dependent on "co-tribesmen" for jobs. Finally, nominating procedures matter. Tribes, which have instituted a systematic nomination process such as the holding of a primary, may find their members more willing to exhibit solidarity during elections because they have had an opportunity to partake in the decision-making. These members may feel greater allegiance to the candidate(s) they chose together rather than feeling forced to support someone imposed upon them by a few tribal leaders.

Indeed studies of the previous use of single nontransferable vote system (SNTV) in Taiwan and Japan illustrate how intra-party competition causes candidates to campaign harder and against each other. SNTV, which is the electoral system used to elect council members in Jordan, is well-known for its ability to fractionalize parties⁶. Gary Cox and Michael Thies (1998) found intra-party competition in Japan to be associated with higher campaign spending and that candidates were more responsive to the spending of copartisans than to candidates from other parties. In his study of Brazil, David Samuels (2001) noted, however, that campaign spending is not only due to the number of competitors but also the quality of these candidates. He argues that if the district magnitude is large enough than candidates do not always spend more if intra-party competition exists. This is because in jurisdictions with large district magnitudes there will be a large number of candidates; and in electoral races with a high number of candidates, each candidate will receive poor information about the competitiveness of the races and will be uncertain of whether to spend more. However, he does find that candidates who face copartisans of high quality as determined by previous experience and evaluations from informal polls and consultations with the media are more likely to spend more. As an electoral system SNTV creates strong incentives for candidates to distinguish themselves from other candidates even (or especially) within their own party (Carey and Shugart 1995). Under SNTV, each candidate is a competitor, regardless of party membership.

We would, therefore, expect municipalities with high levels of diversity but also low levels of tribal cohesion to provide good municipal services because both types of municipalities experience high levels of electoral competition. Municipalities with high levels of diversity should be associated with good service provision regardless of whether cohesion is high or low. On the contrary, locations with low levels of diversity but high levels of

⁶ I use the literature on SNTV to illustrate the consequences of intra-party competition and not because it also happens to be electoral system adopted by Jordan. However, if SNTV encourages intra-party competition, doesn't this mean that all tribes are fractionalized in Jordan? No, because while the use of SNTV means that all tribes are equally *likely* to suffer from electoral fractionalization, the actual level of tribal cohesion during elections depends on other factors such as the size of the tribe, type of tribe, geographic distribution of its members, and other factors.

cohesion should experience poor service provision as these municipalities are subjected to

minimal levels of competition. Figure 2.1 below summarizes these expectations. In general:

H2: Increased tribal diversity exerts a positive impact on service provision only when tribal cohesion is sufficiently high. At low levels of cohesion, increasing tribal diversity does not impact the quality of services.

	Diversity	
High	Poor	Good
Low	Good	Good
Cohesion	Low	High

Figure 2.1 Effect of Tribal Diversity and Cohesion on Service Provision

2.3 Tribal Diversity and Economic Development

The previous discussion has focused on the ability of tribal diversity and cohesion during elections to influence electoral competition and for competition in turn to exert a positive impact on service provision. However, it is possible for diversity to impact public goods provision through another channel as well: economic development. In other words, the relationship may be as follows:

tribal diversity \rightarrow economic development \rightarrow public goods provision

Tribal diversity can promote economic development by encouraging competition in the private sector and offering residents a broad range of occupational choices⁷. When residents hail from different tribes, they are more likely to set up competing businesses. Because of group solidarity, members of the same tribe will feel reluctant to compete against one another but this obligation does not extend to those outside of the tribe. Economic

⁷ It is possible that the lack of tribal cohesion during elections is also associated with improved public goods provision. The reasons why tribal diversity enhances economic development may also apply to communities where tribes are fractionalized electorally. For instance, reputational concerns are lessened in fractionalized communities. Also the root cause of fractionalization during elections may be differences in culture, customs, and traditions between branches of the tribe making political coordination tough. However, due to the limitations in data collection, I examine only the relationship between diversity and economic development.

development also requires that individuals be able to adapt to changing economic needs and to accept all available job opportunities. In homogenous communities where most members share a similar culture, flexibility is limited because if one resident finds a new profession distasteful, everyone in the area will likely share his preferences as most residents are from the same tribe. Even if residents disagree with the prevailing belief, they may be reluctant to voice their opinion for fear of damaging their reputation within the tribe.

For instance, many Jordanians eschew employment as a sanitation worker because they find it shameful and embarrassing even though it would provide a regular income. As a result, a significant number of Jordan's garbage collectors are Egyptian. To encourage Jordanians to overcome these social barriers, the government has renamed sanitation employees "national workers" to help dispel negative connotations. Perhaps as a result of urging by the government, some newspapers have also published articles about Jordanians who are proud to work in sanitation (Ghazal 2011). In heterogeneous areas, such outright rejection of an occupation is rare. On the contrary, members of different tribes are likely to have varying preferences with regard to the new profession; and if their own tribe supports their decisions then they are not too disturbed if members of other tribes may also deem these new professions as legitimate. In heterogeneous municipalities, the adoption of new professions or the acceptance of previously distasteful occupations should occur with greater ease.

Municipalities where all employment opportunities are accepted and where many businesses are established are likely to have healthier local economies. If residents eschew certain positions and avoid establishing private ventures that can bring in investment than unemployment and poverty levels are likely to be high. This leads to the following hypothesis:

H3: Tribal diversity should be associated with higher levels of economic development.

The positive influence of diversity on economic development is also supported by previous literature. Gianmarco Ottaviano and Giovanni Peri (2006) found that cities with high percentages of foreign-born residents are correlated with increases in wages and housing rents. Other studies (i.e. Sassen 2006) focus on the diversity in the populations of global cities, which can be engines of economic growth. Richard Florida (2002) explains that diverse cities are more tolerant and therefore, better able to attract creative people who are essential for sectors such as high-tech or research, which rely on innovative ability. Scott Page (2007) argues that groups with members who have diverse perspectives and tools are better problem solvers and more productive than those with homogenous memberships. He notes, however, that while identity diversity (diversity in terms of cultural, ethnic, or racial categories) may be synonymous with cognitive diversity, this is not always the case.

In turn economic development can improve the provision of public goods. Municipalities with low unemployment and poverty rates and dense population of private businesses should translate into a higher amount of collected fees. By law residents must pay local taxes such as trash fees, sidewalk and road construction fees, and property taxes; but in truth, fee collection is only half-heartedly enforced. While poor residents may try to avoid paying fees, affluent ones can contribute without worrying about their pocketbooks. Likewise, business owners must pay for their initial licensing as well as for its annual renewal. Higher fee collection per capita means that a wealthy municipality will have more funds to

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initiate new projects, buy new equipment, and provide better maintenance of roads, parks, and other municipal responsibilities⁸.

Wealthier communities tend also to have a better educated residential population. Middle-class families can afford to send their children to university, even if they must attend an institution far away from home where they must rent housing and buy their own food. Municipalities with skilled work forces are more likely to have qualified employees working in its offices and competent officials elected to local posts. Educated individuals are also more likely to find jobs than to remain unemployed, perpetuating the healthy economic outlook of their communities. After studying numerous urban governments around the world, Robert C. Fried and Francine Rabinovitz (1980) concluded that "of all the theories to explain the performance differences, the most powerful one is modernization".

2.4 Tribal Diversity versus Ethnic Diversity

In this chapter, I have related this study of tribal diversity to the prevailing literature on ethnic diversity. But are tribes similar to ethnic groups? Can I use my results regarding tribal heterogeneity to refute the negative relationship that has been established by scholars studying ethnic diversity? After all, some ethnic groups can be further sub-divided into tribes but scholars of ethnic groups are not claiming that their findings extend to tribes.

While it would make sense to frame this study against the background of other studies on tribal diversity, they simply do not exist. Most literature about tribes tend to focus specifically on one town or one area and to be descriptive in nature. Some of this literature was also written over 20 of years ago (i.e. Antoun 1979; Gubser 1973; Khoury and

⁸ Wealthier municipalities also have more funds to spend on patronage through the hiring of additional, unnecessary employees to please local residents. Instead of using their extra income to improve services, mayors may choose to employ a larger work force. As long as the number of new employees is within reason, mayors will have enough funds for both hiring *and* service provision.

Kostiner 1990; and Layne 1994). Most studies that address some form of social diversity focus on ethnic (often ethnolinguistic), racial, linguistic, religious, or cultural sources of diversity.

Within this range of studies on social diversity, it is ethnic diversity that most closely approximates tribal diversity in theoretical terms. Members of ethnic groups as well as tribal groups share a common ancestry (albeit mythical at times), historical memories, and a link with a particular piece of land⁹. But is it fair to use the literature on ethnic diversity to make predictions about tribal diversity? Are tribes similar to ethnic groups? John Hutchinson and Anthony D. Smith (1996) note that one characteristic of an ethnic group is that members share a common culture often manifest in a similar language, religion, and customs. This suggests that members of different ethnic groups diverge across these dimensions.

Tribes in Jordan, however, share a similar language (Arabic), religion (Sunni Islam) and arguably a common set of customs as well. But if tribes are so similar then to what extent can we compare them to ethnic groups, which are likely to differ across several dimensions? It is true that tribal diversity hinges on identification. It is not differences in external characteristics such as language or religion that distinguish members of various tribes but their own self-conception. However, the prevalence of tribalism means that their familial identity actually matters. How they behave toward members of their own tribe and other tribes have practical implications for Jordanian society and are shaped by their understanding of what group they belong to. In fact, some tribes are related genealogically but members consider themselves as members of separate groups even though they live in

⁹ Hutchinson and Smith (1996) define an ethnic or ethnic group as possessing six features: (1) a common proper name (2) a myth of common ancestry (3) shared historical memories (4) a common culture (5) ties to a homeland and (6) a sense of group solidarity.

the same area. Consequently, they vote for different candidates, establish separate associations, and are bound by a separate set of social mores.

We should also note that ethnic groups do not always differ on a number of dimensions. For instance, in Jordan, West Bankers as Jordanians of Palestinian descent are called and East Bankers as "original" Jordanians are known share a similar culture, language, and religion. In the United Kingdom, the Scottish, Welsh, and the English speak the same language¹⁰ and arguably share a common culture and religion (i.e. Christianity). In Belarus, Byelorussians, Ukrainians, and Russians possess a similar religion, language, and customs. In Latin America, apart from large differences between the indigenous and non-indigenous populations, ethnic groups such as mestizo and white are quite similar (Fearon 2003). In Uganda, the two largest ethnic groups, the Acholi and Langi also speak similar languages.

Nor do all cleavages between groups matter. Kate Baldwin and John Huber (2010) note that only when ethnic groups differ with regard to socioeconomic class does ethnic heterogeneity exert a negative impact on public goods provision while differences in culture did not matter. Jose Montalvo and Marta Reynal-Querol (2003) also find that religious fragmentation does not impact economic growth (although religious polarization does)¹¹.

We also need to pay attention to whether cleavages are self-reinforcing or crosscutting (Selway 2009). Both the Philippines and Sri Lanka are diverse but in the former, religion (i.e. Catholicism) is a cross-cutting cleavage and wealth is roughly distributed across groups while in Sri Lanka differences in religion reinforce boundaries between groups. In

¹⁰ Welsh is still spoken in Wales and Scots and Scottish Gaelic in Scotland but the primary form of communication by far is English.

¹¹ Religious fragmentation is the probability that two randomly selected individuals in a country will belong to different religious groups. As the number of religious groups increase, so does religious fragmentation. Religious polarization, on the other hand, is a measure of the threat that groups pose to one another. It reaches a maximum value when there are two religious groups of equal size. Rent-seeking models show that social costs and tensions are at the highest when the population is distributed equally between two groups.

Sri Lanka, the Tamils are Hindu or Muslim and the Sinhalese are Buddhist. Wealth is also tied to ethnic groups. As a result in the Philippines, citizens are more likely to cooperate across various ethnic groups while the opposite is true in Sri Lanka¹². In other words, the mere presence of differences between groups does not imply that they are relevant.

While it is true that ethnic groups may be more *likely* to differ on a number of dimensions, we have to remember that this is not always the case. Furthermore, when ethnic groups do diverge across a number of factors, these cleavages may be cross-cutting rather than self-reinforcing. But even if these cleavages are self-reinforcing, we still need to note that not every type of cleavage impacts service provision. All of these factors suggest that results from this study on tribal diversity can indeed challenge the prevailing literature on ethnic heterogeneity and public goods provision.

2.5 Conclusion

This chapter has outlined a theoretical relationship between tribal diversity, cohesion, and public goods provision. Because tribes in Jordan have a good relationship amongst themselves we should not expect tribal diversity to worsen service provision. Rather tribal diversity may actually improve services by increasing electoral competition during municipal elections, resulting in better elected officials and less patronage. However, homogenous municipalities may also experience high levels of competition and less patronage if the dominant tribe is electorally fractionalized. Therefore, I expect tribal diversity to affect service provision only when tribal cohesion levels are sufficiently high.

¹² This example is from Joel Selway. 2009. *Constitutions, cleavages, and coordination: A socio-institutional theory of public goods provision.* PhD dissertation. Available from the author.

In addition I have also argued that tribal diversity enhances economic development, which in turn generates better public goods provision. In the next three chapters, I investigate these relationships using quantitative and qualitative data. Chapter 3 examines the relationship between tribal diversity, cohesion, and municipal services; Chapter 4 focuses on the mechanisms that link these three concepts: electoral competition and patronage; and in Chapter 5, qualitative data is used to demonstrate the relationship between tribal diversity and economic development.

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Chapter III

Tribal Diversity, Cohesion, and Service Provision

In the previous chapter I argued that the presence of tribal diversity, contrary to what is suggested by the literature on ethnic heterogeneity, actually does *not* worsen local services in Jordan. Because of consistent and frequent interaction at the local level and a shared culture and language, tribes in Jordan have good relations with one another and the presence of heterogeneity should not make communication and cooperation more difficult. I also noted that tribal diversity may have a positive impact on local services because of its ability to induce electoral competition. While one individual tribe can coordinate how many candidates to run, one tribe cannot prevent another tribe from offering candidates. Consequently, heterogeneous municipalities are likely to witness higher levels of electoral competition, which results in the election of better qualified candidates. These candidates in turn improve municipal services.

However, I also argued that intra-tribal cohesion during elections is also a critical factor. Some tribes are very cohesive during elections and only the endorsed candidates register for the race and a high percentage of member support only these endorsed candidates. On the other hand, some tribes are extremely fractionalized. Not only do a number of additional candidates decide to run alongside the candidate endorsed by the tribe but members support these renegade candidates as well. In homogenous areas, there may be only one dominant tribe, but the degree of intra-tribal cohesion during elections means that electoral competition can fluctuate. Therefore, I argued that tribal diversity does not have a

direct impact on service provision but that its influence depends on the level of tribal cohesion during elections.

Figure 3.1 illustrates the argument that I presented in Chapter 2. When levels of tribal diversity are high, we would expect high levels of electoral competition and therefore, for services to be good. However, in municipalities where diversity levels are low, increasing tribal fractionalization can offset some of the negative consequences of homogeneity. Another way to state this is that when cohesion levels are low during elections, tribal diversity has no impact on service provision; but when cohesion levels are high, increasing diversity should have a positive impact on service provision.

	Diversity		
High	Poor	Good	
Low	Good	Good	
Cohesion	Low	High	

Figure 3.1 Effect of Tribal Diversity and Cohesion on Service Provision

In this chapter, I test these hypotheses with quantitative data gathered from Jordan. In section 1, I describe my measures of tribal diversity, cohesion, and municipal services and how I collected this data. In section 2, I present regression results first for the relationship between diversity and municipal services and secondly for the interactive relationship between diversity, cohesion, and services. In order to confirm my findings, I perform some robustness checks in section 3. Finaflly, in section 4 I offer some concluding thoughts about the relationship between diversity, cohesion, and public goods provision.

3.1 Measuring Tribal Diversity, Cohesion, and Service Provision

Regression analysis was used to evaluate the relationship between tribal diversity, cohesion, and service provision across all 93 of Jordan's municipalities. As noted in Chapter

1, Jordan is an excellent place to situate this kind of study given the importance of tribes in social and political life there. Because its municipalities have some degree of autonomy, it is also possible to compare service provision across municipalities within the country rather than conducting a multi-country study where controlling for confounding factors may be difficult.

Data was gathered for all 93 of the municipalities under the jurisdiction of the Ministry of Municipal Affairs (MOMA). Three areas in Jordan are governed by special authorities: the Greater Amman Municipality (the capital), Wadi Musa, and the Aqaba Special Economic Zone and are not included in this study. The 13 Palestinian refugee camps in Jordan, although some of them are located within municipality boundaries, are also not under the jurisdiction of MOMA but the United Nations Relief and Works Agency (UNRWA) and the Department of Palestinian Affairs (DPA). Approximately 60 percent of Jordan's population is of Palestinian descent but only 17 percent of them reside in the camps. Improving and maintaining the infrastructure of the camps as well as tasks like trash collection are the responsibility of the DPA¹. In some camps, the DPA works with the municipality to perform these tasks. For municipalities that contain camps, data gathered on service provision refers only to areas *outside* of the camp.

Like most Arab countries, Jordan is a centralized state where ministries assume most responsibilities. The construction or maintenance of schools in a particular municipality, for instance, is undertaken by the relevant field office of the Ministry of Education (Taamneh

¹ There are 10 official and 3 unofficial refugee camps in Jordan. The unofficial camps are neighborhoods which are considered camps by the Jordanian government but not by UNRWA. According to UNRWA, a camp is "a plot of land put under the disposal of UNRWA by the host government for accommodating Palestinian refugees and setting up facilities to cater for them". Areas, which are not allocated for this specific purpose, are not considered camps. However, UNRWA does maintain service facilities even in the unofficial camps. See UNRWA. *UNRWA and refugee camps in Jordan*. Available from UNRWA office in Amman, Jordan, p1-2.

2007). Municipal work is restricted to responsibilities such as street paving and maintenance, streetlighting, street cleaning, garbage collection, health and sanitary inspections in public buildings and food outlets, monitoring zoning violations, landscaping of public areas, and public building projects. There are a total of 26 tasks which municipalities are responsible for; and only for a few of these tasks do municipalities share jurisdiction with relevant central ministries.

3.1.1 Tribal Diversity

Tribal diversity was measured by counting the number of tribes that offered candidates for the municipal council in the 2007 municipal elections. In order to ascertain the number of tribes that ran candidates for each municipality, I created a unique dataset by classifying over 2300 candidates for recent municipal elections on the basis of their tribal affiliation. This was done through discussion with locals and consulting reference books. More information about this coding process as well as measuring tribal diversity in general is located in Appendix B.

Council members and mayors of the 93 municipalities are elected every four years. In municipal elections, each resident has two votes. S/he can vote for a mayor who is selected via the first-past-the-post system. Residents can also vote for one council member within their electoral district. Some municipalities are divided into multiple electoral districts with one or more council members representing each district while others have only one district. The number of council members ranges from 4 for some of the least populated locations to 23 for Irbid, one of the largest municipalities in Jordan. The electoral system for council members is the single-non-transferable-vote (SNTV) system where the top "n" vote getters in the council election are awarded with seats, where n represents the number of seats on the council. In 2007, the Jordanian government also decreed that 20 percent of all municipal council seats must be reserved for women. This meant that female candidates who do not win through direct competition may be allocated a "quota" seat on the council if they win a higher percentage of the votes than their female competitors.

Because this measure is a simple count of the number of tribes that offer candidates for the municipal council, it is not able to account for the size of the tribe or offer an understanding of how the municipality is fractionalized. It also tends to undercount the number of tribes as small tribes², tribes whose members are spread over several electoral districts as opposed to concentrated in just one district, and tribes of Palestinian descent as they often do not run candidates. West Bankers as Jordanians of Palestinians descent are often referred to, are usually from smaller tribes and this may be one reason they run candidates less frequently. However, the main reason often cited for their disinterest in political participation (as they are also less likely to vote than East Bankers) is because of disenfranchisement by the government. Municipalities with large numbers of West Bankers have fewer representatives per person in parliament than areas with large ethnic Jordanian populations. Despite making up almost 60 percent of the population, ethnic Palestinians are often not appointed to positions of military or political significance such as high-level ranks in the army, governors of provinces, and high-level administers in sensitive ministries (Zahran 2012). Human Rights Watch (2007) also reported that 2,700 ethnic Palestinians have had their citizenship revoked.

Government interference in the 2007 municipal elections was also reported in three municipalities. In their attempt to stop the Islamic Action Front from winning local

² Included in this category of small tribes are migrants who have moved to the municipality but who are without their tribe.

elections, it was reported that the government encouraged or discouraged certain individuals to run in these three locations (National Center for Human Rights 2007). Even if the government did not directly prevent candidates from running, the knowledge that an election is "fixed" may deter some candidates or encourage others.

Furthermore, some municipalities undergo tribal negotiations prior to elections and choose mayors and council members via consensus rather than through elections. For these areas, the list of candidates is simply the list of individuals who have been already been selected for the relevant positions. In the 2007 municipal elections, only one municipality out of 93 chose all of their elected officials through this method and a total of 16 out of 93 municipalities (or 17 percent of municipalities) selected some of their candidates in this way as well.

While it would have been preferable to utilize more detailed measures of tribal diversity, this was not possible given data restrictions in Jordan. The central government does collect detailed information on tribes and their membership numbers, but this information is considered sensitive and not released to the public. Other possible sources of such data like phonebooks and tribal maps are also incomplete. Phonebooks, which often serve as a major resource for identifying local residents in many other countries, are arranged by governorate and not by municipality. Furthermore, only 33 percent of the Jordanian population possess a landline and are, therefore, listed in a phonebook. Old tribal maps that show the distribution of tribes across Jordan exist but they date back to the early 1900s and do not capture the internal migration that has occurred since then or the movement of Palestinians to Jordan beginning in 1948. Today Jordanians of Palestinian descent account for 60 percent of the population.

The measure of candidate lists on the other hand identifies the tribes that exist at the

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municipal level. While it offers only a list of the politically salient tribes and does not capture *absolute* levels of diversity, this measure does offer a reasonable assessment of *relative* diversity across municipalities. In homogenous locations only a few tribes can offer candidates while in heterogeneous areas, many more can do so. The bias is also such that I have a more difficult task in evaluating my hypotheses. Because I am not accounting for the presence of small tribes, I am systematically underestimating the diversity in places that have an abundance of these tribes. What this means is that my range of tribal diversity is less than what it should be—in other words the variation in my tribal diversity variable is smaller than what it actually is. This means that it will actually be *barder* for me to locate an effect for tribal diversity and cohesion. Furthermore, because of the systematic undercounting of West Bank tribes, I have created a binary variable for the presence of Palestinians within the municipality and will include it in the analyses.

But is tribal diversity merely a function of district magnitude? Remember that some municipalities are divided into electoral districts and that the number of council seats varies from district to district. Is my count of the number of tribes offering candidates for the council election simply a reflection of the number of seats that are available? If there are a few seats, only a small number of tribes will offer candidates but if a large number of seats are contested, the quantity of tribes competing for a position should be higher as there is greater likelihood of winning a seat. If district magnitude and a count of the number of tribes are correlated, than my measure does not capture tribal diversity but just political opportunism. Figure 3.2 below plots district magnitude against my measure of tribal diversity.

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Figure 3.2 District Magnitude and Tribal Diversity

Figure 3.2 indicates, however, that there is no relationship between tribal diversity and district magnitude. When district magnitude is low, some districts have a low number of candidates and some a high number. The same is true for districts of high magnitude. Figure 3.2 suggests that we should not be concerned that my measure of tribal diversity is simply a function of district magnitude.

3.1.2 Service Provision

Service provision is measured by two different outcomes: (1) the percentage of municipal revenues that are self-collected³ and (2) the quantity of equipment owned by the municipality such as bulldozers, steamrollers, air compressors used to carry out construction or maintenance tasks. Data for revenues and equipment are for the 2009-2010 fiscal year. The data for revenues is from the Cities and Villages Development Bank (CVDB), the Jordanian bank responsible for the financial affairs of all municipalities while the data for

³ In the regression estimations for the measure, the exact measure used for the percentage of municipal revenues that is self-collected is their log form. This is a common way to treat percentages. The correct way to interpret the log form of a percent is to state, for example that the additional increase in one tribe leads to x *percent* more of municipal revenues that are self-collected rather than x *percentage points* more. See Jeffrey Wooldridge. 2008. *Introductory econometrics: A modern approach*. Mason, OH: South Western College.

equipment is from the Ministry of Municipal Affairs (MOMA).

These measures were selected for several reasons. Firstly, both tasks are solely under the jurisdiction of municipalities and are neither the responsibility of the central government nor other local authorities. Secondly, these measures reflect a balance of both municipal investment and outcomes. The first measure (the percentage of municipal revenues that are self-collected) is an indicator of investment while the second measure (quantity of equipment) is an indicator of actual outcomes. Thirdly, each measure captures an important aspect of service provision. Municipalities often collect only a small percentage of the fees and taxes to them and if they were more thorough in their efforts, they could significantly increase their revenues. However, favoritism to family members and friends impedes this collection process. The availability of equipment is critical for carrying out municipal functions such as fixing streetlights, maintaining and paving roads, and collecting trash.

Seemingly unrelated regression (SUR) was used to carry out analysis. SUR is a technique often used by those who study public goods. It allows for simultaneous estimation of a series of regressions (2 regressions here, one for each of the service provision outcomes) rather than estimating each regression separately. There is one main methodological advantage to using SUR over Ordinary Least Squares (OLS). By allowing errors to be correlated across the multiple equations in SUR, it is more efficient than examining each measure of service provision separately using OLS (Tsai 2007).

3.1.3 Control Variables

For each regression estimation these municipal-level variables served as controls: (1) population (2) area (3) poverty (4) presence of significant population of ethnic Palestinians (5) the number of municipal council seats (6) the category of the municipality
according to MOMA. While inclusion of population, area, poverty, and presence of West Bank tribes as control variables are probably self-explanatory, the number of council seats and the category of the municipality may not be. I include the number of council seats should district magnitude and my measure of the number of tribes be correlated (i.e. if the number of tribes increases as district magnitude increases). Although I show in Figure 3.2 that this association does not exist, I include this variable as a precaution anyhow. As for the latter, the category of the municipality dictates the amount of fees that it can charge. MOMA categorizes municipalities according to their population size and political importance. Currently 4 different categories exist.

In order to determine whether a municipality possesses a "significant" population of ethnic Palestinians, candidate lists were reviewed to identify candidates of Palestinian descent. Municipalities where candidates of Palestinian origin received at least 10 percent of the vote were initially coded as having a "significant" population⁴. Because members are likely to vote for their own tribe, the number of votes received by the candidate can be used as a rough measure of the size of his/her tribe. I used a fairly low threshold (10 percent) to denote the presence of West Bankers because many Palestinians are not politically active and the percentage of votes received by Palestinian candidates is likely to under represent their actual numbers. This initial coding was then reviewed by locals knowledgeable on this subject and changed when necessary.

A measure of municipal wealth were also included as a control as wealthier municipalities can spend more on public goods. The specific measure used is the

⁴ The percentage of votes received by West Bank candidates rather than the percentage of *candidates* that are West Bankers was used to classify municipalities because in some cases, a West Bank candidate may run but the population of residents of Palestinian origin may be quite low. In these cases, examining the percentage of candidates that are of Palestinian origin can be misleading.

the log of total revenues collected by the central government and transferred to the municipality in the previous fiscal year (2008). Using the log form allows us to examine the consequences of one percent increase in revenues rather than the increase of one Jordanian Dinar⁵.

There are 93 municipalities in Jordan but coefficient estimates are based on data for 90 of the observations. The three most populous municipalities have an extraordinarily high number of tribes and heavily influence data results if included. Table 3.1 lists the mean values for the number of tribes (independent variable) and the two measures of service provision (dependent variables) for the first 90 observations and also for the three outliers. As can be seen, the mean values for the three outliers differ quite remarkably from the remaining 93 municipalities. T-tests reveal that the probability these differences are due to chance alone is unlikely.

	N = 90	N = 3	t-value	p-value
No. of tribes	7	43	42.3	0.05%
% of revs that are self-collected [*]	29%	56%	8.9	1.2%
No. of munic vehicles	18	189	4.8	4.0%

Table 3.1 Means of Independent and Dependent Variables

However, deleting these three outliers means throwing away information and leads to biased estimates of the error variance and all of its derivatives. In order to keep these outliers within the regression but to prevent them from exerting influence on coefficient estimates, I created three binary variables for each of these three observations. The binary variable equals 1 if the observation is the outlier in question and 0 otherwise. Including

⁵ Using total revenues as a measure of municipal wealth for regressions where equipment is the dependent variable might seem to make more sense as municipalities might use self-collected revenues or revenues provided by the central government to purchase or fix equipment. However, by using government collected revenues as a control variable, I am isolating the amount of equipment that municipalities were able to purchase of their own accord.

^{*} These values are not the log of the percents but the percent themselves.

these variables allows me to keep the additional information that these 3 observations provide, calculate unbiased estimates of the error variance, eliminate any large residuals (differences in predicted y versus actual y) without affecting coefficient estimates⁶.

3.2 Regression Results

3.2.1 Tribal Diversity

As a first test, I examine the effect of tribal diversity on municipal service provision.

Remember that the first hypothesis was:

H1: Tribal diversity should *not* have a negative impact on service provision at the municipal level. In other words, it should have either a positive impact or no impact on the quality of municipal services.

As Table 3.2 shows, the number of tribes is positively correlated with the percentage

of revenues that are self-collected and the number of municipal service vehicles, but these

results are not significant'.

	% of revs that are self-collected	No. of municipal equipment
Tribal Diversity	0.014 (0.017)	0.24 (0.17)

† Significant at the 85 percen level; * Significant at the 90 percent level; ** Significant at the 95 percent level; *** Significant at the 99 percent level

Table 3.2 Tribal Diversity and Service Provision

These results are as expected. Without taking tribal cohesion into consideration,

tribal diversity seems to have no impact on service provision. Because these results lack

statistical significance, they also suggest that the negative relationship between social

heterogeneity and public goods provision posited by many scholars may not be true.

Perhaps heterogeneous municipalities, regardless of how diverse they are offer

⁶ For more discussion on this technique, please see James DeNardo. Regression Diagnostics Notes.

⁷ For a full table of regression results for this as well as other estimations in the chapter please see Appendix A.

similar levels of services but homogenous municipalities or municipalities where there is only one tribe provide excellent services because residents have similar preferences and cooperation is easier among members of the same tribe. In order to investigate this possibility, I replace the number of tribes with a binary variable for whether or not the municipality is monotribal. A value of 1 means that it is monotribal while a value of 0 means that it is not. Table 3.3 displays the regression results. In neither case are monotribal municipalities associated with better services. In fact there is a negative relationship although once again it is not statistically significant.

	% of revs that are self-collected	No. of municipal vehicles
Monotribal Munic	-0.19 (0.14)	-2.25 (1.45) [†]

Table 3.3 Homogenous Municipalities and Service Provision

It could be that the monotribal binary variable is actually picking up the effects of "nomadism". Many municipalities, which are monotribal, are populated by residents of a nomadic tribe. Members of nomadic tribes tend to be poorer socioeconomically than those of farming tribes as they settled later. Tribal solidarity is also greater meaning that it is harder for officials to collect taxes and fees from family members and demand for patronage is more difficult to resist. Perhaps the negative relationship suggested above is only because the type of tribe (whether it is nomadic or not) has not been controlled for. A new regression was estimated where a binary variable as to whether the municipality is predominantly inhabited by tribes of nomadic origins is included as an interaction with whether the municipality is homogenous or not.

Table 3.4 shows the marginal effect of a municipality being monotribal (as opposed to multitribal) on service provision outcome when the municipality is inhabited primarily by residents of nomadic origins and when it is not. The first column "Effect of homogeneity on" displays the marginal effect for the 5 outcomes; the "upper bound" and "lower bound" columns display the upper and lower bounds of the confidence interval⁸. The marginal effect is only statistically significant when the upper and lower bound are both negative or positive. As in Table 3.3, the results in Table 3.4 do not indicate that monotribal municipalities provide better municipal services than heterogeneous municipalities, even after taking into consideration whether there is a significant presence of residents of nomadic descent. In each of these cases, the upper bound is above zero while the lower bound is not.

	Effect of homogeneity on	Upper Bound	Lower Bound
	% of revenues that are self-	collected	
Not Nomadic	-0.25	0.093	-0.53
Nomadic	-0.20	0.18	-0.52
	No. of municipal vehicles		
Not Nomadic	-5.09	0.82	-6.39
Nomadic	0.92	4.82	-2.34

Table 3.4 Impact of Homogeneity and Nomadic Origins of Tribes on Service Provision

3.2.2 Interaction between Tribal Diversity and Tribal Cohesion

The second step is to examine the relationship between service provision, tribal

heterogeneity, and tribal cohesion. I posited earlier that:

H2: Increased tribal diversity exerts a positive impact on service provision only when tribal cohesion is sufficiently high. At low levels of cohesion, increasing tribal diversity does not impact the quality of services.

To examine this hypothesis, I measure tribal cohesion by calculating the ratio of the number

of candidates that belong to a particular tribe to the number of council seats that tribe could

have won. As I do not know how many candidates were actually endorsed by the tribe itself,

I make a logical guess as to how many candidates the tribe "ought" to have run by

⁸ I am referring to the 95 percent confidence interval.

examining the number of seats the tribe could have won. To ascertain this number of seats, I examine the vote share of candidates of that tribe as compared to the total number of votes in the electoral district. Using this vote share, I calculate how many seats on the council that tribe could logically have expected to win⁹.

A tribal cohesion measure was calculated for each tribe and then averaged across tribes for each electoral district and finally across electoral districts for the municipality. *Low* values of tribal cohesion mean that the tribe is very cohesive (the number of candidates that represent the tribe and the number of seats that could be won are equivalent or close in value) while *high* values indicate that the tribe is fractionalized¹⁰.

But how can we expect each tribe to know how many candidates it ought to run? Through repeated municipal elections since 1955, tribes have gained a fairly good understanding of their own electoral position (National Democratic Institute 1995). Small tribes know that they need to either coalesce together or to ally with a larger tribe in order to be successful. In two of the municipalities I visited (Menuf and Tajuna), some of the smaller tribes had established coalitions where the right of nominating candidates rotated across tribes and members promise to vote for each other's candidate. Larger tribes know that they have good chances of winning and almost always enter the race. Many tribes know how many votes its members offer and the percentage of these votes their candidates are likely to garner. A number of districts (54 percent) also have only one seat on the council and

 $^{^9}$ For instance, candidates A, B, and C are all from Z tribe in an electoral district with 5 seats. Candidate A won 100 votes; B won 120; and C only 95. This means that Tribe Z in total won 315 votes (100+120+95=315). But in this municipality, a total of 787 individuals voted. With 315 votes, tribe Z could only have won 2 of the 5 seats (315/787 = 0.40; 0.40 * 5 = 2). However, there were 3 not 2 candidates from Tribe Z. Given its vote share, it should have run 2 candidates (as it could only have won at most 2 seats) but offered 3 instead. Therefore, its tribal cohesion score is 3/2 or 1.5.

¹⁰ As noted above, a small percentage of municipalities (17 percent) chose some of their officials prior to the elections. If this involved negotiation *between* tribes or even if just *within* the tribe itself then this type of selection shows an extremely high level of tribal cohesion that this measure cannot completely account for.

therefore, offering only one candidate per tribe makes the most sense. It is more difficult for the tribe to predict how many votes they will gain from members of other tribes but the candidate's involvement in civic affairs and general status in the municipality give some indication. Some candidates also enter the race knowing whether other tribes have already promised them a bloc of votes.

It is also possible though that my measure of tribal cohesion is merely a function of tribal diversity. Surely tribes will act in a more cohesive manner when there are a large number of tribes offering candidates and become more electorally fractionalized in homogenous areas where the dominant tribe is likely to win most if not all of the council seats. In the first scenario, tribes must be cohesive in order to win seats while in the second situation, no matter how many candidates it runs, the dominant tribe will still be able to place some of its candidates into municipal positions. This tribe will still control municipal politics no matter which of its candidates win. Figure 3.3 below is a graph of tribal diversity and cohesion.



Figure 3.3 Tribal Diversity and Tribal Cohesion

We can see from Figure 3.3 that diversity does not seem to impact tribal cohesion. If increasing diversity also made tribes more electorally cohesive then we should see a negative trend in Figure 3.3. Remember that higher values on the tribal cohesion measure actually mean that the tribe is more fractionalized. Higher values of tribal diversity are slightly associated with lower values on the tribal cohesion scale but this is also true for low values of tribal diversity. Qualitative evidence from Jordan also support this lack of a relationship. Even when a tribe dominates a municipality demographically and politically, the number of candidates for municipal elections may still be restricted because tribal leaders may decide that it is best if members of certain branch(es) of a tribe win seats in a particular election and encourage only these members to offer candidates. This is done so that different sections of a tribe have an opportunity to participate in political office¹¹.

It is also possible for tribes that dominate demographically to lose elections if they offer too many candidates. Therefore, dominant tribes still need to be strategic about how many candidates to run. In Taybeh municipality in Jordan, the two major tribes are the Qura'an and the Alowneh. It is said that their membership size is roughly equivalent. In the 2007 municipal elections, the Alowneh offered four candidates while the Qura'an just two. Even though the Alowneh candidates won more votes in total, a member of the Qura'an tribe became mayor.

Like the number of tribes, this measure is not meant to serve as an absolute measure of tribal cohesion but to provide some sense of variation in tribal cohesion across municipalities. In general we can expect cohesive tribes to have a good sense of their electoral chances and to endorse an appropriate number of candidates. Their understanding of their electoral chances is apparent when we examine the difference in number of tribal candidates for municipal and parliamentary elections. In a municipal election, there will often be more than one candidate per tribe but in the parliamentary election where the

¹¹ Interview #211

number of votes required to win is much greater, each tribe almost always offers one candidate.

Table 3.5 presents the results of this regression estimation while figures 3.4-3.5 displays the marginal effect of tribal diversity on service provision outcomes for 90 of the 93 municipalities. We can see from Table 3.5 that the tribal diversity, tribal cohesion, and the interactive term are statistically significant in most cases. However, it is difficult to fully grasp this interaction effect without examining the figures. Here for each figure, the middle line displays how the marginal effect of tribal diversity changes with tribal cohesion while the two upper and lower lines display the upper and lower bounds of the confidence interval¹². For the cohesion measure, it should be noted that low values of the variable actually implies high levels of tribal cohesion. As discussed earlier, this is because the measure refers to the number of candidates the tribe offered compared to the number of seats it could win. A value of 2 for the cohesion measure means that the tribe offered 2 candidates per seat when it could only feasibly win one seat, while a value of 1 implies that the tribe offered only 1 candidate for that seat.

For both measures of service provision, the results are as expected. For municipalities where tribes are very cohesive, social heterogeneity is associated with a greater quantity of vehicles and greater reliance on self-collected revenues as opposed to revenues supplied by the central government. In locations where tribes are not cohesive, social heterogeneity has no impact on vehicles or revenues.

¹² I am referring to the 90 percent confidence interval.

	% of revs that are	No. of municipal
	self-collected	vehicles
Tribal Diversity	0.064 (0.035)*	0.70 (0.34)**
Cohesion	0.18 (0.14)	2.77 (1.40)**
Cohesion*Diversity	-0.029 (0.018)*	-0.25 (0.18) [†]

Table 3.5 Interaction Effect of Tribal Diversity and Tribal Cohesion on Service Provision



Figures 3.4-3.5. Effect of Tribal Diversity on Revenues and Equipment by degree of Tribal Cohesion

Table 3.6 displays the substantive difference in self-collected revenues and the quantity municipal vehicles when tribal cohesion is 1 (one candidate is offered on average per seat) but varies the quantity of tribes from 1 to 10 to 22 (the maximum number of tribes). The control variables are held constant at values of the median municipality in terms of population.

	% of Revs that are Self-Collected [*]	No. of municipal vehicles
1 tribe	19%	12
10 tribes	25%	16
22 tribes	39%	21

Table 3.6 Outcomes for Revenues and Equipment by Number of Tribes

As can be seen, when tribes are very cohesive, enhancing heterogeneity can generate large increases in the percentage of revenues that is self-collected and in the number of

^{*} For ease of interpretation, this is not the log of the percent but the percent itself.

municipal vehicles. When the number of tribes increases from the minimum to the maximum, both outcomes double in value.

3.3 Robustness Checks

Using quantitative analysis, I have demonstrated the existence of an interactive relationship between tribal diversity, cohesion, and municipal services. I have shown that tribal diversity has an impact on service provision but only when tribes are electorally cohesive. In this section I examine this hypothesis using a number of additional tests in order to ascertain whether my results are merely due to idiosyncrasies of my measures or the exclusion of important factors. In particular, I conduct three robustness checks. I create a municipal services index, use a new measure of the quantity of equipment, and investigate an alternative explanation for public goods provision.

3.3.1 Creating a Municipal Services Index

Although I have examined the impact of tribal diversity and cohesion on each of the separate outcomes of service provision, it may also be possible to combine the two measures into one overall index of service provision. For the original analysis, I did not create an index because of the possibility that tribal diversity and cohesion may have diverging effects on equipment and on self-collected revenues. Given limited resources, it was also possible that municipalities that did well with regard to collecting revenues were not the same ones that owned an abundance of equipment. Municipalities that spent a great deal of financial resources training staff may not be able to acquire as many service vehicles. However, previous analysis showed that tribal diversity and cohesion have similar effects on both outcomes. This also seems to indicate that the same municipalities that own a large amount

of equipment also collect more of their own revenues. The results of this analysis suggests that it may make sense to combine the two measures of service provision into one index.

In order to combine these two measures, we need to see though if they load neatly onto one factor. Table 3.7 shows us that both measures load highly onto one factor, which means that it is possible to combine these two variables into one index¹³.

	Factor 1
No. of Equipment	0.80
% of revs self-collected	0.80
Eigenvalue of Factor 1	1.29
Proportion of variance	0.64
explained by Factor 1	

Table 3.7 Factor Analysis for Equipment and Revenues

But what dimension does these indicators of public goods provision measure? I would argue that these two outcomes are indicators of non-targeted or non-locational public goods. When municipalities construct new or maintain roads, parks, and libraries, they must choose which areas they will focus on. Will they construct a park in the center of town or will they place it in a different neighborhood? However, the percentage of revenues that are self-collected as well as the amount of equipment are not area-bound. In order for the percentage of revenues to be self-collected to increase, municipal officials must collect fees and taxes from a large proportion of residents; and with regard to the equipment, these service vehicles can be used in any neighborhood.

To evaluate the impact of diversity and cohesion on this overall index of services, I use ordinary least squares. I do not use seemingly unrelated regression because I have combined my dependent variables into one index. The control variables remain the same except for municipal wealth where I utilize both indicators of municipal wealth: amount in

¹³ Principal components analysis was used. The factor loads were also rotated prior to creation of the municipal services index.

revenue contributed by the central government in 2008 and the total amount of revenues collected by the municipality between 2003 and 2008. The first indicator was used as a control variable when the dependent variable was the percentage of revenues that are self-collected, and the second when the dependent variable was the quantity of equipment. I include both here as I have combined the two outcomes into one index.

	Municipal Services
Tribal diversity	0.074 (0.036)*
Cohesion	0.22 (0.15)
Diversity*Cohesion	-0.033 (0.019)*

Table 3.8 Interaction Effect of Tribal Diversity and Cohesion on Municipal Services Table 3.8 indicates that tribal diversity and cohesion together have an interactive impact on municipal services. Figure 3.6 also confirms this.



Figure 3.6 Impact of Tribal Diversity and Cohesion on Municipal Services

3.3.2 Alternative Measure for Equipment

It is possible that the quantity of equipment owned by the municipality is mainly contingent upon the population of that area. We would expect that the higher the population, the greater the quantity of equipment. Even though I control for population in my regression analysis, it would be best to confirm that the relationship between these three variables is not driven primarily by population. To do so, I use an alternative measure of the quantity of equipment: the ratio of equipment to residents or in other words, the number of equipment per person within the municipality. For this analysis, I change the dependent variable and drop the population variable as I have already divided the quantity of equipment by population. All other variables remain the same. I also do not use seemingly unrelated regression as I am evaluating only one dependent variable and not two.

	Ratio of equipment to
	residents
Tribal diversity	0.000014 (0.000043)
Cohesion	0.00012 (0.000018)
Cohesion*Diversity	-0.0000079 (0.000022)

Table 3.9 Interaction effect of Tribal Diversity and Cohesion on the Ratio of Equipment to Residents

Table 3.9 shows regression results using this new measure for the quantity of equipment. As we can see, tribal diversity does not exert a statistically significant impact on this new measure and that the interaction term is only close to standard levels of significance. Figure 3.7 also confirms that there is not a statistically significant relationship between these three variables. However, the cohesion variable is still statistically significant and in the expected direction. This means that municipalities where tribes are electorally fractionalized are associated with better services.



Figure 3.7 Effect of Tribal Diversity on the Ratio of Equipment to Residents by degree of

Tribal Cohesion

This new analysis does not confirm the previous assertion that tribal diversity and cohesion collectively have an impact on service provision. However, we should be cautious in accepting this interpretation. One explanation as to why tribal diversity and the interaction term do not achieve statistical significance here is the fact that large municipalities in terms of population may rely on economies of scale with regard to equipment. As. population increases, we would expect the number of equipment owned by the municipality to increase as well but this relationship is not likely to be linear. This is because as population increases in absolute numbers the population *density* of a municipality is likely to do so as well. Municipalities with high levels of population and population density will not require as many service vehicles as municipalities with high population but low levels of population density. For instance, three garbage compressors are necessary to serve three areas of the municipality if these areas are located far apart from one another. But only one garbage compressor may be necessary if these areas are located next to each other. Consequently, the relationship between tribal diversity, cohesion, and the ratio of equipment to residents is not a linear one but one of diminishing marginal returns. Figure 3.8 shows that indeed there is a positive relationship between population numbers and population density.



Figure 3.8 Relationship between Population and Density

3.3.3 Alternative Explanation

In a semi-democratic country like Jordan, the central government and the ability of those in power to play favorites amongst the municipalities could be the actual explanation for variation in service provision. Perhaps some municipalities do better only because the Center has been more generous in providing financial and infrastructural assistance to those locations and not because diverse municipalities promote electoral competition. In fact there are three ways in which the Center can positively bias municipal performance:

- It can grant that municipality more funds when contributing to its budget.
 Remember that a percentage of municipal revenues come from the coffers of the central government.
- 2. With regard to my specific measures of service provision, it can purchase more equipment for the municipality. The equipment may have been acquired by the Center instead of by the municipality itself. However, with regard to revenues that are self-collected, the central government does not assist in the collection of fees; and
- The Center can assist the municipality in providing one of its services (i.e. paving or maintaining a road) so that additional funds remain for buying equipment or training employees to collect fees.

As for the first option (contributing more to the budget), I have already controlled for revenues from the central government in all regressions. This is reflected in the "municipal wealth" variable which includes all financial contributions from the Center. With regard to the second option (the purchasing of equipment by the Center), my measure of municipal equipment only includes those that were acquired by the municipality itself. All vehicles and equipment purchased either by Ministry or by NGOs working with municipalities in the last 5 year were subtracted from the total number of vehicles owned by the municipality. However, I have not accounted for the third option. Perhaps the Ministry assisted the municipality with another task and therefore, freed funds for the purchasing of equipment or provided additional training for employees who then became more skilled in fee collection.

For this next regression I include a "ministry assistance" variable. This variable was created by documenting every incidence of Ministry assistance in the last 5 years such as constructing a public marketplace for which the municipality can charge rental fees, paving roads within the municipality, or additional training for municipal employees. It also includes the participation of the municipality in a NGO program to improve local governance and/or participation. Table 3.10 displays regression results when this variable is included.

	% of revs that are	No. of municipal
	self-collected	vehicles
Tribal Diversity	0.074 (0.033)**	0.71 (0.34)**
Cohesion	0.21 (0.13) [†]	2.80 (1.38)**
Cohesion*Diversity	-0.032 (0.017)**	-0.25 (0.17) [†]
Ministry assistance	0.24 (0.066)***	0.14 (0.69)

Table 3.10 Regression Results with "Ministry Assistance" Variable

Even with the inclusion of "ministry assistance", tribal diversity, tribal cohesion, and the interaction variable do not change substantially in terms of the substantial value of coefficients or statistical significance. This is further corroborated by Figures 3.9-3.10 which display this interaction effect and the upper and lower bounds of the confidence interval for this interaction effect.



Figures 3.9-3.10 Effect of Tribal Diversity on Revenues and on Equipment by degree of Tribal Cohesion, with Inclusion of the "Ministry Assistance" Variable.

3.4 Conclusion

This chapter makes three contributions on the study of social diversity. First of all, it suggests that a negative relationship between diversity and public goods provision is not as straightforward as some scholars would suggest. Heterogeneous municipalities do not automatically experience worse service provision than homogenous ones. Secondly, the quality of relations *between* groups themselves may be an important factor in predicting whether diversity has a positive or negative impact. In locations where relations between groups are friendly, sociable, and warm, heterogeneous municipalities may actually be in an advantageous position with regard to public goods. Thirdly, this relationship depends on a third factor—the degree of cohesion *within* the groups themselves. Heterogeneous municipalities are only associated with better services when groups are cohesive, unified, and disciplined. When groups are not cohesive and intra-group competition is as fierce as intergroup competition, then increasing diversity has little impact on the quality of services. In other words internal heterogeneity is as important as external heterogeneity with regard to public goods provision.

I have investigated the relationship between diversity, cohesion, and public goods provision in this chapter but have only alluded to the mechanisms that drive these relationships. I assume that heterogeneity and cohesion has an impact on electoral competition and patronage but do not formally test it here. In the next two chapters I will systematically analyze each of these links along the causal chain.

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Appendix A

Full Regression Results

Appendix A presents the full results of all analyses conducted in this chapter. The regressions appear roughly in the same order as they do in the chapter.

	% of revs that are self-	No. of municipal
	collected	vehicles
Tribal diversity	0.014 (0.017)	0.24 (0.17)
Presence of Palestinians	0.30 (0.16)*	-2.20 (1.63)
Munic wealth	-0.66 (0.21)***	3.43 (2.09)*
Poverty	0.0041 (0.0043)	0.0015 (0.042)
Population	0.0000093 (0.0000070)	0.00022 (0.000070)***
Area	0.0000079 (0.037)	0.000054 (0.00012)
# of Council Seats	0.039 (0.037)	2.07 (0.37)***
Category 1	0.80 (0.41)**	7.60 (4.09)*
Category 2	0.44 (0.26)*	1.68 (2.56)
Category 3	0.15 (0.23)	0.040 (2.27)
Outlier 1	-3.19 (2.15) [†]	85.94 (21.40)***
Outlier 2	-1.61 (1.15)	-19.21 (11.48)*
Outlier 3	-3.77 (2.10)*	105.43 (20.89)***
Constant	6.07 (2.54)**	-52.57 (25.32)**
Number of observations	93	93
R-squared	0.28	0.97

† Significant at the 85 percent level; * Significant at the 90 percent level; ** Significant at the 95 percent level; *** Significant at the 99 percent level

Table 3.11 Tribal Diversity and Service Provision

	% of revs that are self-	No. of municipal
	collected	vehicles
Monotribal munic	-0.19 (0.14)	-2.25 (1.44)†
Presence of Palestinians	0.28 (0.16) [†]	-2.23 (1.62)
Munic wealth	-0.69 (0.21)***	3.16 (2.10) [†]
Poverty	0.0042 (0.0042)	0.0015 (0.042)
Population	0.00011 (0.000063)	0.00025 (0.000063)***
Area	0.000076 (0.00012)	0.000043 (0.00012)
# of Council Seats	0.045 (0.037)	2.14 (0.37)***
Category 1	0.79 (0.41)**	7.50 (4.08)*
Category 2	0.43 (0.26)*	1.61 (2.55)
Category 3	0.14 (0.23)	0.051 (2.26)
Outlier 1	-3.42 (2.05)*	80.74 (20.50)***
Outlier 2	-1.52 (1.15)	-18.66 (11.48)*
Outlier 3	-3.91 (2.04)**	101.99 (20.40)***
Constant	6.56 (2.57)***	-47.68 (25.67)*
Number of observations	93	93
R-squared	0.28	0.98

Table 3.12 Homogenous Municipalities and Service Provision

	% of revs that are self-	No. of municipal
	collected	vehicles
Monotribal munic	-0.25 (0.17) [†]	-5.09 (1.75)***
Nomadic tribe	-0.69 (0.19)***	-6.29 (1.94)***
Mono*Nomadic	0.045 (0.24)	6.01 (2.49)**
Presence of Palestinians	0.30 (0.15)**	-1.97 (1.53)
Munic wealth	-0.92 (0.20)***	1.50 (2.07)
Poverty	0.015 (0.0047)***	0.056 (0.048)
Population	0.0000094 (0.0000058) [†]	0.00022 (0.000060)***
Area	0.000014 (0.000011)	0.000069 (0.00012)
# of Council Seats	0.056 (0.034)*	2.25 (0.35)***
Category 1	0.73 (0.38)**	8.02 (3.88)**
Category 2	0.37 (0.24) [†]	2.19 (2.46)
Category 3	0.075 (0.22)	0.14 (2.16)
Outlier 1	-2.93 (1.90) [†]	87.77 (19.48)***
Outlier 2	-1.13 (1.06)	-14.44 (10.92)
Outlier 3	-3.50 (1.89)*	108.40 (79.37)***
Constant	9.59 (2.48)***	-25.99 (25.44)
Number of observations	93	93
R-squared	0.39	0.98

Table 3.13 Interaction Effect of Homogeneity and the Preponderance of Residents of Nomadic Descent on Service Provision

	% of revs that are self-	No. of municipal
	collected	vehicles
Tribal diversity	0.064 (0.035)*	0.70 (0.34)**
Cohesion	0.18 (0.14)	2.77 (1.40)**
Cohesion* Diversity	-0.029 (0.018)*	-0.25 (0.18) [†]
Presence of Palestinians	0.26 (0.16) [†]	-1.93 (1.62)
Munic wealth	-0.68 (0.210***	2.54 (2.08)
Poverty	0.0043 (0.0042)	-0.0012 (0.042)
Population	0.000012 (0.0000070)	0.00023 (0.000070)***
Area	0.0000081 (0.000012)	0.000059 (0.00012)
# of Council Seats	0.029 (0.037)	2.12 (0.37)***
Category 1	0.77 (0.41)**	6.98 (4.012)*
Category 2	0.40 (0.26) [†]	0.94 (2.53)
Category 3	0.11 (0.23)	-0.43 (2.23)
Outlier 1	-4.23 (2.19)**	78.10 (21.77)
Outlier 2	-2.50 (1.25)**	-26.14 (12.37)**
Outlier 3	-5.08 (2.21)**	93.50 (21.89)***
Constant	6.22 (2.52)**	-46.03 (24.95)*
Number of observations	93	93
R-squared	0.30	0.98

Table 3.14 Interaction Effect of Tribal Diversity and Cohesion on Service Provision

	Municipal Services
Tribal diversity	0.074 (0.036)*
Cohesion	0.22 (0.15)
Cohesion*Diversity	-0.033 (0.019)*
Presence of Palestinians	0.22 (0.18)
Govt support	-0.62 (0.23)***
Poverty	0.0041 (0.0046)
Population	0.00015 (0.0000077)**
Area	0.0000089 (0.000013)
# of Council Seats	0.065 (0.041) [†]
Category 1	0.86 (0.44)**
Category 2	0.40 (0.28) [†]
Category 3	0.10 (0.25)
Outlier 1	-2.79 (2.40)
Outlier 2	-2.88 (1.36)**
Outlier 3	-3.35 (2.41)
Constant	6.21 (2.75)**
Number of observations	93
R-squared	0.72

Table 3.15 Interaction Effect of Tribal Diversity and Cohesion on Municipal Services

	No. of municipal vehicles per
	person
Tribal diversity	0.000014 (0.000043)
Cohesion	0.00012 (0.000018)
Cohesion*Diversity	-0.0000079 (0.000022)
Presence of Palestinians	-0.000055 (0.00020)
Munic Wealth	-0.00074 (0.00024)***
Poverty	0.000011 (0.0000052)**
Area	0.0000000017 (0.000000015)
# of Council Seats	0.000035 (0.000046)
Category 1	0.00023 (0.00050)
Category 2	-0.00023 (0.00032)
Category 3	-0.000097 (0.00028)
Outlier 1	0.000047 (0.00090)
Outlier 2	-0.00022 (0.00094)
Outlier 3	0.000062 (0.0013)
Constant	0.010 (0.0028)***
Number of observations	93
R-squared	0.43

Table 3.1	6 Interacti	on Effect	of Tribal	Diversity	and C	Cohesion	on the l	Number	of Mun	icipal
Vehicles	per Capita									

	% of revs that are self-	No. of municipal
	collected	vehicles
Tribal diversity	0.074 (0.033)**	0.71 (0.35)**
Cohesion	0.21 (0.13) [†]	2.80 (1.41)**
Cohesion* Diversity	-0.032 (0.017)**	-0.25 (0.18) [†]
Ministry assistance	0.24 (0.066)***	0.18 (0.70)
Presence of Palestinians	0.14 (0.16)	-2.02 (1.66)
Munic wealth	-0.69 (0.20)***	2.53 (2.08)
Poverty	-0.0028 (0.0039)	-0.0023 (0.042)
Population	$0.0000096 (0.0000058)^{\dagger}$	0.00022 (0.000070)***
Area	0.0000068 (0.000011)	0.000058 (0.00012)
# of Council Seats	0.028 (0.035)	2.12 (0.37)***
Category 1	0.13 (0.42)	6.50 (4.40) [†]
Category 2	0.38 (0.24) [†]	0.92 (2.3)
Category 3	0.15 (0.21)	-0.40 (2.23)
Outlier 1	-2.95 (2.08)	79.05 (22.08)***
Outlier 2	-1.98 (1.19)*	-25.74 (12.46)**
Outlier 3	-4.20 (2.08)**	94.15 (22.02)***
Constant	6.15 (2.35)***	-46.08 (24.94)
Number of observations	93	93
R-squared	0.39	0.98

Table 3.17 Interaction Effect of Tribal Diversity and Cohesion on Service Provision, with Inclusion of "Ministry Assistance" Variable

Appendix B

Measuring Tribal Diversity

I measure tribal diversity by counting the number of tribes that offered candidates in the 2007 municipal elections. This process requires that I categorize each candidate into an appropriate tribe. If a candidate hails from a tribe with many different levels (i.e. various branches which divide into clans which then further divide into families, etc.) then I always place him/her into whatever group is the ultimate "umbrella" group. For instance, a candidate may have the surname Al Moor. The Al Moor family is part of Al Mihna, which is part of Al Hqeish, which is part of Al Ghufl, which is part of Al Toqa branch of the Beni Sakher tribe. I would classify this individual as being part of the Beni Sakher tribe. This method is not based on self-identification. In other words I do not place candidates into appropriate tribes based on what group they themselves believe that they belong to.

This method assumes that the tribe is the relevant unit but is this always the case? In homogenous municipalities, various branches of the dominant tribe often nominate candidates so in these municipalities the salient electoral unit is not the tribe but rather the branch. If this is the case should I always be interested in *tribal* diversity across all 93 municipalities of Jordan? While branches, clans, or even families may be the relevant unit for elections¹⁴, the purpose of this study is to understand how *tribes* affect public goods provision. Furthermore, there are differences between cross-tribal and within-tribe electoral competition. For instance, even in homogenous settings where various branches nominate candidates to compete against one another, there may be coordination at the tribe level. In

¹⁴ Although various scholars use different classifications, I roughly use this hierarchy: tribes which subdivide into branches which subdivide into clans which subdivide into families. However, this hierarchy assumes only four levels of segmentation when in reality there may be more or less levels. I also consider confederations like the Beni Hassan or Beni Sakher as tribes.

the municipality of Haif, only two candidates competed for the mayoral position although there are four branches and 23 clans (Peake 1958). Having spoken to residents of Haif, I know that it is through coordination across branches and clans that only two candidates were nominated¹⁵. Sometimes tribes will also decide to rotate the nomination so that each branch gets a turn at nominating a candidate. While some tribes do ally together and collectively decide whom to nominate, this is a rare occurrence and done mostly by tribes with smaller memberships who cannot win a seat or the mayoral position outright; and even when such alliances are made, there is often disagreement about the candidate which can lead to several rounds of negotiations before someone is selected that gains the approval of all tribes. Even after successful negotiations, there is less social pressure to support this alliance candidate than a candidate from one's own tribe¹⁶.

In terms of voting, cross-tribal voting is less socially acceptable than support for a candidate from a different clan or branch of the tribe. In Haif, the mayor was supported by residents both within and outside of her clan or branch but still belonging to the same tribe. However, a candidate with similar credentials but outside of the tribe would not have this automatic support. Finally, patronage obligations may also differ depending on whether the client is from the same tribe but a different branch, clan, or family or from a different tribe altogether. Patronage obligations are felt most strongly by patrons who are of close relation to the client. This suggests that patronage obligations would be most strong between family members than clan members and finally between branch members. However, these connections are still stronger than obligations between patrons and clients of different tribes.

¹⁵ Interviews #191, 196, 195, 205

¹⁶ Interviews #158, 164, 234, 247

water with the first ripple being family members; the second, members of the same clan; and the third, those of the same branch¹⁷.

A second concern is whether it is realistic to assume that tribes have stabilized at certain levels of segmentation relevant for municipal governance, patronage, and public goods provision. Tribes are organic entities and over time, some tribes merge together while others divide into new entities. Is it correct to assume that tribal organizations have "frozen" for the sake of this study? First of all, we should keep in mind that I am only studying the effect of tribal diversity at one point in time. I am not trying to use my current measure of tribal diversity to predict the heterogeneity of a municipality in the future or use it to estimate levels in the past. Moreover, most anecdotal evidence suggests that the formation of new tribes or the merging of tribes into one overall entity is a very slow process. Finally to classify candidates into their various tribes, I consulted references first published in 1958 and those more recently published in 2010¹⁸. Although these reference books span 40 years, the majority of tribes mentioned in these texts are the same.

¹⁷ Interview #175

¹⁸ The oldest book I used to code tribes was: Frederick Gerald Peake. 1958. *A history of Jordan and its tribes*. Coral Gables, FL: University of Miami Press. The most recent book I used was: Abdel Rawaf Al Rawabdeh. 2010. (Dictionary of Tribes in Jordan and Palestine). Amman, Jordan: Sharuq House for Publishing and Distribution.

Chapter IV

The More the Merrier? Tribal Diversity, Electoral Competition, and Patronage

In Chapter 3, I argued that tribal diversity heightens electoral competition in municipal elections, which leads to the election of more qualified leaders, which in turn improves the level of service provision in the municipality. I noted that heterogeneous municipalities are likely to have a higher number of candidates per seat because while an individual tribe can coordinate how many candidates to run, one tribe does not have the authority to order another tribe not to offer any candidates. In heterogeneous areas most politically salient tribes will want to run candidates and as is often the case, some nonpolitically salient tribes will do so as well, resulting in a higher number of competitors.

I also argued in Chapter 3 that tribal diversity has the capacity to reduce patronage. Officials who win with support from within as well as outside of the tribe may be less prone to patronage because they will not feel as obligated to provide clientelistic benefits. While all officials are faced with demands to provide employment or private benefits, patronage obligations are felt most strongly by members of the same tribe. It is impossible, of course, to completely eradicate patronage within Jordan's municipalities but the reality is that if more funds are spent on salaries and on private goods, then less is potentially available for services.

In addition to tribal diversity's ability to augment electoral competition, I noted that homogenous areas where the dominant tribe is uncohesive or fractionalized can also experience high levels of competition. Some tribes are unable to coordinate how many candidates to run and a number of individuals will register themselves as candidates regardless of whether or not they have gained the approval of their tribe. A higher number of candidates in homogenous locations also forces candidates to appeal to a wide range of voters as opposed to reliance on voters within the tribe or a particular branch of the tribe to win elections¹.

In Chapter 3, I demonstrated that tribal diversity and cohesion impact municipal service provision but in this chapter I want to examine the mechanisms that make this association possible. In other words I want to explore other relationships in the following causal chain and determine if they are meaningful:

tribal diversity and cohesion \rightarrow electoral competition \rightarrow patronage levels \rightarrow service provision

This requires that I do three things. First of all, I need to show that tribal diversity, cohesion, and electoral competition are actually related. Secondly, I need to demonstrate that electoral competition reduces patronage. Thirdly, I need to confirm that less spending on patronage and greater electoral competition improves service provision. Exploring all of these relationships will help us understand why tribal diversity and cohesion affects municipal services and why this relationship is not the negative association predicted by the literature.

¹ Even if additional candidates run beyond those that are endorsed by the candidate, why would voters in homogenous areas not feel compelled to support the candidate closest in kin? If there is social obligation to support the candidate who is closest of kin than voters in homogenous settings do not have the freedom of selecting which candidate to support even if all of them are members of his/her tribe. While some Jordanians do rationalize their voting choice in such a way, there are still reasons to believe that the addition of candidates heightens electoral competition in homogenous (monotribal) settings. First of all, there may be more than one candidate of equal kinship distance from the voter so s/he can support any of these individuals. Secondly, it could be that beyond being siblings or cousins, kinship distance does not really matter. One may not feel greater allegiance to a second cousin as opposed to a third cousin. Thirdly, not all tribes divide neatly into branches which further divide into clans; and even if they do, there are disagreements as to what the divisions and subdivisions actually are. Many previously nomadic tribes do have such divisions but members may disagree as to what these divisions are and who belongs to which group. However, many tribes, especially those of farming origins, do not have these divisions. One is simply a member or not a member of the tribe. Without these divisions, it is difficult to calculate kinship distance.

The layout of this chapter is as follows. In Section 2, I examine the relationship between tribal diversity, cohesion, and electoral competition. I find a positive association between diversity, cohesion, and the number of candidates. In Section 3, I investigate whether competition affects municipal services but do not find evidence for this proposition. But having shown that tribal diversity and cohesion can enhance competition, I focus in Section 4 on whether electoral competition can reduce patronage. Indeed the presence of competition is associated with less patronage at the municipal level. However, I also find that higher levels of patronage are not always associated with worse services. I argue that this is because wealthier municipalities spend more on patronage as well as services. Section 5 summarizes all findings in the chapter and offers some explanations for the results. Data on patronage and electoral competition used in this chapter was collected by the Ministry of Municipal Affairs.

4.2 Tribal Diversity, Cohesion, and Electoral Competition

The first step is to assess whether tribal diversity and cohesion affect electoral competition. In Chapter 3, I hypothesized that tribal diversity only had a positive impact on service provision when tribal cohesion is high (and values of the tribal cohesion measure are low). Figure 4.1 below summarizes this hypothesis in graphical form:

	Diversity		
High	Poor	Good	
Low	Good	Good	
Cohesion	Low	High	

Figure 4.1 Effect of Tribal Diversity and Cohesion on Service Provision

I previously argued that electoral competition should be high in municipalities where levels of diversity are high and where tribal cohesion is low leading to excellent municipal services. On the contrary, in municipalities where tribal diversity is low and cohesion is high, electoral competition should be limited and municipalities should suffer from poor service provision. I posited in Chapter 3 that electoral competition is a positive force for service provision because it forces candidates to appeal to voters outside of their own tribe. But are these assertions supported by quantitative data? And which of the following hypotheses is correct?

H1: The impact of tribal diversity on electoral competition depends on the level of tribal cohesion during elections. Only when cohesion levels are high does tribal diversity have a positive impact on electoral competition.

H2: Regardless of tribal cohesion, increasing tribal diversity has a positive impact on electoral competition.

One way to assess these hypotheses is to use regression analysis to examine whether and if so, how tribal diversity and tribal cohesion affects electoral competition for the council and mayoral races. Although both types of officials are chosen via the same election, the actual electoral races are distinct. For each position, there is a separate list of candidates, and every citizen can vote for two candidates: one for the council and one for mayor. In this section, I assess whether tribal diversity and cohesion affect the raw and effective number of candidates and the closeness of elections.

4.2.1 Number of candidates

One measure of electoral competition is the number of candidates that register to run with competitive elections having a higher number of candidates than noncompetitive ones. Although this may seem like a basic requirement, in every cycle of municipal elections in Jordan, a number of electoral districts decide to forego elections altogether and to choose council members prior to the elections². Once decisions have been made as to who will become mayor or a member of the council, these municipalities submit their names to the Ministry of Municipal Affairs and do not

² An earlier version of this chapter directly examined the relationship between tribal diversity, cohesion, and the likelihood that municipalities would select officials without elections but due to poor measures this analysis has been excluded here.

conduct an election. In the 2007 municipal elections, only one municipality out of 93 chose all of their elected officials through this method but a total of 27 out of 93 municipalities (or 29 percent of municipalities) selected some of their candidates in this way³.

Higher numbers of candidates per seat could also mean that each candidate cannot rely solely on the electoral support of the members of his or tribe. Instead candidates in heterogeneous areas will have to seek the support of voters outside of their tribe. These voters are more likely to care about the qualifications, educational background, and experience of the candidate as they are not supporting him based solely upon tribal solidarity. Reliance on such voters as opposed to mainly on tribal support is likely to lead to the election of better qualified officials.

But why doesn't the abundance of candidates fractionalize the vote and therefore, each candidate can rely solely on the number of votes from his/her tribe to win? In this scenario, greater electoral competition in diverse municipalities actually means that candidates there need *fewer* votes to win and can therefore, rely completely or primarily upon tribal support. In Jordan, however, the more diverse a community, the more populated it is. The ability of candidate numbers to decrease competition would prove true if diversity increased but population was "capped". But in Jordan, population and diversity tend to increase together. Table 4.1 displays the results of a bivariate regression between the number of votes cast in the municipality and tribal diversity. If diversity and population were unrelated then the former should have no effect on the latter. However, we can see from Table 4.1 that as tribal diversity increases, so does the number of votes cast.

³ There are a total of 353 electoral districts across 93 municipalities and 12 percent of electoral districts chose officials without elections. For municipalities that bypassed elections, the average number of candidates selected via this process was 2.3. 41 percent of these municipalities chose only one official without elections while 70 percent chose one or two officials.

	# of votes cast
Tribal diversity	725.40 (71.73)***
# of observations	89

† Significant at the 85 percent level; * Significant at the 90 percent level; ** Significant at the 95 percent level; *** Significant at the 99 percent level

Table 4.1 Tribal Diversity and the Number of Votes Cast

We can also see from Table 4.2 that there is a positive and statistically significant relationship between the number of votes per candidate for the mayoral election and tribal diversity. This means that if votes were distributed equally across all candidates in diverse municipalities, each candidate would require more votes to win than his/her counterpart in a homogenous location.

	# of votes cast
	per candidate
Tribal diversity	101.05 (26.39)***
# of observations	89

Table 4.2 Tribal Diversity and the Number of Votes Cast per Candidate

According to H1 and H2, I should expect a higher number of candidates in heterogeneous areas and areas where tribes are fractionalized. In order to assess these hypotheses, I use seemingly unrelated regression (SUR). This technique allows me to simultaneously estimate a series of equations, one for each of the different dependent variables I employ. It also allows errors to be correlated across regressions and therefore, produces more efficient results.

In total I estimate two sets of regressions. For the first set of regressions, the dependent variables are the raw and effective number of candidates in the mayoral race; and in the second set, the dependent variables are the raw and effective number of candidates in the municipal council race. Because the number of council seats varies across municipalities, the raw number and effective number of candidates for the council race are calculated per seat. I use the tribal diversity and cohesion measures based on

mayoral candidates for regressions where the dependent variables are the raw and effective number of candidates in the municipal council race and vice versa.

As in Chapter 3, I measure tribal diversity by counting the number of tribes that offered candidates for either the council or mayoral elections in the 2007 municipal elections. Tribal cohesion is measured by examining the ratio between the number of candidates that a tribe offers for the municipal council or mayoral election and the number of seats it could plausibly have won had the votes it received been distributed optimally amongst an optimal number of candidates. To ascertain the number of seats the tribe plausibly could have won, I examine the vote share won by candidates of a particular tribe compared to the total number of votes in the electoral district. Then using this vote share, I calculate how many council seats that tribe could logically have expected to win⁴. As in Chapter 3, higher *values* on the tribal cohesion measure are actually indicative of lower levels of tribal cohesion. In the case of the mayoral race, the tribe can only win the maximum of one seat as there is only one mayor per municipality.

Given how tribal diversity, cohesion, and the raw number of candidates are measured, there is likely to be a positive association between the indicators purely because of mathematical reasons. Because of this issue, I use the tribal diversity and cohesion measures calculated using the mayoral race when the dependent variable is the raw and effective number of candidates for the council and vice versa. However, in Appendix B, I also show that there is no relationship between the tribal cohesion measure for the council and mayoral elections and the raw number of candidates for the same race. A relationship does exist between tribal diversity and the raw number of

⁴ For instance, candidates A, B, and C are all from Z tribe in an electoral district with 5 seats. Candidate A won 100 votes; B won 120; and C only 95. This means that Tribe Z in total won 315 votes (100+120+95=315). But in this municipality, a total of 787 individuals voted. With 315 votes, tribe Z could only have won 2 of the 5 seats (315/787 = 0.40; 0.40 * 5 = 2). However, there were 3 not 2 candidates from Tribe Z. Given its vote share, it should have run 2 candidates (as it could only have won at most 2 seats) but offered 3 instead. Therefore, its tribal cohesion score is 3/2 or 1.5.

candidates but this is why I use the tribal diversity measure created by mayoral candidates when evaluating the impact of diversity on candidate numbers and vice versa.

I control for the number of council seats (as it may affect the measure for tribal diversity), population or the number of votes per electoral district, and two variables signifying whether there is a significant presence of residents of (1) nomadic origins and of (2) Palestinian origins within the municipality. Jordanians of nomadic descent tend to be more interested in elections and to run more often while the opposite is true for those of Palestinian descent, who feel that they suffer from political discrimination. When the dependent variable is the raw or effective number of candidates for the mayoral race, I control for population but when it is the raw or effective number of candidates for the council race, I control for the average number of votes cast across electoral districts within that municipality. This is because I do not know the population of each electoral district and the number of votes cast per district serves as a proxy for this. Also when the dependent variable is the raw or effective number of candidates for the mayoral race, I include an additional control variable for the number of electoral districts in the municipality as a higher number of districts may be associated with a higher number of candidates.

4.2.2 Closeness of Elections

Tribal diversity and cohesion may also affect the closeness of electoral races. In homogenous settings, we would expect candidates to win easily because they can depend on the votes of their relatives but in multitribal settings for candidates to have to work hard to gain votes from members of other tribes. One way to measure the closeness of races is to examine the ratio of the number of votes won by the first loser (the candidate who would also have been elected had there been an extra seat) to the number of votes won by the last winner (the candidate who won with the least amount of votes). A high ratio means a close race between the last winner and the first loser. A value of 0.50 on this measure means that the first loser won 50 percent as many votes as those won by the last winner while a value of 0.90 means that the first loser won 90 percent as many votes. For the mayoral races, I examine the ratio between the winner and the first loser. As only one candidate can become mayor there is no last winner. For these regressions, I also control for the effective number of mayoral (or council candidates), total number of council seats, the significant presence of Jordanians of Palestinian descent, the significant presence of residents of nomadic origins, and the total number of council seats.

4.2.3 Results

Tables 4.1 and 4.2 display the results of these regression estimations. I only include the coefficients and standard errors for a few key variables in these tables but full regression results are available in Appendix A of this chapter. Figures 4.2-4.5 also displays the effect of tribal diversity on electoral competition conditional upon the degree of tribal cohesion.

	Raw # (mayor)	Eff # ⁵ (mayor)	Raw # (council)	Eff # (council)
Trib diversity	-0.0098 (0.23)	-0.018 (0.15)	0.070 (0.056)	0.060 (0.043)
Trib cohesion	0.022 (0.90)	-0.11 (0.59)	0.071 (0.34)**	0.069 (0.026)***
Diversity*	$0.17 (0.12)^{\dagger}$	0.13 (0.077)*	0.074 (0.022)***	0.063 (0.017)***
Cohesion				
# of obs	89	89	90	90

Table 4.3 Impact of Tribal Diversity and Cohesion on Electoral Competition

⁵ To calculate the effective number of candidates, the following formula was used: 1/(1-F) where F is the fractionalization index for the municipality. The fractionalization index was calculated using the formula for the Herfindahl index: $1-\sum p_i^2$ where p is the proportion of votes that went to candidate i
	Mayoral race	Council race
Tribal diversity	-0.0092 (0.0091)	0.0087 (0.021)
Tribal cohesion	0.0037 (0.016)	0.015 (0.066)
Diversity*Cohesion	-0.0020 (0.0040)	-0.0026 (0.0070)
Eff # of cands	0.024 (0.013)*	0.19 (0.064)***
Number of observations	89	68

Table 4.4 Tribal Diversity, Cohesion, and the Closeness of Elections

From Tables 4.3 and 4.4, we can see that tribal diversity does not have an independent effect on either the number of candidates or the closeness of elections. In not one of the regression results is the tribal diversity variable statistically significant. But what about the interaction between tribal diversity and cohesion? Does tribal diversity have an impact on electoral competition only when tribal cohesion is high as I predicted? When evaluating the impact of an interaction between two variables, it is more useful to examine figures that display this effect rather than studying coefficient tables. Figures 4.2 to 4.7 display this interaction effect. The x-axis in these figures is the level of tribal cohesion while the y-axis is the marginal impact of tribal diversity on electoral competition. The top and bottom lines are the upper and lower bounds of the 95 percent confidence interval, respectively.



Figures 4.2-4.3 Effect of Tribal Diversity on the Raw Number of Candidates by degree of Tribal Cohesion



Figures 4.4-4.5 Effect of Tribal Diversity on the Effective Number of Candidates by degree of Tribal Cohesion

From these figures, we can see that tribal diversity has a positive and statistically significant impact on the raw and effective number of candidates for mayor and the municipal council when tribal cohesion levels are above certain values. This threshold is lower for the municipal council than for the mayoral race. From Figures 4.6 and 4.7, we can also observe that at no level of tribal cohesion does tribal diversity have a statistically significant impact on the closeness of elections.



Figures 4.6-4.7 Effect of Tribal Diversity on the Closeness of Electoral Races by degree of Tribal Cohesion

Now that know that tribal diversity impacts the effective number of mayoral and council candidates at certain levels of tribal cohesion, we can re-interpret the relationship between tribal diversity, cohesion, and the closeness of the electoral race. Note that results in Table 4.2 indicate that tribal diversity does not have a statistically significant impact on the closeness of the electoral or council races. However, Table 4.2 also

indicates that there is a positive and statistically significant relationship between the effective number of candidates and the closeness of the race. A greater effective number of candidates is associated with a closer race, whether for the mayoral position or for council seat. If we were to examine the full regression in Appendix A, we would find that almost no other variables achieve statistical significance in these regressions. The only exception is the number of seats per electoral district, which exerts a positive and statistically significant impact on closeness of the council race.

As tribal diversity and cohesion heighten the effective number of candidates, these results suggest that these two factors may indeed play a role in determining the closeness of mayoral and council races. This role though is not very strong as even after removing the effective number of candidates from both regressions, tribal diversity, cohesion, and the interaction term between the two still remain statistically insignificant.

But what do the results in Tables 4.1 and 4.2 and Figures 4.2-4.7 suggest for H1 and H2? These numbers suggest, first of all, that tribal diversity does impact electoral competition but that its effect is mainly limited to increasing the raw and effective number of candidates. This supports H1, which outlines an interactive relationship between tribal diversity, cohesion, and the number of competitors. On the contrary, there is no evidence for H2, which suggested that tribal diversity has an independent effect on electoral competition.

Even though there is support for H1, the results do not conform exactly to this hypothesis either, which stated that tribal diversity will heighten electoral competition only when tribal cohesion levels are sufficiently high (and when values on the tribal cohesion measure are low). However, Figures 4.2 to 4.5 indicate the opposite—namely that tribal diversity increases electoral competition only when tribes are already fractionalized and that at high levels of tribal cohesion (when tribal cohesion measures are low), diversity has no impact on degree of electoral competition.

But we should also note that tribal diversity begins to impact the raw and effective number of candidates for the municipal council even when tribes are quite cohesive (and values on the tribal cohesion measure are low). However, tribal diversity only influences the raw and effective number of mayoral candidates when tribes are already quite fractionalized (and values on the tribal cohesion measure are high). From Figures 4.2 to 4.3 we can see that when the tribal cohesion measure is around 0.3, diversity increases the raw and effective number of candidates for the municipal council. Only when tribal cohesion measures are above 1.3 does tribal diversity exert a positive impact on the number of candidates for mayor. This may be due to the relatively large number of candidates for the mayoral position compared to the municipal council. Because the mayor holds more authority than council members and the position is more prestigious, there may always be a large number of candidates regardless of how fractionalized a municipality's tribes are. However, a position on the municipal council is less lucrative and may be more sensitive to levels of tribal cohesion.

4.3 Electoral Competition and Service Provision

In the previous section I established that tribal diversity and cohesion can heighten some aspects of electoral competition but does competition also bring about better municipal services? As I argued earlier, high levels of electoral competition may force candidates to appeal to voters outside of the tribe and these voters are more likely to care about the qualifications of the candidate than those within the tribe. Hence, in diverse areas and in homogenous areas where the tribe is electorally fractionalized and candidates must appeal to a broad audience to win; and these voters, free from any tribal obligations, support candidates based on their qualifications, leadership experience, and commitment to the municipality leading to the election of better officials.

A second explanation is that candidates who face many competitors feel that they must prove themselves once they win and work extra hard to improve services. Two mechanisms could explain this phenomenon. First of all, newly elected officials may want to impress residents as s/he fears that without offering excellent services, s/he may not be elected again, especially as the competition is likely to be intense. Secondly, it could be that heightened electoral competition forces candidates to campaign more widely and more intensely so that they learn more about the needs of their community. Once in office, they are likely to exhibit greater awareness of residents' needs and try to meet them.

Finally, if electoral competition does reduce candidates' reliance on votes solely from members of their tribe, then competition may also attenuate the need for elected officials to provide patronage. Although all officials feel the pressures of patronage, these obligations are felt most strongly by members of the same tribe. The less funds that are devoted to patronage, then the more funds that are potentially available for services. Later on in Section 4, I will test this hypothesis. These three rationales suggest that:

H3: Electoral competition improves services at the municipal level.

If electoral competition does indeed impact public goods than the measures utilized for competition above (i.e. number of candidates) should achieve levels of statistical significance when included in the original regressions of Chapter 3. In Chapter 3, I investigated the relationship between tribal diversity, cohesion, and service provision. The dependent variable was service provision (as measured by the percentage of revenues that are self-collected and the quantity of equipment owned by the municipality) and the independent variables were tribal cohesion and diversity. The control variables included the presence of a significant number of Jordanians of Palestinian descent, the presence of a significant number of Jordanians of nomadic origins, municipal wealth, population, area, the total number of council seats, the category of the municipality, and dummy variables for outliers. However, due to missing data, the outliers are often dropped during analysis. For explanation as to why these variables are included, please see Chapter 3. For this new set of regressions, the dependent and control variables remain the same for the most part. The only variable that I exclude is the total number of seats because this variable is closely related to the population of a municipality.

Because tribal diversity and cohesion influence electoral competition—it is through this hypothesized relationship with electoral competition that diversity impacts municipal services—the latter should achieve statistical significance when included in the original regression. Previous analyses have demonstrated that the raw and effective number of candidates for the mayor and municipal council share a statistically significant relationship with tribal diversity and cohesion and are included here as the independent variables; and as I have already established this statistically significant relationship between the two factors (i.e. tribal diversity, cohesion, and electoral competition), I do not include measures for tribal diversity and cohesion in the regression equation. Because the closeness of elections did not have a statistically significant relationship with either tribal diversity or cohesion, it is not included as an independent variable.

Table 4.5 displays coefficient estimates for each measure of electoral competition. Note that these are actually the results of six separate sets of regressions, one for each measure of electoral competition. These results suggest that even though tribal diversity and lack of tribal cohesion heightens electoral competition, competition does not impact services. No measure of electoral competition shares a statistically significant relationship with any indicator of service provision.

	% of revenues	No. of municipal
	self-collected	equipment
Raw # of cands (mayor)	-0.019 (0.016)	0.0092 (0.0075)
Number of observations	89	89
Eff # of cands (mayor)	-0.022 (0.025)	0.014 (0.012)
Number of observations	89	89
Raw # of cands per seat (council)	-0.032 (0.069)	0.0064 (0.033)
Number of observations	92	92
Eff # of cands per seat (council)	-0.10 (0.088)	0.038 (0.042)
Number of observations	90	90

Table 4.5 Impact of Electoral Competition on Service Provision

4.4 Tribal Diversity, Cohesion, and Patronage

What about the relationship between tribal diversity and cohesion and their impact on patronage levels? Now that I have demonstrated that tribal diversity and cohesion can affect electoral competition, I need to examine whether competition can attenuate clientelism within the municipality. I argued earlier that diversity and cohesion should reduce patronage because they heighten electoral competition, making it difficult for officials to win based on votes from their tribe alone. Officials who win with support from within as well as outside of the tribe should be less susceptible to patronage because they will not feel as obligated to provide clientelistic benefits. While all officials are faced with demands, patronage obligations are felt most strongly by members of the same tribe as Jordanian custom dictates prioritizing family members above everyone else. At the same time, candidates in homogenous areas where the dominant tribe is electorally fractionalized must also appeal to voters outside of their particular branch or tribe. These candidates should also feel less of an obligation to provide patronage to supporters. In more specific terms, I am arguing that: H4: The presence of electoral competition reduces levels of patronage within the municipality.

But how might patronage manifest itself in the municipality? One area is employment and spending on salaries. Municipal officials often hire additional but unnecessary employees in order to reward supporters and therefore, may devote a large percentage of the expenditure to salaries. A job in the municipality while not highly paid is respectable, requires shorter hours than a position in the private sector, and may be guaranteed for life—attributes that make employment in the municipality an attractive opportunity. The Ministry of Municipal Affairs is aware of this problem and currently requires that every new position as well as hired employee be approved by the Ministry itself. As a result, hiring has become more difficult but officials have also managed to persist in underhanded ways. For instance, they appoint additional temporary workers such as garbage collectors or "daily" workers as these new employees need not be approved by the Ministry. Some of these employees will never work as a garbage collector even though their official title will be such. Municipal officials may also purchase a large number of "regular" cars. The official purpose of these vehicles is to provide transportation when employees are out and about on official municipal business but in reality favoured employees may borrow them for private usage.

To evaluate the relationship between electoral competition and patronage, I estimate a series of regressions. I use four indicators of patronage: (1) the percentage of expenditure on salaries (2) the ratio of the number of municipal employees to the number of residents (3) the percentage of employees that are temporary and (4) the percentage of municipal equipment that are comprised of regular cars. I do not combine these indicators into one overall measure using factor analysis as they do not lead neatly onto one factor. The factor loadings are included in the appendix.

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As in prior analyses I use only those measures of electoral competition (raw and effective number of candidates) that had statistically significant relationships with tribal diversity, cohesion, and/or the interaction variable. Control variables are municipal wealth, population, area, the significant presence of Jordanians of Palestinian descent, and the significant presence of Jordanians of nomadic descent; and because I have already established that these measures of electoral competition share a statistical significant relationship with tribal diversity, cohesion, and the interaction variable between the two of them, I do not include the latter (i.e. measures of tribal diversity, cohesion, and the interaction between the two variables) in the regression equations. I estimate a set of five regressions where for each set the dependent variable is an indicator of patronage (i.e. the percentage of expenditure spent on salaries, the ratio between employees and residents, percentage of employees that are temporary, and the percentage of equipment that are comprised of regular cars) and the independent variable is an indicator of electoral competition.

	% expend	employees to	% employees	% of equipment
	on salaries	residents ratio	that are temp	that are reg cars
Raw # of cands	0.0060	-0.00016	-0.0041	-0.0034
(mayor)	(0.0033)*	$(0.00011)^{\dagger}$	(0.0023)*	(0.0013)***
# of observations	89	89	89	89
Eff # of cands	0.0077	-0.00029	-0.0057	-0.0049
(mayor)	(0.0051) [†]	(0.00017)*	(0.0036)	(0.0020)**
# of observations	89	89	89	89
Raw # of cands	0.032	-0.0010	-0.014 (0.010)	-0.0048 (0.0058)
(council)	(0.014)**	(0.00050)***	. ,	· · · ·
# of observations	90	90	90	90
Eff # of cands	0.047	-0.0014	-0.019 (0.013) [†]	-0.0095 (0.0074)
(council)	$(0.018)^{***}$	(0.00063)**	. ,	
# of observations	90	90	90	90

Table 4.6 Impact of Electoral Competition on Patronage

Table 4.6 presents the results of this analysis. As we can see, electoral competition does indeed impact levels of patronage although the direction of the effect is not always as predicted. Increasing the raw number of mayoral candidates leads to a

decrease in the percentage of employees that are temporary and the percentage of equipment devoted to regular cars while increasing the raw number of candidates for the council is associated with a lower employees to residents ratio. A higher number of effective candidates for the mayoral or council positions also results in a lower ratio. Furthermore, a higher number of effective candidates for mayor is associated with a smaller percentage of equipment that is devoted to regular cars.

However, in addition to these negative relationships, the raw number of mayor and council candidates as well as the effective number of mayoral candidates is positively associated with a higher percentage of expenditures spent on salaries. This positive relationship suggests that at times electoral competition can augment log-rolling, where the elected official tries to reward of his/her supporters by offering positions in the municipality.

4.4.1 Patronage and Service Provision

The next step is to determine whether patronage actually impacts municipal services. One would expect that patronage and service provision share a negative relationship such that spending on one reduces spending on another. Furthermore, the more that a culture of clientelism thrives in the local community, the less residents will feel compelled to pay their fees and taxes and the more relaxed municipal employees will also be in collecting them. Decreases in the amount of fees and taxes that a municipality collects should also affect the amount of equipment they can maintain or acquire. Therefore, I expect:

H5: Increasing levels of patronage will have a negative impact on municipal services.

To test this hypothesis, I examine whether patronage and service provision share a statistically significant relationship. In this set of regression analyses, the dependent variables are the percentage of revenues that are self-collected and the quantity of equipment while the independent variables are the four indicators of patronage. As before, I use seemingly unrelated regression to estimate four sets of regressions: one for each measure of patronage. The control variables are the same as in the original regressions of Chapter 3 and are as follows: municipal wealth, poverty, population, area, the category of the municipality, the significant presence of Jordanians of nomadic origins, the significant presence of Jordanians of Palestinian descent, and dummy variables for three outliers. If patronage is important then it should exhibit statistical significance when included in these regressions.

	% of revenues	No. of
	self-collected	equipment
% of expend on salaries	-0.89 (0.46)**	$0.32 (0.22)^{\dagger}$
# of observations	93	93
Employees to residents ratio	-41.86 (21.89)*	24.11 (10.26)***
# of observations	93	93
% of employees who are temp	2.12 (0.64)***	-0.13 (0.32)
# of observations	93	93
% of equipment that are reg cars	0.79 (1.15)	-1.22 (0.53)**
# of observations	93	93

Table 4.7 Impact of Patronage on Service Provision

From Table 4.7, we can observe that patronage does affect service provision but sometimes in the opposite direction than I anticipated. The percentage of revenues that are self-collected is negatively associated with the percentage of expenditures spent on salaries as well as with the employees to residents ratio. The number of equipment is also negatively related to the percentage of equipment devoted to regular cars. However, there is also a positive relationship between the ratio of employees to residents and the quantity of equipment as well as between the percentage of employees that are temporary and the percentage of revenues that are self-collected. Why is there a negative relationship with some measures of patronage but not others?

One possibility is that the percentage of employees that are temporary is not really a good measure of patronage. Perhaps the majority of these temporary employees were hired for good reason. A second possibility is that while this is a good measure of patronage, municipalities are quite good at absorbing additional employees either because these employees are replacing those who leave the municipality or because they accomplish necessary tasks; and as long as the workforce does not become too large then additional employees do not pose financial or managerial problems. This would explain why the percentage of employees that are temporary has a positive impact on selfcollected revenues but the ratio of employees to residents a negative one.

But why does the employees to residents ratio exert a negative impact on selfcollected revenues but positive impact on the quantity of equipment? Perhaps a large workforce implies that more residents can exercise their clientelistic ties to avoid paying a fee or tax. As for the positive relationship between the employees to residents ratio and the quantity of equipment, this could be due to the geographical distribution of the population. Municipalities with high employees to residents ratios may be places where residents are distributed across several areas of the municipality that are far away from each other. This, for instance, would require that the municipality own several garbage compressors so that these areas can be served simultaneously. At the same time municipalities that residents living in several but separate and distinct areas often have several municipal offices with the headquarters being in the center of the municipality. Having several offices will of course, inflate the number of staff members working for the municipality.

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It is also possible that municipalities that engage in patronage are also the same municipalities that can afford it. This would explain the positive association between service provision and some of the indicators of patronage. These municipalities spend more on patronage but also have enough funds leftover to spend on services as well such as acquiring new equipment. Table 4.6 displays the results of four multivariate regressions where I examine the relationship between the four measures of patronage and the amount of revenues per resident. This is the total amount of revenues and includes revenues that are self-collected as well as the amount granted by the central government and other sources. The control variables include area, percentage of residents who are in poverty, the category of the municipality, whether residents are primarily of nomadic descent, and the presence in significant numbers of Jordanians of Palestinian descent.

	Revenues per resident
% of expenditure on salaries	-54.02 (33.36) [†]
# of observations	93
Ratio of employees to residents	6670.80 (726.41)***
# of observations	93
% of employees that are temp	104.79 (52.10)**
# of observations	93
% of equipment that are reg cars	140.42 (82.73)*
of observations	93

Table 4.8 Relationship between Patronage and Revenues

The results in Table 4.8 indicate that there is some truth to the statement that wealthier municipalities spend more on patronage. The amount of revenues per resident is positively associated with the percentage of equipment that are regular cars, the percentage of employees that are temporary, and the ratio of employees to residents. However, it is negatively associated with the percentage of expenditure devoted to salaries. This last result between salaries and total revenues per resident reinforce what was suggested earlier--that it is financially feasible for municipalities to hire additional employees as long as they are still spending a reasonable amount on salaries. Once this amount becomes too large then the financial status of the municipality is negatively affected. Wealthier municipalities may spend more on patronage but this does not mean that poor municipalities do not engage in it at all. Rather the amount is relative. They spend less on patronage (and perhaps on services as well) while wealthier municipalities that can afford to do so spend more.

4.5 Conclusion

Tribal diversity and cohesion together can improve municipal services. In Chapter 3, I demonstrated that tribal diversity can improve service provision for municipalities where tribes are very cohesive during elections. But why is this? In this chapter, I explored the plausible mechanisms that link these two factors. In particular I examined tribal diversity and cohesion's ability to generate electoral competition, which I argue lead to the election of better officials who spend less on patronage.

First of all, I confirmed that tribal diversity and cohesion does indeed affect electoral competition. In Section 3, I showed that when tribes are fractionalized within the municipality, tribal diversity can lead to a higher number of candidates for both the mayoral and municipal council elections. For places like Jordan where political parties are weak, tribes can serve as a source of competition. The presence of tribal diversity and the lack of tribal cohesion can discourage the monopolization of political power by one group.

Despite tribal diversity and cohesion's ability to augment competition, it seems that competition does not necessarily result in improved services. Rather competition does not seem to matter at all with regard to municipality performance. Although these findings are contrary to my expectations, perhaps these results should not be surprising given the fact that Jordan is a semi-democratic country. In the 2007 municipal elections, there were a number of irregularities including pressure on some of candidates to withdraw from the race, the dropping of names of registered voters from polling stations but allowing some others to vote without their identity cards, letting some citizens vote more than once, allowing children to vote, and permitting the representative of some candidates to remain and asking others to leave during the casting of ballots. The most flagrant violations were in Zarqa, Irbid, and Madaba where soldiers were bussed in and overwhelmingly voted for particular candidates (National Center for Human Rights 2007).

The government has consistently meddled with electoral rules so that political parties are purposefully weak and organizes electoral jurisdictions and issues laws so that 60 percent of its population—Jordanians of Palestinian descent—are underrepresented compared to "native" Jordanians. As a result, West Bankers, despite their high population, tend not to run for office and often avoid voting altogether, claiming that the system is biased against them. When these structural barriers are not enough to sway elections in the direction favored by the government, high-level officials intervene outright by discouraging some candidates to run and encouraging others. In 2007, soldiers were dispatched to four municipalities to vote for particular candidates.

As a result, elections can be intense and yet produce less than brilliant officials. For instance, Jordanian citizens have been highly dissatisfied with the performance of members of parliament who were elected in 2007. In a poll conducted in 2009 by the Jordanian research institute, the Center for Strategic Studies, only 13 percent of respondents were satisfied with the performance of their own individual members while 79 percent complained that MPs are concerned about their own or tribal interests rather

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than the country as a whole (Center for Strategic Studies 2009a; Center for Strategic Studies 2009b).

Still we should not be entirely pessimistic about electoral competition's ability to generate positive outcomes as we have also learned that competition can reduce the usage of patronage. Municipalities that experienced high levels of electoral competition were associated with a lower municipal employees to population ratio, a smaller percentage of the municipal workforce devoted to temporary employees, and a greater percentage of equipment devoted to carrying out essential municipal tasks. Although we did not investigate the direct relationship between tribal diversity, cohesion, and levels of patronage, these results suggest that contrary to the literature on ethnic diversity, tribal diversity is not associated with greater pork. Rather than engage in unlimited log rolling, officials in diverse places as well as homogenous locations where the dominant tribe is electorally fractionalized seem to exercise at least moderate amounts of restraint.

It is also possible that diverse municipalities elect candidates that are qualitatively different from those selected in homogenous areas. However, the competitiveness of elections may have little to no impact on this process. Perhaps candidates in diverse areas, because they have to appeal to a broader spectrum of voters, have more leadership experience, sustained a longer history of involvement with charitable and civic organizations, and are more aware of municipal problems. Unfortunately I am unable to substantiate these hypotheses in this dissertation but merely offer these assertions as possible explanations as to how tribal diversity improves service provision.

In the next chapter, I will also investigate an alternative mechanism linking diversity and municipal services. I will argue that diversity promotes economic growth through its ability to attract migrants, encourage the establishment of businesses, and tolerate new occupations. Economic growth in turn produces a wealthier municipality that can provide improved services. Given the limitations of electoral competition in a semi-democratic country, it is possible that diversity's ability to generate and maintain economic growth as well as its ability to attract migrants offer the most powerful explanation of its influence.

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Appendix A

Full Regression Results

This appendix contains the full results for all data analyses carried out in this chapter.

The regressions appear roughly in the same order as they do in the chapter and are arranged according to subject area. Blank cells indicate that a particular variable was not

included in the regression analysis.

	No. of votes cast
Diversity	725.40 (71.74)***
Constant	1824.34 (620.93)***
Number of observations	89
R-squared	0.54

A.1 Tribal Diversity, Cohesion, and Electoral Competition

[†]Significant at the 85 percent level; * Significant at the 90 percent level; ** Significant at the 95 percent level; *** Significant at the 99 percent level

	No. of votes cast per candidate
Diversity	101.05 (26.39)***
Constant	525.67 (228.44)**
Number of observations	89
R-squared	0.14

Table 4.9 Tribal Diversity and the Number of Votes Cast

Table 4.10 Tribal Diversity and the Number of Votes Cast per Candidate for the Mayoral Election

	Raw # of cands	Effective # of cands
Diversity	-0.0098 (0.23)	-0.018 (0.15)
Cohesion	0.022 (0.90)	-0.11 (0.59)
Cohesion*Diversity	$0.17 (0.12)^{\dagger}$	0.13 (0.077)*
Presence of Palestinians	-1.80 (1.06)*	-1.08 (0.69) [†]
Presence of nomadic resids	-1.10 (0.86)	-0.44 (0.44)
Population	-0.0000026 (0.000037)	-0.0000051 (0.000024)
# of electoral districts	0.56 (0.24)**	0.32 (0.16)**
Total # of council seats	-0.50 (0.24)**	-0.33 (0.16)**
Constant	8.08 (2.34)***	5.82 (1.52)***
Number of observations	89	89
R-squared	0.35	0.33

Table 4.11 Impact of Tribal Diversity and Cohesion on the Mayoral Race

	Raw # of cands	Effective # of cands
Diversity	0.070 (0.056)	0.060 (0.043)
Cohesion	0.071 (0.34)**	0.069 (0.026)***
Cohesion*Diversity	0.074 (0.022)***	0.063 (0.017)***
Presence of Palestinians	0.80 (0.19)***	0.45 (0.15)***
Presence of nomadic resids	-0.03 (0.17)	-0.024 (0.13)
Avg # of votes per district	0.000068 (0.000029)**	0.0000082 (0.000022)
Constant	1.38 (0.25)***	1.19 (0.19)***
Number of observations	90	90
R-squared	0.51	0.49

Table 4.12 Impact of Tribal Diversity and Cohesion on the Municipal Council Elections

	Closeness of race	Closeness of race
	(mayor)	(council)
Tribal Diversity	-0.0092 (0.0091)	0.0087 (0.021)
Cohesion	0.0037 (0.016)	0.015 (0.066)
Cohesion*Diversity	-0.0020 (0.0040)	-0.0026 (0.0070)
Eff # of cands	0.024 (0.013)*	0.19 (0.064)***
Presence of Palestinians	0.071 (0.078)	0.015 (0.077)
Presence of nomadic resids	0.072 (0.058)	0.093 (0.066)
Avg # of seats per district		0.047 (0.016)***
Total # of seats	0.0029 (0.013)	-0.024 (0.016)†
Constant	0.62 (0.14)***	0.23 (0.23)
Number of observations	89	67
R-squared	0.10	0.33

Table 4.13 Impact of Tribal Diversity and Cohesion on the Closeness of Municipal Elections

A.2 Electoral Competition and Service Provision	A.2	Electoral	Competition	and Service	Provision
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	% of revenues that are	
	self-collected	No. of equipment
Raw # of cands	-0.019 (0.016)	0.0092 (0.0075)
Presence of Palestinians	0.32 (0.16)*	0.0013 (0.075)
Presence of nomadic resids	-0.48 (0.18)***	-0.20 (0.083)***
Munic wealth	0.34 (0.22) [†]	0.28 (0.10)***
Poverty	0.013 (0.0052)***	0.0032 (0.0034)
Population	-0.32 (0.19)*	0.15 (0.087)*
Area	0.0000016 (0.000012)	0.0000068 (0.000054)
Category 1	0.37 (0.42)	0.52 (0.19)***
Category 2	0.031 (0.25)	0.21 (0.12)*
Category 3	-0.11 (0.22)	0.12 (0.10)
Constant	-3.48 (2.31) [†]	-3.28 (1.08)***
Number of observations	89	89
R-squared	0.25	0.81

Table 4.14 Impact of the Raw Number of Candidates in the Mayoral Race on Service Provision

	% of revenues that	
	are self-collected	No. of equipment
Eff # of cands	-0.022 (0.025)	0.014 (0.012)
Presence of Palestinians	0.33 (0.16)**	-0.0016 (0.75)
Presence of nomadic resids	-0.48 (0.18)***	-0.21 (0.084)***
Munic wealth	0.35 (0.23) [†]	0.28 (0.10)***
Poverty	0.012 (0.0052)***	0.0032 (0.0024)
Population	-0.34 (0.18)*	0.16 (0.086)*
Area	0.0000021 (0.000012)	0.0000066 (0.0000054)
Category 1	0.39 (0.42)	0.52 (0.190***
Category 2	0.039 (0.25)	0.20 (0.12)*
Category 3	-0.098 (0.23)	0.11 (0.10)
Constant	-3.47 (2.33) [†]	-3.25 (1.08)***
Number of observations	89	89
R-squared	0.25	0.81

Table 4.15 Impact of the Effective Number of Candidates in the Mayoral Race on Service Provision.

	% of revenues that	No. of equipment
	are self-collected	
Raw # of cands	-0.032 (0.069)	0.0064 (0.033)
Presence of Palestinians	0.39 (0.16)***	-0.039 (0.073)
Presence of nomadic resids	-0.48 (0.18)***	-0.21 (0.085)***
Munic wealth	0.34 (0.22) [†]	0.29 (0.11)**
Poverty	0.013 (0.0052)***	0.0034 (0.0024)
Population	-0.36 (0.18)**	0.17 (0.087)**
Area	0.0000023 (0.000011)	0.0000056 (0.0000054)
Category 1	0.45 (0.40)	0.45 (0.19)**
Category 2	0.055 (0.25)	0.20 (0.12)*
Category 3	-0.11 (0.22)	0.12 (0.10)
Outlier 2	0.11 (0.60)	0.043 (0.29)
Outlier 3	0.14 (0.71)	0.71 (0.33)**
Constant	-3.15 (2.28)	-3.47 (1.07)***
Number of observations	92	92
R-squared	0.28	0.86

Table 4.16 Impact of the Raw Number of Candidates for the Municipal Council on Service Provision

	% of revenues that	
	are self-collected	No. of equipment
Eff # of cands	-0.10 (0.088)	0.038 (0.042)
Presence of Palestinians	0.39 (0.15)***	-0.044(0.072)
Presence of nomadic resids	-0.50 (0.18)***	-0.20 (0.084)**
Munic wealth	0.30 (0.22)	0.30 (0.11)***
Poverty	0.013 (0.0051)***	0.0031 (0.0024)
Population	-0.32 (0.18)*	0.15 (0.087)*
Area	0.0000023 (0.000011)	0.0000057 (0.0000053)
Category 1	0.44 (0.40)	0.45 (0.19)**
Category 2	0.063 (0.25)	0.20 (0.12)*
Category 3	-0.10 (0.22)	0.12 (0.10)
Outlier 1	0.13 (0.63)	0.63 (0.30)**
Outlier 2	0.0065 (0.60)	0.078 (0.28)
Outlier 3	0.15 (0.70)	0.71 (0.33)**
Constant	-2.93 (2.26)	-3.57 (1.07)***
Number of observations	93	93
R-squared	0.30	0.88

Table 4.17 Impact of the Effective Number of Candidates for the Municipal Council on Service Provision

A.3 Electoral Competition and Patronage

	Factor 1	Factor 2
Employees to residents ratio	0.2985	0.7576
% employees that are temp	0.6893	-0.2573
% spent on salaries	-0.4231	0.6033
% equipment that are reg cars	0.7094	0.2889
Eigenvalue of Factor 1	1.	.24
Eigenvalue of Factor 2	1.	.09
Proportion of variance explained	by Factor 1	0.31
Proportion of variance explained	by Factor 2	0.27

Table 4.18 Factor Analysis with Indicators of Patronage (using principal components analysis and after rotation)

	0/ = f = -1 = -1	Energlands to	0/ - 6 1	$0/$ = f = \cdots is a set
	% of expend on	Employee to	% of employees	% of equipment
	salaries	residents ratio	that are temp	that are reg cars
Raw # of	0.0060 (0.0033)*	-0.00016 (0.00011)†	-0.0041 (0.0023)*	-0.0034
candidates				(0.0013)***
Presence of	-0.0030 (0.036)	-0.00016 (0.0012)	-0.036 (0.026)	-0.0060 (0.014)
Palestinians				
Presence of	-0.0087 (0.040)	0.00011 (0.0013)	0.0081 (0.028)	0.010 (0.016)
nomadic resids				
Munic wealth	-0.074 (0.041)*	0.0010 (0.0013)	0.031 (0.029)	-0.0013 (0.015)
Poverty	-0.0021(0.0011)*	0.000018	-0.0022	-0.00028 (0.00045)
		(0.000038)	(0.00081)***	
Population	0.0000032	-0.0000017	0.00000061	-0.00000018
	(0.0000015)**	(0.00000052)***	(0.0000011)	(0.0000061)
Area	-0.00000083	0.00000023	0.00000019	-0.0000017
	(0.0000027)	(0.00000086)***	(0.0000019)	(0.0000010)*
Constant	1.45 (0.53)***	-0.0032 (0.018)	-0.20 (0.38)	0.085 (0.021)
# of observations	89	89	89	89
R-squared	0.16	0.22	0.23	0.13

Table 4.19 Impact of the Raw # of Mayoral Candidates on Levels of Patronage

	% of expend on	Employee to	% of employees	% of equipment
	salaries	residents ratio	that are temp	that are reg cars
Eff # of	0.0077 (0.0051)†	-0.00029 (0.00017)*	-0.0057 (0.0036)	-0.0049 (0.0020)**
candidates				
Presence of	-0.0068 (0.0036)	-0.00016 (0.0012)	-0.034 (0.026)	-0.0045 (0.014)
Palestinians				
Presence of	-0.010 (0.039)	0.00011 (0.0013)	0.0089 (0.028)	0.011 (0.016)
nomadic resids				
Munic wealth	-0.073 (0.041)*	0.0011 (0.0013)	0.031 (0.029)	-0.0012 (0.015)
Poverty	-0.0022	0.000020	-0.0022	-0.00023 (0.00045)
·	(0.0011)*	(0.000038)	(0.00081)***	
Population	0.0000034	-0.00000018	0.00000052	-0.00000027
-	(0.0000015)**	(0.000000051)***	(0.0000011)	(0.00000061)
Area	-1.44 (0.53)***	0.00000023	0.00000036	0.0000018
	· · · ·	(0.00000085)***	(0.0000019)	(0.0000010)*
Constant	1.45 (0.53)***	-0.0045 (0.018)	-0.20 (0.38)	0.081 (0.22)
# of observations	89	89	89	89
R-squared	0.15	0.23	0.23	0.12

Table 4.20 Impact of the Effective # of Mayoral Candidates on Levels of Patronage

	% of expend on	Employee to	% of employees	% of equipment
	salaries	residents ratio	that are temp	that are reg cars
Raw # of	0.032 (0.014)**	-0.0010	-0.014 (0.010)	-0.0048 (0.0058)
candidates		(0.00050)***		
Presence of	-0.035 (0.036)	0.00043 (0.0012)	-0.012 (0.026)	0.0021 (0.014)
Palestinians		· · · · ·	× ,	
Presence of	-0.0029 (0.040)	-0.000083 (0.0014)	0.0065 (0.029)	0.011 (0.016)
nomadic resids				
Munic wealth	-0.016 (0.032)	-0.0014 (0.0010)	0.029 (0.023)	-0.010 (0.012)
Poverty	-0.0025	0.000027	-0.0022 (0.00082)	-0.00024 (0.00046)
	(0.0011)**	(0.000039)		
Population	Ò.0000Ó0086	-0.000000019	0.00000052	-0.00000036
-	(0.00000043)	(0.00000015)	(0.00000031)	(0.000018)
Area	0.00000019	-0.0000016	0.00000087	0.00000018
	(0.0000025)	(0.00000081)**	(0.0000018)	(0.00000095)**
Constant	0.69 (0.42)	0.031 (0.015)	-0.17 (0.30)	0.20 (0.17)
# of observations	92	92	92	92
R-squared	0.13	0.16	0.35	0.079

Table 4.21 Impact of the Raw # of Candidates for the Municipal Council on Levels of Patronage

	0/ = 6 ==== = = = = =	Energlands to	0/ = 6 = = = 1 = = = = =	0/ = f = even in the set of
	70 of expend on	Employee to	70 of employees	76 of equipment
	salaries	residents ratio	that are temp	that are reg cars
Eff # of	0.047 (0.018)***	-0.0014 (0.00063)**	-0.019 (0.013)†	-0.0095 (0.0074)
candidates				
Presence of	-0.033 (0.035)	0.00019 (0.0012)	-0.012 (0.026)	0.0026 (0.014)
Palestinians	· · · ·	· · · · ·	~ /	
Presence of	0.0018 (0.040)	-0.00020 (0.0013)	0.0050 (0.029)	0.0094 (0.017)
nomadic resids	· · · · · · · · · · · · · · · · · · ·			
Munic wealth	-0.015 (0.031)	-0.0016 (0.00099)*	0.030 (0.023)	-0.0094 (0.012)
Poverty	-0.0025	0.000030	-0.0022	-0.00023 (0.00045)
	(0.0011)**	(0.000039)	(0.00083)***	
Population	0.00000046	-0.000000011	0.00000018	-0.00000012
1	(0.0000036)	(0.00000013)	(0.0000026)	(0.00000015)
Area	-0.0000011	0.00000016	0.0000015	0.0000020
	(0.0000024)	(0.000000077)**	(0.0000018)	(0.00000092)
Constant	0.65 (0.42) [†]	0.035 (0.014)***	-0.18 (0.30)	0.19 (0.17)
# of observations	93	93	93	93
R-squared	0.16	0.16	0.33	0.086

Table 4.22 Impact of the Effective # of Candidates for the Municipal Council on Levels of Patronage

A.4 Patronage and Service Provision

	% of revenues that	
	are self-collected	No. of equipment
% of expend on salaries	-0.89 (0.46)**	0.32 (0.22) [†]
Presence of Palestinians	0.34 (0.15)***	-0.029 (0.071)
Presence of nomadic resids	-0.48 (0.17)***	-0.21 (0.083)***
Munic wealth	0.27 (0.22)	0.32 (0.11)***
Poverty	0.011 (0.0051)**	0.0041 (0.0024)*
Population	-0.33 (0.17)*	0.16 (0.083)**
Area	0.000020 (0.00011)	0.0000058 (0.0000053)
Category 1	0.60 (0.40) [†]	0.40 (0.19)**
Category 2	0.13 (0.25)	0.18 (0.12) [†]
Category 3	-0.077 (0.21)	0.11 (0.10)
Outlier 1	0.38 (0.64)	0.54 (0.30)*
Outlier 2	0.025 (0.59)	0.069 (0.28)
Outlier 3	0.18 (0.69)	0.70 (0.33)**
Constant	-2.03 (2.30)	-3.89 (1.09)
Number of observations	93	93
R-squared	0.32	0.88

Table 4.23 Impact of the Percent of Expenditure on Salaries on Service Provision

% of revenues that are		
self-collected	No. of equipment	
-41.86 (21.89)*	24.11 (10.26)***	
0.40 (0.15)***	-0.054 (0.070)	
-0.49 (0.17)***	-0.21 (0.081)***	
0.69 (0.28)***	0.0090 (0.13)	
0.012 (0.0050)**	0.0039 (0.0023)*	
-0.82 (0.28)***	0.43 (0.13)***	
0.0000039 (0.000011)	0.00000048 (0.0000052)	
0.61 (0.40) [†]	0.36 (0.19)*	
0.12 (0.25)	0.16 (0.12)	
-0.019 (0.22)	0.11 (.10)	
0.27 (0.63)	0.54 (0.29)*	
0.21 (0.60)	-0.022 (0.28)	
0.19 (0.69)	0.69 (0.32)***	
-3.80 (2.24)*	-3.12 (1.05)***	
93	93	
0.32	0.88	
	% of revenues that are self-collected -41.86 (21.89)* 0.40 (0.15)*** -0.49 (0.17)*** 0.69 (0.28)*** 0.012 (0.0050)** -0.82 (0.28)*** 0.0000039 (0.000011) 0.61 (0.40) [†] 0.12 (0.25) -0.019 (0.22) 0.27 (0.63) 0.21 (0.60) 0.19 (0.69) -3.80 (2.24)* 93 0.32	

Table 4.24 Impact of the Percent of Expenditure on Salaries on Service Provision

	% of revenues that	
	are self-collected	No. of equipment
% employees who are	2.12 (0.64)***	-0.13 (0.32)
temporary	· · ·	
Presence of Palestinians	0.39 (0.14)***	-0.038 (0.072)
Presence of nomadic resids	-0.50 (0.16)**	-0.21 (0.083)***
Munic wealth	0.19 (0.22)	0.29 (0.11)***
Poverty	0.018 (0.0051)***	0.0031 (0.0025)
Population	0.29 (0.17)*	0.17 (0.083)***
Area	0.0000051 (0.000011)	0.0000054 (0.0000053
Category 1	0.16 (0.39)	0.46 (0.19)**
Category 2	0.048 (0.24)	0.20 (0.12)*
Category 3	-0.13 (0.21)	0.12 (0.10)
Outlier 1	0.31 (0.60)	0.62 (030)**
Outlier 2	0.047 (0.57)	0.049 (0.28)
Outlier 3	-0.15 (0.67)	0.72 (0.33)**
Constant	-2.11 (2.17)	-3.53 (1.08)**
Number of observations	93	93
R-squared	0.36	0.88

Table 4.25 Impact of the Percent of Employees who are Temporary on Service Provision

	% of revenues that	
	are self-collected	No. of equipment
% equipment that are	0.79 (1.15)	-1.22 (0.53)**
regular cars		
Presence of Palestinians	0.36 (0.15)**	-0.036 (0.070)***
Presence of nomadic resids	-0.48 (0.18)***	-0.20 (0.082)**
Munic wealth	0.36 (0.22)*	0.28 (0.10)***
Poverty	0.013 (0.0051)***	0.0020 (0.0023)
Population	-0.38 (0.17)**	-0.16 (0.080)**
Area	0.0000013 (0.000011)	0.0000075 (0.0000053)
Category 1	0.41 (0.41)	0.52 (0.19)***
Category 2	-0.024 (0.23)	0.25 (0.16)**
Category 3	-0.12 (0.22)	0.14 (0.10)
Outlier 1	0.16 (0.63)	0.57 (0.29)**
Outlier 2	0.082 (0.60)	0.053 (0.28)
Outlier 3	0.15 (0.70)	0.73 (0.32)***
Constant	-3.40 (2.28)*	-3.16 (1.05)***
Number of observations	93	93
R-squared	0.29	0.88

Table 4.26 Impact of the Percent of Equipment devoted to Regular Cars on Service Provision

	Total revenues	Total revenues	Total revenues	Total revenues per
	per person	per person	per person	person
% expend on	-54.02 (33.36)†			
salaries				
Employees to		6582.69		
residents ratio		(696.75)***		
% employees			101.26 (48.20)**	
who are temp				
% of equipment				138.72 (83.65)*
that are reg cars				
Presence of	-5.86 (10.94)	1.47 (7.75)	-3.60 (10.82)	-3.81 (10.93)
Palestinians				
Presence of	-4.81 (12.31)	-8.87 (8.70)	-5.40 (12.18)	-8.73 (12.47)
nomadic resids				
Poverty	0.8 (0.39)**	0.79 (0.26)***	1.21 (0.38)***	1.04 (0.37)***
Area	0.00027 (0.00058)	0.00034 (0.00041)	0.00023 (0.00057)	0.000023 (0.00058)
Category 1	-42.52 (25.89)*	-34.23 (18.18)*	-64.26 (26.42)	-52.04 (25.68)*
Category 2	-45.26 (15.97)***	-19.40 (11.57)*	-49.79 (15.56)***	-51.81 (15.76)***
Category 3	-28.60 (15.92)	-10.39 (11.42)	-31.29 (15.71)	-32.86 (15.90)**
Constant	112.00 (22.68)***	3.68 (14.28)	67.81 (18.05)***	82.23 (16.15)***
# of observations	92	92	92	93
R-squared	0.26	0.63	0.27	0.26

A.5 Patronage and Municipal Wealth

Table 4.27 Impact of Patronage on Total Revenues per Person

Appendix B

Additional Analyses

B.1 Tribal Cohesion and the Raw number of candidates

Tribal cohesion is a ratio calculated as follows: the number of candidates running from each tribe to the number of seats that the tribe could feasibly win. For tribal cohesion measures for the mayoral race, the number of candidates utilized in the ratio is the number of candidates running from each tribe in the *mayoral* race; and for tribal cohesion measures for the municipal council, this number is based on the *council* race.

In this chapter I argue that in municipalities where tribes are not electorally cohesive, we should find a higher number of candidates. But since tribal cohesion includes the raw number of candidates as part of the measure, is it possible that the two share a positive association merely because of the mathematics behind the indicators? Shouldn't places with high values on the tribal cohesion measure (and therefore, are electorally fractionalized) also have a high raw number of candidates? If this is the case then any relationship between tribal cohesion and the raw number of candidates is due to the mathematics behind the measures rather than a theoretical connection between the two factors.

The best way to assess this possibility is to examine whether there is such a relationship. Figures 4.7-4.9 display a series of scatter graphs that examine this bivariate relationship.

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Figures 4.8-4.10. Tribal cohesion and the Raw Number of Candidates

As we can see, none of these figures indicate there is a direct, positive, and bivariate relationship between tribal cohesion and the raw number of candidates. These figures give us greater confidence in the regression results regarding tribal cohesion and the number of candidates.

Chapter V

Tribal Diversity and Economic Development

In municipalities with a heterogeneous mix of tribes, an abundance of shops fill the streets and residents are eager to work in a variety of occupations. In contrast, in homogenous areas, many types of shops such as bakeries and butchers are lacking. Residents often have to drive long distances in order to purchase groceries and supplies. Frustrated with the high level of unemployment in their community, they demand more investment. But when development agencies establish new venues of employment such as a bakery, residents balk, proclaiming that they would never subject themselves to such servile kind of jobs.

Unlike residents in homogenous municipalities, those in heterogeneous communities are not bound by social convention to avoid business competition with members of their tribe. Similarly, members of different tribes are likely to possess diverging values and beliefs, facilitating the adoption of new professions in heterogeneous communities. As a result, diverse municipalities are more likely to have vibrant private sectors and lower unemployment and poverty rates.

If residents shun employment when they need it or refrain from establishing private ventures, then municipality revenues can be adversely affected. All businesses within municipal boundaries must apply for a license and renew it annually. In addition, residents pay fees and taxes to the municipality. Without private businesses and high numbers of unemployed residents unwilling to pay for their fees or taxes, municipal coffers will suffer Funds are critical to the work of municipalities and without enough financial resources, it is impossible to open new roads, fix streetlights, or maintain parks and libraries. While it is true that municipalities do receive a portion of the funding from the central government, they could significantly increase their revenues if they only collected more of their own fees and taxes. It is estimated that municipalities currently only collect 75 percent of the fees that they are owed. Furthermore, a number of municipalities are in debt. In 2009, 77 percent of municipalities owed money to the central government.

Using primarily qualitative data gathered from numerous locations in Jordan, this chapter explains how tribal diversity can augment economic development, which in turn improves public goods provision:

tribal diversity \rightarrow improves economic development \rightarrow improves public goods provision

Section 1 outlines the methodology of the study by describing how various sites and individuals were selected for interviews. Section 2 presents the main theoretical arguments of the chapter. Using qualitative data, I explain how tribal diversity can promote the establishment of businesses, maintain their financial health, and why heterogeneous communities offer its residents more occupational choices. I then test these hypotheses using quantitative data. In Section 3, I describe the role of migrants in promoting change in their adopted communities. Section 4 concludes the chapter by reviewing the main qualitative and quantitative findings.

5.1 Methodology

Most of the evidence provided in this chapter is based on interviews that were conducted with Jordanians across a number of municipalities in 2009 and 2010. In particular, I primarily made efforts to visit municipalities that varied according to tribal diversity. Secondary criteria for selecting municipalities included variance in geographical location, population size, origin of local tribes (farming versus nomadic), level of inward migration, and the presence or absence of a significant Palestinian-Jordanian population. In total over 260 interviews were conducted in 14 municipalities.

For five of the fourteen municipalities, I returned daily over a period of at least two weeks to conduct interviews. These municipalities are: Haif, Tajuna, Safur, Menuf, and Zeitoun. Of these five, one of them, Haif¹, is monotribal while Tajuna is inhabited by residents primarily from two tribes. In Haif, most residents are of nomadic origins while in Tajuna they are of farming origins. Safur is more heterogeneous than either Haif or Tajuna with most residents from five different tribes. The residential population is mixed in Safur as most residents are primarily of farming origins although there is a significant minority that are of nomadic origins as well. Menuf and Zeitoun are even more diverse than Safur. Both have residents from a number of different tribes and a high percentage of internal migrants from other areas of Jordan who have relocated because of employment opportunities. Also with several refugee camps either nearby or within the boundaries of the municipality, both Menuf and Zeitoun have a significant population of Jordanians of Palestinian descent.

In addition to these five case studies, I also visited nine municipalities where I interviewed either the mayor or the local program coordinator of a community development center. Distributed across the country, these local community centers offered youth and women's programs and also undertook local development initiatives like helping to establish

¹ The names of all municipalities used in this chapter are pseudonyms used in place of the actual names of municipalities.

a bakery or providing loans for small businesses. In choosing these additional municipalities, I also tried to select locations that varied according to the factors described earlier.

Table 5.1 provides information about the 14 municipalities I visited. The municipalities are arranged by order of tribal diversity: from least to most diverse. As Table 5.1 demonstrates, these municipalities fluctuate with regard to their degree of heterogeneity. However, I differentiate only between monotribal and multitribal municipalities in this chapter in order to relay sharp and distinct observations of these two groups.

	No. of			Presence of	Level of
Municipality*	tribes	Location	Population	Palestinians	migration
Haif	1	South	9,122	No	29.5
Hasbaya	1	South	9,653	No	3.9%
Amuda	1	South	1,427	No	16.4%
Tajuna	2	North	29,147	No	11.3%
Safur	5	South	10,931	No	18.9%
Kharsit	6	North	20,970	Yes	36.0%
Tarhuna	10	North	28,077	Yes	10.4%
Mijris	11	North	56,585	Yes	28.0%
Marsafa	12	South	26,330	No	20.0%
Jabeil	12	North	58,138	Yes	25.9%
Tawergha	13	South	46,836	No	24.4%
Menuf	22	Central	100,826	Yes	24.7%
Zeitoun	39	Central	402,260	Yes	28.5%
Belkas	51	North	414,760	Yes	26.7%

*In bold are the five case study municipalities.

Table 5.1 Characteristics of Municipalities where Interviews were Conducted

Interviewees were local residents, civic leaders, and directors of local community centers. In selecting residents, individuals who fulfilled these categories were targeted: those originally from the area, those not originally from the area (migrants), members of dominant tribes, and members of minority tribes. The purpose was to gather a variety of perspectives by conversing with those in powerful positions as well as those who were not. Members of
large tribes that are indigenous² to an area are frequently politically and socially dominant because of their population numbers. They can win elections and establish their own tribebased associations. Members of local small tribes or migrants are often in an inferior position and have to work harder for these same achievements.

To locate residents who fulfilled these categories, the "snowball" method was used. At the end of a meeting, the interviewee was asked for recommendations of others to speak to with a description of the type of resident targeted³. Because relations are close in Jordanian communities, I was often successful in obtaining at least one recommendation along with contact information. I would then review those who had been recommended, choosing a number of individuals that fit my criteria to speak with. I always tried to interview several individuals of the same "type" in order to confirm the information I was given. For instance, if I wanted to understand how it felt to be a member of a "minority" tribe in the area, I would interview several individuals from different tribes. I tried also not to interview only those individuals recommended by one person as they may all share a similar perspective.

While it would have been ideal to select my interviewees randomly, this was not possible as no municipality had a list of residents that they were willing to share with me. Phonebooks, which are often the main resource for identifying local residents in most countries, do exist in Jordan but only 33 percent of all Jordanians have landlines (Department of Statistics 2009). Nor are the names in the phonebook arranged by municipality but by governorate.

² I use the term "indigenous" to refer to tribes who have lived in a location for such a long time that they are considered "native" to that area. Of course, at one point these tribes were probably also migrants to this location but because they are currently considered to be "from" that area, they are accorded a particular status within the municipality.

³ For instance, if I wanted to speak to a resident who is a sheikh but from a small tribe, I would ask my interviewees if they knew anyone who fit these criteria.

Directors of local community centers were also invaluable sources of information as many of them have worked in their community for many years and have experiences engaging residents in both monotribal and multitribal settings. The community centers where they are employed are the local branches of one particular charitable organization headquartered in Amman. The centers are distributed in 52 locations and in 36 municipalities. As a result of their extensive time living and working in their municipalities, these community center directors were able to provide insightful comparisons between homogenous and heterogeneous communities. In order to protect the anonymity of my interviewees, I do not identify the name of this charitable organization and use pseudonyms for all individuals that I mention in this chapter.

The type of data analysis used in this qualitative study is best described as "explanation building", where the researcher uses cases to explore proposed causes and rival accounts (Yin 1989). Interview transcripts were reviewed repeatedly to isolate patterns and common regularities. These responses were then clustered together to produce the themes emphasized here. To verify the veracity of interviewees' responses, the same questions were asked of several individuals. This triangulation reduces the probability that a noted theme is just one individual's world view as opposed to a general phenomenon.

Although most of the evidence is qualitative in nature, quantitative analysis is provided where possible in order to evaluate claims as well. This quantitative analysis helps us to ascertain whether claims made by interviewees are generalizable beyond their communities to the rest of Jordan. If diversity does lead to greater economic growth we should be able to see evidence in common socioeconomic measures at the municipal level. It should also be noted that the qualitative data is used to explain a causal link between tribal diversity and economic development or tribal diversity and migration but not between economic development and service provision. I use quantitative data to examine this latter relationship.

Throughout the chapter, I will argue that tribal diversity can enhance economic development. I am not stating that this causal effect is unidirectional and neither the qualitative or quantitative evidence in this chapter can establish this definitively. Economic development can also enhance tribal diversity by encouraging citizens to migrate to locations where jobs are abundant. Amman and Aqaba are two of the most diverse cities in Jordan because there are many employment opportunities. In both of these locations, residents hail from municipalities all across the country as well as outside of it. Residents of Safur municipality often mentioned the high out-migration rate to Amman, especially among those with university education. My main purpose is not to state that my relationship of interest is the primary one but simply that it exists alongside the more "established" link between economic development and migration.

5.2 Tribal Diversity and Economic Development

Tribal diversity can enhance economic development within municipalities. It can promote the opening of several shops, restaurants, or local businesses where only one might have existed and ensure that these shops remain financially sound. Even though a neighborhood might benefit from more than one local supermarket, potential business owners may shy away from establishing a second supermarket if it violates social protocol. Once a business has opened, it is considered socially unacceptable for a relative of that business owner to establish the same type of enterprise. In other words, family members should not compete against each other.

Because municipalities collect annual fees for business licenses, the existence of private enterprise is one way that municipalities are able to raise funds to carry out service provision. Some private enterprises also hire employees. This promotes employment in the municipality and employed residents are more willing to pay their fees and taxes. In Jordan, while all residents are supposed to pay their fees and taxes, many do not. However, when a resident desires some kind of municipal work such as the granting of a business license, s/he must pay all fees and taxes that are owed to the municipality. Therefore, a higher number of businesses means not just a higher rate of employment but a higher percentage of residents who pay their fees and taxes.

One shop owner, Rafiq, remarked that a relative was contemplating opening a supermarket but once he established his store, the relative decided otherwise⁴. A local community development director, Bushra, remarked, "If I see that someone has succeeded with a supermarket, I will do it too. But not [if I must compete] against my relative."⁵ The same type of shop can be opened but it must be placed in a different area where it is not in direct competition with a family member's business. Another community director, Farah compared the difference between her village which is monotribal with a multitribal location, "[I]f I open a mini market my cousin will be ashamed to open a mini market next to it because he is my relative, while [in a place] where there are a lot of families if someone

⁴ Interview #248

⁵ Interview #226

opens a mini market I can't tell him 'No, don't open the mini market' and say things like that."⁶

Once a business has been established, multitribal communities can help perpetuate its survival. Because credit cards are not prevalent in Jordan, residents who do not have available cash must ask store owners for permission to buy things on credit with the promise to pay for the items once they receive paychecks. They may also request discounts on items they wish to purchase. These demands exist in both monotribal and multitribal settings and are especially acute in small towns and villages where most residents know each other and a high percentage are related by marriage. Rafiq, who owns a vegetable shop, a small supermarket, and an eatery in a small town notes that: "[I]n our village, all people have good relationships [with one another], as if they are one family. We support each other; we do not have strangers; we know each other, and we are all relatives, through marriage..."⁷

While that may be, monetary relationships are still easier to maintain with friends and acquaintances, rather than with relatives. As Farah, the community development director in Belkas municipality explained, it is difficult to extract payment from relatives,

"[P]eople might ask you [shop owner] to get the things they want and pay him later, so a merchant can end up with depleted...capital by the end of the month and if people don't give the money back...the merchant might be ashamed to ask his relatives to pay back the money."⁸

Another interviewee, originally from a monotribal community in the South but who now lives in Amman, believes there are clear differences in how family members and friends are treated by municipal employees. He explained that while it is possible to ask a friend to pay his property taxes or other fees he owes, he could never ask a relative out of shame and

⁶ Interview #171

⁷ Interview #248

⁸ Interview #171

embarrassment⁹. The owner of a small minimarket in central Jordan also agreed that family members are more presumptuous than acquaintances when demanding to buy on credit¹⁰.

Heterogeneous communities, therefore, help store owners retain their profitability while simultaneously maintaining their reputations. It can attenuate demands for patronage by decreasing connections between owners and customers. Musa, who owns a shop that sells coffee in Zeitoun municipality, recollected that his father's business in Kalyoub municipality failed because an overwhelming number of customers requested discounts or promised to pay later. As Kalyoub was a small municipality at that time with few stores, most residents knew each other and his father was too embarrassed to refuse or to force debtors to settle their accounts. In Zeitoun municipality, the large size of the population means that few are related to Musa or even know much about Musa and his family. When they visit Musa's shop most customers do not even think to ask him to pay later or request a special discount. This helps Musa's business to stay profitable¹¹.

Jealousy between family members also plays a role in the lack of financial success of a business. Shop owners report that some residents deliberately choose not to buy from their shops because they did not want the owner to become too wealthy or influential in the community. Residents who were most likely to feel jealousy were family members. Rafiq complained that "my relatives do not want me to grow bigger than them or become more important, so they do not buy from me"¹². Another resident felt that his community lacked bakeries, grocery stores, butchers because potential new business owners felt that envy

⁹ Interview with Hamdan, Amman municipality

¹⁰ Interview #232

¹¹ Interview with Musa, Zeitoun municipality

¹² Interview with #248

among relatives would cause any business to fail¹³. Multitribal communities, unlike monotribal settings can therefore offer a steady stream of customers who are not deterred for personal reasons.

It is not surprising then that monotribal areas lack shops, grocery stores, butchers, eateries, and bakeries. Farah compared her village to a nearby town, with residents from several different tribes:

"[E]specially in Mazura [my village], not everything is available...[A]t 10 o'clock the door is closed and you cannot go and get a glass of water from outside [or] if you need bread and you didn't buy it...There is no shop which sells chicken...There is no shop to sell meat...[I]f you go now to Sahbarah [neighboring town], you see bakery, shops, everything you find it there, it has a market, so everything is available, until I think 1 o'clock in the morning..."¹⁴

In Haif, a municipality in southern Jordan, a variety of stores have been established but almost all of the founders are *not* members of the local tribe. Bushra, a community development director in another monotribal village notes that people have to travel to a nearby city, 80 kilometers away in order to access a bakery or a vegetable shop¹⁵. In contrast multitribal communities often have a variety of businesses. Safur, a municipality in the proximity of Haif and with a similar population size, offers an assortment of businesses in multiple regions of the municipality, the majority of which are owned by members of local tribes.

Not only are multitribal communities accommodating to private enterprise, they also offer residents a broader selection of income sources. Quick to adopt new professions and to neutralize criticism against them, residents in heterogeneous communities have more employment options than those from homogenous areas. Because everyone is from the

¹³ Interview #126

¹⁴ Interview #171

¹⁵ Interview #226

same kinship network, residents in monotribal communities tend to share similar values and beliefs and norms are difficult to change. Bushra who has worked with homogenous and heterogeneous communities comments,

"Each tribe has its own traditions and customs...[Someone] from a tribe may break a tradition. For example, they might open a salon [a place for cutting or styling hair]... But if it was just one tribe [who had member(s) establish a salon], they would not do it [as] they are frightened because of some tradition or custom [they may be breaking]. But if they see another tribe do it, they think we can go and do this. They are...free from many restrictions."¹⁶

Widad, a community development director who hails from a monotribal community

herself but now lives in a multitribal municipality notes that while differences between

members of the same tribe do exist, "most of them would have the same mentality"¹⁷.

The acceptance of all different types of employment allows the community to

develop economically. Thana, a community development director compared the density of

shops in a homogenous versus a heterogeneous setting.

"In Habata for example they don't have a bakery, they buy from Mijris [a major city in northern Jordan]...No competition, they all have the same tradition [in Habata]. We have everything here [in Kharsit, her municipality]...In the past they [residents in Kharsit] used to refuse to work at a bakery before but now they accept [this type of employment]. Neighborhood Omar [in Kharsit municipality] are all Sabawis¹⁸ [who] don't join the army...so they started new shops and businesses...and that is how it started. In the past it was very hard to see someone from Beni Khalid [her tribe] who owns a shop, but now you can."¹⁹

Rahma, a community development director in southern Jordan noted that local residents in

monotribal areas refuse investment projects and job opportunities that benefit the

community because they consider certain professions dishonourable. Rahma's organization

¹⁶ Ibid

¹⁷ Interview #118

¹⁸ Sabawis refer to those originally from B'ir Saba in what is now Israel. Because they are of Palestinian descent, they tend not to work in the public sector in Jordan.

¹⁹ Interview #169

financed the construction of a bakery where none previously existed and like Thana she faced opposition because, "They think...work[ing] in this bakery--it will be shameful. How is it that I work in this bakery, and all the day in the face of fire, and selling bread to people." Nor would local residents condescend to working as barbers because they consider it as a servile occupation. These residents prefer employment in the public sector or for men, joining the army²⁰.

Because residents in heterogeneous municipalities are willing to accept a broad a range of occupations while those in homogeneous settings are not, we would expect employment levels to be higher in heterogeneous than in homogenous municipalities, ceteris paribus. As noted earlier, unemployed residents will not be particularly keen to pay their fees and taxes owed to the municipality. Even though every resident is legally required to pay their charges, many municipalities do not enforce this law. However, it is logical that employed residents who have a steady income will be willing to pay these fees.

Monotribal communities are also slow to adapt because fear of harming the family's reputation within the community is particularly acute. Kinship ties between residents means that no issue is considered private and news travels quickly. Farah, noted that when she learned to drive a car,

"the first to oppose was my family--how could you drive a car and it's not right [meaning shameful]...there were no women who drove cars [in my community], so when I drove a car for the first two, three months--most of the women started to train to drive a car. It's like you broke a barrier..."²¹.

One resident, Mahmoud, who relocated from a monotribal community in the South to a major municipality in central Jordan feels limits to his freedom when he returns home

²⁰ Interview #225

²¹ Interview #171

because everyone in the community knows each other and "everyone is observing"²². The high number of social obligations he must attend in his hometown also offers generous observation opportunities. Mahmoud can refuse invitations to social events in his new place of residence because they are extended by friends or acquaintances but he cannot in his hometown because they are offered by relatives, who would be offended. In general back home "You cannot ignore any occasion".²³ Because ties between family members are so close and abundant social occasions lead to continuous monitoring, residents in monotribal communities find it difficult to adopt new ideas, including new occupations they may deem acceptable but the rest of their relatives do not.

Lama, a student at the university in Marsafa and originally from this municipality expressed the same sentiment. While living elsewhere in Jordan with her parents, she could wear normal blouses and trousers as long as they were modest, loose-fitting and covered her entire body. However, since relocating back to Marsafa for university, she has had to don the *jilbab*, a long coat worn over her clothes that covers her body from her shoulders to her feet. This is not because her parents personally believe this is appropriate attire but because they fear that their relatives in Marsafa will accuse her of immodesty if she violates local custom²⁴.

Another interviewee who resides half of his time in Haif municipality and the other half in Melafi, a multitribal community next to Haif, described the discrepancy in personal freedom between the two places, "[L]iving here gives me more personal freedom. People there [in Haif municipality] are all relatives and cousins, so they are very curious to know everything. If I lived there and people saw a rented car parking in front of my house with

²² Interview #239

²³ Ibid

²⁴ Interview with Lama

two girls coming inside...people would definitely have come to check and see what this is all about."²⁵

5.2.1 Quantitative Evidence

To what extent, however, are the statements of these Jordanians generalizable? Are these impressions that are pertinent only to these particular individuals and their communities or does tribal diversity actually enhance local economic development which in turn improves service provision? In order to ascertain the validity of these assertions, I examine some quantitative evidence.

Unfortunately I do not have data on the number of private businesses, their rate of survival, or the types of professions in which residents are employed. However, we can still infer the likelihood of a relationship between tribal diversity, economic development, and service provision by examining data on local incomes and poverty and unemployment rates along with data on tribal diversity and quality of services, which I do possess.

Data on local incomes and poverty and unemployment levels is from the Department of Statistics in Jordan. The data on local incomes is for the year 2008 while the poverty and unemployment levels are for 2004. Once again, the number of tribes is calculated by counting the number of tribes that offered candidates for the 2007 municipal election; and service provision is measured by the percentage of revenues that are selfcollected and the quantity of equipment owned by the municipality. Data on revenues is from the Cities and Villages Development Bank while the data on equipment is from the Ministry of Municipal Affairs.

²⁵ Interviews #205 and 206. The interviewee's comments about the rented car and the two girls is a reference to myself and my female translator who travelled from Amman to interview him.

If tribal diversity encourages the establishment of businesses and their financial health and openness to a wide variety of occupations, then we would expect lower levels of unemployment and poverty and higher levels of income in heterogeneous areas. In municipalities with a mix of tribes, residents are likely to embrace all employment opportunities as opposed to rejecting certain professions that they fear will harm their reputation and are also likely to be self-employed through establishing their own businesses. In other words:

H1: Tribal diversity should improve local economic development.

Table 5.2 below shows the difference in the mean income and unemployment and poverty levels between homogenous (monotribal) and heterogeneous municipalities. I use t tests to indicate whether these differences are statistically significant²⁶. Note that income here refers to the average income per individual (not household) per month in Jordanian Dinars. We can see here that monotribal municipalities do worse with regard to income, unemployment, and poverty rates and that these differences are statistically significant. But are higher incomes and lower unemployment and poverty rates associated with better services? I had argued earlier that economic development should improve service provision because residents will be more willing to pay their fees and taxes. Municipal employees in wealthy municipalities may also be highly educated given that personal income and education are often highly correlated. This argument is summarized in the following hypothesis:

H2: Economic development should lead to improved service provision.

²⁶ I conduct one-tailed tests here because my primary concern is whether heterogeneous municipalities perform *better* with regard to income and unemployment and poverty levels as opposed to just whether there is a difference between the two groups. In more specific terms I am interested in whether the mean for monotribal municipalities is lower than the mean for heterogeneous municipalities with regard to income and higher with regard to unemployment and poverty levels.

	#. of obs	Income	Diff	Unemployment	Diff	Poverty	Diff
Monotribal munics	30	1051 (68)	62*	21.2% (0.62)	3.2***	24.0% (3.0)	8.2***
Diverse munics	63	1113		18.0% (1.19)		15.8% (3.0)	
# of observations	93	72^{27}		93		93	

* Significant at the 90% level (one-tailed test); ** Significant at the 95% level (one-tailed test); *** Significant at the 99% level (one-tailed test)

Table 5.2 Differences in Mean Income, Unemployment, and Poverty rates between Homogenous and Heterogeneous municipalities

²⁷ The number of monotribal municipalities for this t-test is 30 and for diverse municipalities, 50. Not all of the municipalities were included in this difference of means test. This is because this income measure was created originally from a measure at the subdistrict level. The boundaries of subdistricts sometimes overlap with municipalities but not always. Where possible, I have transformed these subdistrict measures into municipal level measures using my knowledge of Jordanian geography. However, as subdistricts are larger than municipalities, some municipalities correspond to the same subdistrict. As a result this means that several municipalities share the same average income. To facilitate data analysis, I removed all municipalities that shared a duplicate income level with another municipality. In total 21 municipalities were removed.

Table 5.3 displays the results of a regression in which we examine the relationship between income, unemployment, and poverty rates and service provision. Because each of these measures of economic performance may exert differing influences, I do not combine them into a single factor. Instead I examine the impact of each measure individually on municipal services. The unemployment and poverty rates are measured in log form²⁸. As before, service is measured by the percentage of revenues that are selfcollected and the quantity of equipment owned by the municipality.

I begin with bivariate regressions (Table 5.3) between municipal services and measures of economic development, then re-estimate these regressions with demographic controls (Table 5.4), and finally add a full set of control variables (Table 5.5). I do this because income, unemployment, and poverty levels may be correlated with a number of control variables. By beginning with bivariate regressions and slowly adding to the regression equations, I can better isolate the impact of these indicators of economic development.

Table 5.4 displays the results of bivariate regressions where indicators of economic development are the independent variable and municipal services the dependent variable. As we can see here, only income and poverty have statistically significant impacts on service provision and more specifically, the quantity of equipment. Municipalities with higher incomes and lower poverty rates are associated with a lower quantity of equipment.

For the regression estimations in Table 5.4, I have included control variables for tribal diversity, population, and area of the municipality in the equations. In this set of regressions, poverty ceases to have a statistically significant impact on the quantity of

²⁸ We should interpret the log of a percent as follows: as unemployment (or poverty) increases by one percent (as opposed to one percentage point), the quantity of vehicles or the percent of revenues increases by X percent (as the number of vehicles is also measured in log form).

	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment
Income	0.00021 (0.00037)	0.0016 (0.00043)***				
Unemployment	. ,	. ,	0.0093 (0.24)	-0.33 (0.27)		
Poverty					-0.025 (0.086)	-0.28 (0.094)***
# obs	72	72	93	93	93	93

Table 5.3 Impact of Income, Unemployment, and Poverty on Service Provision (bivariate regressions)

	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment
Income	0.000071 (0.00038)	0.00052 (0.00019)***				
Unemployment			0.010 (0.24)	0.10 (0.11)		
Poverty				· · ·	0.034 (0.086)	-0.012 (0.042)
Tribal div	0.013 (0.013)	0.018 (0.0067)***	0.021 (0.013) [†]	0.013 (0.0064)*	$0.020(0.013)^{\dagger}$	0.012 (0.0063)*
Population	0.11 (0.12)	0.30 (0.060)***	-0.061 (0.10)	0.42 (0.050)***	-0.057 (0.10)	0.41 (0.051)***
Area	0.000021 (0.0000092)***	0.000020 (0.0000046)***	0.000011 (0.0000089)	0.000015 (0.0000043) ***	0.000012 (0.0000086)	0.000016 (0.0000042)***
# obs	72	72	93	93	93	93

Table 5.4 Impact of Income, Unemployment, and Poverty on Service Provision (with some control variables)

	% revenues		% revenues	No. of	% revenues	No. of
	self-collected	No. of equipment	self-collected	equipment	self-collected	equipment
Income	0.000082	0.00040 (0.00016)**				
	(0.00037)					
Unemployment			0.30 (0.25)	0.13 (0.11)		
Poverty					0.030 (0.083)	0.0018 (0.037)
Tribal div	0.011 (0.018)	0.019 (0.0080)**	0.020 (0.016)	0.012 (0.0073)*	0.017 (0.016)	0.011 (0.0073) [†]
Population	-0.20 (0.23)	0.051 (0.10)	-0.49 (0.18)***	0.13 (0.11)	-0.48 (0.19)***	0.14 (0.083)*
Area	0.000021	0.0000063	-0.0000062	-0.0000020	-0.0000025	-0.00000031
	(0.000014) [†]	(0.0000060)	(0.00012)	(0.0000055)	(0.000012)	(0.000053)
Presence of Pals	0.12 (0.23)	-0.065 (0.10)	0.35 (0.17)**	-0.019 (0.075)	0.32 (0.17)*	-0.030 (0.076)
Municipal wealth	-0.052 (0.28)	0.27 (0.12)**	0.55 (0.24)**	0.33 (0.11)***	0.47 (0.23)**	0.23 (0.10)***
# council seats	0.019 (0.040)	0.054 (0.018)***	0.014 (0.037)	0.043 (0.016)***	0.017 (0.038)	0.044 (0.017)***
Category 1	0.37 (0.46)	0.26 (0.20)	0.36 (0.42)	0.36 (0.19)*	0.47 (0.42)	0.40 (0.19)**
Category 2	0.054 (0.28)	0.29 (0.12)***	0.098 (0.27)	0.25 (0.12)**	0.18 (0.26)	0.29 (0.12)***
Category 3	-0.18 (0.25)	0.24 (0.11)**	0.013 (0.23)	0.17 (0.10)*	0.025 (0.23)	0.18 (0.10)*
Outlier 1	-0.084 (0.70)	0.38 (0.31)	-0.38 (0.72)	0.36 (0.32)	-0.17 (0.70)	0.46 (0.31) [†]
Outlier 2	0.14 (0.70)	-0.065 (0.31)	-0.28 (0.69)	-0.21 (0.31)	-0.25 (0.69)	-0.18 (0.31)
Outlier 3	-0.72 (0.94)	-0.48 (0.42)	-0.59 (0.92)	-0.11 (0.41)	-0.55 (0.92)	-0.092 (0.41)
# obs	72	72	93	93	93	93

Table 5.5 Impact of Income, Unemployment, and Poverty on Service Provision (full set of control variables)

equipment. Only income continues to have a statistically significant impact. It is still positively associated with the quantity of equipment.

Finally in Table 5.5, I include a full set of control variables. These are the same control variables as in my initial regression analyses of tribal diversity, cohesion, and municipal services in Chapter 3. These variables are: the presence of a significant number of Jordanians of Palestinian descent, municipal wealth, population, area, total number of council seats, the category of the municipality, and dummy variables for 3 outliers. For explanation as to why these variables are included, please see Chapter 3.

As before, Table 5.5 shows us that only income has a statistically significant impact on municipal services and that more specifically, it is positively associated with the quantity of equipment. Also as before, neither unemployment nor poverty has an impact on municipal services. Why does the level of income have statistical significance but not unemployment and poverty rates? One explanation could be that poverty and unemployment rates are too blunt of measures while income level better captures the economic situation of a municipality. Another explanation is the quality of the data. All three measures of economic development were originally collected at the subdistrict level.

While the boundaries of some municipalities are the same as the boundaries of subdistricts, this is not always true and in some instances one subdistrict will include several municipalities. I was able to transform the income data myself from subdistrict to municipal level but I do not know what procedure was used for the unemployment and poverty data, which was originally collected by the Department of Statistics but given to me by the Local Government Development Program (LGDP), an organization that worked with several municipalities in 2009-2010 to improve service provision. Originally funded by the

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Millenium Challenge Corporation, a US government agency created by Congress, LGDP no longer exists.

Also why does income only matter for the quantity of municipal equipment but not for the percentage of revenues that are self-collected? I had argued that municipalities with wealthier residents would fare better in collecting fees and taxes because residents would be more willing to pay. However, income does not have a statistically significant impact on self-collected revenues in any of the regression results detailed in Tables 5.3-5.5. I control for municipal wealth for the regression analysis in. Table 5.5 and so the acquisition and maintenance of equipment cannot be due to a larger municipal budget²⁹. Instead these results suggest that municipalities with wealthier residents either prioritize acquiring equipment or are able to use their funds efficiently so that they can acquire it. If the latter is true then this suggests that wealthier municipalities may have better officials and employees who are able to administer effectively as they do not necessarily collect more in terms of fees and taxes but are able to use the funds they do have available to purchase or repair equipment. Table 5.6 shows the results of a bivariate regression for the average number of years of formal schooling for municipal officials (mayor and council members) and income. These results suggest that municipalities with wealthier residents may indeed be led by more competent officials

	% of municipal officials with an univ degree
Income	0.0024 (0.00094)***
# of observations	93

Table 5.6 Impact of Income on the Education Level of Municipal Officials

²⁹ Although if this were true, this would be due to greater financial support from the central government as opposed to funds generated by the municipality itself. Recall that all municipalities receive financial support from the central government. On average, 65 percent of a municipality's revenues are provided by the Center.

5.3 Migrants and Economic Development

Multitribal communities are more flexible and tolerant than their homogenous counterparts but multitribal communities with a large number of migrants are even more so, and therefore, likely to experience even greater economic vitality. I argue in this section that migrants are even more likely to possess new ideas and to be less beholden to reputational concerns. Why is this good for service provision? First of all, this means that residents are likely to embrace a broad array of occupation choices and are therefore, to increase employment rates. Secondly, because migrants possess differing ideas and are not constrained by competition with relatives (as they have few if any relatives in the area), they may prove particularly entrepreneurial and successful at business.

Migrants who have no familial relationship with the indigenous tribes of that community (either by marriage or by blood) are especially in unique positions to challenge accepted norms. Although different tribes might once have possessed distinct customs and traditions, after many years of living together their disparities become muted. New residents are more likely to hold diverging beliefs and values than those who have lived in the community for a long time, even if these past residents are members of different tribes. They also face less social pressure to conform because there are few if any relatives, beyond the nuclear family, to express disapproval. Even if members of other tribes vocalize criticism, their words may carry less weight because they represent the views of an "outsider"³⁰. This lack of social obligation along with the possession of diverging beliefs and values permit migrants to establish new businesses or to adopt new occupations with ease.

³⁰ Residents may give greater weight to the opinions of family members because they trust them and believe that relatives want to help and not hurt them with their advice. There is also greater social pressure to accept advice from family members because increased interaction between relatives means that estranged relationships are felt keenly.

Bushra, the community development director in a small southern town, laments that the lack of migration has hindered development in her community:

"When there is just one tribe, you can see the same ideas, the same thoughts. Me and my cousin—the same ideas, the same thoughts. Nothing new. But when there is...someone from outside [the tribe]...maybe he has new ideas. He wants to invest in something. So this motivates me to make something like him. You can see the area where there are 2 tribes—it is more developed. And when you talk about how long it takes for a tribe become modern--if there is one tribe, maybe you can wait 10 years for this tribe to become modern. But if you put 5 families you can see these changes come along faster and more quickly."³¹

Rahma, the community development director in a large southern city, expresses the same sentiment. In her work with the Bedouin community, she found that some residents would prefer for their children to marry Palestinians, who are believed to have different customs and to be particularly business minded but who do not usually live in the same communities as Bedouins. Some told her, "I will make my son marry a Palestinian woman. She will have new ideas for her children. For our family, that will be much better.' They know that they will change if...new people come and live amongst them"³².

For Marsafa municipality, the establishment of an university in recent years, has transformed attitudes of local residents, especially towards women. One female graduate of the university, who hails from Amman stated that she and her female friends once avoided walking in the city center for fear that Marsafa boys would throw pebbles at them as it was considered inappropriate for women to stroll alone.³³ Nowadays, it is common for female students or residents, as long as they are not originally from Marsafa to walk alone in the city. For Marsafa girls, however, walking without an accompanying male is still discouraged. Although attitudes have not completely changed, Marsafa residents have become more

³¹Interview # 226

³² Interview #225

³³ Interview with Salwa, graduate of the university in Marsafa

tolerant and it is likely that the passage of time will coax additional modifications. The director of a community center, Ghiyath, stated that some Marsafa residents originally opposed the establishment of the university because it placed girls and boys together in the same classroom³⁴. But when they realized that Marsafa girls did not begin dressing immodestly or become entangled in romances with male students as a result of studying at the university, opposing parents reduced their criticism.

The opening of a new university and the arrival of new migrants does not have a direct impact on public goods provision. However, in addition to the new employment opportunity that it provides, the presence of a new university changes the values and beliefs of original residents. In Marsafa, parents are now more willing to send their daughters away to university and when they finish, these daughters will be more likely to work, given their degrees and changing attitudes toward women in Marsafa itself. At the same time, the presence of migrants with new ideas about investment and businesses will encourage private ventures in the municipality. A number of private businesses have already been established in Marsafa such as restaurants, internet cafes, and supermarkets; and as migrants have few if any relatives in the municipality, they are free to establish competing businesses and some have done so. The increased employment of women (as well as men) and the presence of new businesses can all improve fee collection for the municipality.

It would be presumptuous to assume, however, that the mere presence of migrants will transform communities. Whether an area becomes more or less tolerant as the result of migrants depends on who is migrating and their numbers. If migrants are more conservative than original residents then we would not expect the community to become more tolerant and open-minded. If there are only a few migrants, their impact may be small although there

³⁴ Interview #197

is anecdotal evidence that the introduction of even a few new residents, as long as they are welcomed by the community, can generate change. It would also be naive to assume that new behaviour will be accepted by the entire community. Initial opposition is inevitable and can be widespread. What is noteworthy is not whether opposition is present or absent but whether new modes of thinking and acting have been introduced. Acceptance and adoption of these new methods without doubt requires time as the previous residents become accustomed to them.

In large cities like Amman where a high proportion of residents are migrants and the population is very large, everyone is accorded an extra level of anonymity. Even if most of the members of one tribe have moved from their original municipality to Amman, they tend to be distributed in different locations in the city so that observing their relatives' actions is difficult. The employment rate is also higher in cities so that residents have less time to delve into each other's business.

The diversity of diverse areas is also self-perpetuating. Those who move in search of further employment opportunities prefer to settle in communities with different tribes as opposed to a location with one or two dominant tribes, where they will clearly be in the minority. New residents feel precarious, insecure, and marginalized in monotribal areas, where most if not all of the community's political and social positions are monopolized by members of the dominant tribe. They may be welcomed into the community but with regard to local affairs, their participation and decision-making abilities will be limited. In heterogeneous communities, however, there is no dominant tribe and their numbers will be similar to other tribes in town. A medical doctor Wazir, lives in Haif municipality where the population is dominated by one tribe. He recently became ostracized from the local community because of a spat between children. During a visit to his friend Mohammad's house, a quarrel between Mohammad and another resident's sons escalated into a confrontation between the two men themselves. Mohammad, like Wazir is not originally from Haif municipality while the second man, Ahmed, is a member of the dominant tribe in Haif municipality. When Wazir tried to adjudicate, Ahmed began beating him resulting in a scar on his head. After the incident, Wazir contemplated whether or not to file charges against Ahmed. He eventually decided against doing so because while he felt Ahmed acted unlawfully, Wazir feared it would harm his relationships in the community and further estrange him from local residents. As he and Mohammad are not originally from Haif, they have few family members there and therefore, few to support their case³⁵.

Another resident in this same community whose relative is a local council member found it difficult even to register to vote in Haif municipality, although he has lived there for many years. Each time he tries to register he is rebuffed and told to vote in his original hometown. Although Hatim has the right to vote in Haif municipality as he is a Jordanian citizen who can show evidence that he resides in Haif, employees at the local office of the Civil Affairs Bureau, who are also members of the dominant tribe in Haif municipality, has made the process difficult for him. Hatim explained that local residents felt that "outsiders" should not have the right to influence local politics³⁶.

Tribal monopolies are not limited to extreme scenarios but are reflected in innocuous pursuits such as associational life. Mahmoud, who relocated to Aweina village

³⁵ Interview #222

³⁶ Interview #201

from the South, found the local civic association to be dominated by the main tribe. Associations in Jordan vary to the extent that they are tribe-centric. Some associations have a genuine diverse membership with a governing council that also reflects the local tribal makeup. These associations distribute their services in a fair and equitable manner, trying to fulfil local needs rather than for the sake of maintaining paternalistic relations. Other associations are completely "tribal". The association serves only one tribe and excludes members from other tribes from joining or assuming leadership positions. In monotribal communities, associations are often controlled by the dominant tribe. Mahmoud noted that "since the establishment of this association in 1992, presidents were always from Hasmar [the dominant tribe in this monotribal community]...70% of members are from that family". Not only does the Hasmar tribe restrict membership but they also oppose the establishment of any other association, except by a member of their tribe because:

"[T]hey will think that this man [the person who established the association and is not from the dominant tribe] comes from outside of this area, and managed to establish a new association that will give him power and support his networking with other associations. And even though he is a stranger [meaning he is not originally from this community], he was able to do what we could not achieve although we are from this area"³⁷.

In contrast, new residents in multitribal areas feel comfortable, secure, and empowered. Nabil, a long-time employee at the Ministry of Municipal Affairs and who has held a number of senior administrative positions in the Ministry notes that no residents wants to live in an area where their minority status means they are in an inferior position. He also explains that in heterogeneous communities, municipal officials are more likely to consider the needs of all residents with regard to public goods provision but that in homogeneous areas, one tribe will dominate politically and its desires and wishes will be

³⁷ Interview #239

prioritized³⁸. Just as Mahmoud's participation in the local civic association is unwelcomed, so would be his decision to run for municipal elections should he have desired to do so.

In fact, Mahmoud from Aweina village actually relocated there because the diversity of tribes in the overall municipality meant that he would not be among the minority:

"Menuf municipality [where Aweina village is located] has a diversity of people from different origins...but in Sayara municipality, if I go there I will be a complete stranger. You know that the Jordanian society is a tribal society, and any village in Sayara consists of one family, and any one out of this [meaning his] family will be an odd member."

In Safur, a multitribal community in the South only 60 km away from Haif, residents, even if they are not originally from Safur speak positively about their experience living there and their conviction that services are distributed fairly and without favoritism. For instance, most residents of Safur are of farming origin, but a small minority concentrated in particular pockets of the municipality are of nomadic descent. Abdel Rahman, a resident of nomadic origins indicated that albeit nomadic families are few in number, their areas are served as well as areas where tribes of farming origin dwell³⁹. Khaled, a member of a tiny tribe in Safur, has not only been successful in establishing an association but is also the director of a confederation of multiple associations in the community that have established a cooperative together⁴⁰. When asked if family members of council members receive better municipal services, he replies, "No, because people would notice"⁴¹.

Abbas, a faculty member at the local community college⁴² and of Palestinian origin has never faced obstacles when registering to vote in Safur, a multitribal municipality in the

³⁸ Interviews with Nabil, employee of MOMA

³⁹ Interview # 212

⁴⁰ Interview #210

⁴¹ Ibid

⁴² A community college is a higher education institution that offers Associate's Degrees. These are degrees that usually require two years of study compared to universities which offer Bachelor's Degrees and usually require four years of study.

South. Unlike residents in monotribal locations, he has been invited to join several civic associations⁴³. Abbas also owns a hair salon and a small restaurant. He noted that the municipality completes a hygiene inspection of both places five or six times a year but that these inspections are always fair. Even Egyptian workers who are in the most precarious position because they lack Jordanian citizenship have few complaints about the way they are treated. One actually prefers Safur to Egypt and pointed out that the fact he has lived in Safur for 15 years indicates that he feels welcome there. Another praised the municipality for the speedy process in obtaining his carpentry license⁴⁴.

Multitribal associations are not free of tribalism. They also have associations dominated by one tribe but unlike monotribal locations this type of phenomena seems less likely. The reasons for this are unclear and require more study. Perhaps the multitude of tribes in heterogeneous areas translates into more civic associations overall as compared to monotribal locations with each tribe or several tribes establishing their own organization. The high number of associations in turn implies that the likelihood of at least some associations wanting a diverse membership is higher than in a homogenous area. Perhaps the composition of the population in multitribal municipalities is such that if associations did not permit membership by multiple tribes, they would have very few members; or perhaps constant interaction between members of different tribes in heterogeneous locations has resulted in norms that view exclusion of other tribes as unethical.

It would be incorrect to state that across all multitribal communities, new residents are integrated as full members of the municipality. If the community is small, there may still be a preference to offer positions of political and social influence to members of the

⁴³ Interview with #219

⁴⁴ Interview #218

"indigenous" tribes. An employee at Menuf municipality, a multitribal community, noted that if a candidate from an "outside" tribe won municipal or parliamentary elections, local "indigenous" residents would be "offended". They would question the right of this individual to be in power given that it is *their* community, even if the candidate won rightfully⁴⁵. In Zeitoun municipality, a council member who originally hails from the South but has lived in Zeitoun for the majority of his adult life, notes that some members of the local dominant tribe resent his presence on the council⁴⁶.

Discrimination against migrants does exist even in multitribal settings. The crucial difference is not the absence or presence of discrimination but its *degree*. In homogenous communities, new residents are permitted to join civic associations but would never be promoted to the governing body of these associations. In diverse communities, not only are they encouraged to join associations, but they can be elevated to prominent positions in the governing body and may even be urged to establish their own associations.

5.3.1 Quantitative Evidence

As before, I use quantitative evidence to ascertain whether the level of migrants actually differs between homogenous and heterogeneous municipalities and whether it also has an impact on local services. First of all, do heterogeneous municipalities really have more migrants? Table 5.7 displays the difference in mean percent of residents who are migrants between the homogenous and heterogeneous areas. Residents whose previous residence differs from their current residence in the past 6 months are considered migrants.

⁴⁵ Interview with Emir, employee at Menuf municipality

⁴⁶ Interviews # 262 and 267

	# of obs	% of municipal residents	Diff
		who are migrants	
Monotribal munics	30	0.14 (0.016)	0.04**
Heterogeneous munics	63	0.18 (0.0014)	
# of observations	93		

This data is from the 2004 census conducted by the Department of Statistics and is from their 2004 census.

Table 5.7. Difference in Mean Percent of Municipal Residents who are Migrants Between Monotribal and Heterogeneous Municipalities

We can see that on average, heterogeneous municipalities are likely to have 4 percentage points more of migrants than homogenous municipalities. Results of a t test also indicate that this difference is statistically significant. However, we would also like to know if migration levels actually impact services. In other words, we need to ascertain whether the following is true:

H4: Municipalities where a larger percentage of the population are migrants experience better municipal services.

In order to ascertain whether there is evidence for this hypothesis, I use regression analysis to analyze the relationship between level of migration and service provision. I include the same control variable as before: the significant presence of a number of Jordanians of Palestinian descent, municipal wealth, population, area, number of council seats per person, the category of the municipality, and dummy variables for 3 outliers. I also add a measure of economic development to the regression equation as wealthy municipalities may attract more migrants because of the promise of employment. As income was the only factor that had a statistically significant impact on service provision, I use this measure rather than the unemployment or poverty rate.

	% of revs that are	No. of municipal
	self-collected	equipment
Tribal diversity	0.022 (0.016)	0.021 (0.0081)***
Migration level	0.36 (0.12)***	0.10 (0.059)*
# of observations	72	72

Table 5.8 Impact of Migrants on Service Provision

From Table 5.8 we can see that level of migration does indeed influence service provision, even after controlling for income. Municipalities with high levels of migration are more self-reliant on revenues and also purchase more equipment. Both of these findings are contrary to stereotypes about immigrants, which are often blamed for being a burden on resources. However, this relationship may be conditional upon the socioeconomic situation of the migrants themselves. Interview evidence in Jordan suggests that most migrants move for reasons of employment but only if commuting is impossible from their current home. As family and tribal ties are very close, most individuals prefer to live in their original communities and endure long commutes⁴⁷. Only when the commute is truly unbearable will they move to a new area. This suggests, therefore, that migrants are individuals who may already have employment before they move to a new municipality. But once they have moved they are able to contribute to taxes and fees of their new place of residence.

This may also explain why migration has a greater impact on revenues than on equipment and the opposite is true for tribal diversity. From Table 5.8, we can see that tribal diversity has a positive and statistically significant impact on equipment but not on revenues. As migrants are likely to be employed, they are more likely to pay the taxes and fees in their new municipality. This explains why level of migration is associated with a higher percentage of revenues that are self-collected. However, because migrants are new to an

⁴⁷ Interview with Kamal Saleh, Assistant Director General, Department of Statistics, Amman, Jordan.

area, they often do not run for elections and it is the presence of diversity amongst "indigenous" tribes in the area that has the strongest impact on equipment.

5.4 Conclusion

In this chapter, I have argued that tribal diversity encourages private enterprise and increase levels of employment, which in turn contributes to better public goods provision. Diversity can promote the establishment of businesses and support their profitability. Heterogeneous locations are also associated with a wide variety of occupations and new professions are accepted more readily than in homogenous settings. Unlike monotribal areas, which migrants tend to avoid, multitribal municipalities attract residents from different locations and in turn, their presence encourages these communities to become even more tolerant and open-minded.

Multitribal communities with a high percentage of residents who are migrants should fare even better with regard to private ventures and employment levels. With regard to private enterprise, migrants need not fear that they will have to compete with members of their tribe as there will be few if any members in their new residence. They will also feel less bound by social mores of the area, freeing them to accept new types of professions. Their openness to private enterprise and new occupations should encourage other members of society to break social taboos as well.

The increasing number of private enterprises and a higher rate of employment, I argue, is a positive force for municipal services. Privately-owned businesses must pay fees for their business licenses, increasing municipal funds. Furthermore, in order to obtain the license in the first place and to renew it every year, owners must confirm that they have paid all of their other municipal fees and taxes. Therefore, private businesses generate income for the municipality not only through their licensing fees but also by enforcing fee collection in other areas. Similarly, employed residents will be more willing to pay municipal fees and taxes than their unemployed counterparts. Finally, heterogeneous municipalities experience a more equitable distribution of public goods because there is no dominant tribe in the area while in homogenous locations, members of minority tribes may face discrimination.

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Appendix A

Full Regression Results

A.1 Tribal Diversity and Economic Development

	% revenues	No. of	% revenues	No. of	% revenues	No. of
	self-collected	equipment	self-collected	equipment	self-collected	equipment
Income	0.00021 (0.00037)	0.0016 (0.00043)***				
Unemployment			0.0093 (0.24)	-0.33 (0.27)		
Poverty					-0.025 (0.086)	-0.28 (0.094)***
Constant	-1.64 (0.47)**	1.08 (0.47)**	-1.41 (0.69)**	3.76 (0.78)***	-1.32 (0.24)***	3.53 (0.26)
# obs	72	72	93	93	93	93
R-squared	0.0046	0.16	0.00	0.016	0.0009	0.087

Table 5.9 Impact of Income, Unemployment, and Poverty on Service Provision (bivariate relationship, full regressions)

	% of municipal officials
	with an univ degree
Income	0.0024 (0.00094)***
Constant	8.90 (1.04)***
# of observations	93
R-squared	0.087

Table 5.10 Impact of Income on the Education Level of Municipal Officials

	% revenues	No. of	% revenues	No. of	% revenues	No. of
	self-collected	equipment	self-collected	equipment	self-collected	equipment
Income	0.000071	0.00052				
	(0.00038)	(0.00019)***				
Unemployment			0.010 (0.24)	0.10 (0.11)		
Poverty					0.034 (0.086)	-0.012
ý						(0.042)
Tribal div	0.013 (0.013)	0.018	0.021 (0.013) [†]	0.013	$0.020 (0.013)^{\dagger}$	0.012
		(0.0067)***	· · · ·	(0.0064)*	~ /	(0.0063)*
Population	0.11 (0.12)	0.30 (0.060)***	-0.061 (0.10)	0.42	-0.057 (0.10)	0.41
1				(0.050)***		(0.051)***
Area	0.000021	0.000020	0.000011	0.000015	0.000012	0.000016
	(0.0000092)***	(0.0000046)***	(0.0000089)	(0.0000043)	(0.0000086)	(0.0000042)
	(******)	()	(*******)	***	()	***
Constant	-0.75 (0.97)	-1.01 (0.49)**	-1.39 (1.22)	-1.86 (0.58)	-1.21 (1.01)	-1.43
						(0.50)***
# obs	72	72	93	93	93	93
R-squared	0.18	0.87	0.13	0.84	0.13	0.84

Table 5.11 Impact of Income, Unemployment, and Poverty on Service Provision (with some control variables)

	% revenues		% revenues	No. of	% revenues	No. of
	self-collected	No. of equipment	self-collected	equipment	self-collected	equipment
Income	0.00082 (0.00037)	0.00040 (0.00016)				
Unemployment			0.30 (0.25)	0.13 (0.11)		
Poverty					0.030 (0.083)	0.0018 (0.037)
Tribal div	0.011 (0.018)	0.019 (0.0080)**	0.020 (0.016)	0.012 (0.0073)*	0.017 (0.016)	0.011 (0.0073) [†]
Population	-0.20 (0.23)	0.051 (0.10)	-0.49 (0.18)***	0.13 (0.11)	-0.48 (0.19)***	0.14 (0.083)*
Area	0.000021	0.0000063	-0.0000062	-0.0000020	-0.0000025	-0.00000031
	$(0.000014)^{\dagger}$	(0.0000060)	(0.00012)	(0.0000055)	(0.000012)	(0.000053)
Presence of Pals	0.12 (0.23)	-0.065 (0.10)	0.35 (0.17)**	-0.019 (0.075)	0.32 (0.17)*	-0.030 (0.076)
Municipal wealth	-0.052 (0.28)	0.27 (0.12)**	0.55 (0.24)**	0.33 (0.11)***	0.47 (0.23)**	0.23 (0.10)***
# council seats	0.019 (0.040)	0.054 (0.018)***	0.014 (0.037)	0.043 (0.016)***	0.017 (0.038)	0.044 (0.017)***
Category 1	0.37 (0.46)	0.26 (0.20)	0.36 (0.42)	0.36 (0.19)*	0.47 (0.42)	0.40 (0.19)**
Category 2	0.054 (0.28)	0.29 (0.12)***	0.098 (0.27)	0.25 (0.12)**	0.18 (0.26)	0.29 (0.12)***
Category 3	-0.18 (0.25)	0.24 (0.11)**	0.013 (0.23)	0.17 (0.10)*	0.025 (0.23)	0.18 (0.10)*
Outlier 1	-0.084 (0.70)	0.38 (0.31)	-0.38 (0.72)	0.36 (0.32)	-0.17 (0.70)	0.46 (0.31) [†]
Outlier 2	0.14 (0.70)	-0.065 (0.31)	-0.28 (0.69)	-0.21 (0.31)	-0.25 (0.69)	-0.18 (0.31)
Outlier 3	-0.72 (0.94)	-0.48 (0.42)	-0.59 (0.92)	-0.11 (0.41)	-0.55 (0.92)	-0.092 (0.41)
Constant	0.69 (2.67)	-3.17 (1.19)***	-6,19 (2.78)**	-4.57 (1.24)	-4.35 (0.92)	-3.73 (1.03)
# obs	72	72	93	93	93	93
R-squared	0.24	0.90	0.25	0.88	0.24	0.88

Table 5.12 Impact of Income, Unemployment, and Poverty on Service Provision (full set of control variables)
A.2 Migration and Service Provision

	% of revs that are self-	No. of municipal
	collected	equipment
Tribal diversity	0.018 (0.017)	0.020 (0.0079)***
Migration level	0.44 (0.12)***	0.095 (0.057)*
Presence of Pals	-0.16 (0.12)	-0.34 (0.25)
Income	0.00042 (0.00016)	0.0019 (0.00034)
Municipal wealth	0.26 (0.12)**	-0.089 (0.26)
Population	0.060 (0.099)	-0.16 (0.21)
Area	0.0000061 (0.0000059)	0.000020 (0.000012) [†]
# of council seats	0.047 (0.018)***	-0.013 (0.037)
Category 1	0.29 (0.20) [†]	0.51 (0.43)
Category 2	0.32 (0.12)***	0.16 (0.25)
Category 3	0.28 (0.11)***	-0.0038 (0.24)
Outlier 1	0.40 (0.30)	-0.0073 (0.64)
Outlier 2	-0.11 (0.31)	-0.069 (0.65)
Outlier 3	-0.38 (0.42)	-0.26 (0.88)
Constant	-2.92 (1.17)***	1.81 (2.48)
# of observations	72	72
R-squared	0.35	0.91

Table 5.13 Impact of Migrants on Service Provision

	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment
Income	-0.00013 (0.00042)	0.00041 (0.00021)**				
Unemployment Poverty			0.0092 (0.23)	0.096 (0.11)	0.17 (0.10)*	0.070 (0.048) [†]
Nomadic origins	-0.19 (0.19)	-0.11 (0.093)	-0.27 (0.016)*	-0.20 (0.074)***	-0.45 (0.0.19)**	-0.027 (0.088)***
Tribal diversity	0.014 (0.013)	0.019 (0.0067)***	0.023 (0.013)*	0.014 (0.0062)**	0.023 (0.0130*	0.014 (0.0060)**
Population	-0.16 (0.13)	0.27 (0.065)***	-0.16 (0.12)	0.35 (0.054)***	-0.18 (0.11) [†]	0.34 (0.054)***
Area	0.000023 (0.0000092)***	0.000020 (0.0000046)***	0.000014 (0.0000089)	0.000017 (0.0000042)***	0.000015 (0.0000085)*	0.000018 (0.0000040)***
Constant	0.016 (1.21)	-0.58 (0.61)	-0.37 (1.33)	-1.12 (0.63)*	-0.34 (1.05)	-0.90 (0.50)*
# obs	72	72	93	93	93	93
	0.20	0.88	0.16	0.85	0.18	0.86

A.3 Residents of Nomadic Origins, Economic Development, and Migration

Table 5.14 Impact of Income, Unemployment, and Poverty Levels on Municipal Services (with some control variables)

	% revenues		% revenues	No. of	% revenues	No. of
	self-collected	No. of equipment	self-collected	equipment	self-collected	equipment
Income	-0.00014	0.00030 (0.00019)				
	(0.00041)					
Unemployment	. ,		0.27 (0.25)	0.10 (0.11)		
Poverty					0.21 (0.09)**	0.081 (0.042)*
Nom origins	-0.23 (0.18)	-0.10 (0.082)	-0.22 (0.15)*	-0.16 (0.067)**	-0.60 (0.17)***	-0.26 (0.079)***
Tribal div	0.011 (0.018)	0.018 (0.0079)**	0.019 (0.016)	0.011 (0.0071)*	$0.022(0.015)^{\dagger}$	0.012 (0.0071)*
Population	-0.24 (0.23)	0.033 (0.10)	-0.53 (0.19)***	0.11 (0.081)	0.088 (0.17)	0.15 (0.086)*
Area	0.000022	0.0000068	-0.0000028	0.00000045	0.000021	0.0000041
	(0.000013)*	$(0.0000059)^{\dagger}$	(0.000012)	(0.0000054)	(0.000011)	(0.0000051)
Presence of Pals	0.17 (0.23)	-0.043 (0.10)	0.37 (0.17)**	-0.0054 (0.073)	0.30 (0.16)*	-0.0070 (0.074)
Municipal wealth	-0.081 (0.27)	0.26 (0.12)**	0.48 (0.24)**	0.28 (0.11)***	-0.94 (0.26)***	0.14 (0.090) [†]
# council seats	0.026 (0.040)	0.057 (0.018)***	0.019 (0.037)	0.046 (0.016)***	0.060 (0.035)*	0.054 (0.016)***
Category 1	0.33 (0.46)	0.24 (0.20)	0.36 (0.42)	0.35 (0.18)*	0.83 (0.39)***	0.43 (0.18)**
Category 2	0.024 (0.28)	0.28 (0.13)**	0.093 (0.26)	0.25 (0.12)**	0.42 (0.25)*	0.29 (0.11)***
Category 3	-0.21 (0.25)	0.23 (0.11)**	-0.0027 (0.22)	0.16 (0.098)*	0.12 (0.21)	0.16 (0.099)*
Outlier 1	0.0070 (0.69)	0.42 (0.31)	-0.26 (0.72)	0.44 (0.31)	-0.63 (0.67)	0.49 (0.30)*
Outlier 2	0.20 (0.69)	-0.039 (0.31)	-0.17 (0.68)	-0.13 (0.30)	-0.24 (0.64)	-0.13 (0.30)
Outlier 3	-0.73 (0.93)*	-0.48 ().42)	-0.58 (0.91)	-0.11 (0.40)	-1.47 (0.87)	-0.21 (0.40)
Constant	1.81 (2.80)	-2.67 (1.24)	-4.65 (2.94)†	-3.46 (1.29)***	8.53 (2.42)***	-1.61 (0.82)*
# obs	72	72	93	93	93	93
R-squared	0.25	0.91	0.27	0.89	0.35	0.89

Table 5.15 Impact of Income, Unemployment, and Poverty Levels on Municipal Services (full set of control variables)

	% of revs that	No. of municipal	% of revs that	No. of municipal
	are self-collected	equipment	are self-collected	equipment
Migration level	0.45 (0.12)***	0.10 (0.057)*	0.49 (0.10)***	0.039 (0.049)
Nomadic origins	-0.28 (0.17)*	-0.11 (0.081)	-0.45 (0.16)***	-0.25 (0.079)***
Tribal diversity	0.017 (0.016)	0.020 (0.0078)***	0.024 (0.014)*	0.012 (0.0070)*
Income	-0.0081	0.00031		
	(0.00037)	(0.00018)*		
Poverty	. ,	, ,	0.15 (0.086)*	0.074 (0.042)*
Presence of Pals	-0.29 (0.24)	-0.15 (0.12)	-0.055 (0.16)	-0.056 (0.082)
Municipal Wealth	-0.13 (0.25)	0.25 (0.12)**	0.23 (0.20)	0.22 (0.10)**
Population	-0.21 (0.21)	0.040 (0.10)	-0.41 (0.16)***	$0.12(0.080)^{\dagger}$
Area	0.000021	0.0000067	0.0000039	0.0000024
	(0.000012)*	(0.0000058)	(0.00011)	(0.0000052)
# of council seats	-0.0060 (0.0037)	0.050 (0.018)***	-0.0076 (0.034)	0.047 (0.016)***
Category 1	0.47 (0.42)	0.27 (0.20)	0.53 (0.37) [†]	0.40 (0.19)**
Category 2	0.13 (0.25)	0.31 (0.12)***	0.25 (0.23)	0.29 (0.11)***
Category 3	-0.030 (0.24)	0.27 (0.11)***	0.13 (0.20)	0.17 (0.098)*
Outlier 1	0.11 (0.63)	$0.45 (0.30)^{\dagger}$	-0.11 (0.61)	$0.48(0.30)^{\dagger}$
Outlier 2	-0.0023 (0.63)	-0.083 (0.30)	-0.48 (0.61)	-0.17 (0.30)
Outlier 3	-0.24 (0.87)	-0.37 (0.41)	-0.20 (0.81)	-0.092 (0.39)
Constant	3.24 (2.58)	-2.36 (1.23)*	-0.51 (2.16)	-2.53 (1.05)**
# of obs	93	93	93	93
R-squared	0.38	0.91	0.42	0.89

Table 5.16 Impact of Migrants on Service Provision (after controlling for nomadic origins of residents)

Appendix B

Additional Analyses

B.2 Nomadic Origins of Tribes and Economic Development

For scholars who know Jordan well, they may argue that the primary reason that monotribal municipalities are associated with worse economic performance is that most are occupied by previously nomadic tribes who settled more recently than tribes of farming or peasant origin. Due to frequent relocation, it was difficult for members of these tribes to get an education. Travelling together and having to defend themselves far from any other settlement also meant that family ties are closer and reputational concerns greater amongst members nowadays. Most Jordanians also note that it is members of these previously nomadic tribes who tend to prize honor above all else and therefore, to reject any employment opportunity that they feel threatens this value. Finally, as previously nomadic tribes are quite large, they are often the dominant tribe in a monotribal area leading to a conflation between the factors of homogeneity and origin of tribe. So are the differences in economic development between monotribal and heterogeneous municipalities actually explained by the fact that many monotribal municipalities have high populations of residents of nomadic origin?

Table 5.17 below displays the mean unemployment, poverty, and income levels for (1) municipalities that are monotribal and where residents are primarily of nomadic origins (2) municipalities that are monotribal but *not* primarily of nomadic origins.

	# of obs	Income	Diff	Unemp	Diff	Poverty	Diff
Monotribal	16	968 (42)	173***	20.6%	1.2	33.4%	20.1*
+ Nom				(1.64)		(3.91)	**
Monotribal	14	1140 (55)		21.8%		13.3%	
+ NOT				(1.77)		(2.53)	
Nom						. ,	
# of obs	30	29^{48}		30		30	

Table 5.17 Difference in Mean Income, Unemployment, and Poverty Rates between Monotribal Municipalities that are Nomadic and those that are not Nomadic

As we can see from Table 5.17, monotribal municipalities with primarily populations of nomadic origins do worse with regard to monthly income and poverty levels. So could the difference in economic development between monotribal and heterogeneous municipalities be driven by the fact that many of these municipalities are nomadic? Table 5.12 examines this issue in another way by comparing the mean income, poverty, and unemployment levels for municipalities that are (1) monotribal but where residents are *not* primarily of nomadic origins and (2) heterogeneous municipalities. If the nomadic origins of residents is the primary explanation as to why monotribal municipalities suffer from the lack of economic development, then heterogeneous municipalities should have levels of income, unemployment and poverty rates that are similar to monotribal municipalities where most residents that matters but not whether the municipality is monotribal than socioeconomic levels should be similar between monotribal municipalities with non-nomadic tribes and heterogeneous municipalities.

⁴⁸ The number of observations for this ttest is 15 for the monotribal and nomadic category and 14 for the monotribal and non-nomadic category. Remember that a number of observations for the income variable were duplicates and therefore, were removed.

	# of obs	Income	Diff	Unemplt	Diff	Poverty	Diff
Monotribal +	14	1140 (55)	27	21.8%	3.8***	13.3%	2.5
NOT Nom				(1.77)		(2.53)	
Multitribal	63	1113 (29)		18.0%		15.8	
				(0.62		(1.62)	
# of obs	77	57 ⁴⁹		77		77	

Table 5.18 Difference in Mean Income, Unemployment, and Poverty Rates between Monotribal Municipalities that not Nomadic and Heterogeneous Municipalities

Here we can see that monotribal municipalities where most of the residents are *not* of nomadic origins actually don't perform much worse than heterogeneous municipalities. Monotribal municipalities where most residents are not of nomadic origins have higher unemployment rates but they also have slightly higher incomes and lower poverty rates although these differences are not statistically significant. These differences suggest that perhaps it is the nomadic origins of residents rather than the homogeneity of a municipality that explain why monotribal municipalities lack economic development.

However, it could also be the case that municipalities with high populations of residents of nomadic origins suffer from lack of economic development but that tribal diversity improves their socioeconomic situation. The presence of additional tribes may encourage private enterprise and the acceptance of new occupations. One way to investigate this proposition is to examine whether heterogeneous municipalities where residents are primarily of nomadic origins do better with regard to socioeconomic development than monotribal municipalities where most residents are of nomadic origins.

⁴⁹ The number of observations for this ttest is 14 for the monotribal and NOT nomadic category and 43 for the heterogeneous category.

	# of obs	Income	Diff	Unempl	Diff	Poverty	Diff
Monotribal + Nom	15	920 (46)	48	20.6%	0.5	33.3%	4.1
				(1.64)		(3.91)	
Multitribal + Nom	16	968 (42)		20.1%		29.3	
				(2.04)		(4.44)	
# of obs	31	28^{50}		31		31	

Table 5.19 Difference in Mean Income, Unemployment, and Poverty Rates between Monotribal and Heterogeneous Municipalities where Residents are primarily of Nomadic Origins

Table 5.19 suggests that increasing diversity does not improve the economic situation of municipalities where the majority of the population is of nomadic origins. Although municipalities that are heterogeneous and also have residents of nomadic origins do better with regard to unemployment and poverty rates than homogenous municipalities with nomadic residents, they actually fare worse with regard to monthly income. However, none of these differences are statistically significant. This series of t tests suggests that it may be the nomadic origins of residents that explain lack of economic development rather than the homogeneity of a municipality. Table 5.17 shows us that monotribal municipalities with residents of nomadic origins fare worse with regard to unemployment and income levels. From Table 5.18, we can see that monotribal municipalities where residents are *not* of nomadic origins share similar levels of unemployment, poverty, and income with heterogeneous municipalities; and the results in Table 5.19 suggest that increasing tribal diversity does not improve economic development in areas populated by previously nomadic tribes.

If the nomadic origins of residents does matter, then do results change if we include this variable in the analysis? Table 5.20 displays regression results for a set of equations

⁵⁰ The number of observations for this ttest is as follows: 13 for the monotribal and nomadic category and 15 for the heterogeneous and nomadic category. One observation was removed because it was a duplicate.

where a limited number of control variables are included while results in Table 5.21 include the full set of control variable.

From Table 5.20, we can see that the significant presence of residents of nomadic origins does lead to worse service provision in two of the three sets of regressions. When the independent variable is unemployment and poverty, the variable for nomadic origin of residents is negatively associated with the percentage of revenues that are self-collected and the quantity of equipment. This relationship is statistically significant. However, including this variable does not does not really alter the relationship between income, unemployment, poverty, and service provision. As in Table 5.4 when this variable was excluded, income has a positive and statistically significant relationship with the quantity of equipment but not the percentage of revenues that are self-collected. Unemployment does not have a statistically significant relationship with either of the service provision measures. The only change is with regard to poverty. In Table 5.4, poverty, like unemployment did not have a statistically significant relationship with either measure of the service provision. However, here poverty and revenues share a positive association that is significant at the 90 percent level. But does this relationship persist if we include the full set of control variables?

As in Table 5.20, the nomadic origins of residents do exert a negative impact on service provision quite consistently across the three sets of equations. After including this variable as well as the full set of control variables, income no longer has a statistically significant relationship with the quantity of equipment. However, poverty has a positive and statistically significant relationship with both measures of municipal services. This is a strange result.

	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment	% revenues self-collected	No. of equipment
Income	-0.00013 (0.00042)	0.00041 (0.00021)**				
Unemployment Poverty			0.0092 (0.23)	0.096 (0.11)	0.17 (0.10)*	0.070 (0.048) [†]
Nomadic origins	-0.19 (0.19)	-0.11 (0.093)	-0.27 (0.016)*	-0.20 (0.074)***	-0.45 (0.0.19)**	-0.027 (0.088)***
Tribal diversity	0.014 (0.013)	0.019 (0.0067)***	0.023 (0.013)*	0.014 (0.0062)**	0.023 (0.0130*	0.014 (0.0060)**
Population	-0.16 (0.13)	0.27 (0.065)***	-0.16 (0.12)	0.35 (0.054)***	-0.18 (0.11) [†]	0.34 (0.054)***
Area	0.000023 (0.0000092)***	0.000020 (0.0000046)***	0.000014 (0.0000089)	0.000017 (0.0000042)***	0.000015 (0.0000085)*	0.000018 (0.0000040)***
# obs	72	72	93	93	93	93

Table 5.20 Impact of Income, Unemployment, and Poverty Levels on Municipal Services (with some control variables)

	% revenues	No of equipment	% revenues	No. of	% revenues	No. of
	self-collected	No. of equipment	sen-conected	equipment	sen-conected	equipment
Income	-0.00014	0.00030 (0.00019)				
	(0.00041)					
Unemployment			0.27 (0.25)	0.10 (0.11)		
Poverty					0.21 (0.09)**	0.081 (0.042)*
Nom origins	-0.23 (0.18)	-0.10 (0.082)	-0.22 (0.15)*	-0.16 (0.067)**	-0.60 (0.17)***	-0.26 (0.079)***
Tribal div	0.011 (0.018)	0.018 (0.0079)**	0.019 (0.016)	0.011 (0.0071)*	0.022 (0.015) [†]	0.012 (0.0071)*
Population	-0.24 (0.23)	0.033 (0.10)	-0.53 (0.19)***	0.11 (0.081)	0.088 (0.17)	0.15 (0.086)*
Area	0.000022	0.0000068	-0.0000028	0.00000045	0.000021	0.0000041
	(0.000013)*	$(0.0000059)^{\dagger}$	(0.000012)	(0.0000054)	(0.000011)	(0.0000051)
Presence of Pals	0.17 (0.23)	-0.043 (0.10)	0.37 (0.17)**	-0.0054 (0.073)	0.30 (0.16)*	-0.0070 (0.074)
Municipal wealth	-0.081 (0.27)	0.26 (0.12)**	0.48 (0.24)**	0.28 (0.11)***	-0.94 (0.26)***	0.14 (0.090)†
# council seats	0.026 (0.040)	0.057 (0.018)***	0.019 (0.037)	0.046 (0.016)***	0.060 (0.035)*	0.054 (0.016)***
Category 1	0.33 (0.46)	0.24 (0.20)	0.36 (0.42)	0.35 (0.18)*	0.83 (0.39)***	0.43 (0.18)**
Category 2	0.024 (0.28)	0.28 (0.13)**	0.093 (0.26)	0.25 (0.12)**	0.42 (0.25)*	0.29 (0.11)***
Category 3	-0.21 (0.25)	0.23 (0.11)**	-0.0027 (0.22)	0.16 (0.098)*	0.12 (0.21)	0.16 (0.099)*
Outlier 1	0.0070 (0.69)	0.42 (0.31)	-0.26 (0.72)	0.44 (0.31)	-0.63 (0.67)	0.49 (0.30)*
Outlier 2	0.20 (0.69)	-0.039 (0.31)	-0.17 (0.68)	-0.13 (0.30)	-0.24 (0.64)	-0.13 (0.30)
Outlier 3	-0.73 (0.93)*	-0.48 ().42)	-0.58 (0.91)	-0.11 (0.40)	-1.47 (0.87)	-0.21 (0.40)
# obs	72	72	93	93	93	93

Table 5.21 Impact of Income, Unemployment, and Poverty Levels on Municipal Services (full set of control variables)

Table 5.21 displays regression results when all control variables are included. For these set of regressions, the nomadic origins of residents is associated with worse services for the most part. For this set of analyses poverty also has a positive relationship with revenues and quantity of equipment. One explanation is that poverty is related to another factor and this factor shares a positive correlation with service provision. For instance, it could be that municipalities that have high levels of poverty receive more support from the Jordanian government, donor agencies, or NGOs. The European Union, for instance, recently completed a program to increase economic development in Jordan's "poverty pockets". Municipalities that receive assistance may be awarded with grants to buy equipment or offered training for its municipal employees.

B.3 Migration and Economic Development (Chapter 5)

With regard to level of migration, remember that monotribal municipalities did worse with regard to level of migration (see Table 5.22).

	# of obs	% of municipal residents	Diff
		who are migrants	
Monotribal munics	30	0.14 (0.016)	0.04**
Heterogeneous munics	63	0.18 (0.0014)	
# of observations	93	93	

Table 5.22 Difference between Monotribal and Heterogeneous Municipalities with regard to the Mean Percent of Municipal Residents who are Migrants

Once again could it be the presence of residents of nomadic origins that explains this difference between monotribal and heterogeneous municipalities? However, as Table 5.22 shows, there are no significant differences between migration levels in monotribal municipalities where residents are primarily of nomadic origins and monotribal municipalities where this is not the case (see Table 5.22). This means that the difference in

	# of obs	% of municipal residents	Diff
		who are migrants	
Monotribal + Nom	16	0.14 (0.025)	0
Monotribal + NOT Nom	14	0.14 (0.020)	
# of observations	30	30	

migration levels between monotribal and heterogeneous municipalities is not likely due to the fact that some monotribal municipalities also have a primarily nomadic population.

Table 5.23 Difference in Mean Level of Migration between Monotribal Municipalities that are Nomadic and those that are not Nomadic

This is also confirmed by Table 5.24 which shows the impact of migration level on service provision and includes a binary variable for whether the municipal population is primarily of nomadic origins or not. Because poverty proved to be significantly related to service provision in Table 5.24 above, I include it in the first set of regressions here and income in the second set. Even after including this new binary variable, migration continues to have a positive and statistically impact on service provision. However, as in previous regression analysis, the relationship between migration and revenues is statistically significant at conventional levels but not the relationship between migration and equipment is not always so. When income is included in the regression, migration shares a statistically significant relationship with equipment but not if poverty is included.

	% of revs that	No. of municipal	% of revs that	No. of municipal
	are self-collected	equipment	are self-collected	equipment
Migr level	0.45 (0.12)***	0.10 (0.057)*	0.49 (0.10)***	0.039 (0.049)
Nom orig	-0.28 (0.17)*	-0.11 (0.081)	-0.45 (0.16)***	-0.25 (0.079)***
Tribal div	0.017 (0.016)	0.020 (0.0078)***	0.024 (0.014)*	0.012 (0.0070)*
Income	-0.0081	0.00031		
	(0.00037)	(0.00018)*		
Poverty	, ,		0.15 (0.086)*	0.074 (0.042)*
# of obs	93	93	93	93

Table 5.24 Impact of Migrants on Service Provision (after controlling for nomadic origins of resident

Chapter VI

Conclusion

In this dissertation, I have argued that contrary to the findings of the ethnic heterogeneity and public goods literature, the presence of tribal diversity is actually a positive force for public goods provision. Previous studies, which found a negative association between the two factors, ignored the relationship between groups and whether that relationship is good or bad as well as the extent of cohesion within the groups themselves. By focusing on the case of Jordan, I demonstrate how consideration of this relationship and tribal cohesion can lead to vastly different results from the previous literature. Jordan is also an excellent place to study tribal diversity given the salience of tribes in social and political life as well as variation in levels of diversity across the country.

6.1 Summary of Argument and Main Findings

In Jordan, tribes generally have good relations with one another as a result of a long history of living together and therefore, heterogeneous municipalities do not suffer from many of the problems that scholars use to explain the negative relationship between heterogeneity and public goods provision. For instance, the fact that all Jordanians speak Arabic facilitates communication between different groups. Daily interaction between members of different tribes in the workplace, places of worship, or residential neighborhoods also mean that if a member of one tribe behaves badly toward the member of another tribe, that individual will likely be sanctioned. Rather than a negative relationship, I have argued that tribal diversity enhances public goods provision through its ability to enhance electoral competition. Tribes often act as political parties, nominating candidates for elections. While an individual tribe can coordinate how many candidates to nominate, it is difficult for one tribe to direct another tribe *not* to offer any candidates in the municipal elections. As a result there will be more competitors in diverse areas, forcing candidates to appeal to voters outside of their own tribe. These voters are more likely to care about the qualifications, previous leadership experience, and commitment of candidates as they are not supporting someone based on family relations alone. Hence, competitive elections are likely to produce better officials who wish to improve service provision. These candidates are also less likely to engage in patronage as clientelistc obligations are felt most keenly by members of the same tribe. However, winning candidates in diverse municipalities are not likely to have succeeded based on votes from their tribe alone.

Furthermore, tribes are not always cohesive during elections and sometimes additional candidates run alongside endorsed candidates and divide votes among the tribal membership. Therefore, homogenous municipalities where tribes are electorally fractionalized can experience as much competition as heterogeneous locations. In Chapter 3, I investigated these hypotheses and found that indeed tribal diversity does not worsen public goods provision at the municipal level. I also find evidence of an interactive relationship between tribal diversity, cohesion, and public goods provision when tribes are cohesive, increasing diversity can positively impact service provision by heightening electoral competition amongst candidates for the municipal council.

While Chapter 3 examined the overall relationship between tribal diversity, cohesion, and public goods provision, Chapter 4 scrutinized the various links along the causal chain that bind these factors together: electoral competition and the level of patronage. Quantitative analyses reveal that diverse municipalities as well as

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homogenous locations where the tribe is fractionalized experience higher levels of electoral competition as well as lower levels of patronage. However, while patronage affects service provision, electoral competition does not.

In Chapter 5, I also investigated the possibility that tribal diversity encourages economic development, which in turn improves service provision. Using qualitative data, I show that residents in heterogeneous municipalities are more likely to establish businesses and for these businesses to survive because they need not worry about competing against family members nor having to offer these individuals a large number of discounts. Residents in heterogeneous municipalities also adopt new professions more easily as they are from different tribes and are therefore, likely to have diverging values and beliefs. In homogenous locations where most residents are from one dominant tribe in the area, values and beliefs are likely to be shared by the entire population. This means that if one individual deems a new profession to be inappropriate then most residents in the same municipality will agree. Even if some members disagree with the prevailing opinion, they may be fearful of acting differently should it harm their reputation within the tribe. This is less of a problem in heterogeneous locations where a high proportion of residents do not belong to the same tribe.

I also note that migrants are particularly beneficial for economic development because they are even more likely to hold diverging views and beliefs and to care less about their reputation as they are unrelated to the majority of residents. In municipalities with a high proportion of migrants, there is an even denser network of businesses and speedier adoption of new occupations.

The establishment of private businesses and the willingness of residents to work in a variety of occupations is beneficial for municipal coffers. Private businesses must pay a fee to be licensed by the municipality and renew this license annually. Tolerance

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for a broad array of occupations implies lower unemployment rates; and employed residents are more willing to pay their municipal fees and taxes than their unemployed counterparts. These qualitative assertions were also supported by quantitative analysis which showed that heterogeneous municipalities experience higher levels of economic development and migration, which in turn positively impacted service provision.

6.2 Scope and Generalization

While the focus of this study is Jordan, these results are potentially generalizable to many parts of the world such as Southeast Asia, Africa, Central Asia, as well as other countries in the Arab world where tribes exist. Indeed some of the arguments made here about the role of interaction in building good relations between groups have also received confirmation elsewhere. For instance, studies have shown that contact between individuals of different racial groups can lead to more racially diverse social groups and friendships (Emerson, Kimbro, and Yancey 2002; Schofield et al. 2010) and less prejudices toward these groups (Pettigrew and Tropp 2006)¹. In a study on public goods provision, Sellers (1999) also found that when neighborhoods are geographically mixed between "managers and professionals on the one hand…and a disadvantaged population of working class and unemployed residents on the other" then managers and professionals will work toward a broad distribution of public goods than when members of these groups reside in homogenous enclaves where they would prefer to pay for private goods. Although Sellers focuses on professional and not racial, ethnic, or tribal categories, employment positions are often correlated with race and ethnicity. These

¹ Participants in these studies could not choose whether to have contact or not with members of other groups so it unlikely that these findings are due to fact that some individuals are simply more open to friendships with members of different groups. An example of when study participants cannot choose whether or not to interact with members of other groups is roommate selection in college. Some universities do not permit freshmen to select their roommates but assign roommates to each student based on criteria such as when they tend to wake up and go to bed.

studies suggest that it is not diversity that is problematic for service provision but the segregation of groups.

But what do findings from this dissertation imply about the previous literature regarding ethnic heterogeneity and public goods provision? And is it possible to conclude that tribal and ethnic diversity are conceptually equivalent and that these results should cause us to rethink the negative relationship between ethnic heterogeneity and public goods? What I wish to highlight in this study is that the basis of identity is important, regardless of whether it is tribal or ethnic. Jordanians identify as belonging to a particular tribe and therefore, behave accordingly. Members of a particular ethnicity also identify with their group and give preference to co-ethnics or derive greater utility when co-ethnics benefit from government policies in the same way that members of Jordanian tribes do. In locations that are ethnically heterogeneous, voters often prefer to support a co-ethnic and in return elected officials offer patronage to members of their group. This is also true for members of Jordanian tribes. In Jordan, the tribal cleavage².

Other forms of identity govern behavior as well. Benedict Anderson (1991) argues cogently that national identity involves perception of belonging to an "imagined community". History is full of examples of peoples of the same ethnic background but which politics has separated such as the Taiwanese and Chinese; Indians, Pakistanis, and Bangladeshis; North and South Koreans; and the Irish and Northern Irish. In the voting literature, some scholars argue that partisanship is not a cognitive decision but rather an emotive one based on feeling that we belong to a particular team (Green, Palmquist, and Schickler 2002; Niemi and Jennings 1991). Our identity as a supporter of Republicans or

² The Palestinian vs. Jordanian cleavage is also relevant in Jordan although it is not part of this study. However, the presence of this cleavage does not diminish the relevance of tribes in Jordan. As stated in Chapter 1, members of both ethnic groups belong to tribes.

Democrats can affect which party we donate money to and/or time, which positions we adopt on issues, whom we socialize with, and of course which candidates we support.

But even if the type of cleavage does matter for public goods provision, this study is valuable for a number of different reasons. First of all it draws attention to other sources of social diversity outside of ethnicity. Even though tribes are present in a number of different locations in the world, only a few studies have systematically examined their role in political life. Other sources of social diversity such as religion, language, culture, gender, and foreign birth have also been eclipsed by work on ethnicity. Secondly, by focusing so much on ethnic heterogeneity, we may begin to assume that all types of social diversity naturally exert negative influences on public goods provision. Also by not comparing ethnic diversity to other forms of diversity we may think that there is something inherently "bad" about ethnicity instead of investigating more systematically why ethnic cleavages might be particularly troublesome. We need to understand what conditions cause cleavages in general to become politicized and whether other differences between groups such as religion, socioeconomic background, and language are self-reinforcing or cross-cutting. However, only further study will determine whether the type of cleavage matters or whether they are interchangeable.

The purpose of this study is not to refute every negative finding between ethnic heterogeneity and public goods provision. What I wish to do is to draw attention to other sources of diversity and to move toward a more theoretical discussion of why some cleavages are problematic for public goods provision and others are not. The contribution of this research project is knowledge that the relationship between groups as well as intra-group relations can affect diversity's impact on public goods provision. Future studies should take these factors into consideration when assessing the relationship between social diversity and service provision.

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