Strategic Behavior in the Israeli-Palestinian Conflict

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Abstract

Over the past 60 years, the Israeli-Palestinian conflict has been a focal point of Middle Eastern politics. Since the 1990s, the two sides have attempted to resolve their land dispute and cease the ongoing cycle of violence. Although it is clear that these hostilities are costly and a peace agreement would be mutually beneficial, the sides have been unable to negotiate a deal. I take an economic approach to the conflict to explain this paradox as well as the dynamics of the interaction over the past 25 years. To do this, I adapt a model developed by Ethan Bueno de Mesquita (2005) that explains the interaction between a government and the moderate and extremist factions of a terrorist dissident group. My additions emphasize the political party of the government and differentiate between concessions and final status peace agreements. Applying the model to the Israeli-Palestinian conflict, I look at a number of key junctures – the 1996 Israeli election, the 2000-01 final status negotiations, and the 2005 Gaza withdrawal – and the strategies each side employed. Each of these events defied Bueno de Mesquita's explanations, but can be rationalized with my adaptations. I conclude that a peace deal requires, at minimum, a confluence of two elements to be successful: a left wing Israeli leadership (e.g. Labour) and a strong Palestinian moderate faction (Fatah). The model shows, conversely, that the current presence of a Likud-led Israeli government and a popular, consolidated, and militarily strong Palestinian extremist group (Hamas) narrows or even eliminates the bargaining space, cutting off deals that would make the majority of people on both sides better off.

Keywords: game theory, Israeli-Palestinian conflict, conflict, commitment problems

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1 Introduction

On May 19th 2011, President Barack Obama, in a seminal speech on the Middle East, pledged his commitment to ending the more than six-decade old conflict between the Israelis and Palestinians. Yet he, like the presidents before him, has been unable to bring an end to the violence and failed negotiations that have characterized the past 25 years.

Despite the perception that a resolution to the conflict would be extremely difficult, its continuing nature remains a paradox. Why would the two sides continue a violent cycle of attacks and retaliation when both would certainly be better off making a deal to live in peace? Scholars have advanced a number of explanations for the failure of Israel and Palestine to reach a comprehensive of peace agreement. Some point to conflicting national identity narratives, others to an unwillingness to compromise on religious lands, and others still on inept leadership and infighting (Bar-Siman-Tov 2010). Yet, unless we accept the absurd premise that they get positive net benefits from the conflict, logic tells us that there exists some agreement that would make both sides better off. What, then, are the reasons that Israel and Palestine have been unable to reach such an agreement?

This is where an economic approach can be illuminating. With the presumption of rationality, I use game theory to help explain not just the continuing nature of the Israeli-Palestinian conflict, but also a number of its internal puzzles. The model I present elucidates why, for example, Yasser Arafat rejected Israel's offer of an independent Palestinian state in 2000 and why Israel unilaterally withdrew from Gaza in 2005, despite these events being ostensibly irrational.

There is a rich literature on both conflict in general and on the Israel-Palestinian conflict in particular. This project differs from preceding research in its close focus on the

conflict itself. Most other authors have used the Israeli-Palestinian conflict as an example or application to help advance a particular model they develop. I do not know of any other papers, however, that attempt to explain the dynamics of the Israeli-Palestinian conflict in their entirety. To that end, I adapt a model presented by Ethan Bueno de Mesquita in his paper "Conciliation, Counterterrorism, and Patterns of Terrorist Violence" (2005). While Bueno de Mesquita's model explains the rises and falls in the level of violence observed from 1990 to 2001, it ultimately falls short in explaining the breakdown of peace talks in the latter half of the 1990s, the rejected 2001 final status agreement, and many of the events following 2005. Therefore, I offer two adaptations that capture important elements missing from Bueno de Mesquita's model. These modifications allow me to explain the pattern of events from 1988 until today, and also yield theoretical predictions as to the main barriers to future peace deals.

This paper proceeds as follows. In Section 2, I review the relevant literature on the Israeli-Palestinian conflict, in particular, and on conflict more generally. In Section 3, I present a potted history of Israel since its independence in 1948, offering cursory explanations for early events and a justification for my consideration of the modern period. In Section 4, I present the Bueno de Mesquita model that forms the basis of my analysis. In Section 5, I offer two adaptations to his model that capture essential omitted factors in the conflict. In Section 6, I apply the model to the conflict and argue for its usefulness in understanding the dynamics of recent interactions. Finally, Section 7 concludes and points to necessary conditions for a future peace deal.

2 Literature Review

The existing literature relevant to my study falls broadly into two categories: articles on the Israeli-Palestinian conflict and more general articles on conflict and its resolution.

2.1 The Israeli-Palestinian Conflict

There is a wide variety of literature on the Israeli-Palestinian conflict, mostly from a political science perspective. For example, Rowley and Taylor (2006) review the conflict from its ancient origins to the establishment of Israel in 1948. The authors highlight the long history of fighting over land that both Jews and Muslims consider sacred.

Most articles, however, focus on the modern period following the establishment of Israel. Abu-Qarn (2008) looks at the economic aspects of the Israeli-Arab conflict over the past six decades. Beyond a broad historical review, Abu-Qarn highlights how a peace agreement would be mutually beneficial. Studies such as El-Naggar and El-Erian (1993), Fischer, et. al. (1993), and Gleditsch, et. al. (1996) examine the many facets of a so-called "peace dividend." These gains include "reduced military expenditure and channeling of the resources to more productive sectors, increased private investment and foreign inflows, and increased regional integration and trade" (Abu-Qarn 6).

Finally, Rowley and Webb (2007) look at how the history of the Israel-Palestine conflict has made current peace negotiations more difficult. The authors contend that weak political systems and a history of "deep-rooted malevolence" have made peace negotiations entail very high transaction costs. These transaction costs are why the Coase theorem – which posits that with good information and low transaction costs two sides should be able to negotiate a mutually beneficial agreement – does not apply in this setting (Rowley and Webb 2007).

Overall, the literature on the conflict underscores how economic, political, and historical differences create barriers to a successful peace agreement, which scholars believe would certainly be mutually beneficial. These historical facts are important when considering how to apply the literature on conflict to the Israeli-Palestinian case.

2.2 Conflict and Conflict Resolution

Most of the economic scholarship on conflict centers on war and its causes. James Fearon's "Rationalist Explanations for War" (1995) focuses on how wars originate when the sides are unable to solve disagreements with bargaining. Fearon presents three mechanisms that reduce or eliminate the bargaining space: issue indivisibility, private information and incentives to misrepresent, and commitment problems. Of these, Fearon discredits the first because of the possibility of linkages with other issues and side-payments. For example, ownership over a sacred site may be indivisible, but in practice plans to share visitation rights, have international oversight, or split administration of two sacred sites can work around these difficulties.

For the second cause, Fearon highlights how asymmetric information can bring about war, mostly through disagreements or miscalculations about relative power and incentives to misrepresent this information. Fearon summarizes this point:

While states always have incentives to locate a peaceful bargain cheaper than war, they also always have incentives to do well in the bargaining. Given the fact of private information about capabilities or resolve, these incentives mean that state cannot always use quiet diplomatic conversations to discover mutually preferable settlements. (400)

The third point, commitment problems, is the most important for my project. Fearon emphasizes a number of possible commitment problems, offensive advantages, a future shift in the balance of power, and strategic territory being the three primary ones. In

general, if an agreement or exogenous factors are going to shift the balance of power between the sides, the bargaining space will shrink significantly. Germane to my study, Fearon uses the example of the Golan Heights. Fearon explains that while both sides may prefer a peace deal, the strategic military value of the Golan Heights means its transfer could radically increase one side's future bargaining leverage (Fearon 1995, 408).

Building on Fearon's analysis, Robert Powell (2006) provides a closer examination of commitment problems, distilling them into two categories. Common to commitment problems, Powell points out, is that bargainers cannot assure a future divisions of benefits, each have the option of using force, and the distribution of power shifts over time. In the first category, large, rapid shifts in the distribution of power undermine settlements. A temporarily weak state is unable to commit to honoring promises because it will have incentives to exploit its better bargaining position when it becomes stronger (Powell 2006, 32). The second problem occurs when preventing an attack is particularly costly. In this situation, a group may prefer to wage war in hopes of improving their lot rather than expending resources on merely maintaining the status quo.

In any model of the Israeli-Palestinian conflict, one crucial element is terrorism, which is frequently conducted by Palestinian extremist groups (Hamas and the Islamic Jihad) and sometimes by moderates (Fatah). The assumption of rationality, essential to a game theoretic model, is pushed to its limits when it comes to terrorism, in general and suicide bombing, in particular. Caplan (2006) argues for the relevance of a rational choice model for terrorists on the basis that evidence points to terrorism responding to incentives, being at least somewhat self (or perhaps communally) interested, and having

mostly rational expectations. From this, the author concludes that terrorists are far closer to "homo economicus" than it would first appear.

Rui J. P. de Figueiredo Jr. and Barry Weingast (2001) build on this understanding, examining how terrorism is used as a form of bargaining leverage in the Israeli-Palestinian conflict. Without terrorism, the Palestinians have little to give the Israelis in return for territorial concessions. De Figueiredo Jr. and Weingast construct a model in which radicals engage in terrorism in order to provoke a response from the government that will push moderates closer to their position. This relies critically on the assumptions that the government either cannot distinguish between moderates and extremists or that anti-terrorist policies impose costs on everyone. The latter of these is almost certainly true in Israel, and this paper highlights how terrorism may influence the relative popularity of the two Palestinian factions. Since popularity is a major determinant of political power, terrorism and retaliation can significantly affect a potential peace deal.

Kydd and Walter (2002) model how violence from extremist groups can disrupt potential peace agreements between the government and moderates. Kydd and Walter apply their model largely to the Israel-Palestine conflict, making it very applicable for my purposes. The model they develop examines the dynamics of a negotiation between the government and moderates with hidden types. The moderates are either strong or weak and either trustworthy or untrustworthy, and these types are unknown to the government. The moderates are able to signal their type by trying to suppress extremist terrorism, but if terrorism occurs, the government cannot be sure if it was the result of: 1) failed suppression, 2) weak trustworthy moderates unable to suppress extremists, 3) strong

untrustworthy moderates unwilling to suppress extremists, or 4) weak untrustworthy moderates unable and unwilling to suppress extremists.

In reference to Israel and Palestine, the model predicts that peace will be difficult to achieve if the Israel does not believe that the (moderate) Palestinian Authority (PA) is strong enough to suppress (extremist) Hamas. Furthermore, Kydd and Walter point out that in situations of higher trust between the Israel and the PA, attacks by Hamas can go a long way to derailing a peace negotiation. Predictably, higher values for peace, lower values for war, and a soft-line government more forgiving of terrorist attacks are conducive to a peace settlement.

Finally, Bueno de Mesquita (2005) extends Kydd and Walter's analysis, more fully exploring the dynamic between a government and dissident groups. Since his model is central to my project, it will be explicated more fully in Section 4.

3 History

3.1 The Warring Period: 1948 – 1988

While the roots of Israel-Palestine conflict lie in the early 20th century tensions between Jewish settlers and local Arab inhabitants, the conflict took on a new dimension after the passing of UN Resolution 181. The 1948 declaration established Jewish and Arab states side-by-side in the former British Mandate of Palestine. Immediately following the resolution's passage and the founding of Israel, Arab forces from Egypt, Syria, Lebanon, Jordan, and Iraq invaded the newly formed state. Israel won the war and expanded its territory. Tense relations and repeated violence ensued for the next 20 years

¹ Israel Ministry of Foreign Affairs, "UN General Assembly Resolution 181 (Partition Plan)" accessed January 11, 2012. http://www.mfa.gov.il/MFA/Peace%20Process/Guide%20to%20the%20Peace%20Process/UN%20General%20Assembly%20Resolution%20181

before, in June 1967, Israel launched a preemptive strike against Egypt when it appeared poised to strike. In the ensuing conflict, known as the Six Day War, Israel captured the Sinai Peninsula and Gaza Strip from Egypt, East Jerusalem and the West Bank from Jordan, and the Golan Heights from Syria. Six years later, in October 1973, Arab forces (primarily Syrian and Egyptian) attacked Israel on the religious holy day of Yom Kippur. The surprise attack was initially very successful, but Israel quickly mounted a counterattack penetrating into Syria within 40 km of Damascus.

The pre-1988 period, characterized primarily by these three wars, represents what I term the "warring period" of the Arab-Israeli conflict. Three features distinguish this period from later years. First, the surrounding Arab nations, not Palestinian groups, were the principal opponents of Israel. Second, the three wars and their aftermath expanded Israeli territory and power roughly to its present status. The Israel of 1948 bears little resemblance to the regional power that it became by 1990, though the 1990 Israel is remarkably similar geographically and militarily to its current state. Conflicts between Israel and Arab nations in the pre-1987 period can rightly be termed "wars" while most, if not all, of the post-1988 armed confrontations are better termed "invasions" or "operations" where Palestine or the Arabs had no reasonable chance of military victory against the Israeli army.

Third, in 1988 King Hussein of Jordan surrendered his claim on the West Bank to the Palestinian Liberation Organization (PLO)² and acknowledged the PLO as "the sole legitimate representative of the Palestinian people" (Kifner 1998). A year prior, Hamas was established as an offshoot of the Egyptian Muslim Brotherhood. These two events established the framework for the three actors – Israel, the PLO, and Hamas – that

² From 1969 to 2006 Fatah led the PLO. For most of this paper I will use the two interchangeably.

dominate today's relations in the region. For those reasons, 1988 separates the "warring period" from the "negotiation period," which is represented by a different set of actors, dynamics, and strategies as the sides attempted to reach a peace accord from the 1990s to present.

3.2 Game Theoretic Rationale for the Warring Period

Following the work of Fearon (1995) and Powell (2006), the three major wars of the pre-1988 period are relatively easy to explain in game theoretic terms. The first of these wars, in 1948, can be viewed as a simple asymmetric information problem. With no past experience against Israel in conventional war, the Arab nations simply underestimated the strength, resolve, and coordination of the Israeli army at that point. The UN Partition Plan offered the Palestinian Arabs less territory than they believed they could win in a military confrontation with the aide of their numerous allies. On the other hand, Israel had no incentive to reveal their actual strength, since doing so might jeopardize their chances of winning. Furthermore, the fact that the land division was handed down by the UN as opposed to bargained between the sides limited the sharing of information and raised the costs of revising the proposal to respond their actual strength.

The wars of 1967 and 1973 can largely be viewed as commitment problems. The Six Day War was a classic pre-emptive war. Israel rationally (and perhaps correctly) believed that Egypt was planning an imminent attack. Fearon observes that if first strike advantages are large enough, the bargaining range can shrink or disappear. Powell (2006, 20) extends this argument by explaining that the "way these advantages undermine political agreements is by creating rapid shifts in the distribution of power. When a state decides to bargain rather than attack, it is also deciding not to exploit the advantages to

striking first." In the Six Day War, the first-strike advantages were too great for Israel to take the time to negotiate an agreement. The results of the war demonstrate this result, as Israel achieved a swift military victory at relatively little cost. This same first-strike commitment problem is also present in the Yom Kippur War. Knowing that Israel had a superior military, the Arab countries used offensive advantages and the element of surprise to gain a military advantage. Even so, the Arab countries were soundly defeated, setting the stage for the asymmetric power dynamic present in the following years.

3.3 The Negotiation Period: 1988 – Present

In 1988, the Palestinian National Council, a parliament-like body for the PLO, proclaimed an independent state of Palestine (Bickerton and Klausner 1995, 229). This set the stage for bilateral negotiations between Israel and the PLO about the creation of a physical state of Palestine in the Middle East. During the 1990s the two sides made great strides towards a peace agreement.

The decade of progress began in 1992 with the election of Prime Minister Yitzhak
Rabin and the Labor party to head the Israeli government. Rabin turned back some of the
settlement policies of his more conservative predecessors and started reaching out to the
PLO diplomatically. In September 1993, Rabin and PLO Chairman Yasser Arafat signed
complementary letters of mutual recognition, representing the beginning of the Oslo
peace process (Bickerton and Klausner 1995, 263). A few days later, Israeli and PLO
leaders signed the Declaration of Principles On Interim Self-Government Arrangements,
which set up the framework for a so-called "land for peace" deal. Under this framework,
Palestine was to renounce violence and lay down arms against Israel in exchange for land
in the West Bank and Gaza Strip for the creation of a Palestinian state. Over the

subsequent five-year period Israel was to slowly transfer more territory over to the newly created PA for civil administration. Meanwhile, the sides would discuss a permanent (so called "final status") agreement and attempt to solve major outstanding issues such as Palestinian refugees, Jerusalem, and Israeli settlements.

The Oslo peace process started off well. It got significant support from the moderate factions of both sides and a majority of approval from both the Palestinian and Israeli people.³ Though there were a few violent exchanges between Israel and Hamas in early 1994, the May 4th Cairo Agreement carried out the first phase of Oslo by formally transferring control of Jericho and parts of Gaza to the PA. The following year, Rabin and Arafat concluded the so-called "Oslo II" agreement, in which Israel turned over even more land. Oslo II put 4% of the West Bank under exclusive Palestinian control, another 25% to administrative-civilian control, and gave the PA full dominion over 65% of Gaza (Shlaim 2001, 528). The Wye River Memorandum, which put the Oslo II parameters into effect, was the last major deal in the Oslo peace process. From there, failed negotiations, broken promises, and missed deadlines punctuated Oslo's slow demise.

There are two principal reasons why the Oslo peace process failed, though scholars point to a number of influential factors. The first is continued violence, especially from the Palestinians. Much of this violence was orchestrated by Hamas, which virulently opposed Oslo. In exchange for the land that Israel was giving up, the Oslo agreements outlined specific security guarantees from the PLO. Yet consistent terrorist attacks during the mid-1990s began to persuade Israel that the PLO and PA were either unable or unwilling to deliver on these promises. Without confidence that its partner could (or

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³ For example, a poll done in September 2003 among Palestinians reported that 65% of them supported the proposed agreement between the PLO and Israeli government (PCPSR, 2003).

would) actually provide security, Israel's incentives to continue the process were greatly diminished.

The second major reason for Oslo's failure was Israel's continued settlement in the West Bank. With a "stake your claim" type of attitude, groups like Gush Emunim fostered Israeli settlements in the occupied territories starting after the Six Day War. A philosophy then developed that once a place was settled it would not be abandoned, making it even more politically difficult for leaders to transfer certain lands to Palestinian administration (Gorenberg 2006). In the same way continued terrorist violence undermined Israel's faith in the PLO, Palestinians saw continued settlement in the West Bank as an affront to the peace process and an indictment of Israel's credibility.

Behind these reasons is the change in Israeli leadership that exacerbated existing trust issues. In 1995, one of the driving forces behind the peace talks, Yitzhak Rabin, was assassinated. His successor, Shimon Peres, continued many of Rabin's policies, but is generally considered to be less effective. The biggest blow to the peace process occurred in 1996 when Peres lost the election to the more conservative Benjamin Netanyahu (Shlaim 2001). Helping Netanyahu win was a sharp uptick in violence, orchestrated mostly by Hamas, in the months leading up to the election. Netanyahu had a strong stance on security and was unwilling to make major concessions in peace negotiations. In addition, Netanyahu continued and increased Israeli settlements in the West Bank, aggravating the PLO and slowing the pace of peace talks.

Though the Oslo Peace Process ultimately failed, it did help set the stage for the most significant final status negotiations of the conflict, which occurred in late 2000.

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⁴ See Avi Shlaim, *The Iron Wall* pg. 556-563 for a discussion of Peres's specific failures after Rabin's assassination.

Under intense pressure from President Clinton, Arafat and Israeli Prime Minister Ehud Barak met at Camp David to discuss a two-state solution. The negotiations resulted in Israel's most comprehensive peace offer, which would have created a Palestinian state in the West Bank and Gaza. Though the proposal addressed all of the main issues (refugees, Jerusalem, and the contiguity of the Palestinian state), Arafat turned it down as inadequate. Shortly after, Clinton's last-ditch effort to reach an agreement failed and the Second Intifada marked the violent and official end to the Oslo peace process.

Though many small confrontations have occurred since 2000, the most significant is the controversy over Gaza. In 2003, the relatively conservative Israeli Prime Minister Ariel Sharon announced that Israel would fully withdraw from the Gaza Strip. In September 2005, the Israeli government removed the 21 settlements and more than 8,000 Israelis living in Gaza (Morley 2005). The unilateral move was thought to be a step forward in the peace process, though no significant progress followed. In 2007, Hamas took control of Gaza (now completely under Palestinian administration) from the PLO. Continued terrorism and rocket attacks coming from Gaza prompted Israel to invade and occupy the southern province in 2008. Israeli officials sought to deal a strong blow to the Hamas in an attempt to deter further rocket fire and "force the radical group to accept a durable cease-fire on Israel's terms." The operation received extensive criticism abroad, but was successful at reducing terrorism. Though US Presidents Bush and Obama have since attempted to resume final status negotiations, no significant progress has been made.

A Formal Model 4

⁵ ProCon.org, Israeli-Palestinian Conflict: Historical Timeline, accessed January 11, 2012. http://israelipalestinian.procon.org/view.resource.php?resourceID=000635#israel2

Ethan Bueno de Mesquita (2005) presents a model that seeks to explain the interplay between patterns of violence and concessions. He notes that we often see a spike in violence following concessions by the government, and yet we continue to see governments making concessions. To explain this paradox – and to understand concessions and terrorist violence more generally – Bueno de Mesquita develops "a model in which terrorist organizations become more militant following concessions because only moderate terrorists accept them, leaving extremists in control." In what follows, I will distill Bueno de Mesquita's complex model down and extract the key findings. Later, I will modify the model to better account for two key factors: the political leadership of Israel and the strength of Palestinian extremists.

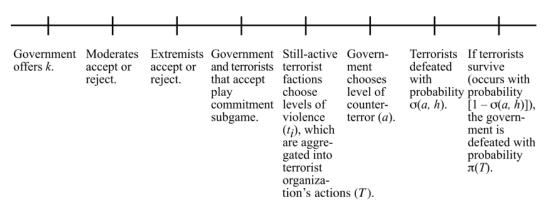


Figure 4.1: Timeline of Strategic Choices (Bueno de Mesquita 2005)

The game proceeds as follows (see Figure 4.1): The government acts first, offering a level of concessions, k. This can principally be viewed as land, but could theoretically include anything from formal recognition to monetary payments. In response to this offer of concessions, moderate and extremist factions⁶ can each accept or reject. The condition for accepting is that the group must lay down arms and cease terrorist activities. If at least

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⁶ For the purposes of this project, Israel is the "government," Fatah and (for the most part) the PLO the "moderates," and Hamas, and to some extent the Islamic Jihad, the "extremists."

one faction accepts, the government plays the "commitment subgame" (described below, shown in Figure 4.2) with the group(s) that accepted. The factions that rejected the concessions – termed "active terrorists" – choose a level of violence, t_i $i \in \{m,e\}$, which is aggregated into a total level of violence T. If one group accepts, $T = t_i$. If both groups decline, however, $T_{m,e} = \lambda t_e + (1-\lambda)t_m$, where t_e is the extremists' preferred level of violence, t_m is the moderates' preferred level of violence, and λ is the relative power of the extremist faction. Intuitively, $t_e > t_m$ meaning that extremists prefer more violence than moderates. After terrorists decide on a level of violence, the government chooses a level of counterterror, a.

Payoffs are then realized. The terrorists are defeated with probably $\sigma(a,h)$, (where h is a variable denoting whether the commitment game was solved) giving the government a victory payoff, W. If the terrorists survive, the government is defeated with probability $\pi(T)$, giving the moderates and extremists payoffs of θ_e and θ_m respectively. If neither side is defeated, they both gain continuation benefits, minus applicable costs. Table 4.1 lists all of the variables Bueno de Mesquita uses and gives brief descriptions.

Variable	Description			
τ	Time coefficient			
k	Level of concessions offered from the government to the terrorist factions			
a	Israeli investment in counterterrorism			
h	Whether government is aided in counterterror (takes value of \overline{h} when			
	moderates aid government in counterterror and \underline{h} when they do not. $\overline{h} > \underline{h}$.)			
σ(a,h)	Probability of the Israel defeating the Palestinian terrorists (increasing in a			
	and h)			
γ(a)	Cost of counterterror (increasing in a)			
T	Terror attempted			
π (T)	Probability of terrorists defeating government (increasing in T)			
R	Terrorist resources			
ηR	Fraction of resources remaining if only one side accepts concessions			
t_{i}	Terrorist group i's preferred level of violence (t _e > t _m)			
$\theta_{\rm i}$	Terror group i's utility from defeating the government ($\theta_e > \theta_m$)			
v(R-T)	Utility from resources spent on non-terror activities (increasing in R-T)			

λ	Influence of the extremists within the terror organization		
c Cost to moderates of aiding the government in counterterror			
В	Government payoff to surviving (continuations benefits)		
W	Government payoff to defeating the terrorists		

Table 4.1: List and description of variables from Bueno de Mesquita (2005)

Bueno de Mesquita solves the model through backward induction. He therefore begins his analysis with the level of counterterror that Israel chooses. Here, the government attempts to "maximize expected utility given the concessions it has made, the expected level of attempted terror, and whether the former terrorists are aiding it" (Bueno de Mesquita 2005, 153). Since these are determined at earlier stages, Israel acts according to the first-order condition expressed in Equation (1).

$$\frac{\partial \sigma(a,h)}{\partial a} \left[W - (1 - \pi(T))(B - \gamma(a) - k - T + V_G) \right] = (1 - \sigma(a,h))(1 - \pi(T))\gamma'(a) \tag{1}$$

This equation simply states that the optimal level of counterterror (a) will occur when the marginal benefit to additional counterterror (left-hand side of Equation 1) balances the marginal cost of the resources expended (right-hand side of Equation 1). More expenditure on counterterror increases the chance that Israel defeats the terrorists ($\sigma(a,h)$) and receives W and also on potential continuation benefits if the game continues (left hand side). However, the expenditure of limited resources is costly if neither side is defeated (right-hand side).

Next, Bueno de Mesquita solves for the optimal level of violence chosen by the terrorist organization. This is a function of the preferences of its constituent members. Terrorists face a tradeoff between the benefits of terror (increased probability of defeating the government) and its costs (increased counterterror from government and thus a higher chance of being defeated and decreased resources for other uses). Bueno de Mesquita shows that if resources do not decrease too much after concessions ($\eta \approx 1$) then $T_e > T_{m,e}$,

meaning that more terror will occur under just extremists than an organization composed of both extremists and moderates.

Before the sides make it to the next stage, they must first attempt to solve the commitment subgame. The solution here will influence counterterror especially, since the government will invest more if the former terrorists are aiding it. The commitment subgame is a simple prisoner's dilemma between the government and the terrorists that accepted concessions.

		Terrorists	
		Aid	No aid
	Concessions	$EU_G(\sigma(a^{\tau}, \overline{h}^{\tau})) - k^{\tau},$	$EU_G(\sigma(a^{\tau},\underline{h}^{\tau}))-k^{\tau},$
Government		$k^{\tau}-c$	k'
	No	$EU_G(\sigma(a^{\tau},\overline{h}^{\tau})),$	$EU_G(\sigma(a^{\tau},\underline{h}^{\tau})),$
	concessions	-c	0

Figure 4.2: Stage game of the commitment subgame (Bueno de Mesquita 2005)

To analyze this game, it is important to note that if either side accepts concessions, only the moderates will do so. If both the moderates and the extremists accept concessions, they will both have to lay down arms, and the government will have no incentive to abide by its concessions since it will have achieved its goal of ceasing terrorism. In the commitment subgame, the government can either offer concessions or not and the terrorists can either aid the government in counterterror or not. Here, the concession made by the moderates is their assistance in rooting out the extremist terrorists, about whom they are presumed to have more knowledge than the government. The situation is a prisoner's dilemma since each side has a dominant strategy to not offer concessions, but both sides would be better off if they could both agree to do so. To solve this game, Bueno de Mesquite provides for history dependent strategies, which allow the

sides to engage in tactics such as tit-for-tat that link actions across time. The commitment subgame is solved for a level of concessions that is not too small relative to the probability of the terrorists or government being defeated but not too large relative to the government's increase in expected utility from the aid increasing their probability of defeating the terrorists. These conditions are expressed for Palestine and Israel, respectively, in the equations below:

$$\frac{k-c}{k} > \sigma + (1-\sigma)\pi \tag{2}$$

$$k < \frac{\overline{\sigma W} + B - \overline{\gamma} - T_a}{\overline{\sigma} + (1 - \overline{\sigma})\pi(T_a)} - \left(\frac{1 - \pi(T_{na})}{1 - \pi(T_a)}\right) \frac{\underline{\sigma W} + B - \underline{\gamma} - T_{na}}{\underline{\sigma} + (1 - \underline{\sigma})\pi(T_{na})}$$
(3)

The first condition (Equation 2) means that the moderates will provide aid if the amount of concessions they get (k) is larger than the probability either side is defeated. This makes the former terrorists unlikely to agree to concessions when the probability that the conflict ends is high, implying that moderates will not abandon strong terrorist organizations or accept concessions from overly powerful governments.

The second condition (Equation 3) compares the benefits Israel will get with and without aid from the moderates. The upper bar variables represent the values these take with aid – by definition $\sigma > \underline{\sigma}$ and $\gamma > \underline{\gamma}$. Since accepted concessions means $T_{m,e} \rightarrow T_e$, we expect the probability that the government is defeated to increase as well $(\pi(T_a) > \pi(T_{na}))$. This means that the value of the counterterror in helping defeat the terrorists must outweigh the probable increase in the chance the government itself is defeated and the cost of giving up concessions.

If the commitment subgame is solved, the moderates must decide if they will get more benefit from engaging in terrorism and trying to defeat the government or accepting concessions. Importantly, Bueno de Mesquita finds that there is a level of concessions acceptable to the moderates but not the extremists, resulting in an extremist-controlled terror organization. The moderates thus must compare k to $EU_m(T_{m,e})$. If $k < EU_m(T_{m,e})$ then they will reject the concessions. However, if $k \ge EU_m(T_{m,e})$, they have an incentive to accept. If the moderates accept, the extremists will, of course, reject since otherwise the government would not honor the concessions.

Finally, the government must choose whether it is worthwhile to offer enough concessions to get the moderates to accept. Knowing the preceding steps, the government must compare the expected utility getting counterterror aid with the value of the concessions. Mathematically, if concessions are not accepted the government will get utility according to Equation (4), if concessions are accepted, utility will be equal to Equation (5).

$$EU_{G}(k < \hat{k}) = \frac{(1 - \sigma_{m,e})(1 - \pi_{m,e})(B - \gamma_{m,e} - T_{m,e}) + \sigma_{m,e}W}{\sigma_{m,e} + (1 - \sigma_{m,e})\pi_{m,e}}$$
(4)

$$EU_{G}(\hat{k}) = \frac{(1 - \sigma_{e})(1 - \pi_{e})(B - \gamma_{e} - \hat{k}) + \sigma_{e}W}{\sigma_{e} + (1 - \sigma_{e})\pi_{e}}$$
(5)

If the moderates accept concessions, the investment in counterterror, the probability of preventing terror attacks, and the amount of attempted terror will all be higher than when both the moderates and extremists are in the terror organization (all else the same). That is, $a_e > a_{m,e}$, $\sigma_e > \sigma_{m,e}$, $\gamma_e > \gamma_{m,e}$, and $\pi_e > \pi_{m,e}$. The comparison of these two equations leads Bueno de Mesquita to a final solution of the model that gives two paths:

1) The "No Deal" path which occurs if the concessions offered are not large enough for the moderates to accept in which case the level of attempted terror is $T_{m,e}$.

2) The "Buying the Moderates" path, where concessions are just large enough for the moderates to accept, the extremists will reject, the moderates will provide counterterror aid, and the level of terror is T_e .

It is useful to compare the state of the world under each of these two situations. The model says that assuming the terrorists' total resources (allocated between terror and non-terror activities) do not diminish too much when the moderates accept concessions, the "level of terrorism is higher following concessions to the moderates. However, the expected duration of the conflict is shorter following concessions to the moderates" (Bueno de Mesquita 2005: 162). Finally, the author addresses the terms of the settlement between the moderates and the government. The following five points summarize Bueno de Mesquita's conclusions about the nature of the concessions settlement:

- 1. The more likely the terrorists are to lose the conflict (higher σ), the more attractive it is to the moderates to strike a deal with the government
- 2. The more radical the moderates are (the higher θ_m), the better the offer made by the government must be for the moderates to accept
- 3. The more control the moderates have over the terrorist organization (the lower λ), the better the offer from the government
- 4. Moderate leaders will be particularly interested in seeking a deal when they believe their control over their organization is declining
- 5. Moderate terrorists might demonstrate an ability to control extremists within their ranks while they are still actively engaged in terror, yet be reluctant to do as much to eradicate those extremists after accepting concessions.

After concluding his analysis of the model, Bueno de Mesquita proceeds to apply the model to the Israeli-Palestinian conflict to demonstrate its practical application. Before I attempt a similar task, I will first offer some adaptations that will help fill a few lacunae in his model. With these adaptations, the model will be able to more fully and accurately describe the dynamics of the conflict over the past 25 years.

5 Adaptations

I offer two main adaptations to Bueno de Mesquita's model, addressing two separate concerns. The first adaptation looks to address a particular section in which I believe he has incorrectly explained historical events. The second adaptation comes as a result of changing conditions that mostly evolved after the scope of his paper. This adaptation allows my model to explain events from 2003 to 2010, a time period that Bueno de Mesquita does not consider, but that would not fit with his model.

5.1 Differing Land Valuations

The first modification helps correct for Bueno de Mesquita's questionable explanation for Israel's change in behavior in 1996. After five years of successful negotiations and increasingly promising land-for-peace deals, Israel suddenly began to back off some of their commitments. While there is dispute as to whether Israel actually reneged on any formal agreements, there is little doubt that Israel violated the spirit of Oslo during the second half of the 1990s by allowing further settlement in the West Bank. At the same time, it appears as though the Palestinian moderates did little to stop Hamas terrorism. Bueno de Mesquita explains this equilibrium shift by saying, "As recent events have demonstrated, the Israelis seem to have concluded that they overestimated the helpfulness of the Palestinians in counterterror. This has led them to renege on promised concessions, which has led the Palestinians to reduce their aid in counterterror" (Bueno de Mesquita 2005: 165). Within the framework of symmetric information and rational actors, especially in a conflict as protracted as this one, it is strange that one side would grossly misestimate the effectiveness of the aid they were receiving. Furthermore, why would it take them nearly three years to make this realization?

I argue that, rather than a misestimation by Israel, the reason for the shift in equilibrium is the change in Israeli leadership from the left-wing Labor party to the right-wing Likud party. As part of their political philosophy, Likud advocates for an Israel in the whole of the ancient land (which includes the West Bank) and general unwillingness to remove any Israeli settlements, a necessity in any viable peace deal.

Conveniently, the doctrinal and preferential differences between the two parties can be modeled as differing values placed on concessions. Likud and other right-wing parties have consistently placed a higher value on land. From continually encouraging settlers, to refusing to give up certain land, to generally opposing the "land for peace" philosophy, Likud has revealed this subjective preference. These divergent valuations are simple to model. If k is the level of concessions offered, let $\Delta_j(k)$ denote the subjective value these concessions have to party $j \in \{R,L\}$. We can then view the value of concessions as $\Delta_R(k)$ for the Israeli right (Likud) and $\Delta_L(k)$ for the Israeli left (Kadima and Labor). The nature of this function is such that $\Delta_L(k) < \Delta_R(k)$ for all k. Importantly, this implies that there exists a level of k for which:

$$\Delta_{L} < \frac{\overline{\sigma W} + B - \overline{\gamma} - T_{a}}{\overline{\sigma} + (1 - \overline{\sigma})\pi(T_{a})} - \left(\frac{1 - \pi(T_{na})}{1 - \pi(T_{a})}\right) \frac{\underline{\sigma}W + B - \underline{\gamma} - T_{na}}{\underline{\sigma} + (1 - \underline{\sigma})\pi(T_{na})} < \Delta_{R}.$$

In other words, all else constant, there exist deals that are acceptable to the Israeli left and not to the Israeli right. Because the Israeli right finds concessions more costly, they will need more counterterror aid from the Palestinians to make a deal. Often this could mean that no deal is possible when the Israeli right is in power. With this adaptation, I can properly explain the collapse of the peace process in 1996 not as a misestimation but a

change in valuation that occurred when Likud defeated Labor in elections. This event is examined in more detail in Section 6.

5.2 Concessions versus Final Status Agreements

The second adaptation I develop involves differentiating between a final status agreement and concessions. This distinction leads to an increased emphasis on λ , the relative strength of the two Palestinian factions – Fatah (moderates) and Hamas (extremists). Where in the previous modification I adapted a parameter within the model, here I add a distinction outside it. While I will use Bueno de Mesquita's variable λ to track changes in power dynamics within the Palestinians, the way it is conceptualized in concessions, as he uses it, and final status negotiations, as I use it, differs significantly.

Bueno de Mesquita's omission of a distinction between a final status agreement — that would end the conflict — and more minor territorial concessions makes the failed 2001 peace offer particularly difficult to explain. In final status negotiations, a few major elements change. First, Palestine must be extremely forward-looking. If they accept a deal, they will forfeit the ability to gain any future concessions. Second, due to the military power disparity, even after a deal is accepted Palestine must be able to fully deliver on their promises. During concessions, Israel is able to tolerate some terrorism because it is receiving counterterror aide and moving toward a final deal. In a final status negotiation, Israel would require far more in terms of security guarantees. These considerations change the dynamic between the sides and lead to an increased emphasis on the relative power of the two Palestinian factions. I will first explain how λ works in Bueno de Mesquita's model, then how it differs with this addition.

In Bueno de Mesquita's model, λ was relatively unimportant, measuring the strength of the extremists relative to the moderates. It appeared in the model through the equation $T_{m,e} = \lambda t_e + (1-\lambda)t_m$, which represents the amount of violence against Israel when both the extremists and moderates are part of the terror organization. The variable $T_{m,e}$ appears in Equation 4, which is critical in determining whether Israel would offer concessions. A higher value for λ means a higher value of $T_{m,e}$ which lowers the government's expected utility if no concessions are accepted. We would therefore expect higher values of λ to make concessions more likely as it increases the bargaining range.

The situation differs in final status negotiations. Recognize first that in any deal the extremists will demand more than the moderates. Therefore, in negotiating a final status deal with symmetric information, a government offer will occur at one of two points: 1) a deal that is just barely acceptable to the moderates, but not to the extremists, or 2) the minimum acceptable to the extremists, which will be accepted by both factions. The history of the conflict has shown that Hamas demands far too much to make the latter deal viable. Hamas still refuses to even acknowledge Israel's right to exist – and has been unwilling to do so even in a comprehensive peace deal. Therefore, we can assume that if any deal is offered it will be of the first variety. When deciding whether to accept such a deal, the Palestinian moderates must consider whether they would be able to internally enforce the agreement. Since the deal would be anothema to the extremists, Hamas would launch a campaign of resistance, likely including a wave of terrorist attacks against Israel, in an effort to undermine the settlement. If the moderates lost this internal struggle (or simply could not suppress violence from the extremists), Israel would lose all incentives to abide by the agreement. This leads to the conclusion that if the extremists are too

powerful relative to the moderates (λ is too high), a final status agreement between the government and the moderates would be unenforceable.

This result is key to my adaptation, and is the main differentiation between my model and Bueno de Mesquita's. It is important to recognize that it is not simply necessary for the moderates to control a majority of Palestinian support. If a final status agreement is concluded, the moderates must be able to suppress all (or nearly all) of Hamas's terrorism. This means that Fatah would have to be militarily powerful enough to wipe out the extremist terror network. Even though third party actors like the United States and the United Nations would likely facilitate a final deal, the moderates would still need to be able to provide strong governance and security in the newly formed state.

This addition also leads to a more nuanced understanding of how changes in λ effect regular concessions. While higher values of λ make the status quo more costly, it also makes the moderate's concessions less valuable. A relatively powerful and popular extremist faction makes counterterror aid from the moderates is not as reliable or effective. A stronger Hamas is more equipped to hide its actions from Fatah, and a weaker Fatah and PA are less able to enforce security measures on Hamas. If λ rises enough, the value of counterterror aid might be low enough that even the Israeli left will be unwilling to make concessions. This counteracts the effect a rise in λ has on $T_{m,e}$ and makes the net influence of changes in λ on a concession agreement ambiguous.

Under high values of λ , a final deal is impossible and the bargaining space for concessions closes considerably, making the relative strength of Hamas and Fatah over time particularly important. In tracking the value of λ , endogeneity is a potential problem. What concerns us is not whether the sides can influence λ , but rather endogeneity with

respect to the peace deals themselves that would conflate motivations of the actors. For example, if concessions are shown to lower λ , the Oslo peace process could just as easily be interpreted as an attempt by Fatah at grabbing power as reflecting the motivations attributed by the model. Therefore, in Section 6, I track the movements of λ over the past 25 years and discuss potential issues of endogeneity. Equipped with these two adaptations, I apply the model, matching its predictions against the historical record.

6 Application

At the turn of the decade in 1990, peace seemed far off between the Israelis and the Palestinians. A strong Israel, led by the hard-line Prime Minister Yitzhak Shamir and his Likud coalition government, was particularly unwilling to compromise with the relatively weak Fatah-led Palestinian Liberation Organization. Events of the preceding 20 years had resulted in an apex in Israeli regional power and security. Not only had Israel yet to recognize the PLO as the official representative of the Palestinian people, but the PLO had also not acknowledged Israel's right to exist. Despite these inauspicious beginnings, however, 1990 marked the beginning of the Israel-Palestinian peace process that continues – unfinished – to this day. Results from the model help elucidate the motivations and actions of the sides since 1990.

Though the PLO was initially weak, it was gaining strength in the early 1990s. This was especially true relative to the extremists (Hamas and the Islamic Jihad), as those groups had yet to rally significant support. Thus, 1990 represented a situation with a low λ and a reasonably moderate Fatah (low θ_m). Bueno de Mesquita notes that when λ is low concessions will be higher, leading to the somewhat counterintuitive intuition that the government might aid extremists in order to incentivize the moderates "to accept

concessions before their power slips away, [decreasing] the ultimate level of concessions granted" (Bueno de Mesquita 2005, 164). However, although the right wing Israeli government did aid emerging extremist groups in the First Intifada, perhaps pushing the PLO to the negotiating table in 1992, λ remained low from 1988 to 1993. This suggests that Israel, in attempting to raise λ , pursued a strategy of concessions over a final status agreement but was careful not to strengthen the extremists too much.

Despite a situation ostensibly ripe for a peace deal, we did not see an agreement until 1993. My first addition to Bueno de Mesquita's model explains why. Recall that for any given k, the Israeli right values those concessions at $\Delta_R(k) > k$, and the Israeli left values them at $\Delta_L(k) < k$. From 1988 to 1992, with Likud in power, we had $\hat{\Delta}_R < \bar{k}$. This meant that the necessary concessions to get the Palestinians to agree were too valuable to the Likud leadership to be worthwhile. A change in Israeli government in 1992 altered this condition, and shortly thereafter the first peace deal was concluded in Oslo. The reduction in the value of concessions to Israel $(\hat{\Delta}_R > \bar{k} \rightarrow \hat{\Delta}_L < \bar{k})$ made a deal possible.

This situation continued throughout the early 1990s as successive peace deals were agreed to and both sides seemed to uphold their end of the bargain. As Bueno de Mesquita mentions, we saw a rise in suicide bombings and other attacks during this time, which is indicative of the extremists taking control of the terror organization and ramping up violence ($T_{m,e} \rightarrow T_e$ post-concessions, where $T_e > T_{m,e}$). The situation of continuing negotiations and progressive peace deals occurred up until 1996, when Likud defeated Labor in Israeli elections.

6.1 Evidence for Differing Land Valuations

One important consideration is how the adaptation of differing land valuations will translate dynamically into the model. Specifically, if the Palestinian moderates expect the right to win upcoming elections they might be cautious to deal with the Israeli left, knowing that Israel may renege on those commitments soon after elections. Only if an election represents an exogenous shock will it not influence the dynamics of the model. While this is generally not a good assumption to make about elections (they are fairly predictable, at least a few months – if not more – in advance), it might be reasonable with respect to the 1996 Israeli election.

A few factors go into this consideration. First, popular Labor Prime Minister Yitzhak Rabin was unexpectedly assassinated in November 1995. Rabin was one of the main architects of the Oslo peace process and his credibility with the PLO and on security issues made him a unique leader. Second, Rabin's replacement, Shimon Peres was less popular and less effective than Rabin had been. The strong electoral mandate that Labor enjoyed was continually eroded throughout early 1996 with the government under the direction of Peres. It is clear that the death of Rabin, an unpredictable event caused by a radical Israeli nationalist, significantly harmed the electoral chances of the Labor party. In 1994, it was a near certainty that Labor would maintain control, two years later that result was in serious doubt.

Even with these setbacks, Peres was expected to win Israel's first direct election. Yet surprisingly, and by a very narrow margin, Likud leader Benjamin Netanyahu defeated Peres in July 1996 (Peretz and Doron 1996). Had the Palestinian moderates expected Likud to win (and subsequently renege on commitments), they would have been less likely to make peace concessions. Yet in the years previous, Israel and the PLO had

concluded agreements that seemed to have been enforced by both sides. This means that the PLO either expected Labor to win and had enforced their end of the bargain in that anticipation, or knew there was a chance Likud would win and renege, but found the agreements worthwhile anyway.

These factors provide substantial evidence that the 1996 election should be viewed as an exogenous shock. Many unexpected events around that time radically altered the political landscape in ways that could not have been predicted years or even months in advance. But even if we do not believe this story, there are still compelling arguments that endogeneity is not a problem. Hamas acted as the model predicted, attempting to sabotage the peace process through a series of suicide bombings. The PLO, on the other hand, had little control over the outcome of Israeli elections. While those in Fatah probably hoped Peres would win, it would have been difficult to directly sway Israeli public opinion, especially in a short period of time. Finally, even if the sides were able to predict the outcome of elections correctly, the PLO would likely have agreed to the deals regardless, as they made considerable territorial gains at relatively little cost during the early 1990s.

Fully exogenous or not, the June 1996 election dealt a "body blow to the Oslo peace process" (Shlaim 2005, 257). Most of the parameters had not changed over the past eight years, so a switch back to a right-wing Likud government meant that the commitment game could no longer be solved. Because concessions were too large for the Israeli right relative to the gains they were receiving in counterterror, they began to renege on their previous commitments. Israeli historian Avi Shlaim (2005, 257) describes this process under Prime Minister Netanyahu:

The foreign policy guidelines of his government expressed firm opposition to a Palestinian state, to the Palestinian right of return, and to the dismantling of Jewish settlements. They also asserted Israel's sovereignty over the whole of Jerusalem and ruled out withdrawal from the Golan Heights. In the Arab world this programme was widely seen as a declaration of war on the peace process.

Upon observing Israeli defection, the PLO had no incentive to abide by their agreements either. The slow marching progress toward a final status began to regress.

Despite the change in leadership, the sides agreed to two significant peace deals during Likud's reign from 1996 to 1999. The more minor Hebron Protocol was signed in 1997 and transferred authority over some of the city of Hebron to the Palestinian Authority. The second, the Wye River Accord, was an agreement for Israel to withdraw from 13% of the West Bank. These agreements are curious, both in that the Israeli right was engaged in concessions, and that these agreements were signed while simultaneously Netanyahu encouraged the expansion of settlements in the West Bank. One major factor was intense U.S. pressure on Israel, which could have brought Israeli's valuation of the concessions (through military aide incentives and Israel's desire to please their greatest ally) below necessary threshold for a deal $(\hat{\Delta}_{R} < \bar{k})$. While Clinton and the American negotiating team were able to push through the Hebron Protocol, concessions in Wye River were too high for Likud to assent. Shlaim (2005, 257) explains that, "a revolt of his ultra-nationalist and religious partners brought down the government after only one pullback." Even though an agreement was accepted in principle, the commitment game was not solved and the deal was not enforced.

6.2 Evidence for Changes in Lambda

After Ehud Barak and the Labor party won elections in 1999, the tide of the peace process changed again. If my argument about Δ is correct, the reinsertion of a left wing

government meant that enforceable peace deals were again possible. The fact that the deals during the early 1990s solved the commitment problem indicates that during the 2000 final status negotiations commitment was not likely a major issue. So why, in a game with symmetric information, would Israel make an offer that was ultimately rejected? To answer this I employ my second adaptation, which emphasizes the role of the relative strength of the two major Palestinian factions.

Though this adaptation of the model is primarily helpful in explaining events post-2000, it is useful to track the entire history of λ since 1990 to ensure that previous explanations are not disrupted by the modification. I find that rather than undermining Bueno de Mesquita's conclusions from the 1990s, this adaptation strengthens his predictions. To explain the changes we observe in the relative strength of the extremist in comparison to the moderates (λ) over time, I employ survey data from the Palestinian Center for Policy and Survey Research (PCPSR). These surveys, conducted among Palestinians in the West Bank, Gaza, and Jordan from late 1993 through 2011, provide an acceptable proxy for the relative strength of the two factions.⁸ In reference to the model, higher support for the moderates (Fatah) represents a lower value of λ . Since λ is normalized between zero and one, the statistics shown in Figure 6.1 represent the percentages of respondents who said they supported each faction out of the total that supported one of the two factions. It should be noted that as a percentage of the total responses, the share of support for the two factions combined usually hovered between 55% and 65%, though it ranged as high as 73% and as low as 43%. In what follows, I will track shifts in λ through PCPSR polling data, with a special focus on whether peace

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⁷ All of the survey data for my analysis can be found at http://www.pcpsr.org/survey/index.html ⁸ For example, Falch and Strom (2005) and O'Malley (2007) both use some sort of electoral or survey measure to gauge political power.

deals affect the value of λ and thus raise endogeneity concerns.

Support Share of Fatah vs. Hamas: 1993 - 2011

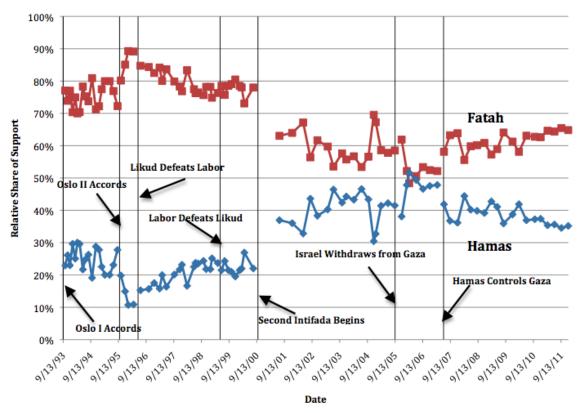


Figure 6.1: Polling data from the PCPSR

The first step in the Israeli-Palestinian peace process was the 1993 Oslo Accords. Because the data set begins in October 1993, it is difficult to assess whether these concessions affected λ . Hamas' support oscillated between 20% and 30% over the next two years, but especially considering that the group was only six years old, it is hard to attribute any particular movement to a certain political event.

Events became clearer after September 1995, when Israel and the PLO agreed to the major land-for-peace deal dubbed Oslo II. While the sample period before the next shock is short, the significant fall in λ over the following year supports the fact that the deal may have strengthened support for Fatah. This led to a situation in early-1996 where the

peace process was at a peak and Hamas' strength was at its nadir. As already noted, this ideal peace-making landscape was spoiled by Benjamin Netanyahu's surprise electoral victory in May 1996. Over the years of Netanyahu's leadership (1996 to 1999), there is a clear upward trend in the strength of Hamas. Since the peace process was the work of Fatah and the PLO, it is not difficult to see how Israel reneging on its end of the deal would raise support for Hamas.

In May 1999, the Labor party regained control of the Israeli government in a landslide victory. Still, a change in government was not sufficient to lower λ – the lack of a peace deal under Barak's leadership perhaps contributing to Fatah's relative support hovering just below 80% in the lead-up to the 2000 negotiations. Then, a series of key events occurred in late 2000 and early 2001, a period for which the PCPSR unfortunately does not have data. In July 2000, negotiations between Barak and Arafat came to a standstill at Clinton's Camp David summit; in September, Ariel Sharon's visit to Temple Mount sparked the Second Intifada; in January 2001, Barak's final status offer was rejected by Arafat; and, in February, Likud won elections under the leadership of new Prime Minister Sharon. Each of these events would likely have a positive effect on λ . We saw from the late 1990s how both failed peace deals and Likud governments strengthened Hamas, and those dynamics are again reflected in the early 2000s. That, combined with the violence of the Intifada (an instance of an exogenous upward shift in λ) caused Hamas to gain strength from roughly 20% in July 2000 to nearly 40% a year later. It was this period, more than anything, that doomed the peace process.

6.3 The Failed 2000-01 Final Status Negotiations

The PCPSR polling data reveals that Hamas strengthened relative to Fatah throughout the late 1990s, but does not tell the whole story. Despite Hamas's rising strength, we still see Fatah with at least 60% support heading into 2000. Why, then, would Hamas be able to prevent a deal? A few factors go into the conclusion that the 2000-01 peace deals were prevented by the strength of the Palestinian extremists.

Recall that under my second adaptation a final status agreement is not possible unless the moderates are sufficiently strong to suppress all (or nearly all) terrorism from extremists. Thus, on its face, relative support of 60%, or even 70% might be insufficient. Moreover, the polling numbers may actually belie the true strength of Hamas.

One reason Hamas might be stronger than it appears comes directly from the model: "the more radical the moderates are (the higher θ_m), the better the offer made by the government. Hence, strategic moderate leaders may have an incentive to recruit and indoctrinate members into the moderate faction with relatively extreme preferences" (Bueno de Mesquita 2005, 163). This means that throughout the early 1990s Arafat may have been recruiting members to Fatah and the PLO with views more radical than his own. A shift in θ_m or the emergence of a radical wing within Fatah with preferences more similar to those of Hamas would certainly imperil a deal close to Arafat's bottom line.

Second, because of successive peace deals throughout the 1990s, Hamas and the extremists had been in sole control of the terror organization for the vast majority of the decade prior to the 2000 negotiations. While Fatah leaders had been in negotiations with Israel, Hamas had been growing and strengthening its military apparatus and terror network. This means that public opinion polls might underestimate the military strength

of Hamas in 2000. It would likely be quite difficult for a relatively unprepared Fatah to suppress their actions without a considerable popular mandate.

Beyond these two reasons, the 2000-01 peace deal was prevented by the efforts of both radical groups to sabotage negotiations. The finality of an agreement at this juncture meant the stakes for both sides were extremely high. According to Ehud Barak, he offered Arafat a Palestinian state in 91% of the West Bank and all of Gaza with Jerusalem as its capital. Though the sides could not get past a number of sticking points, this represented the closest they had ever come to concluding the conflict. The prospect of a deal foreclosing all future claims certainly worried the more extreme Israeli and Palestinian factions. More than just preventing a deal that they found insufficient, Hamas realized that any final status agreement could be the end of their political existence.

On the other side, the Israeli right was concerned that the left would strike a deal that could not be undone. The offer of 91% of the West Bank was far more than Likud would have been willing to cede, especially considering how much their constituents valued that land. These two factors meant that there were significant minorities on both sides looking to undermine the ongoing negotiations. Sure enough, this is exactly what we saw.

On September 23, 2000, Likud leader Ariel Sharon took 1,000 Israeli security guards and marched to Temple Mount, a holy site for both Jews and Muslims (Gelvin 2007, 243). Upon his descent, he announced: "The Temple Mount is in our hands and will remain in our hands. It is the holiest site in Judaism and it is the right of every Jew to visit the Temple Mount" (Goldenberg 2000). Sharon was well aware of the consequences of his actions. Immediately after his visit, Palestinian riots engulfed the Jerusalem streets. The Palestinians were already on edge and Sharon provided a spark to the tinderbox.

Israeli police, in trying to control the riots, killed 47 and wounded 1885 Palestinians in the days that followed – only inflaming the protests (Klein 2003, 97). From this event ensued the Second Intifada, a four-year period of increased violence, and one of the main contributing factors in rising strength of Hamas over that period.

When Barak and Arafat returned to the negotiating table in early 2001 at Taba, the political climate was significantly different than when they had concluded negotiations six months earlier. Hamas was stronger, the Intifada was in full swing, and the terms of both Clinton and Barak were rapidly coming to a close. At the Taba Summit, Barak increased his offer to 97% of the West Bank and all of Gaza. Issues such as security, refugees, and Jerusalem came far closer to resolution (Ross 2004). Yet, ultimately, Arafat rejected this offer – which he probably knew was the best he would receive for many years. In the following months, the more conservative Sharon replaced Barak and the less engaged George Bush succeeded Clinton. This, combined with Hamas' rising influence, foreclosed any productive negotiations for the foreseeable future.

So far, we have three primary reasons why the negotiations in 2000-01 failed, each of which highlight the rising power of Hamas. These conditions explain why we would expect that a deal could not be reached, but do not explain why we see a rejected deal. With symmetric information, Israel would never make any offer they knew would be rejected if doing so were costly. Thus, to understand what happened in 2000 and 2001, we must relax either the assumption of symmetric information or the assumption of the rejected deal being costly. It is likely the case that both were at play to some extent.

The easiest explanation for the rejected offer is that Israel was simply unsure of the Palestinians' minimum acceptable offer. In any deal, Israel would want to offer the

smallest amount necessary for the PLO to accept, thus securing the entirety of the peace dividend. While Israel probably lacked intimate knowledge of this exact value, the past decade of negotiations should have given them a pretty good idea. The first offer at Camp David in 2000 may have been an attempt to locate Arafat's bottom line, but we would certainly expect that in 2001, at a credible deadline for a deal, Israel would have offered what was necessary if it knew. It could be that Israel offered the maximum it could and this was just insufficient. But this would then imply that the sides had expended significant effort and political capital on a deal that was never possible. It seems unlikely, given the length of the negotiations, that both sides were so unaware of each other's bottom lines that they spent all that time negotiating with no possibility of success. While this explanation is plausible, it is ultimately unconvincing.

Though Israel probably had good information about Palestinian preferences, it is fair to assume that they had less of an idea of the internal power dynamics between Palestinian factions – especially because those dynamics were relatively new and more volatile than preferences. This is particularly true since, as previously mentioned, the sides' respective polling numbers might belie internal political strength of one faction or the other. Furthermore, external actors, such as Jordan, Syria, and Egypt, could influence political decisions in unpredictable ways.

Finally, it is clear from the fallout of the rejected final status agreement in 2001 that Israel had very little to lose from their offer being refused. They made an offer of land far greater than anything that had been offered before, which was perceived internationally as an extension of the olive branch. With respect to the failed Taba Summit, American Middle East envoy Dennis Ross (2004) wrote,

Did we ultimately fail because of the mistakes that Barak made and the mistakes that Clinton made? No, each, regardless of his tactical mistakes, was ready to confront history and mythology. Only one leader was unable or unwilling to confront history and mythology: Yasir Arafat (758).

The fact that Ross and many others in the American camp blamed Arafat only served to raise Israel's clout with its greatest ally. Furthermore, much of the damage of the negotiations had already been done. The Second Intifada had begun, and Israel had every motivation to make the best offer to date. If the deal were rejected, they would look good because they had offered so much; if it were accepted, they would secure the majority of the peace dividend and end the conflict. Thus, it is possible that Israel was actually better off after having the deal rejected (as opposed to not offering a deal at all), and it is certainly true that they had, at most, little to lose.

These factors point to one possible explanation of the 2000-01 final status negotiations. Suppose that Israel knew the PLO's bottom line but was unsure of the relative strength of the two factions (λ). If a rejected offer was not very costly, Israel might be enticed to make a proposal, even if there is a chance that it was not enforceable. In that case, Israel would be faced with three possible results:

- 1. The offer is accepted and the PLO remains dominant so it is enforced. This result is clearly good for Israel, as they capture a large portion of the peace dividend since they are well informed about the Palestinian bottom line.
- 2. The offer is accepted but Fatah loses an internal power struggle. This would be bad for Israel, but would never result in equilibrium. Since Fatah has more to lose by accepting and being beaten by Hamas than by rejecting, Fatah would just reject the offer if it expected to lose an internal power struggle.
- 3. Offer is rejected. As already covered, Israel stood to lose very little.

Considering these three outcomes, it is likely that Israel would have found it worth the risk to make an offer. Given the rising power of Hamas and a potentially more radical Fatah following, Arafat may have wanted to accept but was unable to because he lacked the political strength to do so and remain in power. On the other hand, it is possible that no deal was ever possible under these conditions and Israel made the offer knowing it would be rejected, but stood to gain more by making the offer than not. Given that circumstance, we would expect Israel to make the highest possible offer that they would expect to be rejected (perhaps even more than they really wanted to give up) because the higher the offer, the better Israel would look in the court of public opinion.

6.4 Rising Tensions: 2001 – 2005

With my adaptations to the model, the four years following the failed 2001 agreement are easy to explain. Immediately after Arafat rejected Barak's peace proposal, Israel held elections and the right-wing Likud party emerged victorious, this time with a clear electoral mandate. In contrast with the middle 1990s when Likud faced stiff pressures toward peace internally – from a left-wing heavy Knesset – and externally – from the United States – Likud was politically independent in 2001. This immediately meant that the commitment game could not be solved (and even if it could, Ariel Sharon had no interest in offering concessions as $\hat{\Delta}_R > \overline{k}$). With the Second Intifada gaining steam and a breakdown in negotiations, there was a huge spike in violence in early 2001. Since concessions were no longer being offered, T_e changed to $T_{m,e}$.

Giving support to this parameter change is evidence found in 2001 that Fatah and Arafat were involved in terrorism. An Israeli report concluded that, "Yasser Arafat was personally involved in the planning and execution of terror attacks. He encouraged them

ideologically, authorized them financially, and personally headed the Fatah Al Aqsa Brigades organization" (Naveh 2002). This clearly points to Fatah rejoining the terrorist organization alongside Hamas, as is predicted by the model when concessions cease.

While this shift would usually be associated with a drop in violence, there is evidence for a massive increase in resources that would explain the surge in terrorism in $2001.^9$ Furthermore, with the power of Hamas increasing, we see a rise in λ , meaning that $T_{m,e}$ will be closer to T_e than it was in the 1990s. Thus, because of a high η (the fraction of resources gained when the moderates rejoined to the terror organization), a jump in R (total resources), and a higher λ , it seems likely that $T_{m,e}^{2001} > T_e^{1990-2000}$.

This situation of a combined terror organization and high levels of violence continued through the end of the Second Intifada. With a lack of progress on peace and a Likud Prime Minister, we see λ edge upwards in the early 2000s as it did under Netanyahu in the 1990s. The momentary downward blip in λ (see Figure 6.1) coincides with the death of Arafat. An outpouring of sympathy for the party he founded might explain the sudden rise in Fatah support in late 2004. This would also account for its transient nature, as people soon again became more concerned with the political climate.

6.5 Israel's Unilateral Withdrawal from Gaza

Perhaps the most puzzling event of the conflict is Israel's unilateral withdrawal from Gaza in 2005. In 2004, right-wing leader Ariel Sharon announced that Israel would

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⁹ For example, Iran pledged to increase funding of the Palestinian Islamic Jihad terrorist group by 70% in 2001. In general, international aid is mostly administered through the PA, which means the moderates joining the terrorist organization would dramatically increase resources.

¹⁰ Scholars disagree on the formal ending of the Second Intifada. Some say it was in late 2004 with the death of Arafat, while others contend that it continued as late as the September 2005, ending with Israel's disengagement from Gaza. Regardless of the exact date, repeated violence continued throughout the period leading up to Israel's withdrawal.

completely pull out of the Gaza Strip (demolishing some settlements), but at the same time re-committed to Israeli settlements in the West Bank that have long been an obstacle to peace. This presents two puzzles: 1) Why was a Likud leader making concessions? and 2) Why was Israel making concessions without getting anything in return?

The first question is easily answered. This 2004 announcement represents a clear stepping stone as Sharon transitioned from right-wing Likud to the centrist Kadima party that he founded then realigned with in late 2005. His beliefs were simply changing, though his recommitment to settlements indicates that even though he was becoming more liberal, his beliefs did not fully match with those of the left-wing Labor party.

The second question is more interesting. While earlier concessions and peace accords likely caused a fall in λ , in 2005 the evidence is mixed. In December 2004, Hamas won an overwhelming 77 of 118 seats in Gaza (to Fatah's 26) and 7 of 26 councils in the West Bank (to Fatah's 12). A second round of elections in May 2005 delivered a similarly strong result for Hamas. By mid-2005, therefore, two key elements for peace were present: the more moderate Kadima party was now ruling Israel and the strength of Fatah was dangerously low as to threaten future peace progress. The Bueno de Mesquita model predicts that any deal struck between the government and moderates when there is a high λ (strong extremists) will not be very favorable to the moderates, as they would be desperate for a political victory. With my adaptation, we would instead predict that a deal would be unlikely to occur because the moderates would not have the necessary political power to make it enforceable. Yet presumably Fatah still had more information about the whereabouts of Hamas than Israel. So, while a final status

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¹¹ Data from the two elections was compiled by The National Democratic Institute, and can be found at: http://www.accessdemocracy.org/files/1816_palestinianelectionreportrd1_033105.pdf and http://www.accessdemocracy.org/files/1913_wegz_localcouncil_092905.pdf

agreement was certainly not possible, one might expect that this was an ideal situation for an interim agreement. Instead, however, we got unilateral concessions from Israel.

In late September 2005, Palestinians went to the polls in local and parliamentary elections a mere two weeks after the last Israeli troops left Gaza. This vote was supposed to gauge the effectiveness of the withdrawal. Fatah had a strong showing, winning 65 of the 104 municipal councils compared with only 22 for Hamas. *Haaretz* reported the victory, commenting that, "Fatah's showing was better than expected, as the party had been losing ground to Hamas in other recent votes. Analysts said many Palestinian voters are returning to Fatah following Israel's recent pullout from the Gaza Strip" (Harel 2005). An analyst for the *Christian Science Monitor* reported that two effects were at work: 1) "More people than ever believe that violence has been very useful for Palestinians to achieve their national rights" and 2) fewer people now support a violent approach because they see this as an opportunity to rebuild (Prusher and Mitnick 2005).

The PCPSR data supports this conclusion. More than 80% of Palestinians viewed the Israeli withdrawal as a victory for armed resistance and 40% gave Hamas credit for the achievement (compared to 21% for the PA and 11% to Fatah). At the same time, Israel's gesture raised optimism about future negotiations and the peace process. Since Israel refused to negotiate with Hamas, this led many to support Fatah, which had a track record of successful peace negations and was more likely to maintain the current ceasefire (PCPSR 2005). These countervailing forces led to an ambiguous effect on the relative power of the two factions, and, in part, to the contradictory results of the September vote and the opinion polls that followed. With the ceasefire failing to hold, this explanation rightly predicts an upward shift in Hamas' power in 2006.

On its face, the 2005 unilateral disengagement from Gaza may seem to contradict the model. Israel gave up something for nothing and the results showed that conditions were little different after the withdrawal. It is certainly possible that Israel sought to influence the value of λ and was simply not very successful at doing so. Yet this explanation ignores the rationale advanced by Sharon at the time. As the Washington Post reported:

In announcing the 'Disengagement Plan' in December 2003, Prime Minister Ariel Sharon said the withdrawal was to increase security of residents of Israel, relieve pressure on the Israeli Defense Forces (IDF), and reduce friction between Israelis and Palestinians (Morley 2005).

This rationalization supports the conclusion that Israel withdrew because of attacks by Hamas on its settlements and to reduce the cycle of violent retributions that followed. Following de Figueiredo Jr. and Weingast (2001), the attack-retaliation cycle contributed to declining relations and a worsening perception of Israel among Palestinians. This low reputation, in turn, made it easier for Palestinians to identify with extremists groups that opposed Israel. The withdrawal, more than anything, helped break this spiral. Though most Palestinians gave credit to Hamas, they also began to desire a Fatah leadership that would negotiate with Israel and bring an end to the conflict. This sentiment was encouraged by Israel's willingness to cede land in an attempt to quell violence.

Two other factors played a role in the withdrawal. As Sharon mentioned, Israel sought to reduce the strain on its military. Not responding to attacks would have harmed Israel's reputation, one that it has long been building and has been effective in deterring attacks. 12 At the same time, the response cycle was costly, and with Sharon's leftward political shift, the cost of engagement came to outweigh the value of the land and the

¹² We only need to look to the Lebanon wars for evidence of this. Hezbollah launched rocket attacks continually until Israel responded with disproportionate force. Even after the withdrawal, Hezbollah did not continue attacks and the militants regretted the provocation.

settlements in Gaza. Thus, even though Israel could perhaps have extracted some concessions, the move was good for them even though they got nothing in return.

Finally, there is the issue of timing. With the Palestinian factions so close in popularity, Israel could have been attempting to swing the balance of power toward Fatah while it still had the upper hand. The poll taken immediately before the withdrawal gauged support for Fatah at 40% compared to 32% for Hamas. This may have led Israel to believe that Fatah would be able to win a confrontation and consolidate its power in the absence of an Israeli presence. Unfortunately, that was not to be the case. It is not difficult to see, though, how Israel may have forgone trying to extract concessions when they were worried that waiting longer would only mean incurring more violence and an increasing likelihood that Hamas would win control of Gaza.

6.6 Diplomatic Deadlock: 2006 and Beyond

On January 25th, 2006, Hamas won a large majority of seats in the Palestinian Legislative Council despite a close popular vote. This resulted in Israel and some Western allies cutting off aid to Palestine. After the 2005 withdrawal from Gaza, Israel was particularly concerned with the power of Hamas. If Hamas was able to maintain or increase their power it would not only close off a final status negotiation, but also potentially limit concessions. The Israeli embargo, elimination of aid, and an early 2007 transfer of tax revenue to PA president Mahmoud Abbas were all attempts to bolster Fatah relative to Hamas (Myre 2007). These can be interpreted as attempts by the liberal Israeli government, in hopes of continuing the peace process, at shifting λ down.

Unfortunately, their efforts were not particularly effective (see Figure 6.1). In 2007, Hamas won a Gaza turf war against Fatah and gained administrative control of the Strip.

While this did not result in an upward shift in support for Hamas, it did consolidate their power. In particular, with the factions split between the West Bank and Gaza, the ability of Fatah to provide valuable counterterror aid was dramatically reduced. Not only did Fatah have less knowledge of Hamas' actions due to more geographic separation, but the PA also has less ability to enforce its policies in Gaza because Hamas controlled that area. With a high λ , a moderate Israeli government, and low value Palestinian concessions, the model would predict little progress on a peace agreement. Sure enough, from 2007 to 2011 there were a series of unsuccessful negotiations. This situation has persisted until today, with the only change being a switch back to a right-wing Israeli government. Formally this altered nothing (still get the result of no concessions or peace talks), though, true to form, Netanyahu has taken further steps backwards by continuing settlements and refusing to even come to the negotiation table.

The recent gradual decline in λ is likely due to the dramatic reduction in violence that occurred following the Gaza War (Operation Cast Lead) in December 2008. Israel's strong reprisals against Hamas violence demonstrated the negative consequences (as opposed to the Gaza withdrawal) that a militaristic approach can have. Following that operation, rocket attacks and Israeli retaliations subsided significantly, giving a small glimmer of hope to those who seek to renew the peace process.

Overall, there seems to be limited evidence that endogeneity of λ is an issue. While peace deals may lower it and failed peace deals seem to raise it, these instances occur at times when the Israel would have been motivated to take those actions anyway. Though this is potentially problematic, the variability and unpredictability of λ make a peace deal a very ineffective way of influencing λ . Furthermore, it seems clear that there are at least

a few instances of large exogenous shocks that have had a far greater effect on the value of λ than any endogenous actions (most notably, the Second Intifada). While we cannot rule out the possibility that Israel was motivated to agree to peace deals because they would strengthen Fatah, this incentive seems, at most, a secondary consideration.

7 Conclusion

In trying to explain the paradox of the ongoing violent and costly engagement between Israel and the Palestinians in the Middle East, I synthesized the conflict in game theoretic terms. Building off the work of Bueno de Mesquita (2005), I built a model of an interaction between a government and the moderate and extremist factions of a dissident group. I first added distinction between Israeli political parties that value concessions differently ($\Delta_L(k) < k < \Delta_R(k)$). This allowed me to explain why Israel reneged on its commitments following the 1996 elections and why peace talks have generally stagnated under Likud Prime Ministers. Second, I differentiated between final status agreements and concessions. This led to an increased importance for the parameter λ , which represents the strength of the Palestinian extremists relative to the moderates. With this modification it was then possible to explain the rejected 2000-01 peace offers, the 2005 unilateral withdrawal from Gaza, and the lack of progress from 2006-2009.

This analysis helps crystallize the strategic issues at stake for both sides. The application of the model provides an understanding of the underlying forces that keep the sides from a mutually beneficial peace agreement. Ultimately, as both economists and humans we care about what this implies for facilitating peace in the Middle East. To this end, the model highlights a few key points.

First, it is clear that for any peace deal to be possible (especially major concessions or a final status agreement) a liberal political party (Kadima, or better, Labor) must control the Israeli Knesset with its leader as Prime Minister. The more conservative parties – Likud especially – place too high a value on the land to find it worthwhile to grant concessions. Their presence minimizes or eliminates the bargaining space and forecloses negotiations.

Second, a strong moderate group, now represented by Fatah, is essential for peace. The power of this group relative to the extremists is crucially important. If the extremists are too strong (high λ), a final status agreement will not be enforceable. Importantly, this does not just mean that the moderates have more 50% of the vote or leadership of the PLO. The moderates must be strong enough to, if given a state of their own, effectively control and suppress violence from extremists. If after an agreement there is not a near elimination of terrorist violence, Israel will simply renege on the deal. The Palestinian moderates may have been powerful enough in 1996 after Palestinian elections gave a strong mandate to Yasser Arafat. Unfortunately, Israel elected Likud Prime Minister Benjamin Netanyahu shortly after, foreclosing perhaps the best opportunity for peace in the history of the conflict. Currently, Fatah controls less than 50% of the Palestinian movement, clearly lacking the necessary mandate for peace. Fatah, for their part, must look to eliminate corruption, which is often a major consideration for Palestinian voters. Israel must find creative ways to strengthen their moderate opponent, or else peace will remain an elusive goal.

Third, a number of other factors may have a smaller but still material effect. Outside pressure from the United States (or other third party facilitators) is one important

element. Not only will American pressure help push Israel into a more equitable peace deal that is more likely to be accepted, but the United States can offer significant carrots and sticks that can increase the value of the deal for both sides. For example, foreign or humanitarian aid, the threat of discontinuing arms trade, or a free trade agreement, could all incentivize the sides to agree.

Given this understanding, peace in the Middle East seems as far off as it has been in years. A Likud government and a strong Hamas are two seemingly insurmountable obstacles blocking both concessions and final status negotiations. Yet these things tend to go in waves. The majority of both populations prefer peace, and that should help drive their politics to regress back to historical norms after the current leaderships are shown to be ineffective at producing the desired result. Though currently things look bleak, political winds can change fortunes in a hurry, and it is not hard to imagine that in the next ten years another situation will arise where a peace deal will once again seem like a realistic possibility. Let us hope that at the critical juncture the leaders of both sides act rationally.

8 References

- Abu-Qarn, Aamer S. 2008. Six Decades of the Israeli-Arab Conflict: An Assessment of the Economic Aspects. *Economics of Peace and Security Journal* 3.2 (July): 8-15.
- Bar-Siman-Tov, Yaacov. 2010. Barriers to Peace in the Israeli-Palestinian Conflict. Jerusalem Institute for Israel Studies Study no. 406. Retrieved from http://www.jiis.org/.upload/barriers.pdf
- Bickerton, Ian J., and Carla L. Klausner. 1995. *A Concise History of the Arab-Israeli Conflict*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Bueno de Mesquita, Ethan. 2005. Conciliation, Counterterrorism, and Patterns of Terrorist Violence. *International Organization* 59 (Winter): 145-76.

- Caplan, Bryan. 2006. "Terrorism: The Relevance of the Rational Choice Model." *Public Choice* 128.1/2 (July): 91-107.
- De Figueiredo, Rui J. P. Jr., and Barry R. Weingast. 2001 "Vicious Cycles: Endogenous Political Extremism and Political Violence." UC Berkeley: Institute of Governmental Studies. Retrieved from: http://escholarship.org/uc/item/5j47x3jv
- El Naggar, S. and M. El Erian. 1993. The Economic Implications of a Comprehensive Peace in the Middle East. In *The Economics of Middle East Peace: Views from the Region*, edited by S. Fischer, D. Rodrik, and E. Tuma. Cambridge and London: MIT Press.
- Falch, Torberg, and Bjarne Strom. 2005. Wage Bargaining and Political Strength in the Public Sector. CESifo Working Paper No. 1629. Retrieved from http://ssrn.com/abstract=876545
- Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49.3 (Summer): 379-414.
- Fischer, S., D. Rodrik, and E. Tuma. 1993. *The Economics of Middle East Peace: Views from the Region*. Cambridge and London: MIT Press.
- Gelvin, James L. 2007. *The Israel-Palestine Conflict: One Hundred Years of War*. New York: Cambridge University Press.
- Gleditsch, N.P., O. Bjerkholt, A. Cappelen, R. Smith, and J. P. Dunne. 1996. *The Peace Dividend*. Amsterdam, New York and Oxford: Elsevier, Horth-Holland.
- Goldenberg, Suzanne. 2000. Rioting as Sharon visits Islam holy site. *The Guardian*. 28 September.
- Gorenberg, Gershom. 2006. *The Accidental Empire*. New York: Henry Holt and Company.
- Harel, Amos. 2005. Fatah scoops up 65 councils in West Bank local elections. *Haaretz Newspaper*. 29 September.
- Kifner, John. 1998. Hussein Surrenders Claims on West Bank to the PLO, US Peace Plan in Jeopardy. *New York Times*. 1 August.
- Klein, Menachem. 2003. *The Jerusalem Problem: The Struggle for Permanent Status*. Gainesville, Florida: University Press of Florida.
- Kydd, Andrew, and Barbara F. Walter. 2002. Sabotaging the Peace: The Politics of Extreme Violence. *International Organization* 56.2 (Spring): 263-96.

- Morley, Jefferson. 2005. Israeli Withdrawal from Gaza Explained. *The Washington Post*. 10 August.
- Myre, Greg. 2007. Israel releases withheld tax funds to Abbas's office. *The International Herald Tribune*. 19 January.
- Naveh, Dani. 2002. The Involvement of Arafat, PA Senior Officials and Apparatuses in Terrorism against Israel, Corruption and Crime. Jewish Virtual Library. 6 May.
- O'Malley, Eoin. 2007. The Power of Prime Ministers: Results of an Expert Survey. *International Political Science Review* 28.1: 7-27.
- Peretz, Don, and Gideon Doron. 1996. Israel's 1996 Elections: A Second Political Earthquake?. *Middle East Journal* 50.4 (Autumn): 529-46.
- Powell, Robert. 2006. War as a Commitment Problem. *International Organization* 60.1 (Winter): 169-203.
- Prusher, Ilene, and Joshua Mitnick. 2005. West Bank vote to gauge Hamas. *The Christian Science Monitor*. 30 September.
- Ross, Dennis. 2004. *The Missing Peace*. New York: Farrar, Straus, and Giroux.
- Rowley, Charles K., and Jennis Taylor. 2006. The Israel and Palestine Land Settlement Problem: An Analytical History, 4000 B.C.E.-1948 C.E. *Public Choice* 128.1/2 (July): 41-75.
- Rowley, Charles K., and Michael J. Webb. 2007. Israel and Palestine: The Slow Road to Peace or the Fast Track to Mutual Annihilation?. *Public Choice* 132.1-2 (July): 7-26.
- Shlaim, Avi. 2001. *The Iron Wall: Israel and the Arab World*. New York: W.W. Norton & Company.
- ——. 2005. The Rise and Fall of the Oslo Peace Process. In *International Relations of the Middle East*, edited by Louise Fawcett. Oxford: Oxford University Press.