Balance of power and the prospects for peace: the case of the Levant

Green, Ryan J.
Monterey, California. Naval Postgraduate School

http://hdl.handle.net/10945/3838

Downloaded from NPS Archive: Calhoun
THESIS

BALANCE OF POWER AND THE PROSPECTS FOR PEACE: THE CASE OF THE LEVANT

by

Ryan J. Green

December 2002

Thesis Advisor: Glenn E. Robinson
Second Reader: Karen Guttieri

Approved for Public Release; Distribution is Unlimited
THIS PAGE INTENTIONALLY LEFT BLANK
# REPORT DOCUMENTATION PAGE

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.

1. **AGENCY USE ONLY (Leave blank)**
2. **REPORT DATE**
   - July 2001
3. **REPORT TYPE AND DATES COVERED**
   - Master’s Thesis

4. **TITLE AND SUBTITLE:**
   - Balance of Power and the Prospects for Peace: The Case of the Levant

6. **AUTHOR:**
   - LT Ryan J. Green, USN

7. **PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES):**
   - Naval Postgraduate School
   - Monterey, CA 93943-5000

9. **SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES):**
   - N/A

11. **SUPPLEMENTARY NOTES:**
   - The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. **DISTRIBUTION / AVAILABILITY STATEMENT**
    - Approved for Public Release; Distribution is Unlimited

13. **ABSTRACT (maximum 200 words)**

   Over the past 50 years, the Levant has seen more political violence than any other region in the world. This thesis argues that the root cause of this violence is the vast imbalance of power between Israel and its neighbors. Such an imbalance naturally leads to the more powerful country – in this case, Israel – to resort to force in pursuing Israeli interests. Similarly, the imbalance of power acts as a constant reminder of humiliation for the less powerful, compelling these actors to seek to right the imbalance through the use of more unconventional warfare. The end result of power imbalance is perpetual conflict. This thesis focuses on the imbalance of power between Israel and Syria as measured through both military and economic might. This imbalance has been expressed in differing forms of violence by both sides.

14. **SUBJECT TERMS:**
   - Levant, Israel, Syria, Balance of Power, Military, Economic

15. **NUMBER OF PAGES**
   - 79

17. **SECURITY CLASSIFICATION OF REPORT**
   - Unclassified

18. **SECURITY CLASSIFICATION OF THIS PAGE**
   - Unclassified

19. **SECURITY CLASSIFICATION OF ABSTRACT**
   - Unclassified

20. **LIMITATION OF ABSTRACT**
    - UL
BALANCE OF POWER AND THE PROSPECTS FOR PEACE: THE CASE OF THE LEVANT

Ryan J. Green
Lieutenant, United States Navy
B.S., University of Utah, 1997

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

NAVAL POSTGRADUATE SCHOOL
December 2002

Author: Ryan J. Green

Approved by: Glenn E. Robinson
Thesis Advisor

Karen Guttieri
Second Reader

James A. Wirtz
Chairman, Department of National Security Affairs
ABSTRACT

Over the past 50 years, the Levant has seen more political violence than any other region in the world. This thesis argues that the root cause of this violence is the vast imbalance of power between Israel and its neighbors. Such an imbalance naturally leads to the more powerful country – in this case, Israel – to resort to force in pursuing Israeli interests. Similarly, the imbalance of power acts as a constant reminder of humiliation for the less powerful, compelling these actors to seek to right the imbalance through the use of more unconventional warfare. The end result of power imbalance is perpetual conflict. This thesis focuses on the imbalance of power between Israel and Syria as measured through both military and economic might. This imbalance has been expressed in differing forms of violence by both sides.
TABLE OF CONTENTS

I. INTRODUCTION........................................................................................................1
A. PURPOSE..................................................................................................................1
  1. Regional Violence...............................................................................................2
  2. Hegemonic Violence Within the Levant............................................................2
  3. Rebellious Raids..................................................................................................3
B. METHODOLOGY......................................................................................................4
C. CHAPTER OUTLINE..................................................................................................4

II. THE MILITARY IMBALANCE ....................................................................................7
A. INTRODUCTION.......................................................................................................7
B. THE ISRAELI MILITARY........................................................................................8
  1. Army....................................................................................................................8
  2. Navy..................................................................................................................12
  3. Air Force..........................................................................................................13
C. THE SYRIAN MILITARY.......................................................................................14
  1. Army................................................................................................................14
  2. Navy................................................................................................................16
  3. Air Force..........................................................................................................17
D. MILITARY ANALYSIS............................................................................................18

III. ECONOMIC POWER...............................................................................................21
A. THE ISRAELI ECONOMY.......................................................................................23
  1. GNP and Economic Stabilization.........................................................................23
  2. Taxation..............................................................................................................25
  3. Growth..............................................................................................................27
  4. High Technology...............................................................................................29
B. THE SYRIAN ECONOMY.......................................................................................31
  1. GNP..................................................................................................................31
  2. Taxation..............................................................................................................33
  3. Growth..............................................................................................................34
  4. High Technology...............................................................................................35
  5. The Rentier Structure.......................................................................................36
C. ECONOMIC ANALYSIS............................................................................................36

IV. THE LINK TO BALANCE OF POWER....................................................................39
A. BALANCE OF POWER DEFINED...........................................................................39
B. BALANCE OF POWER CASE STUDIES ..................................................................41
  1. Napoleonic France.............................................................................................42
  2. South Africa........................................................................................................43
  3. The Cold War......................................................................................................45
C. APPLICATION TO THE LEVANT............................................................................47
  1. Balance as a Function of the Economy...............................................................47
  2. Balance as a Function of the Military.................................................................47
  3. Does a Link Exist?............................................................................................48
ACKNOWLEDGMENT

I would like to thank six people for the assistance, guidance and patience during this thesis process. First, I wish to thank Dr. Glenn E. Robinson for his guidance and assistance with this thesis. Second, thanks to Dr. Karen Guttieri, for her assistance on the final stages of my thesis. Third, thanks to Dr. Robert Looney, his assistance with the economic chapter was invaluable. Fourth, thanks to Elizabeth Skinner, whose copy-editing was very helpful in forming the final draft. Fifth, I wish to thank Pam Silva of thesis processing, for her assistance and patience during the formatting process. Finally, I wish to thank my wife, Erika, whose was able to cope with me during this time. Thank-you all.
THIS PAGE INTENTIONALLY LEFT BLANK
I. INTRODUCTION

A. PURPOSE

The intent of this thesis is to examine the question, how has the extreme imbalance of power between Israel and Syria affected stability and security throughout the Levant? I contend that this imbalance has decreased stability and has increased security concerns for the Levant countries. The thesis will illustrate that the ongoing conflict in the region arose from a huge disparity in wealth and military strength between the two nations. The paper is divided into five sections: this introduction, three chapters that constitute the body of the work, and a conclusion with several policy recommendations. Before expanding on each of the chapters, the introduction will explain why this thesis question is such an important topic of study today, and what methodologies were used to carry out the work.

The Levant is a critical region, consisting of Israel, Syria, Jordan, Lebanon, Egypt and the Palestinians, for Americans to understand for several reasons. First and foremost is the intifada between Israel and the Palestinians. The fighting from the intifada has pushed the economies of the Levant states into a recession. Furthermore, fighting has spilled over in the past two years to include other regional powers such as Syria, where for example, there has been a sharp increase in Syrian military clashes with Israeli troops. Hundreds have died with no sign of a resolution. Second, the recent terror attacks against the United States were spawned in part by the failure of U.S. leaders to show concern for Arab rights in the region. Third, the fear of another oil embargo led by the region’s Organization of Petroleum Exporting Countries (OPEC) members has increased tension worldwide. Although the Saudi royal family has ensured the United States that oil will not be used as a political weapon, they could conceivably be forced to cease oil shipments to Western nations in order to maintain regime’s internal legitimacy. Finally, increasing violence and unrest in the region is having a serious negative impact on the world economy. Given the deepening economic interdependence brought by globalization, failing markets could reach a global epidemic if a resolution to Middle Eastern violence is not soon reached.
1. **Regional Violence**

The Levant has spawned two indigenous forms of violence that I have termed “hegemonic violence” and “rebellious raids.” Hegemonic violence is action taken by the dominant regional state to establish and maintain control of a specified area or other state. Rebellious raids, by contrast, are used by a weaker state (usually official or non-state organizations within states) to inflict pain on the hegemon.\(^1\) The American Revolution provides an example of the difference between the two forms of violence. In this war, England was the dominant power inflicting hegemonic violence. The British army controlled the fighting and would decimate the Americans whenever the two met in pitched battle. In contrast, George Washington used highly effective “hit and run” rebellious raids against the British to avoid being slaughtered, and to inflict pain and suffering on the British until the rebels’ French allies arrived.

A second and more recent example is the Algerian revolution against a hegemonic France in 1954. The Algerians conducted rebellious raids to inflict pain on French settlers and the French army, whom they could not hope to defeat in conventional battle. In the end, those rebellious raids took such a toll on the French that Algeria won its independence. It is important to understand both the difference between the two forms of fighting, and their role in the current Levantine violence.

2. **Hegemonic Violence Within the Levant**

The result of the power imbalance in the Levant is violence. Hegemonic attacks in this case are overwhelming displays of force coming from Israel. Examples include the occupation of southern Lebanon and to some extent the recent violence in the West Bank. In each of these examples, Israel demonstrated that it has the capability to use overwhelming force to dictate policies and protect Israeli land. The power imbalance arises from the huge disparity in defense capabilities between Israel and Syria, and the Israeli economy’s vastly greater strength.

\(^1\) Examples of violent groups within states would be Hamas, Hizb Allah, Islamic Jihad and Fatah.
The occupation of southern Lebanon by Israel illustrated that a military imbalance in the Israelis’ favor allowed them to take lands at will and turn them into quasi-provinces. The Israeli Defense Force (IDF) moved into southern Lebanon in 1978, and held it for approximately 25 years. Granted, during this time there were small skirmishes in which the combined forces of the Islamist organization Hizb Allah, the Lebanese Army, the Palestinian Liberation Organization (PLO), and the Syrians were able to inflict casualties on the IDF. Nevertheless, this occupation provides another example of Israel’s overwhelming ability to conduct large-scale operations at will because of superior firepower.

The second example of hegemonic violence by Israel was the Israeli invasion of the West Bank in April 2002. During the subsequent occupation, the IDF not only arrested thousands of Palestinians and held territory under martial law with a well-enforced curfew, but it also partially leveled the refugee camp of Jenin. Again, Israel’s ability to control land and people through violence is directly linked to its vast preponderance of power.

3. Rebellious Raids

The second form of violence I discuss is the guerrilla-style skirmish used by weaker nations (in this paper, primarily Syria) to harass the hegemon. Examples of such attacks include raids during the 1973 War, attacks by Hizb Allah against Israeli positions in southern Lebanon, and the suicide bombings of today. Using terrorist organizations to aide in attacking Israel proved an effective weapon for Syria. Syria’s inferior military power, however, confined the raids to minor engagements that did nothing to diminish Israel’s balance of power advantage.

Israel was victorious in the 1973 war with Syria and Egypt. This war nevertheless proved that weaker nations such as Syria and Egypt could inflict pain and suffering on the hegemon. Swift surprise attacks from the Sinai and southern Lebanon inflicted hundreds of casualties on the Israelis. While these attacks were the limit that the weaker nations could accomplish, the psychological impact was devastating. No longer was Israel safe because of military might, but rather the weaker nations had found a way to inflict suffering.
The use of terrorists such as Hizb Allah to carry out actions also became more prevalent after the 1973 war. Terrorist groups continually harassed Israel with rocket attacks and suicide bombings. These attacks further outraged the Israelis while demonstrating to the Arabs that Israel was vulnerable after all.

B. METHODOLOGY

This thesis will use the case study of relations between Israel and Syria to demonstrate that there is a devastating imbalance of power between the two states. Furthermore, I will argue that this imbalance of power is the source of violent action in the region. The focus of the thesis is on both the military and economic imbalances that have persisted over time. Moreover, Israel has signed peace agreements with Egypt, following the 1973 war, and Jordan in 1994, unlike Syria and by proxy Lebanon. Therefore, Egypt and Jordan are not plausible comparative states to understand the prolonged violence in the Levant. An in-depth case study, between Israel and Syria, is the most expedient means to explain why the region is so troubled.

C. CHAPTER OUTLINE

Chapter II examines the military imbalance of power between Israel and Syria. This chapter presents data on the relative strengths of the military forces of the two opponents. I detail the army, navy and air force of each state in the first two sections, in order to establish empirically that the Israelis have a distinct military advantage over the Syrians. The final section of the chapter then analyzes the data presented. The results illustrate a military advantage for Israel that is unprecedented in the region. This military advantage is a primary contributor to the instability of the region, spurred by a balance of power competition.

Chapter III focuses on the economic imbalance of power between Israel and Syria. This chapter examines three factors that affect economic strength: gross national product (GNP); percent growth over time; and the effect that a high technology sector can have on GNP. Chapter III will show that the Israeli economy is strong, with a healthy GNP, steady growth, and control of a solid percentage of the world high technology
market. In contrast, the data on Syria will illustrate the country’s lack of a solid economic base by each of these measures. The percent of market share in high technology in and of itself is not an indicator of a strong economy; in this case study, however, it serves as a proxy indicator that a country has a modern, globally engaged economy. Thus, the finding that Syria lacks the modern economy that Israel possesses further supports the conclusion that an imbalance exists between Syria and Israel.

Chapter IV applies balance of power theory to the Levant as a means of explaining the region’s ongoing violence. This chapter is derived from a realist balance of power approach with a few slight modifications. I draw my arguments from Partha Chatterjee’s *The Classical Balance of Power Theory.*\(^2\) I also draw on Emerson M. S. Niou and Peter C. Ordeshook’s *A Theory of the Balance of Power in International Systems*\(^3\) to simplify and enhance the application of the theory. A critical combination of the two pieces provides a working model that will give readers a clear understanding of the reasons behind the turbulence in the Levant.

The conclusion of this thesis focuses on the prospects for peace between Israel and Syria. This section discusses the impact that power balancing has on security in the Levant. Furthermore, it will make clear recommendations that could, if implemented, lead to a signed peace agreement between Israel and Syria. Such an agreement not only would ease security issues, but would benefit the economies of all nations in the region. Robust economic activity in turn is critical to creating a lasting peace in the region.

---


II. THE MILITARY IMBALANCE

A. INTRODUCTION

This chapter illustrates the extent of the military imbalance between Israel and Syria. The purpose is to demonstrate that instability between the two nations is best explained from a balance of power perspective. When a regional power possesses much stronger armed forces than its neighbors, they will feel compelled to develop strong militaries as well. The resulting arms race further exacerbates instability and insecurity because there will always be a perceived or actual comparative imbalance. Furthermore, pitting forces against one another, as Syria and Israel have done, is highly destabilizing, as neither nation can predict the potential actions of its opponent. For this reason, the northern border of Israel remains extremely tense, relying on an active military presence to maintain peace.

The chapter is divided into three main sections. The first two detail the Israeli and Syrian armed forces divided by service: army, navy and air force. The focus is on manning, equipment and training. The subsections on equipment probably are the most pivotal because they show clearly the biggest advantage for Israel: modern equipment and the ability to maintain it. The final subsection for each military, on training, shows how an effective training program promotes the efficiency indispensable to winning battles.

The third section presents an analysis of the disparities between the two rivals’ armed forces. The data will show that the Israelis have a large advantage in two of the three areas, equipment and training, while the third area, manning, is relatively closely matched. This imbalance in equipment and training is critical to Israel’s success in military action. The ongoing conflict with the Palestinians has provided the Israelis with far more effective training than Syria can manage.
B. THE ISRAELI MILITARY

One school of thought argues that the Israeli military advantage is shrinking. Many who argue this point, however, look specifically to Egypt as the counterbalance to Israeli power. Although the Egyptian military has trained with the American military and has begun to develop doctrine similar to that of the United States, Israel’s qualitative edge not only persists, but has grown throughout the 1990s.

1. Army

I have divided this section into manning, equipment (weapons) and training, in order to make the data on the army’s actual strength accessible, and the results—whether or not a balance of power exists—more evident.

a. Manning

The manpower of the Israeli military has not grown over the last fifteen years. At the end of the 1970s, Israel’s army was twice as large as that of Syria. By 1993, however, the gap had shrunk to about 1.3 times as great. The number of regular ground troops alone rose from 176,000 to 187,000, while the entire Israeli ground forces—reserves, regular troops, tanks, artillery and air defense artillery—totaled 521,000. A half million people in service is a good number to safeguard any homeland. By comparison, the United States Marine Corps numbers roughly 180,000, including aviation and combat service support. The United States Army totals around 700,000 people. Overall, the Israeli Defense Force constitutes a top line fighting force.

---


7 Heller and Shapir, p. 232.
The manning levels over the past fifteen years follow a fairly cyclical pattern of increases and cutbacks, according to the level of perceived threat. From the mid-1980s through about 1992, the Israelis believed that a strong military was needed to combat the coalition of regional Arab forces arrayed against them. During this period, the IDF maintained a large number of personnel on active duty in anticipation of a possible attack, most likely from Syria. This posture lasted up through 1991 and the second Gulf War. From 1991 through 1996, the Israeli military went through drastic cutbacks and down-sizing, a Clinton-like reform. Heller and Shapir elaborate why this shift in ideology occurred:

There were three causes for the change: a change in intelligence assessments regarding Syria, cuts in the defense budget and other budgetary constraints, and a change of approach toward the Palestinian Authority and the possibility of a serious deterioration in relations with the Palestinians. Mirkam-2000’s basic working assumption was that the chances of war with Syria, the main enemy, were very low.8

In short, the Israelis believed that the potential for war was low, thus there was no need to risk exacerbating tensions with a military build-up. The other development that encouraged lower levels of manpower in this period was the signing of a pivotal peace agreement with Jordan. The Israel-Jordanian peace agreement allowed the two signatories to invest resources in their economies. When quality of life begins to improve, no one wants to risk prosperity by going to war. By the end of 1996, however, Israel had begun to re-invest in its military, after its intelligence services reported the Syrian threat to be greater than first thought.

b. Equipment

The Israeli ground forces are highly mechanized. Throughout the 1980s, the inventory for heavy equipment numbered around 4,000 tanks and nearly 11,000 other armored personnel carriers (APC).9 The number of Israel’s armored vehicles is nearly equal to that of the combined strength of Egypt, Jordan and Syria. Moreover, the might of the Israeli ground forces is amplified by their superiority in artillery: “principally self-

---

8 Heller and Shapir, p. 50.
propelled and equipped with advanced fire control systems and high-performance munitions.” Superior artillery allows accurate fire suppression of enemy targets and close support for the ground forces. Chart 1 shows the approximate equipment inventory of the Israeli Defense Force (exact numbers are not available).

**Chart 1**

<table>
<thead>
<tr>
<th>Tanks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merkava &amp; M-60A-3 (upgradeable to A-7)</td>
<td>2,120 in service¹¹</td>
</tr>
<tr>
<td>APC’s:</td>
<td></td>
</tr>
<tr>
<td>Achzarit and M-113</td>
<td>Unknown</td>
</tr>
<tr>
<td>Nagmashot, Nagmachon, Nakpadon &amp; RBY</td>
<td>5,325 in service¹²</td>
</tr>
</tbody>
</table>

Exact numbers of artillery pieces also were unavailable; Heller and Shapir, however, estimate that number to be just below 2,000 guns. These guns ranged from 290mm to 155mm howitzers, along with a hodgepodge of self-propelled and towed guns and howitzers, while the mortars numbered around 40. Aside from impressive quantities of weaponry, the quality of artillery the IDF maintains tends to be state-of-the-art.

c. Training

Two different types of training distinguish the Israeli army. First is the basic and advanced training that every soldier receives. This distinction in the type of training offers the soldier rewards, such as becoming a NCO or even an officer. The

---

¹⁰ Ibid. p. 283.

¹¹ The total number of tanks in the IDF inventory is estimated to be around 3,900. Actual numbers are classified. This data was obtained from Heller and Shapir; p. 233.

¹² Heller and Shapir again cite that the total number reaches 8,010 APCs when incorporating the second tier equipment. P. 234.

¹³ Ibid. p. 234.
second type of training is the continued technical training necessary for Israeli personnel to maintain and use their high-tech weapons.

Moreover, the distinction in training provides all recruits with knowledge of the advantages of military service. Israel requires all males at the age of eighteen to serve in the armed forces. Therefore, providing the knowledge that a distinction exists generally prompts some recruits to remain in service. Upon induction at the age of eighteen, recruits are separated into three different categories: generalized, women’s corps and corps/brigade. The generalized service is for non-combat and female units.

Generalized trainees are offered an indoctrination into military life that lasts only one month, as the majority of their service will not require combat training. The corps/brigade section trains recruits for combat roles: tanks, artillery and infantry. Corps training, which generally refers to all non-infantry combat units such as armor and artillery, employs an arduous program designed to ready a soldier for battle. Brigade training lasts up to five months and is the most rigorous of all. From brigade training the Israeli armed forces reap infantrymen, and airborne and special forces soldiers (who then receive yet further specialized training). Once members of the IDF graduate from their respective basic training, the next evolution is advanced training.

Advanced training is primarily for corps recruits, to teach them the maintenance and operation of the equipment they will be using. For this, an additional three months of school is required for all corps personnel. The next level of advanced training is NCO and officer training. Those recruits who distinguish themselves in their company or battalion are made to attend NCO school. This is a chance to lead within the unit and earn promotions. Furthermore, if while in NCO training servicemen set themselves apart from the rest of the pack, they will receive an offer to attend officer training school. Altogether, the Israeli army’s training process is complex, and for the most part yields dedicated soldiers.

---

14 Metz, p. 291.
15 Ibid. p. 292.
2. Navy

Although by world standards the Israeli navy is small, as a regional power it is a very professional force with devastating capabilities. A long-neglected arm of Israel’s military forces, the Israeli navy won acclaim during the 1973 war, when it sank eight Arab missile boats without any losses to itself. This dramatic success led to a flurry of planning to enhance the navy’s capabilities. There was no marked improvement, however, until the late 1980s; during most of that decade Israel was preoccupied with detecting and engaging PLO terrorists infiltrating from the Red Sea. It emphasizes fast coastal patrol boats, while boasting a few French corvettes and submarines to assist in blue water operations.

a. Manning

Through the end of the 1980s, the Israeli Navy comprised approximately 9,000 personnel. Of this number, 1,000 were officers; the other 8,000 included approximately 3,200 conscripts, with an additional 1,000 reservists. The end of the 1980s saw rekindled interest among policymakers for building a stronger, more potent navy, and from early 1993 onward Israel began to receive the support it needed to modernize. While the navy is still the most neglected branch of the Israeli armed forces, its number of personnel has increased dramatically, to approximately 19,500. The total is split almost directly in half, with 9,500 in the active navy and around 10,000 in the reserves.

b. Equipment

The navy’s equipment reflects Israel’s primary concern with coastal defense. The surface ships, including three missile corvettes, are designed to handle the littoral, with limited blue water ability. The Israeli navy maintains only four operational submarines, which are its primary strategic weapon. There are no carriers in the Israeli fleet. (See Appendix One for a list of ships in the Israeli navy.)

16 Metz, p. 284.
17 Ibid. p. 283.
18 Heller and Shapir, p. 233.
19 Appendix one provides ships class, numbers in service and the armament that each class contains.
c.  Training

There is limited information on training regimes in the Israeli navy. What there is suggests that the routine is similar to that of the army in that, in the absence of service academies, officers are skimmed from the enlisted ranks. Furthermore, once a sailor obtains basic seamanship training, the only way to learn a job is to become operational.

3. Air Force

The Israeli air force is a highly professional force that avails itself of the finest military equipment the United States has to offer. The service won acclaim during the 1967 war, which success led to a decade of increased support, manpower and prestige. It further distinguished itself with the 1981 bombing of the Osiraq nuclear reactor in Iraq. The first time the Israeli air force demonstrated its ability to conduct in-flight refueling came during the bombing of the PLO headquarters in Tunis in 1985. Early successes ensured the air force’s future growth.

a. Manning

By the late 1980s, the Israeli air force consisted of about 28,000 personnel, of whom approximately 9,000 were professionals and 19,000 were conscripts. It also maintained about 50,000 reservists. The trend of increasing manpower would continue into the following decade. By the end of the 1990s, active forces stood at 36,500, the reserve force at 54,000, placing the grand total at 90,500.

b. Equipment

This section looks only at the combat aircraft of the Israeli air force. The total, of 778 craft includes any airplanes that are used for munitions delivery. (The Israelis also maintain a fleet of support aircraft that handle such tasks as transportation and refueling.) By this measure, Israel’s advantage over Syria is significant. In addition,

---

20 Metz, p. 284.
21 Ibid. p. 285.
22 Heller and Shapir, p. 233.
23 All data again was obtained from Heller and Shapir; p. 236-238.
the United States makes the highest quality equipment available to Israel on advantageous terms (refer to Appendix Two for complete details).

c. Training

Learning to fly is relatively universal. Flight dynamics are the same in any region of the world. The Israeli basic pilot training is similar to that of the United States. Therefore, the Israelis have distinct advantages over regional rivals. First, the United States regularly sends pilots and air mechanics to Israel to train airmen on the proper procedures to maintain all aircraft. The American pilots also provide vital training that ensures the young Israeli pilots are the crème of the region. The United States also invites Israeli pilots to train at American air force bases, thus providing the Israelis with the most up-to-date training on the air platforms. This state-of-the-art training provided by the United States is a distinct tactical advantage for Israeli Pilots.

C. THE SYRIAN MILITARY

The Syrian armed forces have seen a definite decline in the last fifteen years. From the late 1970s through the late 1980s, with the backing of the Soviet Union, the Syrian military was in a position to rival any military in the region. As Soviet power began to decline, however, its gifts of weapons to Syria to ward off the United States and Israel ceased, and the USSR (later Russia) began to require hard currency for any weapons it provided.

1. Army

The army has been the backbone of the Syrian military, but even so, data suggests it cannot match Israel’s strength. I, again, have broken the section into manning, equipment and training.

a. Manning

The 1980s were the final major growth period for the Syrian military. During this phase of the Cold War, the Soviet Union was determined to match the United States in all regions throughout the world. In the Levant, Syria was a Soviet proxy that benefited greatly over a short period. At its apex in 1985, the Syrian army consisted of
500,000 regular troops and 340,000 reservists. 24 When the Soviet Union collapsed in 1990, the Syrian Army lost the vital assistance that had made it a dominating force in the region. The Russian Federation, unlike its predecessor, needed hard currency for its arms. As a result, the Syrian military began to decay in the 1990s. Manpower dwindled to 406,000: 306,000 regulars and 100,000 reservists, a decline from 1985 in excess of 50 percent. 25 Besides the loss of Soviet support, a poor economy forced Damascus to spend money on more immediate needs than the military.

b. Equipment

Equipment quality and quantity are difficult to assess accurately, not because numbers are too small, but because the numbers seem highly inflated. The inaccuracy appears in part to be because the Syrians seem to count equipment that was promised but never delivered during the Cold War, and more importantly, equipment that is out of commission. The purpose may be to deter neighboring states from taking the offensive. Appendix Three, 26 which details Syrian equipment, may not provide accurate data, and it is more than likely that actual numbers are far smaller than those shown.

The Syrian Army maintains three types of self-propelled howitzers: 2x 122mm and 1x 152mm for 505 guns. In the towed gun section, there are seven types: 3x 122mm, 1x 130mm, 2x152mm and 1x180mm. There are two mortars over 160mm: 240mm and 160mm and one under 160mm, the 120mm mortar system. Overall, the artillery and mortar section of the Syrian arsenal consists of approximately 2,100 different weapons. 27

c. Training

The Syrian Army’s training program is different from that of the IDF. While the Syrians do maintain general basic training for all enlisted personnel and conscripts, officers are not garnered from the enlisted ranks, but rather groomed at the military academy in Homs. 28 This is a two-year program that generates primarily

---

26 Appendix Three focuses on tanks and armored personnel carriers
27 All data for the Syrian Army was obtained from Heller and Shapir, p. 363.
28 Collelo, p. 261.
infantry officers. Officers and recruits attend advanced training in other specialties, as well. Furthermore, officers may be selected for tours in Russian military academies, to further their education and value.

Syrian operational training consists of watching the Israelis on maneuvers in the Golan, then moving a tank approximately fifty feet forward and fifty feet back again. While this sounds preposterous, such maneuvers are due to a lack of money for fuel, which has a heavy impact on training. Moreover, the bulk of Syrian military equipment is falling apart, and there is no money for the spare parts to fix them.

2. Navy

In the last fifteen years, manning and the equipment in the Syrian navy have remained fairly constant. Syrian tradition does not accord prestige to the navy, therefore it has not received the necessary funds to develop along with the army and the air force.

a. Manning

While the 1980s saw a dramatic increase in funds to the army and the air force, the navy was left alone. By 1985, the Syrian navy reached its maximum size with a total of 6,500 personnel: 4,000 regulars and 2,500 reservists.29 These numbers have not appreciably changed over the past decade.30 The manning of the Syrian navy is far below that of the Israelis, and therefore is a cause of tension between the navy and the government. Although the primary function of the Syrian navy, coastal defense, is similar to that of the Israeli navy, the Syrians have believed that there was a more credible threat from the land and the air.

b. Equipment

The Syrian Navy’s equipment is inferior to that of its Israeli counterpart. For instance, Syria’s Romeo class submarines are no longer operational, nor are the Komar-class fast patrol boat and the Vanya-class mine warfare vessel.31 Without these vessels, Syria does not have a notable navy. Appendix Four, which details the Syrian Navy’s assets, shows quite a few holes in Syrian coastal defenses.

29 Collelo, p. 259.
30 Heller and Shapir, p. 262.
31 Ibid. p. 369-370, moreover, the three classes of boats are unserviceable.
c. **Training**

Training in the Syrian navy is non-existent. The navy is subordinate to the army and subsequently does not receive the time or the money properly to train sailors. If any Syrian sailor were expected to defend the coast, or a ship for that matter, the lack of war fighting skills would be disastrous.

3. **Air Force**

The air force has seen the biggest swing in its fortunes over the last fifteen years. At the height of the Syrian military build up in the 1980s, the air force had approximately 140,000 airmen.\(^{32}\) Severe budget cuts after the collapse of the Soviet Union, however, compelled the air force to draw down, and it eventually begin to decay on the runway.

a. **Manning**

Throughout the 1980s, the air force maintained 100,000 regular airman (officer and enlisted) and 37,500 reservists.\(^{33}\) At that time, the Soviet Union was supplying the Syrian air force with airplanes, training and spare parts to maintain the planes. The collapse of the USSR in 1990 forced the Syrian air force to downsize over the following decade to 30,000 regular airmen and 10,000 reservists.\(^{34}\) The air force lost manpower because the aircraft were breaking down and left unrepaired, so no flight hours could be logged. The breakdowns in turn occurred because of a lack of parts to fix them. Russia was now demanding payment for its goods and services, and Syria did not have the funds to pay. What funds the state did have were being directed into programs that would prevent unrest among the population.

b. **Equipment**

The Syrian Air Force was composed of Soviet aircraft. This section measures combat aircraft only because offensive capabilities better illustrate the imbalance of forces between Israel and Syria, and the resulting potential for conflict. The Syrians were equipped with air tankers, air cargo and transport planes as well. The numbers (see Appendix Five) illustrate that not only are the Syrian aircraft aging, but

\(^{32}\) Collelo, p. 259.

\(^{33}\) Ibid. p. 259.

\(^{34}\) Heller and Shapir, p. 362.
there is a serious shortage of parts to maintain the current inventory properly. This situation will cripple the Syrians if they become involved in any aggressive action against the Israelis.

c. Training

Training is a moot point for discussion. Syrian officers attend the Air Force Academy, but any further training is limited by the lack of funds for machinery and fuel. The 1980s saw many young Syrian pilots training in the Soviet Union. Those days have passed, and now pilots are lucky if they fly fifteen hours a month.

D. MILITARY ANALYSIS

The evidence shows that Israel’s military is vastly superior to that of the Syrians. The only arena in which the Syrians hold a slight advantage is the number of active duty army personnel. That aside, however, the Israeli navy and air force far exceed the Syrian navy and air force in strength and firepower. In all areas, the IDF has a tremendous qualitative advantage in equipment, machinery and munitions.

Going by the numbers, Syria’s larger army gives it a first strike advantage. If the Syrians mounted a swift, accurate and relentless first strike, there is a possibility that the Israeli army would not be able to recover. If, however, the Israelis were able to defend and hold the line against a first strike, then Israel’s well-equipped and well-trained reserve forces probably would decimate the Syrians. The Israeli reserves outnumber the Syrians almost three to one, giving them, in total numbers (active duty and reserves), a 1.3 to 1 advantage over the Syrians.

Israel possesses a further advantage in equipment. The bulk of the equipment used by Israel originates from the West, primarily the United States. Western weaponry has proven generally to be highly reliable. In contrast, Syria’s reliance on Soviet manufactured goods has been ill-fated. The collapse of the USSR forced client states such as Syria to pay for Russian goods before they are shipped. This includes spare parts as well as new equipment. Because the Syrian economy is not robust, available funds generally bypass the military in order to finance programs that prevent civil unrest.
From this discussion it becomes clear that there is a direct link between the strength of the Syrian economy and the strength of Syria’s military. The Israeli economy is far stronger than Syria’s and accordingly, the IDF is far superior to the Syrian military.
III. ECONOMIC POWER

Where governments lack legitimacy because of corruption, repression, or incompetence, civil conflict can erupt. Where countries experiencing such economic and social stresses are further characterized by ethnic, religious, or regional fragmentation, where some groups feel they have no political voice, and where discontented groups can now gain easy access to information that elucidates their comparative deprivation, contact other discontented groups, and even purchase arms to further their goals, all from the internet, the probability of conflict may be greater than at any time in the past.35

Chapter III examines the economic balance of power between Israel and Syria. After examining the evidence that such an imbalance exists, the chapter then seeks to answer the question, How does this imbalance affect regional stability and security in the Levant? Carol Lancaster, in her article “Developing Countries: Winners or Losers?” states that conflict and insecurity are a result of severe economic volatility.36 When a state’s economy is robust, the likelihood of instability leading to conflict is low, but a stagnant economy increases the probability of unrest within states. This chapter concludes that the imbalance of economic power between Israel and Syria has fostered political instability in the region. The article, “The Price of Peace,” in the Wall Street Journal supports this paper’s thesis that violence is a response to an economy that is failing or is far weaker than surrounding states. Further lending to support such a failing economy only exacerbates the chance for conflict.37 The likelihood of instability increases because if a discord between a government and the populace exists, an expedient method to refocus the discord is to attack neighboring states and blame the economic turmoil on that nation.

36 Lancaster, p. 660.
Because state economies follow a cyclical pattern of growth and recession over time, this chapter will focus only on the last fifteen years. Israel’s economy, until recently, has been flourishing, primarily because of revenue generated by growth in tourism, robust and increasing foreign capital investment, and the development of a high technology industry. The Syrian economy by contrast has generally suffered high inflation, poor exchange rates and a lack of foreign investment since the 1970s, as a result of harsh private sector reforms enacted by President Hafiz al-Asad. These policies led to a mass exodus of capital from within Syria, as well the drying up of foreign investment. Moreover, the Syrian economy is reliant upon external rents to maintain growth. This economic imbalance between the two states has increased regional instability and raised security concerns between Syria and Israel. The result has been violence ranging from war, in 1967 and 1973, to recent acts of terrorism.

This chapter is divided into two sections. The first section examines the current state of the Israeli economy by focusing on three indicators: gross national product (GNP), growth over the period in question, and the percentage of GNP generated by the “high technology” sector. The evidence will show that the Israeli economy has grown consistently over the past fifteen years; the only setbacks have been a direct result of violence, most notably the Palestinian intifadas.

The second section of the chapter focuses on the Syrian economy. An examination of Syrian GNP, growth and high technology as a percentage of GNP reveals that the Syrians are far behind the Israelis. While the Syrian economy has experienced growth spurts over the fifteen years in question, the economy overall has been weak and unable to maintain growth without assistance from outside sources. In addition, the section examines the impact of the rentier structure on the Syrian economy. The rentier structure is designed so that the government receives the majority of revenue and then dispurses to the public. Moreover, this structure relies on complacency and apathy from the populace. In other words, there is very little public involvement within the government. The evidence demonstrates that the Syrian economy risks constant collapse, thus exacerbating existing security problems in the region.
A. THE ISRAELI ECONOMY

The three parts of this section, GNP, growth and percentage of GNP contributed by high technology, use data from the period 1985 to the present. I preface this analysis with a brief history of Israeli economic trends and the policies that led to the country’s present prosperity. The part on GNP includes the 1985 Economic Stabilization Plan and the impact of taxation on the economy. I use high technology as an indicator of economic health because the proportion of GNP generated from new technology is a measure of the economy’s level of modernization. In other words, a modern economy tends to gain revenue from technology exports.

1. GNP and Economic Stabilization

From 1973 to 1988, the growth of Israel’s GNP declined to approximately two percent per annum. This was a dramatic downturn from the remarkable growth the economy had experienced in its first thirty-four years of existence. Inflation began to soar, from single digits to over 445 percent. By the early 1980s, the government realized it needed to act, and instituted what was known as the Economic Stabilization Program of July 1985. In a departure from other analysts, I contend that the so-called third economic period starts from the inception of this program, which introduced a period of recovery and eventual primacy in the region.

Israel’s gross national product reached an all-time low in 1985, and the country was on the verge of bankruptcy. This crisis prompted government officials to formulate the Economic Stabilization Program, which they hoped would be a solution. Michael Shalev cites Bichler and Nitzan, who suggested that it was time for Israel to adopt a more outward looking economic strategy. Furthermore, according to Gringberg, the mid-1980s were an especially favorable period for radical economic reform. The stabilization program consisted of five measures. First, it devalued the over-inflated exchange rate by 18.8 percent, and froze the exchange rate at NIS1.50 to $1.00, thus

---

38 Shalev, p. 141.
39 Ibid. p. 140.
40 Ibid. p. 134.
allowing for normal market fluctuation. Second, domestic commodity prices were raised then frozen, this was an attempt to generate consumer spending. Third, the program decreased subsidies and increased taxes. Fourth, the cost-of living-allowance was suspended. The fifth and final step in economic reform was restricting the economy so that Israel was not dependant upon the state for revenue.

At first, the Economic Stabilization Program had an adverse impact, as it lowered actual income. The Israeli government, however, was taking a long-term view, and in time the economy began to turn around. Moreover, the engineers of the plan saw the crisis as an opportunity to devise a strategic reorientation of economic policy. This reorientation was designed to make the economy self-reliant and to build a solid revenue base. While restrictive at first, Israel’s economic policy paid off, and by the end of 1986 the government removed the majority of state-imposed restrictions. From that point, the economy steadily moved forward (see Figure One below). Israel’s GNP slowly gained ground through the last half of the 1980s, going from roughly $48 billion, in 1985, to just under $58 billion in 1989.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>49,015</td>
<td>51,579</td>
<td>55,483</td>
<td>56,988</td>
<td>57,485</td>
</tr>
</tbody>
</table>

The 1990s started where the preceding decade left off, with a growing economy, as Figure Two illustrates. GNP continued to increase from $67 billion in 1990 to $99 billion by 1999. This dramatic recovery illustrates how a strong government and sound economic policies were able to bring the country through hardship and turmoil. This

---

41 Ibid. p. 173.
43 Metz, p. 174.
44 This data extracted from the World Bank’s Developing Country Indices; a CD-rom containing country data and statistics the data was compiled in 1999. https://www.worldbank.org.
upswing has only recently slumped since Palestinian Authority President Yasser Arafat’s declaration of the second intifada (a violent uprising against Israeli rule in the territories occupied by Israel since 1973. According to Shalev, “In the course of the 1990s, the economy experienced a wave of growth that was comparable in pace to the Asian tigers and brought average living standards within reach of the rich OECD democracies.”

Figure Two, 1990-1998 GNP in $ millions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>61,524</td>
<td>66,609</td>
<td>70,258</td>
<td>74,467</td>
<td>79,711</td>
<td>84,825</td>
<td>88,514</td>
<td>90,200</td>
<td>98,512</td>
</tr>
</tbody>
</table>

2. Taxation

The stabilization plan of 1985, however, was only one factor that spurred GNP in the 1980s. Changes in taxation policy were another important aspect of strong economic growth. This policy separates the Israeli experience from that of the Asian “paper tigers.” From 1982 to 1984 Israel was running a budget deficit between 12 and 15 percent of GNP. After implementation of the Economic Stabilization Plan, the budget was balanced. The primary reason for this turnaround was the raising of taxes. Initially, the Israeli tax system was similar to that of a rentier state. The state relied on aid and other rents to meet the balance of payments rather than levying taxes on personal income. The aid that Israel has relied upon to boost the economy primarily came from the United States. Moreover, this aid supplemented the Israeli economy to allow the economic stabilization plan of 1985 to work. Even with the influx of aid coming from America, the economy needed a bigger effort from the Israelis. Therefore, by fiscal year (FY) 1986, however, the rate of taxation had gone from 35 percent to a combined 57 percent GNP: 33 percent from income tax, 20 percent value added tax and customs duties generating another four percent. (See Figure Three below.) Reduced spending in turn decreased

---

47 Metz, p. 154.
inflation, which also helped raise the GNP. In short, the Israeli government entered a period of “state contraction.”

Figure Three, 1985-1989 Tax Revenue (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>44.86</td>
<td>42.38</td>
<td>40.17</td>
<td>36.78</td>
<td>34.46</td>
</tr>
</tbody>
</table>

Figure Four shows a lower rate of taxation in the 1990s than in the last half of the 1980s. This came about because the economy was growing and state revenue was being generated from other sources (i.e., agriculture, high technology sales, state grants and loans), freeing the government from its heavy reliance on taxes as a source of funding. While steady economic growth was due in part to the high tax rate of the 1980s, the strong economy eventually permitted the government to lower taxes. Tax cuts in turn further added to economic growth by boosting retail spending.

Figure Four, 1990-1998 Tax Revenue (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>33.73</td>
<td>25.20</td>
<td>33.30</td>
<td>33.82</td>
<td>34.47</td>
<td>35.35</td>
<td>34.65</td>
<td>35.58</td>
<td>36.62</td>
</tr>
</tbody>
</table>

Although according to the figures above the tax burden appears to be onerous for Israel’s citizens, at this time the government began to re-incorporate business taxes into the revenue stream. This was one immediate effect of the stabilization program, as well as the reduction of the tax rate on undistributed profits from an “internationally high level of 61 percent in 1984 to the rich-country norm (only 36 percent) in 1996.” The ability to decrease taxes signals stability in the state and a prosperous economy. Furthermore, the ability of the government to extract a sizeable amount of revenue from taxes provides an economic “crutch” in case other sources of revenue begin to diminish.

Another reason for the rise in GNP was state contraction--in this case a reduction of the welfare state. This can be seen as a move towards a more even division of labor.

---

48 Shalev, p. 134.
50 World Bank CD-rom, 1999.
51 Shalev, p. 135.
between the state and private industry. Logically, a retraction of government entitlements and subsidies would be matched by an increase in the importance and competitiveness of domestic markets. In the case of Israel, Shalev notes:

The decline since the mid-1980s in the share of national resources distributed by the Israelis is quite remarkable. Total public expenditure had been equivalent to at least three-quarters of the national product since the 1973 war. Nevertheless, two years after stabilization the figure fell to 62 percent and by 1994 it had troughed at only 54 percent. Almost all a decline in government spending.…

The reduction in subsidies reaped dividends for Israel. High government spending in the 1970s led to recession in the early 1980s. As spending moved from the government to private industry in the form of capital investment and wages, workers’ incomes began to increase, which in turn spurred retail spending and the economy as a whole. The result of taxation and state contraction was the reversal of the recession in the mid-1980s, followed by tremendous growth in the 1990s.

3. Growth

One means to determine the strength of a state’s economy is by plotting its trends over time on a graph. This will yield a curving line called the “growth curve.” In general, a state with a positive curve is a strong state. Another means to determine economic strength is the source of state revenue. If a state receives the majority of its revenue from external sources (rents), then no matter how much growth the economy exhibits it will remain inherently weak. A state economy dependent for a large percentage of its income on rents is dependant upon the economies of other nations. If for any reason these rents diminish or cease altogether, the dependant nation’s government will begin to suffer unrest and loss of support as its populace is forced to bridge the revenue gap normally filled by rents.

---

52 Ibid. p. 134.
53 Shalev, p. 134. Data obtained was from a comparison of two five year periods, (1980-1984) & (1992-1996); the source was BOI-96, Appendix Table Hay-la.
54 The “curve” refers to the graph used to illustrate rates of growth. A strong state will typically average a positive (upswinging) curve while a weak country will have a negative (downswinging) curve.
Studies have determined that a stable economy will show annual growth ranging from two to six percent above population growth. Growth above two percent, however, does not in itself indicate a stable government. By contrast, a thriving state may experience moments in which the growth rate falls under the two percent mark, as did the United States during the 1980s. This decade was marked by recession, but the government remained stable. A state on the brink of collapse nevertheless could exhibit tremendous growth, as did Iran in 1978 prior to the Iranian revolution. Only massive economic aid from the United States gave the tottering government of Reza Shah Pahlavi the appearance of stability.

Israel’s growth rate from 1961 to 1972 was roughly ten percent per annum. Between 1972 and 1985, growth slumped to a relatively stagnant three percent. The Economic Stabilization act of 1985 began to reverse the declining growth rate (see Figure Five), but the last half of the 1980s was a turbulent time for the Israeli economy. The introduction of new reforms and the withdrawal of government regulations from many aspects of business brought about severe fluctuations in annum growth over the remainder of the decade, averaging one percent. This may not seem drastic given that two percent growth is still considered an acceptable rate of growth. The test for the Israeli government, however, was its ability to push through radical economic reforms and remain stable during the ensuing adjustments.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>3.9085</td>
<td>5.2306</td>
<td>7.5694</td>
<td>2.7133</td>
<td>0.8238</td>
</tr>
</tbody>
</table>

Figure Five is the growth by percentage that each economy exhibited annually for the last half of the 1980s.

The 1990s brought amazing prosperity to Israel. Most of the reforms enacted in the mid-1980s gradually were revoked as the economy continued to grow (see Figure

55 From author interview with Robert E. Looney, Economist and Professor at the Naval Postgraduate School.
56 Metz, p. 144.
Six). By the final stage of the stabilization plan in the mid-1990s, Israel’s economic growth was averaging approximately 8.6 percent.\textsuperscript{58}

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>7.0769</td>
<td>8.2642</td>
<td>5.4797</td>
<td>5.9897</td>
<td>7.0422</td>
<td>6.4163</td>
<td>4.3489</td>
<td>1.9043</td>
</tr>
</tbody>
</table>

Figure Six is the growth by percentage that each economy exhibited annually for the 1990s.\textsuperscript{59}

The ruling Labor Party’s successful conclusion of a peace treaty with Jordan, signed in 1994, contributed to the prosperity of both countries. By opening up Israel’s economy to neighboring states, policymakers increased avenues for economic growth through trade. The assassination of Prime Minister Yitzak Rabin in 1995, however, precipitated an economic slowdown that continues today (Figure Six).\textsuperscript{60} Nevertheless, despite the political and economic turbulence that Israel has experienced over the past fifteen years, growth has remained positive.

4. High Technology

Israel has led the region in developing its high technology industries.\textsuperscript{61} As well as being an indicator of a progressive economy, technology is also a leading force on the world market. Globalization through media such as the Internet, global telecommunications, and video teleconferencing has meant that economies must adjust to new market conditions or be left behind. Approximately 22 percent of Israel’s GNP in the 1980s came from technology exports (see Figure Seven).\textsuperscript{62}

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>23.9</td>
<td>21.9</td>
<td>22.7</td>
<td>25.8</td>
<td>26.1</td>
</tr>
</tbody>
</table>

\textsuperscript{58} This percent was the average of the growth for 1990-1996.

\textsuperscript{59} World Bank CD-Rom, 1999.


\textsuperscript{61} http://www.photius.com.

\textsuperscript{62} Refer to the World Bank’s: Developing Countries Indices 1999. Also refer to figure nine which shows the average of the last half of the 1980s is 22 percent.

\textsuperscript{63} World Bank CD-Rom, 1999.
This percentage continued to grow throughout the 1990s (see Figure Eight below). The data reveals that Israel has developed a strong modern economy that generates a sizeable proportion of GNP from the high technology sector. This modern economy enables Israel to be less reliable on foreign aid and more independent.

Figure Eight, 1990-1997 % of high technology 64

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>26.4</td>
<td>27.6</td>
<td>24.9</td>
<td>25.3</td>
<td>25.1</td>
<td>27.8</td>
<td>30.2</td>
<td>33.1</td>
</tr>
</tbody>
</table>

These exports have produced revenue in the billions of dollars (see Figure Nine below), and the world market for high-tech products continues to grow.

Figure Nine 1985-1989 high tech exports in millions of dollars 65

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>1246.4</td>
<td>1329.7</td>
<td>1648.3</td>
<td>2161.5</td>
<td>2439.9</td>
</tr>
</tbody>
</table>

It therefore can be expected to be a reliable source of income for Israel into the foreseeable future. The high technology market is another area in which Israel has widened the economic gap with Syria. World Bank charts further support the notion that the Israeli economy is more modern than the relatively traditional economy of Syria. The ability of the Israelis to exploit this revenue source will continue to widen economic gap in the future (see Figure Ten).

Figure Ten, 1990-1997 high tech exports in millions of dollars 66

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>2759.1</td>
<td>2879.2</td>
<td>2918.7</td>
<td>3401.5</td>
<td>3868.5</td>
<td>4722.4</td>
<td>5654.1</td>
<td>6869.9</td>
</tr>
</tbody>
</table>

65 World Bank CD-Rom; 1999.
66 Ibid.
B. THE SYRIAN ECONOMY

Over the last fifteen years, the Israeli economy has exhibited resilience and the ability to overcome economic crises. In contrast, the Syrian economy has not had the success of the Israeli economy. This section examines the Syrian economy through GNP, growth and the percent of high technology that comprises GNP. The lack of high-tech industries is one hallmark of Syria’s relatively traditional economy, one that relies on agriculture and foreign aid rather than innovative enterprise to generate revenue.

1. GNP

Unlike Israel, Syrian GNP has not fared well. From its independence in 1946 through the mid-1960s, the Syrian economy was entirely agrarian. Therefore, growth was slow and depended on the vagaries of rainfall and crop yield. A revolution in 1963, brought the Ba’th Party to power and installed a socialist government in Syria. The new government introduced reforms to expand the public sector, provide subsidies for agriculture, and impose limitations on the private sector. The government also seized production of strategic minerals as part of its program to nationalize key industries. During this period, Syria hemorrhaged skilled workers, experienced administrators and capital, which had a negative effect on GNP during the decade of the 1960s.

The 1970s brought another revolution and the rise of Hafiz al-Asad to power. Asad was discontent with the direction of the Ba’th party. Asad’s dynasty trumped democracy when his son assumed the presidency upon Asad’s death in 2000. The economy, ironically enough, flourished during Asad’s rule, mostly because oil prices were unusually high due to the OPEC oil embargo that began in 1973. Syria and other OPEC members reaped a (temporary) financial windfall. Remittance from Syrian workers in the oil fields of neighboring countries such as Saudi Arabia, Kuwait and Iraq further bolstered the Syrian economy during this period. The relatively high standard of living that Syrians began to enjoy would last only to the end of the 1970s. Even

---

67 Metz, p. 109.
69 These were minerals such as oil and phosphates.
70 Metz, p. 109.
though the country seemed to have a booming economy, the fact remained that Syria was
dependant on foreign aid, primarily from Saudi Arabia (money) and the Soviet Union
(military aid), and on revenue generated from the export of raw materials, to keep it
solvent.

By the mid-1980s, the Syrian economy had gone from relative prosperity to
austerity.\(^{72}\) This was due to a sharp decline in oil prices, a huge disparity in the country’s
balance of payments, and a decline in foreign capital aid and investments because of
Syria’s support for Iran in the Iran-Iraq War in the 1980s. The government’s excessive
reliance on foreign aid and oil revenues, combined with the country’s inadequately
developed industrial sector, contributed to the sharp economic decline. The already weak
industrial sector further suffered from a chronic shortage of electrical capacity.

Figure Eleven, Syrian GNP/year for 1985-1989\(^ {73}\) (in $millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>10,929</td>
<td>10,357</td>
<td>10,266</td>
<td>11,596</td>
<td>10,176</td>
</tr>
</tbody>
</table>

A comparison of Figure One with Figure Eleven shows that over the last half of
the 1980s the Syrian economy was barely one-fifth the size of Israel’s economy. The
1990s however, were a new era for the Syrian economy. GNP grew to a steady $15
billion or so (see Figure Twelve), thanks to improved relations with the Saudi
government, a result in turn of Syrian support for the allies in the 1991 Gulf War against
Iraq. Syria also benefited at this time from so-called “windfall rents,” revenue that is
short-lived and generally is not a lasting commodity (e.g., war reparations, high crop
yield or high state-to-state grants).\(^ {74}\)

Figure Twelve, Syrian GNP/year for 1990-1997\(^ {75}\) (in $millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>11,066</td>
<td>11,910</td>
<td>12,977</td>
<td>13,884</td>
<td>14,941</td>
<td>15,855</td>
<td>16,357</td>
<td>19,944</td>
</tr>
</tbody>
</table>

---

\(^{72}\) Ibid, p. 110.
\(^{73}\) World Bank CD-Rom; 1999.


\(^{75}\) World Bank, 1999.
In 1991, the Asad government put into effect the so-called “Law 10.” This law attempted to open the Syrian economy to foreign investment and sought to revitalize the private sector. On the surface, Law 10 looked like the beginning of real economic reform. In truth, however, the new law turned out to be a defensive reaction toward instability within the ruling regime.76

2. Taxation

Figure Thirteen shows that the percent of Syria’s state revenue generated by taxes is roughly 20 percent, which is relatively low compared with Israel. This percentage should generate concern, because if the state’s primary sources of revenue--oil and foreign aid--decrease or disappear as happened in the 1980s, then the economy once again will be in shambles. A diverse state economic structure, with revenue flows from multiple sources, is more able to cope with economic hardship than one like Syria’s, that depends on only one or two revenue streams.

Figure Thirteen, 1985-1989 Percentage of GDP from Taxes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>0.0</td>
<td>12.8</td>
<td>14.899</td>
<td>14.345</td>
<td>17.129</td>
</tr>
</tbody>
</table>

Syria’s tax revenues come mostly from imports and foreign investment. There are little or no income taxes, and what little taxes do come from workers are in the form of remittance from laborers who work in other countries (see Figure Fourteen). Inadequate tax revenue is yet another reason the Syrian state does not handle fiscal crises well, and growth stays to a minimum.

Figure Fourteen 1990-1997 Percentage of GDP from Taxes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>16.71</td>
<td>18.09</td>
<td>19.40</td>
<td>17.46</td>
<td>17.47</td>
<td>18.68</td>
<td>16.50</td>
<td>16.40</td>
</tr>
</tbody>
</table>

3. **Growth**

On the face of it, the Syrian economy is comparable to Israel’s in growth over time. The test, however, lies with the curve in the growth of GNP and the origins of state revenue. If, for instance, the curve is negative or the sources of revenues are unstable then the actual growth becomes more detrimental then helpful. The Syrian economy’s growth over the fifteen-year period this study deals with has been sporadic at best. The economic improvements of the 1990s brought about by increases in foreign aid, unusually high crop yields and a good oil market, were the result of good fortune, not good economic planning (see Figure Fifteen). Despite having a lot more money, the Syrian economy essentially was in the same position it was in the beginning of the 1980s.

![Figure Fifteen, Percent Growth in Syrian GNP 1990-1997](image)

The years 1985 and 1988 saw positive growth in the Syrian economy only because rents were plentiful. On the other hand, growth over the last half of the 1980s was flat (see Figure Sixteen). When revenues from foreign aid and remittances dried up, the Syrian government was thrust into a position where it needed to open the economy to private business or risk internal strife. Law 10, formulated to meet this crisis, instituted a grace period to entice wealthy Syrian elites to return and invest in their country, and to attract foreign businesses to invest in Syria.

![Figure Sixteen, Percent Growth in Syrian GNP 1985-1989](image)

---

77 World Bank CD-Rom; 1999.


80 World Bank CD-Rom; 1999.
4. **High Technology**

Syria has no high technology industry to speak of. During the 1980s, revenue-generating exports of high technology peaked at six percent of Syria’s total exports (see Figure Seventeen).

Figure Seventeen, Percent of Syrian exports that are high technology 1985-1989

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>6.14</td>
<td>1.6236</td>
<td>1.3978</td>
<td>0.0</td>
<td>5.994</td>
</tr>
</tbody>
</table>

State revenue during this period peaked at $1.2 billion (see Figure Eighteen). These figures are in stark contrast to Israel’s well-developed high-tech sector, and are comparable to any under-developed economy.

Figure Eighteen 1985-1989 high tech exports $millions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>12.19</td>
<td>8.19</td>
<td>5.88</td>
<td>0.0</td>
<td>7.9</td>
</tr>
</tbody>
</table>

Despite the growth in state revenues for the period, the 1990s actually saw a decline in Syria’s high technology sector, to the point where it contributed nothing to the export market. Besides highlighting the traditional economy that Syria still relies on, the data further suggest that there is a vast economic imbalance of power between Syria and Israel (see Figures Nineteen and Twenty below).

Figure Nineteen, Percent of Syrian exports that are high technology 1990-1997

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>2.6376</td>
<td>0.0</td>
<td>0.8011</td>
<td>0.0</td>
<td>0.0</td>
<td>0.8946</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Figure Twenty, 1990-1997 high tech exports $millions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Syria</td>
<td>39.64</td>
<td>0.0</td>
<td>2.28</td>
<td>0.0</td>
<td>0.0</td>
<td>6.19</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

---

81 Ibid.  
82 World Bank CD-Rom; 1999.  
83 Ibid.  
84 Ibid.
5. The Rentier Structure

The rentier economy is one structured so that the state receives the overwhelming bulk of its revenue from outside sources such as natural resource sales and foreign policy sales. The inherent weakness of this system is that money flow is unidirectional. In other words, payment is made directly to the state and then the state directs the flow of money to the populace. The state’s citizens do not have any economic interaction with their government other than to receive whatever it directs their way. Limiting government participation to a select elite works until a fiscal crisis occurs and the government is forced to attempt some quick reforms in order to stay in power. As with Law 10, the result rarely brings more that a temporary, superficial benefit.

Syria’s rentier structure is inherently weak. The Asad government’s reliance on aid and oil to maintain revenues and a positive GNP severely hindered a real deepening of the industrial base and the foreign investment needed to develop a strong market economy. Furthermore, an unengaged, government-supported populace becomes complacent and unable to innovate.

Nor does the rentier structure provide the capability to cope with an economic crisis. If the rents cease then the government is forced to extract revenue from other sources, generally through some form of taxation. As a result, the dependent population becomes enraged because their quality of life is deteriorating. They begin to push for change, resulting in civil unrest and government crackdowns.

C. ECONOMIC ANALYSIS

The Levant today is a notoriously unstable region with profound security concerns. Using three indicators over the period 1985-1997--GNP, growth and the percentage high tech exports contribute to GNP--this paper seeks to demonstrate that the

---

85 As is the case with Jordan.

86 For more information on the rentier structure see; Giacomo Luciani’s, *The Oil Rent, the Fiscal Crisis of the State and Democratization*, or Chaudhry’s *The Price of Wealth: Business and State in Labor Remittance and Oil Economies*. 

36
economic imbalance between Israel and Syria is one important factor that has adversely affected the stability and security of the region.

The data presented in the preceding section show that Israel’s GNP, over the period in question, was approximately five times that of Syria. Translated into raw purchasing power, this gap meant that Israelis enjoyed a better quality of life, and that the state of Israel was able to take advantage of vast resources available on the world market. In contrast, the Syrian economy during this same period remained dependent on outside resources such as foreign aid to meet state needs, which in turn curtailed the Syrian’s government’s ability to take advantage of markets. The GNP of both nations was further impacted by their respective systems of taxation. A state such as Israel that derives a majority of its revenue from taxation has a greater ability to withstand economic downturns than one such as Syria that relies on such volatile revenue sources as raw material exports, aid and agriculture. Israel’s 1985 Economic Stabilization plan shifted the Israeli economy from a socialist to a more market friendly form with a broad tax base. If Syria’s government had attempted to introduce such reforms, it probably would have instigated a coup d’etat.

A comparison of the economic growth in both countries over the fifteen-year period illustrates two points. First, the Israeli economy was strong and able to maintain steady growth throughout the entire period primarily because it was self-sustaining. Israel was able to maintain growth and keep unemployment at a low rate. Israel’s ability to be self-sustaining came from strong industrial production, a high technological market and limited reliance on state-to-state revenue. The strategic rents that Israel received from the United States during this time were an important factor that aided the Israeli economy’s fast recovery through the last half of the 1980s. Furthermore, the aid provided enough relief so that Israel could move towards a self-sustaining economy.

Second, rate of growth by itself is not a reliable gauge of economic health. On the surface, for example, the Syrian economy outgrew the Israeli economy throughout the 1990s, but a closer look reveals that Syria’s apparent growth came from strategic rents, not from increased production. While the growth rate took a phenomenal upswing during the 1990s, Syria’s GNP actually grew only slightly.
Third, it is readily apparent that revenue from Israel’s well-established high-tech industry far surpassed that of Syria over the period of study. This income alone generated roughly 25 percent of Israel’s GNP in the 1990s. By contrast, Syria’s high-tech export market is non-existent. Syria’s inability to develop new industries also has inhibited its economy from becoming self-reliant, further exacerbating the economic imbalance between the two nations. Raw data from the World Bank depict a huge disparity between the two countries’ relative wealth. If Syria hopes to compete with the economic power of Israel or any other developed nation, the Syrian government’s reliance on rents must cease. Syrian leaders must reform their economy to encourage industries that are able to produce revenue, rather than continuing to rely on money given by other nations. Increasing self-reliance will promote competition, which in turn, promotes industrial expansion. Industrial growth lowers unemployment and increases tax revenues, which give the state the flexibility to implement reforms and improve infrastructure. A stable and prosperous Syria will be able to close the economic gap with Israel and contribute to security and stability in the Levant.
IV. THE LINK TO BALANCE OF POWER

Chapter IV applies the theory of balance of power to explain why relations between Syria and Israel tend to reflect instability and heightened insecurity. Up to now, balance of power arguments have not been applied to the turmoil between Syria and Israel, and should produce a fresh and parsimonious explanation of the trouble in the Levant.

This chapter is divided into three sections. First, I define balance of power theory by synthesizing works by Emerson M.S. Niou and Peter C. Ordeshook, and Partha Chatterjee. These authors’ ideas provide sound criteria by which to judge whether balancing exists, and a working model of the theory that can be applied to the countries of the Levant. Second, I use three case studies to illustrate how balance of power manifests in specific instances: Napoleonic France, which dominated Europe in the early 19th century until Russia and Great Britain rose against it; South Africa’s preponderance of power in the southern region of Africa; and the Cold War standoff between the United States and the Soviet Union. Although relations between the two superpowers sometimes brought them close to war, the two nations never fought each other. Balance of power theory suggests that the Cold War remained cold because neither of the two enjoyed a preponderance of power. Therefore I conclude that a balance is needed between Syria and Israel in order for them to coexist in peace.

The final section in this chapter applies balance of power theory to the Levant. This section will describe the severe imbalance that persists between Syria and Israel and show how this imbalance contributes to the instability that presently dominates the Levant. Until this imbalance is addressed by the world community, prospects for peace will remain limited.

A. BALANCE OF POWER DEFINED

For the purposes of this thesis, I draw my definition of balance of power primarily from Emerson M.S. Niou’s and Peter C. Ordeshook’s *A Theory of the Balance of Power in International Systems*. This work postulates that balance of power, and therefore,
stability, is dependant upon system and resource stability. The authors present a model I use to show that military power and economic strength are the two primary factors that must be balanced to achieve stability. To supplement Niou’s and Ordeshook’s arguments, I draw upon Partha Chatterjee’s *The Classical Balance of Power*. Together, these works provide a comprehensive and useful explanation of balance of power theory.

Niou and Ordeshook argue that the understanding of balance of power has become muddled over time, and that a more lean and concise model was needed. They concluded that balance of power was based on the notion of system and resource stability, as described in the introduction to their book:

Attempts at incorporating the assumption that national leaders pursue clearly defined objectives, and at applying the theory of cooperative games to the analysis of international systems, have led to little success in formalizing the concept of balance of power, and in providing theoretical justification for much of the scholarly intuition about this concept. But by assuming that such leaders temper their desire to maximize resources by the goal of ensuring the survival of their countries, and by distinguishing between two forms of stability—one in which no nation’s existence is threatened and one in which no nation’s resources are threatened—we offer a model that yields necessary and sufficient conditions for both forms of stability.  

In short, a strategic balance between nations is possible only when there is system and resource stability. While the authors do not precisely define system and resource as military or economic means, I made this deduction based on the authors’ assumption that states seek to “maximize power and resources.” In order to maximize national power, it may be assumed that a nation needs a strong military as well as a robust economy. Moreover, without a strong economy, a nation will lack the resources to build a powerful military. Weaker nations therefore will tend to form alliances in order to balance against the hegemon.

---


88 Ibid. p. 687.
To find a more clear definition of the terms “system and resource,” I turned to Partha Chatterjee’s *The Classical Balance of Power*. Chatterjee provides the link that incorporates the military and economy into the balance of power model:

The rulers of each of these nation-states are primarily concerned with preserving what they perceive to be their national interests, which presumably include such things as national identity, independence, territorial jurisdiction, power capabilities, etc.; and also with the furthering of those national interests, which implies suitable changes in national power capabilities.89

Chatterjee further defines “national power capabilities” as military and economic means, most notably population, material resources, industrial capacity and armed forces.90 This definition offers not only a sufficient basis for comparison of the relative strengths of Syria and Israel, but also a means to disprove the theory. One example of a nation with a weak military and moderate economy that has managed to survive is Switzerland. This example shows that military strength is not the key to stability, rather a flourishing economy is the key.

Before applying this concept to the Levant, one question needs to be addressed: is there any impact (negative or positive) to regional actors in the presence or absence of a balance of power? After all, if a connection cannot be made between imbalances and conflict or a balanced system and stability, then there is no reason to take the discussion further.

B. BALANCE OF POWER CASE STUDIES

This section uses three case studies, Napoleonic France, South Africa and the Cold War, to provide empirical data to support my thesis that instability between Syria and Israel is a function of balance of power. These studies will illustrate that when the military and economic strength of two nations are relatively balanced conflict is minimized, and when an imbalance pertains conflict will result.


90 Ibid. p. 52.
1. Napoleonic France

The French revolution was a turning point not only for France and its people, but also for the security of Europe. After Napoleon ascended to power, he began a military build-up that culminated in his 1812 march on Russia. French domination of Europe lasted until Austria, Russia, and Germany could form a coalition capable of balancing against France and bringing to bear the military power needed to defeat Napoleon.

Napoleon’s France was able to become a regional hegemon by generating and borrowing enough wealth to raise an enormous, well-equipped army; this combination of treasure and force enabled Napoleon to conquer Europe. While Napoleon was able to raise a moderate sum of money through taxation, he found he could not borrow what he needed except at high rates of interest. He increased the state’s revenues before war broke out only by establishing credibility through repayment of external debt. Once the French exchequer had credibility, France was able to borrow from other nations at manageable interest rates. This resource stability provided the means for Napoleon to begin a military build-up. If he had chosen to settle for the status quo instead of conquest and domination, the other countries of Europe would have continued trading with France and allowed Napoleon to develop a defensive force for national security without challenge. His ambitions, however, combined with the state’s increasing indebtedness, would inevitably lead to France’s economic collapse, a new balance of power and increasing stability within the region.

Once war began, state funds decreased rapidly and the Directory, the ruling council of France under Napoleon, was forced to increases taxes in an attempt not only to fight the wars, but also to continue to borrow from other nations. The attempt failed and France ultimately was defeated. Napoleon’s invasion of Russia, hampered by fierce resistance, a long supply chain and insufficient money, produced devastating results. Russia, Britain, Prussia, and the Hapsburg Empire eventually formed an alliance that was able to balance against French power and quell Napoleon.

---

a. Lessons Learned

The Napoleonic wars demonstrate first of all that a state that possesses an excess of military might is perceived to threaten the sovereignty of other nations. A preponderance of military strength will be understood to exist only for the purpose of aggressive action against neighboring nations. Second and more importantly, Napoleon’s rise illustrated the link between a strong military and a strong economy. The French military only grew when the economy was robust. When war started and the economy plummeted, Napoleon was forced to raise taxes in order to maintain his military force. The generation of taxes did not produce the desired result. The end of wartime lending to France, coupled with extended supply lines to Russia, soon became too difficult to overcome.

2. South Africa

The second case that illustrates the link to my argument that an imbalance produces conflict is South African dominance of the lower African continent. Until it began to make attempts at peaceful negotiations in 1984, Pretoria’s regional policy could most aptly be characterized as a policy of destabilization. In the words of Simon Jenkins: “The entire South African regional policy effort becomes collapsed into an attempt by Pretoria to inflict maximum material damage on the economies and social structures of regional states.” Why was South Africa able to dominate neighboring states with relative ease? The answer again lies with the economy and military.

The South African economy was far more developed than any of its neighbors. Its vast diamond industry relied on immigrant workers, as many as 300,000 in 1973. As a result, other nations’ livelihood depended on the South African mining trade. Economic dominance was the first step for the South African government to establish its

---


policy of destabilization. The South African economy dominated the region, forcing its neighbors into reliance, cooperation and obedience. If they failed to conform, they incurred military and economic punishment.

While South Africa maintained a strong economic advantage, the government realized that a large military force would be necessary not only to defend the country, but to enforce foreign policy as well. Therefore, by the mid-1970s, the military budget grew more than one and a half times over the previous year. The goal of the South African government was to have armed forces that could be used, so that when economic measures did not coerce neighboring countries to follow Pretoria’s wishes, force could be brought to bear. Peter Vale also discusses South Africa’s coercive foreign policy, although he focuses on developments since 1989. Furthermore, since the collapse of the Berlin Wall, little seems to change with respect to South African policy towards neighboring states. The collapse of the Soviet Union, while it did not seem to change South Africa’s policy of regional dominance, did increase the level of difficulty the international community has influencing a land that is far from the mainstream of the “modern world.”

a. Lessons Learned

There are two primary lessons to take from this case study: first, that economic and military power are linked, and second, if one nation establishes hegemony, then it will try to coerce others through economic and military methods. The South African case study shows that a nation that acquires a vast preponderance of power will use force (economic and military) in order to coerce neighboring states to be subservient to it.

As with Napoleonic France, South Africa was able to build a military because its economy was robust. The difference between the two case studies is that neighboring states in southern Africa are reliant on their migrant workers in South Africa to stimulate their own economies, whereas Napoleon had to improve France’s economy.

---

95 Ibid. p. 188.
96 Ibid. p. 198.
after a revolution. By comparison, South Africa had a broader-based economy from which to develop a military. Raw materials and diamonds were pivotal to South Africa’s flourishing economy. A strong economy spurs the military growth that will enforce policy and coerce neighbors to align with a regional hegemon.

3. The Cold War

The final case study presented here is that of the Cold War (for the purposes of this study, 1945-1989). The Cold War was based on a balance of power between the Soviet Union and the United States. This example illustrates that stability is possible as long as a balance is maintained. The two focal points for this case study will be to show the link between economic and military power, and how the two factors affect the stability of the international system. I maintain that the Soviet Union and the United States never fought a war because there was a balance of power between them that preserved stability and prevented war.

During the period 1945-1989, the United States and the Soviet Union tried to discredit the other side’s form of government through economic and military means. Each side believed that it was necessary to possess the finest and most destructive military. In order to accomplish this, they had to have the economic potential and strength to maintain the spending that a military of this magnitude would need.

I have already established that the military and the economy of a nation are linked. The Cold War was no different. The Soviets and the Americans were able to build their massive militaries because the economy of each nation was designed specifically to build a military. The USSR’s communist ideology was used to funnel vast state revenue into developing a deterrent force comparable to the American military, while social programs suffered.

In contrast, the economy of the United States, while generally better than the Soviet economy, was constantly in a state of flux when it came to the amount of money spent on any one program, including the military. The early 1980s were an economically difficult time for the country, so political leaders used inflammatory rhetoric to bolster popular support for increased military spending. In the 1980s, President Ronald Reagan
called the Soviet Union an “evil empire” in order to convince Congress to divert more money to military spending.98

Why then, given the lack of trust between the two nations and their vast military power, did the Soviet Union and the United States never go to war directly with one another? Simply put, they had created a stable balance of power. Each nation wielded a tremendous arsenal in order to deter the other from attacking, a policy that became known as mutually assured destruction, or M.A.D. This policy rested on the knowledge that if either side launched a preemptive strike, then the other side would retaliate with enough force to annihilate the aggressor. Moreover, by the end of the Cold War, the world’s economies were becoming increasingly more interdependent. Therefore, any destructive action taken by either side would have far greater impacts than coercion or simple destruction.

a. Lessons Learned

The Cold War is a valuable case study for the balance of power argument. The forty-four year period in which the two sides maintained relative military and economic parity was without direct conflict between the two nations. Ironically, since the collapse of the Soviet Union, the level of conflict around the world has dramatically risen. Some argue that the world is shifting toward multi-polarity, while others argue that the world has become unipolar, with several states that could be classed as second tier below the one remaining superpower. The intent of this paper is not to argue either way, but to point out that the Cold War produced a stable environment, and that the reason for the stability was the balance of power between the United States and the Soviet Union. The two superpowers based their power on a massive military structure on a strong economic base.

The Soviet Union collapsed due to a failing economy. This failing economy, in turn, led to the degradation of the Soviet military, proving again that there is a link between the economy and military might. If a nation possesses the economic

98 George Lucas director of “Star Wars” coined the evil empire; President Ronald Regan adopted this phrase to refer to the Soviet Union. Every time Reagan spoke publicly, this phrase was used to rally the public against the Soviet Union and the rest of the communist states.
capacity to maintain and build a strong military, then only two outcomes are possible: it will become a hegemon or balance with another nation.

C. APPLICATION TO THE LEVANT

This chapter has defined balance of power and has provided three examples that illustrate the need for a balance of power in order to ensure peace. How then does balance of power theory apply to the Levant? Chapters one and two of this thesis presented data showing that Israel maintains a lop-sided advantage over Syria in economic power and in the size, capabilities and equipment of its armed forces. Furthermore, I have already established a positive link between a robust economy and a strong military. These factors explain why violence in the region has been steadily increasing over the past fifteen years.

1. Balance as a Function of the Economy

Chapter II argued that there is a huge imbalance in the economies of Syria and Israel. To establish that this imbalance exists, I used the following criteria: GNP, percent growth over a fifteen-year period, and percent high technology on the market place. The chapter demonstrated that the Israeli economy far surpassed the Syrian economy. The Israelis relied primarily on taxes, industry and aid for generating state revenue. Syria relied first and foremost on state-to-state aid, then what money state-owned industry could produce, and finally a limited tax base (primarily from business). Furthermore, the aid that Israel receives, not only bolsters the economy, but also serves further to develop the military. Because the Israeli economy far surpasses the Syrian economy, the imbalance is not isolated to state revenue; the military is deeply affected as well.

2. Balance as a Function of the Military

The Israeli Defense Force (IDF) and the Syrian military reflect the relative economic strength of their countries. Chapter one showed that the IDF is a far superior force compared with the Syrian armed forces. This finding was based on an examination of the personnel, equipment and training of the army, navy, and air force of each nation. The result is decidedly tilted in favor of Israel. Israeli personnel not only have better
morale, but their equipment is new and training more effective, thus giving them a distinct advantage over the Syrians.

a. Technology

The Israelis rely on Western (primarily American) weaponry. Because the majority of Israeli weapons are from the United States, they are in good working condition, and America continually sells parts and supplies to upgrade and maintain the weapons and systems used in Israel. In contrast, the Syrians relied on the Soviet Union, and with its end came the end of the weapons sales. During the Cold War, the USSR provided weapons on “good faith” credit, to balance the American presence in the Middle East, but after 1990 the Russian Federation demanded payment up front, something Syria could not do. This further exacerbated the deficiency in Syrian weapons, as now out-of-date Soviet armaments could not be maintained or made available for training.

b. Training

Training is an integral part of developing sound tactics and proficiency in the armed forces. Here Israel again has a definite advantage over Syria. The Israelis regularly conduct exercises with the U.S. military, while the Palestinian intifada has given the IDF practice in real-world operations. This combined training has helped win the IDF a reputation as an elite force not only in the region, but worldwide. In contrast, Syrian training consists of moving two tanks situated on the Golan Heights back and forth to simulate operations.99 Poor Syrian training is due in part to the lack of useable equipment, and also to insufficient funds to purchase supplies or even fuel.

3. Does a Link Exist?

This section has not only applied balance of power theory to the Levant, but it also has demonstrated that there is a definite link between military and economic strength. Syria’s lack of technology and modern weapons shows how a failing economy hinders military development. The Israelis have managed to separate themselves from the rest of the region not only with their sophisticated military technology, but also by their ability to maintain the weapons they have. The link between the economy and the

99 Lt. Col. Scott Williams, USMC, witnessed this example while he was in Israel.
military may be seen in Syria’s inability to purchase the equipment, spare parts and fuel it needs, and consequently its poor military training. A huge imbalance exists between Israel and Syria. That this imbalance has exacerbated security concerns and instability in the region is self-evident.

4. Conclusion

This chapter demonstrates that balance of power theory is an effective method for examining conflict in the Levant. I have offered a definition of balance of power based on certain criteria, and find that if there is imbalance then violence is likely to occur. To support this claim I discussed three case studies: Napoleonic France, South Africa and the Cold War. The first two cases illustrated that violence occurs in the presence of a power imbalance. These cases further established a link between economic and military power. The Cold War provides evidence that major war can be averted through a balance. Having laid the groundwork, I then applied the theory to the Levant, in particularly to the case of Syria and Israel. This portion of the chapter discussed the evidence that there is in fact an imbalance between the two rivals, previously illustrated in chapters I and II. I also elaborated on the link between the economy and military using the models of Syria and Israel. The next section then broke down the power imbalance into economic means (using chapter II for support) and military means (using chapter I as support). Based on the previous chapters and this theory, I conclude that the imbalance between Syria and Israel has led directly to an increase in instability and insecurity in the region. The violence has seemed to increase, even as the disparity between Israel and Syria continues to grow.
V. CONCLUSIONS/RECOMMENDATIONS

A. CONCLUSIONS

This thesis has argued that the theory of balance of power is a viable tool for understanding the stability and security problems that plague Israeli-Syrian relations. Stability in the Levant can be achieved only if the imbalance ends. The empirical data I have provided show that large gaps in capability exist in two areas: military power and economic strength. I do not argue that the two sides must reach complete parity, but that the current disparity must greatly diminish.

Chapter II compared the Syrian and Israeli armed forces in terms of manning, equipment and training. It found that equipment and training are two critical criteria for a dominant military. The data on Syria demonstrated that old, faulty equipment renders a military useless. Furthermore, training is vital for proficiency, lethality and effectiveness. The Israeli military gap with Syria is important for discussion because it clearly shows that the Syrians would not last long in a drawn-out battle with the Israelis. This is not a “size of the military” question in this case; the Israel and the Syrian armies are comparable to each other in actual numbers of troops. The only difference is that Israeli forces are mainly in reserve, while the majority of Syrian troops are in the regular army. Rather, the gap is in capability, as calculated by training and equipment.

The third section of this thesis discussed the economic imbalance between Israel and Syria. The military gap, while important, does not weigh as heavily in determining whether countries will come into conflict as does economic strength. After all, a strong military does not mean a nation is intending to go to war. The economy, on the other hand, dictates the strength not just of a society, but of its military as well. It follows then that promoting a strong economy for both Israel and Syria is the key to stability.

I looked at data in three areas that give a good picture of an economy’s strength: GNP, rate of growth, and the percentage of GNP contributed by high technology industries. It became apparent that the composition of the GNP matters. If a nation relies primarily on state-to-state grants or other strategic rents to provide its revenue, the economic structure is likely to prove unstable. A government with a diversified revenue
stream is more likely to withstand fluctuations in any given sector. Moreover, a thriving GNP usually is a good indicator of strong growth. Chapter III showed that the Syrian economy is weak because Damascus persists in getting a majority of its revenue from state-to-state grants, while Israel’s economy, by contrast, is broad-based and supplies the state with revenue from multiple sources. These sources include, but are not limited to, taxes--both business and personal, a robust high technology industry, exportation of minerals, and economic assistance. The paying of taxes is important because it gives citizens a stake in how the state is governed. For their part, high technology industries are regarded as a proxy by which a modern economy is distinguished from a traditional economy. These two sectors account for nearly 65 percent of the Israeli GNP. Since reliance on rents or foreign grants is minimal, Israel maintains stability in times of economic hardship. This has been demonstrated by the Palestinian intifadas, during which Israel suffered economic losses but its government remained stable.

B. RECOMMENDATIONS

In this section I recommend policies that would facilitate the signing of a peace agreement between Israel and Syria. A formal peace accord is in the best interest of both nations, for economic as well as security reasons. Peace would open new markets that neither Israel nor Syria has until now been able to enter, offering new opportunities for growth. Prosperity in turn keeps the populace content and decreases internal instability. If a nation is not worried about whether the neighboring government will fail, then it is less likely to engage in an excessive military build-up and risk regional instability as insecure neighbors follow suit. While an agreement would benefit the economies and well-being of both nations, there are specific conditions each would have to meet to make an agreement possible.

1. Israeli Terms for Peace

Israel has three demands that Syria must fulfill before it considers formally ending hostilities. First, the Syrians must not occupy or use Lake Tiberius for water or any other purposes. Lake Tiberius was annexed by Israel during the 1967 war, at the same time as the Golan Heights. While Israel has agreed to the return of the Golan down to a few
hundred meters next to the Lake Tiberius, Israel would cede the entire Golan if there were a guarantee from Syria that Syrians would not occupy or use water from the lake.

Second, Syria must withdraw from Lebanon. This is one remaining point that Israel is adamant about. Lebanon once was a valuable source of revenue and trade for all of the Levant. When Syria occupied Lebanon, the black market and crooked politicians drove business from Israel to the Syrians. Third, Israel wants recognition from the Arab League for its right to exist. This recognition is not a driving factor in regional relations, but the Israelis would like to extend business and trade to all Arab neighbors. Since Israel reached peace agreements with Egypt in 1973 and Jordan in 1994, the Israelis have seen the benefits of new and extended markets in those countries. Furthermore, it is in the best interests of any Arab nation to achieve peace with Israel. Since Israel holds a strong lobby in the U.S. government, any neighbor that needed assistance could petition Israel to ask for U.S. help.

2. Syrian Conditions for Peace

In contrast to Israel’s demands, the conditions that drive Syrian hopes for peace center on the Palestinians and the hope for a nation of Palestine. While this issue was a moot point until recently, the intifadas and Israeli occupations of Palestinian territory have vaulted this issue to the forefront of the Arab League’s agenda. While it is possible that Syria would settle for an agreement as long as Israel withdraws from the West Bank and Gaza, the likelihood is very low.

The second critical issue for Syria is the complete return of the Golan Heights to Syria. Israel could possibly have avoided losing the few hundred meters of the bank on Lake Tiberius, if they had not returned the entire Sinai to Egypt. As it stands, the issue of the Golan must be addressed in order for the Syrians to consider a peace proposal to be legitimate.

The third term for peace is the right of return. Syria maintains that Israel must grant all expelled Palestinians the right to return to their homeland within Israel. Syria would, however, likely accept a ceremonial right of return, that is to say, as long as this issue was part of the peace agreement the Syrians would not demand its enforcement.
Finally, Syria demands that the Israelis cease expansions of settlements within Palestine. The issue of Israel disbanding settlements and leaving the West Bank and Gaza is a potential source of conflict in any peace negotiations. Israel has constantly expanded the existing land area that surrounds the settlements and pushed the Palestinians into a smaller and smaller area. Therefore, the disbanding of settlements has become an issue that Syria will insist be settled at a peace conference.

3. **Future Prospects for Peace**

This thesis finds that prospects for future peace in the Levant rest on closing the balance of power gap that exists between Israel and Syria. The military and economic disparity between the two countries has exacerbated security concerns in the region. Economic parity, however, would be reached easily if both nations would lift trade restrictions. As the evidence shows, economic strength is the most pivotal factor for achieving strategic balance. After all, a nation with a strong economic base has the means to build strong defenses and attract allies.

While economics are one key to peace between Syria and Israel, however, specific issues are also inhibiting the process, as discussed in the previous section. The likelihood of a solution to the Golan Heights issue is high. Israel has reduced its claim to a few hundred meters; these final meters should not pose a threat to a peace agreement. Nor will the issue of water rights to Lake Tiberius (which is linked to the Golan issue) pose a problem for negotiations, since the Syrians receive greater than 70 percent of their water from far north in Turkey.

The questions of Palestinian autonomy and a homeland, however, remain intractable problems for now. As long as terror bombings continue in Israel proper, the idea of settling the dispute with Palestine is a non-starter. If other Arab nations would take the initiative to stop the bombings, then Israel would be more inclined to sign a peace accord officially recognizing a Palestinian state. This issue will remain the chief stumbling block to any peace agreement between Syria and Israel.
### APPENDIX ONE: ISRAELI NAVAL VESSELS

<table>
<thead>
<tr>
<th>Submarines:</th>
<th>Number:</th>
<th>Armament:</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAL</td>
<td>3</td>
<td>SL-Harpoon SSM, 8x533mm torpedo</td>
</tr>
<tr>
<td>Dolphin</td>
<td>1</td>
<td>SL-Harpoon SSM, 6x533mm torpedo</td>
</tr>
</tbody>
</table>

| Surface Ships:    |                      |                                               |

<table>
<thead>
<tr>
<th>Missile Corvettes:</th>
<th>Number:</th>
<th>Armament:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eilat Class</td>
<td>3</td>
<td>1xSA-536 Helicopter, 8x Harpoon SSM, 8x Gabriel II SSM, 64x Barak-1 SAM Launcher, 1x76mm gun, 2x25mm Sea Vulcans, 6x324mm Torpedo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fast Patrol Boats:</th>
<th>Number:</th>
<th>Armament:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliya Class</td>
<td>2</td>
<td>1xSA-536 Helicopter, 8x Harpoon SSM, 4x Gabriel II SSM, 2x20MM Guns, 1x Vulcan Phalanx, 2x12.7mm MG</td>
</tr>
<tr>
<td>Hetz Class</td>
<td>7</td>
<td>8x Harpoon SSM, 6x Gabriel II SSM, 1-2x 76mm Guns, 1x Vulcan Phalanx, 2x20mm Guns, 2x12.7mm MG Some are used for ASW with 2x3x324mm Torpedo with sonar</td>
</tr>
<tr>
<td>Mivtach Class</td>
<td>2</td>
<td>5x Gabriel II SSM, 2x3x324mm Torpedo with sonar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patrol Craft:</th>
<th>Number:</th>
<th>Armament:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Dovra</td>
<td>14</td>
<td>2x20mm or 2x25mm MG, 2x12.7mm MG, 1x84mm MRL (depth charge)</td>
</tr>
<tr>
<td>Dabur</td>
<td>18</td>
<td>2x20mm MG, 2x12.7mm MG, 2x324mm Torpedoes, 1x84mm MRL</td>
</tr>
<tr>
<td>Nahshol</td>
<td>3</td>
<td>2x12.7mm MG</td>
</tr>
</tbody>
</table>
## APPENDIX TWO: ISRAELI AIR FORCE

<table>
<thead>
<tr>
<th>Model:</th>
<th>Number in service/origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-151</td>
<td>25 since 1998 (American)</td>
</tr>
<tr>
<td>F-15 Eagle</td>
<td>73 since 1976 (American)</td>
</tr>
<tr>
<td>F-16A/B/C/D</td>
<td>245 since 1980 (American)</td>
</tr>
<tr>
<td>F-4E/RF-4E Phantom</td>
<td>140 since 1969 (American)</td>
</tr>
<tr>
<td>A-4 Skyhawk</td>
<td>120 since 1967 (American)</td>
</tr>
<tr>
<td>Kfir C-2/TC-2/C-7/TC-7</td>
<td>35 since 1976 (Israeli, based on the French Mirage III)</td>
</tr>
<tr>
<td>AH-64A Apache</td>
<td>42 since 1990 (American)</td>
</tr>
<tr>
<td>AH-1G/1S Cobra</td>
<td>65 since 1981 (American)</td>
</tr>
<tr>
<td>500MD Defender</td>
<td>33 since 1979 (French)</td>
</tr>
</tbody>
</table>
## APPENDIX THREE: SYRIAN ARMORED VEHICLES

### Tanks

<table>
<thead>
<tr>
<th>Model</th>
<th>Number</th>
<th>In service/origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-72/T-72M</td>
<td>1,500-1,600</td>
<td>Since 1979 (Russian)</td>
</tr>
<tr>
<td>T-62</td>
<td>1,000</td>
<td>Since 1974 (Russian)</td>
</tr>
<tr>
<td>T-55/T-54</td>
<td>1,100</td>
<td>Since 1957 (Russian)</td>
</tr>
</tbody>
</table>

### APC’s

<table>
<thead>
<tr>
<th>Model</th>
<th>Number</th>
<th>In service/origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMP-1</td>
<td>2,450</td>
<td>No data (Russian)</td>
</tr>
<tr>
<td>BMP-2</td>
<td>70</td>
<td>No data (Russian)</td>
</tr>
<tr>
<td>BTR-152</td>
<td>560</td>
<td>Since 1957 (Russian)</td>
</tr>
<tr>
<td>BTR-40/50/60</td>
<td>1,000</td>
<td>Since 1956 (Russian)</td>
</tr>
<tr>
<td>BRDM-2</td>
<td>900</td>
<td>No data</td>
</tr>
</tbody>
</table>
## APPENDIX FOUR: SYRIAN NAVAL VESSELS

### Fast Patrol Boats

<table>
<thead>
<tr>
<th>Class</th>
<th>Number</th>
<th>Armament</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ossa I</td>
<td>6</td>
<td>4xSS-N-2A Styx SSM, 4x30mm Guns</td>
</tr>
<tr>
<td>Ossa II</td>
<td>10</td>
<td>4x SS-N-2C Styx SSM, 4x30mm Guns</td>
</tr>
</tbody>
</table>

### ASW Assets

<table>
<thead>
<tr>
<th>Class</th>
<th>Number</th>
<th>Armament</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petya II</td>
<td>2</td>
<td>3x533mm Torpedoes, 4xBRU 2500 ASW Mortars, 22 mines, 4x76mm Guns</td>
</tr>
</tbody>
</table>

### Mine Warfare Vessels

<table>
<thead>
<tr>
<th>Class</th>
<th>Number</th>
<th>Armament</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonya Class</td>
<td>1</td>
<td>2x30mm MG, 2x25mm MG</td>
</tr>
<tr>
<td>T-43</td>
<td>1</td>
<td>16 mines, 2x37mm Guns, 8x14.5mm MG</td>
</tr>
<tr>
<td>Yevgenia Class</td>
<td>5</td>
<td>2x25mm Guns, 2x14.5mm MG</td>
</tr>
</tbody>
</table>

### Patrol

<table>
<thead>
<tr>
<th>Class</th>
<th>Number</th>
<th>Armament</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhuk</td>
<td>8</td>
<td>4x14.5mm MG</td>
</tr>
</tbody>
</table>
# APPENDIX FIVE: SYRIAN AIR FORCE

<table>
<thead>
<tr>
<th><strong>Type:</strong></th>
<th><strong>Number:</strong></th>
<th><strong>In Service/Origin:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mig-25 (Foxbat)</td>
<td>35</td>
<td>Since 1980 (Russian)</td>
</tr>
<tr>
<td>Mig-29 (Fulcrum)</td>
<td>20</td>
<td>Since 1987 (Russian)</td>
</tr>
<tr>
<td>Mig-21 (Fishbed)</td>
<td>200-210</td>
<td>Since 1974 (Russian)</td>
</tr>
<tr>
<td>Mig-23</td>
<td>100</td>
<td>Since 1974 (Russian)</td>
</tr>
<tr>
<td>Su-24 (Fencer)</td>
<td>20</td>
<td>Since 1988 (Russian)</td>
</tr>
<tr>
<td>Su-20/22</td>
<td>100</td>
<td>Since 1978 (Russian)</td>
</tr>
<tr>
<td>Mi-25 (Hind)</td>
<td>55</td>
<td>Since 1980 (Russian)</td>
</tr>
<tr>
<td>Sa-342 (Gazelle)</td>
<td>45</td>
<td>Since 1976 (Russian)</td>
</tr>
</tbody>
</table>
THIS PAGE INTENTIONALLY LEFT BLANK
BIBLIOGRAPHY


DISTRIBUTION LIST

1. Defense Technical Information Center
   Fort Belvoir, Virgina

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California

3. Professor Glenn E. Robinson
   Naval Postgraduate School
   Monterey, California

4. Professor Karen Guttieri
   Naval Postgraduate School
   Monterey, California

5. Professor Robert E. Looney
   Naval Postgraduate School
   Monterey, California