



## ISRAEL'S ECONOMIC GROWTH: SUCCESS WITHOUT SECURITY

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*While economic development theorists generally hold that security is a prerequisite for economic growth, Israel's war-torn history has not prevented it from creating a strong, modern, and diversified economy, one which rivals European countries instead of its neighbors in the region. This article considers the factors that allowed for Israel to succeed economically despite its persistently poor security situation. It specifically cites the importance of the location and type of violence Israel has faced, the consistent arrival of highly educated immigrants, the influx of foreign capital driven by political motives, and the development of a robust domestic military-industrial complex.*

Since independence in May 1948, Israel has fought six wars, two intifadas, a continuing terrorism threat, an economic boycott, and intermittent diplomatic isolation. It is currently in a formal state of war with two of its neighbors (Syria and Lebanon) and has only a cool peace with the other two (Jordan and Egypt), despite peace treaties. In effect, all of its land borders are relatively closed to trade. More generally, it is an outcast in the Middle East, deprived of any opportunity to benefit from the commerce generated by regional oil wealth but having to bear the costs of living in a neighborhood characterized by arms races and instability.

Nonetheless, Israel has a strong, modern, and diversified economy that in 2000 posted an annual Gross Domestic Product (GDP) of \$104.1 billion, 40 percent of which consisted of exports of goods and services. Growth for 2000 reached six percent.(1) Israel's per capita Gross National Income (GNI) for 2000, at almost \$17,000, placed the state ahead of Spain, Portugal, Greece, and New Zealand.(2) No longer classified as a "developing country" by the World Bank, 54-year-old Israel now ranks as a high-income economy and was identified as one of the most global emerging markets by

Foreign Policy magazine's Globalization Index.(3) Over the past decade, Israel's high-technology industry, second only to California's Silicon Valley in concentration of firms, powered economic growth and attracted massive Foreign Direct Investment (FDI) to the country, a figure that reached \$4.4 billion in 2000.(4)

Israel today ranks third in the world in the number of university graduates per capita, after the United States and the Netherlands.(5) It possesses the highest per capita number of scientists in the world, with 135 for every 10,000 citizens (compared to 85 per 10,000 in the United States),(6) and publishes the highest number of scientific papers per capita.(7) According to one recent survey, almost 81 percent of Israelis own cell phones, placing it sixth in the world. Another survey found that 54 percent of Israelis own personal computers, in comparison to only 42 percent of U.S. respondents.(8)

Measured against the performance of other countries that gained independence after World War II, Israel's economic success has been nothing short of remarkable—and highly unexpected. In creating a modern industrial economy rivaling those of several Western

European countries, Israel has defied a host of conventional predictors of sustainable economic development, most conspicuously the premise that security is a necessary, if not sufficient, prerequisite for economic growth. Given its historic lack of security, how has Israel managed to achieve such high levels of economic prosperity? What accounts for Israel's unexpected economic success?

It is essential at the outset to define what "security" means in the Israeli context. Generally, threats to a country's security can be divided into two categories: internal and external. Internal threats refer to issues of law and order, and include demonstrations and street violence connected to political instability and regime illegitimacy. External threats are those posed by foreign armies or militant groups and can range from occasional cross-border raids to full-scale invasions. For this article's purposes, the term "security" will be used expansively to encompass both internal and external threats to Israel's continued existence and well-being. Moreover, in keeping with the multifaceted reality of the Arab-Israeli conflict, this paper will discuss threats to Israel's security on both the military and economic fronts.(9)

This article argues that a combination of conventional and unconventional factors, economic and otherwise, allowed Israel to overcome the barriers posed by an enduring lack of security. Foremost among them is the fact that until the advent of Palestinian suicide bombings in 1990s, much of the violence associated with the Arab-Israeli conflict never entered Israel proper (i.e., inside the Green Line dividing Israel from the West Bank and Gaza Strip), so the physical infrastructure of Israel's economy remained largely unharmed.

Second, the lack of security did not deter successive waves of Jewish immigration to the state -- immigration propelled mainly by non-economic forces. Although the task of absorbing so many immigrants drained the country's budget, especially in its early years

and then again in the 1990s, the influx of so many people, including highly educated and skilled workers, created an instant domestic market and a rich reservoir of human capital.

Third, partly because of its precarious military position, resource-poor Israel attracted large amounts of foreign capital driven by political, rather than economic, motives. Foreign loans and outright transfers in the form of donations from Jewish communities, reparations from Germany, and military and economic aid from the United States facilitated the country's development as well as its citizens' relatively high living standard.

Last, and perhaps most important, Israel's urgent defense needs gave rise to a domestic military-industrial complex that became an unmatched engine of economic growth, spurring technological advancement and netting significant export income.

Of course, these were not the only factors responsible for Israel's unanticipated economic success. But they are the most salient in the context of the country's economic development in the absence of security. By historical accident, many of these elements are specific to the post-Holocaust emergence of a Jewish state, casting doubt on whether Israel's experience can be replicated by other emerging markets. However, several contributing factors that will not be discussed at length in this paper can potentially be applicable elsewhere, chiefly Israel's adoption of a democratic form of government and its strong base of social capital.

Part I of this article provides a brief overview of the literature linking security and market-building and discusses its relevance to the Israeli case. Part II will explain the history of Israel's economic development and examine the discrete challenges that the country faced. Part III will elaborate on the above-mentioned reasons why Israel was able to surmount those challenges. And Part IV, the conclusion, will consider what lessons may be gleaned from Israel's economic history that could be applied

to other similarly situated developing economies.

### SECURITY AND MARKET BUILDING

Among the most fundamental and important underpinnings of the market-building approach to development is the idea that uncontrolled violence and positive economic development are incompatible. As Robert Bates (10) explains, economies of all sorts are founded on a base of capital investments. These investments, whether of money or time, energy, and skill, entail risks because investors may not be able to recoup their present-day costs through future payoffs. In the absence of security, when the uncertainty of future events is compounded, such risks run especially high. Citizens, much less outsiders, will not invest in a state if what they produce will likely be destroyed or taken from them in the future. Hence, conventional wisdom does not expect there to be any considerable productivity in the absence of a peaceful order.(11)

A similar notion has traditionally held with regard to the determinants of FDI. Socio-political instability and the resulting "political risks" are often thought to influence FDI flows to specific countries.(12) Indeed, a 1966 survey of corporate executives ranked political instability as the most important variable guiding their foreign investment decisions.(13)

Based on such a proposition, Israel's economy should not have succeeded as well as it has. Averaging a war per decade and facing constant terrorist attacks, Israel, at least superficially, has plainly lacked the kind of "peaceful order" envisioned by development theorists. A closer look, however, will reveal that in Israel's case, it is important to distinguish between a lack of security due to foreign threats and a lack of law and order. Much of the literature that is devoted to economic development and security considers internal violence, such as bandit raids or tit-for-tat clan skirmishes. Although such a model may

apply, to an extent, to relations between Arabs and Jews in Ottoman- and mandate-era Palestine, it never applied within the Jewish economy itself.

In any case, the establishment of the state of Israel effectively put an end to such small-scale hostilities. Indeed, until the first Palestinian intifada broke out in the Gaza Strip and the West Bank in December 1987, Israel's main security threats were external, emerging from the surrounding Arab states. Thus, Israel's security situation must be analyzed from both inside Israel's borders and outside, complicating the security-economic development thesis laid out above.

Another twist specific to Israel's development is that from 1950 and onward, Israel was subject to an Arab boycott which eventually came to include many non-Arab companies around the world. This harmed Israel's economy, but cannot be said to have endangered its security. To the extent, then, that Israel's economy developed under different conditions from those analyzed by theorists such as Robert Bates and Mancur Olson, any evaluation of the Israeli experience will necessarily stray from the predictions set forth by these authors.

### HISTORY OF ISRAEL'S ECONOMIC DEVELOPMENT

#### *The Pre-State Yishuv*

The foundations of Israel's economy date back to the pre-state Jewish settlement (*yishuv*) that began in the early 1880s, in what was then Ottoman-controlled Palestine.(14) Indeed, much of the *yishuv*'s economic activity set the pattern for Israel's later development.

Led by mainly young, socialist immigrants from Russia and Eastern Europe and fueled by continuing immigration that saw almost 550,000 Jews arrive in Palestine between 1882-1947,(15) the *yishuv* focused its energies on building communal agricultural settlements that were meant to make the return to the land

practical as well as symbolic. Numbering 12 in 1918, these collective settlements grew to 19 in 1921, and to 25 in 1925. By 1945, they reached 179.(16) The early emphasis on agriculture—in a land with a limited water supply, and in 1950, of which two-thirds consisted of desert and barren hills (17)—would prove lucrative in later years as Israeli agricultural productivity and innovation allowed the country to become largely self-sufficient in terms of food production, and a leading exporter of produce and agricultural technology.

Agriculture, a labor-intensive occupation, was particularly well-suited to employ the thousands of Jewish immigrants who arrived each year. From 1882 to the eve of independence, the Jewish population grew at a rate of 4.9 percent annually from immigration alone.(18) Immigrant absorption, particularly the distribution of jobs, was controlled by the *yishuv* organizations and the powerful, politically active *Histadrut* trade union, which functioned not only as a labor advocate but later came to own many Israeli businesses. After the state's creation, political parties, especially the Labor party that held power uninterrupted during Israel's first three decades and was identified with the *Histadrut*, continued to exert a heavy influence on the state's employment structure.

In a trend that would continue well into Israel's future, the *yishuv* was financed in large part by the donations and investments of Diaspora Jews, whose money contributed to construction, manufacturing, and agricultural production, as well as public funds used to purchase land.(19) Such ideological foreign investment was and remained vital to the *yishuv*'s, and later the state's, development given that the country attracted little foreign commercial interest until the 1990s. But by placing vast amounts of capital in the hands of a central authority, it also furthered the state-dominant economic model that Israel would follow for almost forty years.

Driven by Jewish immigration and capital, the *yishuv* economy, based largely on agriculture and small manufacturing, grew at an annual rate of 13.7 percent between March 1919 and December 1947.(20) Although violent skirmishes with the local Arab population (which had doubled during the same period) (21) did occur, the *yishuv* economy was able to prosper in a relatively secure environment given that, beginning after World War I, the British mandate authorities maintained basic law and order while the *Haganah*, forerunner of the modern-day Israel Defense Forces (IDF), protected specifically Jewish interests.(22)

#### *The First Twenty Years: 1948-1968*

Following independence, the new state's economy was structured around three basic elements: high defense costs, mass immigration absorption, and the building of new institutions such as banks, a national insurance institute, and government agencies, all of which necessitated massive infusions of public money into the economy. Almost immediately, the government implemented an austerity program, including rationing basic goods and limiting the amount of foreign currency individuals could hold. It also poured money into agricultural and water development projects.(23)

A formidable challenge, however, arose with the early immigration explosion that more than doubled the Jewish population from May 1948 to 1951. Annual Jewish immigration for those years reached a rate of 22.6 percent.(24) Many of the immigrants arrived from Middle Eastern and North African countries, among them a high proportion of children, and they were almost completely dependent on the state for housing, language instruction and education, job training, and employment. Their numbers led to labor shortages and strengthened the *Histadrut*'s job-dispensing position in the economy.

Although the state had inherited a well-developed bureaucracy from the *yishuv*, capable of administering the government's social and

economic programs, it remained dependent on outside funding. Lacking exploitable natural resources and offering only a small and fledgling domestic market, as well as heavy-handed government intervention, Israel attracted little foreign investment. Contributions and loans from Diaspora Jews, often in the form of low-interest Israel bonds, helped finance the state's imports of energy, raw materials, and production inputs. Far more significant, however, was the reparations agreement that the government signed with West Germany on September 10, 1952, which provided a massive infusion of much-needed foreign currency into Israel's economy.(25) The agreement pumped about \$850 million directly into state coffers until 1964 and financed the lion's share of Israeli imports, mainly with German goods, between 1953 and 1965.(26)

While immigration and the war effort sapped the government's budget (the latter especially necessitating large foreign currency expenditures to purchase weapons, as well as diverting the productive labor force resulting in a loss of national product), they also stimulated the economy, galvanizing production – often underwritten by the state—to meet defense and consumer needs. German reparations helped fund continued large-scale government investment in agriculture and manufacturing through joint ventures, subsidies, loans and grants to private investors.(27)

Meanwhile, the Sinai campaign in which Israel joined forces with Britain and France in attacking Egypt following the nationalization and closing of the Suez Canal, led to a mini-economic boom in 1956. Immigration numbers rose to 70,000 in 1957 (the highest number since 1951), unemployment declined, productivity grew (especially in agriculture and industry), and the state's balance of payments improved.(28) Similarly, the 1967 War brought Israel out of the recession that had been deliberately induced by the government the previous year to combat high consumption rates

that produced inflation and a growing trade deficit. Following the war, unemployment was greatly reduced, productivity and private consumption began to rise, industries related to defense (from metals to computers) benefited, as did tourism, and new immigration began. Further, the domestic market expanded to include the newly occupied West Bank and Gaza Strip, which also provided a source of cheap labor.(29)

In sum, Israel saw tremendous economic growth in the 1950s and 1960s. Its GDP increased by an astounding 30.1 percent in 1951, and averaged a rate of 9.2 percent for the 1950-1968 period, second in the world only to Japan's 9.7 percent.(30) Private consumption grew by 9 percent for the same period.(31) A World Bank mission to Israel in October-November 1968 labeled Israel's performance an "economic miracle" given its dearth of natural resources, hostile neighbors, and large-scale immigrant absorption. The mission attributed Israel's success to two factors: human skill ("a capable and determined population with a broad base of well-educated and energetic people who proved able to overcome the difficulties of economic development with great ingenuity") and foreign capital ("originating chiefly from private donations of American Jews and from reparation payments by West Germany.") (32)

#### *Ups and Downs: 1968-1989*

The most significant change in Israel's economy following the 1967 War took place in the country's government-financed defense industry.(33) Forged during the pre-state *yishuv* and expanded in the 1950s when attempts to buy abroad were often unsuccessful,(34) Israel's military sector until 1967 focused on producing light arms and communications equipment.(35) After the war, with its ambitions stoked by its fantastic victory, Israel began to produce sophisticated weapons systems including fighter jets, tanks, and missiles both for its domestic market and, later,

for export. The acceleration of military production was driven by a number of factors, chiefly: necessity in light of the War of Attrition with Egypt in the late 1960s as well as continued cross-border terrorist attacks; the French arms embargo following the outbreak of 1967 hostilities, which cut off Israel's main supply of weapons; the U.S. refusal, until the 1970s, to sell Israel any major weapons' systems; and the government's desire to respond to military needs in a way that developed local industry.(36)

The surge in military production was also a quest for technological superiority, given the population ratio between Israel and the surrounding Arab states. Defense spending as share of Gross National Product (GNP) doubled from 10.4 percent in 1967 to 20.2 percent in 1969 and reached 25.7 percent in 1970,(37) as the government poured massive resources into research and development (R&D), boosting employment in the defense industry from 14,000 in 1966 to 34,000 in 1972,(38) and setting the industry up as a major engine of economic growth.

The 1973 War sent Israel's defense budget soaring even higher as Arab countries, flush with newly acquired petrodollars or aid from oil-exporting states, could now purchase the most advanced weaponry. When the Middle East arms race, exacerbated by Cold War rivalries, took off, Israel's defense costs reached an annual average of approximately 32 percent of GNP for 1973-1976,(39) an amount that could only be financed by the U.S. grants and loans that started in 1972 and paid for an increasing amount of U.S. military equipment. (Between 1972 and 1979, U.S. military aid amounted to about one-quarter of the country's total defense consumption.) (40) Throughout the 1970s, Israel continued to devote about 30 percent of its national product to defense, though the numbers fell toward the end of the decade and stabilized around 20 percent throughout the 1980s. Significantly, Israel's signing of a peace treaty with Egypt—the largest,

most powerful Arab country—in 1979 did not result in deep reductions in defense spending.(41)

Despite the added jobs and export revenues generated by an invigorated defense industry, as well as a 1975 free trade agreement with the European Community (Israel's largest trading partner from that point to the present), economic growth slumped from 1973 through the 1980s. The decline was attributable to post-1973 defense demands (which may have come at the expense of investment) as well as the rise in energy costs and the global recession. Israel's GDP grew a modest 2.7 percent annually from 1981-1989, with a per capita GDP rise of only 1.1 percent.(42)

Inflation reached double digits by the early 1980s, as public sector employment—long protected by the *Histadrut* labor union – grew to 30 percent of the labor force, forcing Israel into heavy debt to finance rising levels of private consumption in the face of stagnant output.(43) Only in 1985 did a coalition government institute a salutary economic program, overhauling the Israeli currency and adopting reforms designed to curb public spending. Privatization reforms severely weakened the *Histadrut*, which had used its political influence to acquire significant construction, insurance, health services and other businesses (simultaneously representing big business and “big labor”), and paved the way for the 1990s economic boom.

#### *The High Tech Revolution: 1990-2000*

Since 1990, Israel experienced substantial economic growth powered by massive immigration from the former Soviet Union and a dynamic “high tech” sector, both of which operated under the relatively favorable geopolitical climate created by the Middle East peace process. The collapse of the Soviet Union and the ensuing political and economic turmoil drove almost 900,000 new immigrants to Israel from 1989 to 1998, augmenting Israel's population of 4.56 million people by 19.3

percent.(44) Many of these immigrants were highly educated and assimilated fairly easily into the Israeli market. More than 55 percent had post-secondary education, and more than half held academic and managerial positions in their former countries: 15 percent were engineers and architects, 7 percent were physicians, 18 percent were technicians and other professionals, and 8 percent were managers.(45) Their arrival contributed to annual GDP growth of 6 to 7 percent in the first half of the 1990s, one of the highest rates in the world.(46) The pace of expansion slackened during the latter half of the decade, plunging to only 2 percent in 1998, though FDI flows—a novel addition to Israel's economy—continued to climb.

Dovetailing with immigration in the 1990s was the unprecedented growth of the country's high tech sector which currently achieves total annual sales of more than \$7 billion and ranks among the top five world leaders in the field,(47) with Tel Aviv identified as one of the 10 top high-tech centers in the world.(48) Indeed, as of December 2000, 9 out of every 1000 Israelis were employed in high tech research and development, almost twice the concentration of the United States and Japan.(49)

Israel's high tech history has its roots in the IDF's Science Corps, created in 1948 to develop advanced military equipment. Indeed, the military-industrial complex has long served as a mechanism for transferring scientific knowledge from the army to the civilian sector, as will later be explained. With the scaling down of Israel's defense budget beginning in the late 1980s, thousands of skilled workers left the army to form a base of start-ups, which found a receptive business environment as a result of sustained government deregulation, privatization, and liberalization since 1985. The Middle East peace process, initiated with the Madrid Conference in 1991 and continuing through the 1993 Oslo Declaration and the

1994 peace treaty with Jordan, positioned Israel—by far the most technologically advanced country in the region – to take advantage of globalization and its corresponding international flow of capital. FDI became a novel and pronounced element of the economy totaling more than \$7 billion between 1993 and 1997,(50) and hitting a record high in 2000 with almost \$5 billion.(51)

At the same time, Israel's high tech industry went global, providing the third highest number of initial purchase offerings (IPOs) on the NASDAQ in New York, after the United States and Canada, and the second highest number on London's Alternative Investment Market, behind Britain.(52) Today, high tech goods and services account for one-third of Israel's exports.(53) Although the industry has been in decline in the opening years of the twenty-first century, largely mimicking the U.S. new economy downturn, it is expected to recover as soon as U.S. firms did.

There are mixed reviews as to how the 1990s' peace process affected Israel's economic performance, if at all, during the last decade. Certainly, the illusion of progress in solving one of the world's most intractable conflicts made the region a more attractive investment target in general. The Middle East-North Africa (MENA) economic summits, which brought Israelis together with representatives from Arab governments and businesses throughout the decade, lent Israel a sense of legitimacy as an economic partner and may have helped assuage fears about Israel's precarious position in the region, both of which impacted incoming FDI flows. In addition, tourism, long a strong sector of Israel's economy, may have increased as a result of the peace agreements. Yet, analysts have noted that Israel achieved high growth levels (slightly above 6 percent) beginning in 1990 – a year before Madrid and three years before Oslo.(54) Moreover, the peace process did not lead to reductions in defense spending (55) nor any regional water, transportation, or

energy projects, as was hoped. It is understandable that the promise of regional trade never materialized given that Israel's economy is not complementary to those of its neighbors. In fact, there has already been under-the-table trade that probably cannot expand beyond current levels.(56)

It is important to note that the economic prosperity of the 1990s coincided with a new, deadly dimension of the Arab-Israeli conflict: the advent of Palestinian suicide terrorism inside the Green Line. The Israeli Government Press Office reported in 1998 that more Israelis were killed by Palestinian terrorism in the 5 years following the Oslo Accords than in the preceding 15 years combined.(57) Israel's economy has not escaped the violence unscathed but it is hard to isolate precisely the economic impact of the terrorism. Israel's productivity started to dip in 1996, when the first wave of bombings began. But many analysts point to the Asian economic crisis of 1997-1998, followed by the bursting of the U.S. high tech bubble, as an explanation for why Israel has not yet recovered its early 1990s momentum.

#### *The Second Palestinian Intifada: 2000-2002*

A look at Israel's performance since the Palestinian uprising began in September 2000 reveals a similarly mixed picture. The dangerous security situation has combined with a global economic slowdown triggered by the bursting of the U.S. high tech bubble to throw Israel into one of the worst recessions in its history. Israel's GDP contracted by .06 percent in 2001 and is expected to decline by about one percent in 2002.(58) Unemployment has reached over 10 percent—a jump of almost 20 percent since the beginning of 2001.(59) Tourism dropped more than 50 percent from 2000 to 2001, at a cost of \$1.7 billion, and has continued to fall.(60) Defense expenditures have increased as government receipts have fallen, and the Israel shekel has lost value against the dollar.

Private economists agree with the Israeli government that two-thirds of the decline in Israel's GDP from 2000 to 2002 is due to the high tech downturn rather than the intifada.(61) Indeed, Israel's economy is the most tech-dependent in the world, with 15 percent of the country's GDP and 31 percent of all exports originating in the high tech sector; thus, the global high tech slowdown has hit Israel harder than other countries.(62) Nonetheless, despite the intifada, the Tel Aviv 100 Index outperformed the U.S. S&P 500 over the period from May 2001-May 2002. It also tracked the U.S. index more closely than it did the pattern of suicide bombings.(63)

A report by Israel's Ministry of Industry and Trade reveals that despite major suicide bombings in Israel's city centers and Israeli retaliation in the Palestinian territories, Israel's ports, communications, transport, power and water sectors (i.e., its economic infrastructure) have been operating undisturbed. Significantly, both Goldman Sachs and McKinsey and Co. reported in 2001 that Israel's high tech economy had not been affected by the attacks, noting that many R&D centers are far from the flashpoints of violence. Many foreign investors do fear traveling to Israel, but Israeli businesspeople have more frequently traveled to them and have exported goods at a higher rate.(64)

However, many non-high tech industries have been deeply affected by the violence, especially industries that rely on Palestinian labor such as agriculture and construction. A marked decline in tourism, which accounts for 3 percent of GDP and has declined even further after September 11, has reverberated in the hotel and hospitality sectors prompting the government to announce an almost \$100 million emergency loan to the hotel industry.(65) The Palestinian violence has also cost Israel about \$200 million in property damage, payments to victims, extra security, police, and hospital expenses. In addition, exports to the Palestinian Authority are down.



In all, the Bank of Israel estimates that the cost of the intifada in 2001 was \$2.6 billion.(66)

### *Challenges Particular to Israel*

In total, Israel's economic success is quite unique among developing countries given the conditions under which it evolved: few natural resources, a socialist legacy, regional warfare, and mass immigration absorption—all of which combined should have brought failure. Israel's case must be further distinguished from other successful development stories such as those of the Asian tigers because of the challenges particular to Israel that stemmed from its security situation.

The most enduring challenge since the state's creation has been the social and economic cost of a heavy defense burden. Throughout the years, Israel has consistently topped any list of developed economies in percentage of national product devoted to defense. At the height of its defense spending in 1976-1977, Israel's military expenditures totaled more than 30.7 percent of its GNP. In comparison, the United States spent 5.7 percent, the United Kingdom 4.9 percent, and France 3.85 percent for the same period.(67) A quarter-century later, despite massive reductions, Israel's defense budget in relative terms remains three times higher than that of the United States or European countries at a rate of around nine percent of GDP.(68) Of course, since the early 1970s, Israel's defense burden has been cushioned by annual U.S. military aid transfers that by the late 1980s had reach almost \$2 billion.(69) Nonetheless, throughout the 1990s – after the Cold War and in the thick of the peace process – defense expenditures as a percentage of total government spending remained above 20 percent.(70)

Beyond direct military expenditures lay the hidden costs of defense: the special construction costs mandated by the provision that every residential building contain a bomb

shelter and, after the Gulf War biological-chemical attack scare, that every new home contain a sealed-off room; the construction of bypass roads; the value of land held by the army for training; and the diversion of the best scientific minds to the military sector's needs.

Indeed, the costs of defense in Israel have taken a pronounced human and social toll as well. Compulsory military service at age 18 exists for every Jewish Israeli, lasting three years for men and two years for women.(71) As a result, most Israelis start their post-secondary education and careers later than their contemporaries in other countries. Moreover, during their compulsory service, soldiers earn a fraction of what they could in the civilian market, diminishing their incomes and the economy's productive capacity. That capacity is also distorted by compulsory reserve duty for most men (and some women), which can take employees away from their jobs for more than a month each year. Another claim is that the enormous investment in Israel's defense budget came at the expense of a redistribution of income to the weaker segments of society, namely Jews whose ancestors came from Arab and Muslim countries, not to mention Israeli Arabs. These communities have remained underprivileged as inequality persisted and grew.(72)

Presumably, Israel's economy could have developed at a much faster pace had it not had to devote such a large share of its resources—economic and human—to defense. It is true that many developing countries, especially the Arab countries situated around Israel's perimeter, spend similar if not higher percentages of their national product on the military. But they have done so at the expense of the economic, social, and political achievements that Israel can claim. Thus, while Israel's economy in per capita terms has approached that of some of the world's most advanced countries, its military spending has had to keep pace with countries whose leaders have traded butter for guns,

subordinating their citizens' basic socio-economic welfare to the acquisition of arsenals.

While the costs of maintaining a superior defense capability have been mitigated to an extent by the substantial value Israel's military-industrial complex has added to the economy, Israel weathered another challenge—the Arab economic boycott—less successfully. The Arab boycott of Israel actually preceded the state's creation. It began with a December 1945 Arab League decision to refuse all commercial contact with the Jews of Palestine, with the stated goal of thwarting the establishment of a Jewish state. By 1951, the boycott extended beyond direct business contact with Israel to any foreign firm that “aided” Israel.(73) A third-tier boycott introduced later—of firms doing business with firms that did business with Israel—was a logistical failure from the outset. Regardless, at its height the boycott was enforced by 18 Arab countries and 10 non-Arab Muslim states, including Pakistan, Indonesia, and Malaysia.(74)

International companies employed one of two strategies to deal with the boycott. The more sophisticated firms continued to do business with Israel but managed to hide any overt ties to the country. Others simply caved in. Often, firms from a single country would divide up the Arab and Israeli markets among themselves. For example, Japanese automobile manufacturers allocated the Arab market to Honda, Nissan, Mazda, and Toyota, and the Israeli market to Subaru, Daihatsu, and later Mitsubishi.(75)

There is no clear indication of how much actual damage the boycott did to Israel's economy, though one private study put the figure at \$40 billion since 1948.(76) Israel's success certainly belies any notion that the boycott significantly impeded the country's growth. The most harm done was likely in deterring foreign investment. Indeed, until the late 1970s, foreign firms accounted for no more than 5 percent of all investment in Israel.(77) On the other hand, quite apart from the boycott,

transnational companies may have stayed away from Israel because of its scant natural resources, high wage structure, and small domestic market, not to mention the government's heavy hand. Investors could not have been encouraged by the decision of Israel's first prime minister to grant the *Histadrut's* demand to be part of any foreign investment.(78)

The boycott certainly increased Israel's energy costs, though until the 1979 overthrow of Iran's shah, Israel was able to purchase oil from Iran. Afterward, Israel's peace treaty with Egypt allowed Egyptian (and other) oil to flow to Israel. With the exception of oil, the direct boycott (prohibiting state-to-state economic relations) probably did not harm Israel at all, given the incompatibility of the Israeli and Arab economies. In any case, Israel's gaze always lay beyond the Middle East to the advanced states of Europe and North America.

## **WHAT ACCOUNTS FOR ISRAEL'S SUCCESS?**

The success of Israel's economic development despite its lack of security is attributable to four main factors:

### *Location of the Violence (79)*

Although Israel has been in a state of war (or cold peace) with surrounding Arab states for its entire existence, the violence associated with the Arab-Israeli conflict rarely penetrated Israel's borders on a significant scale until the 1990s. Thus, economic development proceeded unscathed by the destruction of war. Terrorism, on the other hand, did reach Israeli targets inside the country and around the world since the pre-state era. But terrorism, as will be explained, does not threaten development in the same way that war does.

In its first 40 years, Israel fought a war per decade with surrounding Arab countries. However, only on two occasions—in 1948 and 1973—did Arab armies launch full scale invasions of the Jewish state. Both times,

Israel's army repelled the offensives before they made serious inroads into Israeli territory, and managed to push the fighting into Arab land. Thus, the brunt of the attacks was absorbed by Israel's military in terms of lost lives and damaged equipment. Spared the widespread destruction and occupation usually associated with war, Israel's economic infrastructure was able to develop unharmed. Its transportation and communications networks were undisturbed; its ports remained open; its factories and production facilities continued to produce, as did its farms; its offices and businesses operated regularly; and its laboratories and universities were able to thrive far from the war front. Of course, Israel's workforce was affected by the wars as reserve soldiers were called into active duty, but not to the extent of crippling productivity.

The suicide bombings of the past decade changed the equation by bringing the violence into the hearts of Israel's major cities, into points of mass transit and commerce such as buses and shopping malls. Paradoxically, Israel saw enormous economic growth in the 1990s spurred by mass immigration and foreign investment. The key to understanding why the violence did not deter growth lies in the nature of terrorism and the fact that it aims at psychological rather than physical destruction. Terrorism does not stop industrial activity. Terrorists targeted wedding halls and cafes, not the Tel Aviv Stock Exchange or high tech industrial parks. Israelis have continued to work and produce, even if they have stopped visiting crowded places.

Similarly, while waves of terrorism have frightened away tourists, causing heavy losses to tourism-related sectors of Israel's economy, they have not discouraged foreign investment mainly because "new economy" goods and services are often intangible and thus are not in danger of physical destruction. Moreover, when foreign investors have been fearful of traveling to Israel, Israelis have traveled to them—another

indicator that new economy business can be conducted almost anywhere (i.e., there is no factory to inspect, construction to oversee, etc.) As a result, despite the terrorism, the risks associated with investment in the 1990s were fewer than in the previous 40 years.

In sum, the violence of the Arab-Israeli conflict did not have much of a direct influence on the development of Israel's economy. Israel's physical infrastructure was largely insulated from the fighting, and its "intellectual" infrastructure has not provided a ready mark for attack.

#### *Sustained Immigration*

One would expect that a country perpetually at war with its neighbors, with a compulsory military draft for men and women (and reserve duty thereafter), and under constant terrorist threat, would not attract large numbers of immigrants. Yet Jewish immigration to Israel has continued unabated since the *yishuv* era, peaking in the early state period and again after the fall of the Soviet Union. High rates of immigration led to expanded consumer demand and the growth of a domestic market; job creation and home construction; a larger workforce and increased productivity; and, with the arrival of highly educated immigrants, scientific progress and commercial innovation.

The unstable security situation exerted little, if any, impact on immigration because most of the immigration was propelled by non-economic forces. (The 1990s immigration from the former Soviet Union is an exception, as will later be explained.) Many Jews, especially in the early years of the state, immigrated to Israel because of religion and ideology. During the pre-state era, the idea of building a Jewish state in the biblical land of Israel was a practical and logical alternative to the antisemitism that many Russian and Eastern European Jews endured in their native countries. Similarly, after the decimation of European Jewry during the Holocaust, Israel served as a haven for many

survivors and their families. For many religious Jews around the world, Israel held a strong pull as the realization of a promised return to the Jewish homeland. Such religious motivation has continued to bring Jews to Israel, particularly from Anglophone countries.

After the state's creation, Israel's "pull" was complemented by a "push" from Arab and Muslim countries to expel their Jewish residents. The anti-Israel sentiment in Middle Eastern countries, especially those that had just fought against Israel's independence, caused many Jews to fear for their safety. Many Jews fled countries such as Iraq, Yemen, and Iran in secret, leaving behind their homes and possessions. Today, they (and their descendants) comprise roughly half of the country's Jewish population.

It is important to remember that successive Israeli governments have actively encouraged immigration as a means of strengthening the country against the vastly more numerous surrounding Arab population. (Officials have also made an ideological plea for an "ingathering of the exiles" to attract Jewish immigrants.) Even in 2002, the government of Prime Minister Ariel Sharon called for massive fund-raising to help Argentina's approximately 250,000 Jews escape their country's current political and economic turmoil, which has left them in a precarious position. The Jewish Agency, a governmental body with representatives around the world, vigorously recruits Jewish immigrants and helps settle them once they arrive in Israel. The Agency played an important role in airlifting thousands of Yemenite Jews to Israel in the 1950s in "Operation Magic Carpet" and again in the 1984-85 "Operation Moses" which brought almost 17,000 Ethiopian Jews to Israel, and the 1990-1993 "Operation Solomon" during which 15,000 Ethiopian Jews were airlifted to Israel in one day.(80)

The Jewish Agency was also instrumental in engineering early Soviet immigration to Israel starting in the 1970s when it operated covertly

in the USSR, which then did not allow Jews to emigrate. It maintained a prominent role throughout the 1990s, when more than one million Soviet immigrants arrived in Israel.

The Soviet immigration of the last decade stands out from previous waves both because of its sheer volume and because of its economic motivation. In fact, for many of the immigrants, Israel was a second-choice destination; the United States was the first. The political and economic disarray in the former Soviet republics, including Russia, drove the mass exodus of Soviet Jews who were undaunted by the prospect of military service in the face of the first Palestinian intifada, which began in December 1987, or the Iraqi Scuds that fell near Tel Aviv during the 1991 Persian Gulf War. These immigrants brought to Israel a tremendous reservoir of skill and education that helped fuel the high tech boom of the last decade.

#### *Foreign Transfers*

Like many emerging markets, Israel could not have achieved such a high rate of development without significant infusions of foreign capital. Private capital usually gravitates toward resource-rich, stable areas. Israel, of course, lacks both precious resources and stable borders. Yet it still managed to attract substantial foreign transfers, the main sources of which—donations from world Jewry and wealth transfers resulting from Jewish immigration, German reparations, and U.S. aid—were driven by political and ideological motives. The non-economic character of the transfers—the fact that the money came explicitly for development purposes, rather than for profit—afforded successive Israeli governments considerable leeway to direct development and subsidize a high standard of living. It was also essential given the high levels of government spending necessitated by Israel's defense burden and immigrant absorption. In fact, foreign aid to Israel on a per capita basis is the highest in the world.(81)

The security threat to Israel has actually resulted in higher levels of foreign transfers. For example, contributions from world Jewry to Israel have increased during wartime.<sup>(82)</sup> More important is the U.S. military aid that Israel has received annually since the early 1970s. Most of the military aid, totaling almost \$2 billion annually, consists of imports of U.S. military equipment—a condition stipulated by the American government.<sup>(83)</sup> The aid helps relieve Israel's heavy defense burden and provides Israel with the most advanced weaponry necessary to maintaining its qualitative edge in the region.

With the exception of the American military aid, the foreign “gift” transfers to Israel are slowly coming to occupy a less prominent position in the Israeli budget. German reparations to the state ended almost 40 years ago (though payments to individual survivors continue) and donations from Diaspora Jews are becoming less important relative to GDP.<sup>(84)</sup> There has even been talk, most notably by former Prime Minister Benjamin Netanyahu, about ending the non-military component of the annual U.S. aid package, which amounts to about \$1 billion a year.

#### *The Military-Industrial Complex*

The final factor accounting for Israel's economic success despite its perilous security situation is the emergence of the country's formidable and internationally competitive defense industry, which became a crucial engine for export-oriented growth. Created to supply the defense needs of constant warfare against Arab neighbors, Israel's government-funded military-industrial complex eventually grew to become the fifth largest arms exporter in the world.<sup>(85)</sup> By pursuing a goal of technological superiority in military equipment and strategy, the defense sector triggered a “spillover” effect that powered Israel's commercial industries and the 1990s high tech boom.

The local success and global expansion of Israel's military industry following the 1967 War had a number of positive effects on Israel's economy. Traditionally, military production has been the most modern sector of the economy, benefiting from massive R&D investment. Indeed, during the 1980s, an estimated 65 percent of all government R&D expenditures were defense-related (compared to 13 percent in civilian sectors).<sup>(86)</sup> The advanced technology developed in military research centers has been transferred to civilian sectors largely by former soldiers trained as army technicians, programmers, and engineers. The result has been industrial innovation and the creation of Israel's high tech economy.

Israel's military production has also netted the country significant export income. Military exports grew in the 1970s parallel to Israel's battlefield success and reputation. From 1973 to 1997, arms exports increased 25 times over from \$40-70 million to \$1.52 billion.<sup>(87)</sup> By 1986, the New York Times reported that arms and security services accounted for more than 25 percent of Israel's industrial exports.<sup>(88)</sup> That number is still accurate today.<sup>(89)</sup> Such high production has also ensured employment for many Israelis. Today 20 percent of all industrial employment is military related.<sup>(90)</sup> Finally, financing a large defense industry also allowed the government to direct development—and employment—to less developed parts of the country.

Although Israeli military procurement has shifted in recent years to become more dependent on U.S.-made weapons, especially given the annual “strings-attached” U.S. military aid package of grants and loans to Israel, Israel's defense industry remains strong. It became even stronger after September 11, 2001, as global demand for Israeli security services rose. However, its influence on Israel's economy is slowly declining as the private high tech sector, which produces dual use technologies and offers young scientists greater

financial rewards, comes to dominate.(91) Nonetheless, the military-industrial contribution to Israel's economic growth cannot be emphasized enough.

## CONCLUSION

Many of the factors accounting for Israel's creation and its subsequent economic success are unique to the Jewish state and to Jewish history. In particular, the existence of a large Jewish Diaspora living under conditions that facilitated immigration and economic and ideological support is an historical accident that hardly, if ever, exists elsewhere in the world. Similarly, the timing of the state's creation—after the Holocaust and at the very outset of the Cold War—was instrumental in inducing desperately needed German reparations and later U.S. sponsorship. The combination of local ingenuity and foreign funding is a fundamental reason why Israel was able to develop as well as it did.

There are, however, several elements of the Israel experience that can travel across time and distance. Israel's adoption of a democratic form of government was crucial to ensuring responsible development and heading off much of the corruption that plagues many developing countries. Democracies have been shown to constrain governments from earning rents and to be more likely to prevail in wars against autocratic states.(92) Israel has thus enjoyed an advantage in international politics that other developing states can also gain.

Israel has also benefited from a significant measure of human and social capital that has facilitated economic growth. Many of the immigrants who arrived in Israel both before and after 1948 brought education and skills with them, which they applied to Israel's development. They also created strong academic institutions that continued to train native Israelis in the latest technologies. Additionally, especially in the early state period, the spirit of working toward a common enterprise that built on centuries of a shared

religious and national past helped sustain the ideological devotion of many Israelis to the state's success. This kind of social capital allowed Israelis to resolve collective problems more easily, and build a strong civic base to support economic development.(93)

In sum, the Israeli experience probably cannot be identified as a model for development given the many unique factors that converged to result in Israel's economic success. Israel does, however, provide a lesson that defies conventional expectations of economic growth in the absence of security.

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## NOTES

1. World Bank Israel data profile, available at <<http://www.worldbank.org>>.
2. Note that the CIA World Fact Book (2001) estimated Israel's 2000 per capita GDP (measured in purchasing power parity) at \$18,900. The World Bank Development Indicators data is available at <<http://devdata.worldbank.org/external/CPProfile.asp?SelectedCountry=ISR&CCODE=ISR&CNAME=Israel&PTYPE=CP>> .
3. Available at <[http://www.foreignpolicy.com/issue\\_janfeb\\_2002/global\\_index.html](http://www.foreignpolicy.com/issue_janfeb_2002/global_index.html)>.
4. Ibid.
5. Shoshana Neuman, "Aliyah to Israel: Immigration Under Conditions of Adversity," Discussion Paper No. 89 (December 1999), Institute for the Study of Labor (IZA), Bonn, p.22.
6. See Clement M. Henry and Robert Springborg, Globalization and the Politics of Development in the Middle East (Cambridge: Cambridge University Press, 2001), p.202.

7. Yair Aharoni, The Israeli Economy: Dreams and Realities (London: Routledge, 1991), p. 3.
8. The cellular phone statistic comes from a UN report on global human development, reported in Shahar Ginosar, "Am Bchira: Totzaot ha-Emet" *Yediot Ahronot*, August 2, 2002, "7 Days" section, pp. 14-22, 86. The survey on computer statistics was conducted by the Global TGI market research company in New York and was reported in Hani Barbash, "Israel outranks U.S. in home computers and cellular phones," *Ha'aretz*, January 24, 2000.
9. A third aspect – the diplomatic front – will not be addressed.
10. See generally, Robert Bates, Prosperity & Violence: The Political Economy of Development (NY: W.W. Norton & Company, 2001).
11. For the specific prediction, see Mancur Olson, "Dictatorship, Democracy, and Development," *American Political Science Review*, Vol. 87, No. 3 (September 1993), pp. 567-575, especially p. 567.
12. Such a broad assertion, however, has been questioned by Harinder Singh and Kwang W. Jun in "Some New Evidence on Determinants of Foreign Direct Investment in Developing Countries," Policy Research Working Paper 1531, The World Bank (November 1995).
13. *Ibid*, p.5.
14. Note than in discussing the pre-state economy, it is important to distinguish between the Jewish economy and the Arab economy, which were almost completely separated. For more see Chapters 1-6, Yuval Elizur, Economic Warfare: The One Hundred Year Economic Confrontation Between Jews and Arabs (Israel: Kineret, 1997) (in Hebrew).
15. Neuman, p.1. Note that Jewish immigration to Palestine was limited after 1929 by British mandate authorities in a plan to ensure that Jews would not exceed more than one-third of the Palestinian Arab population, though Jews continued to arrive illegally.
16. Aharoni, p. 206.
17. David Horowitz, The Enigma of Economic Growth: A Case Study of Israel (New York: Praeger Publishers, 1972), xiii.
18. Neuman, Table 2, p.57.
19. In this manner, much of the land of present-day Israel came to be owned by the state.
20. Aharoni, p.67.
21. *Ibid*, p.5.
22. It is important to recall that at the time, Palestine's Arab population did not yet field an organized fighting force and was therefore not cohesive enough to direct anything more than sporadic, if dangerous, violence at yishuv settlements.
23. Aharoni, p.72-3.
24. Neuman, Table 1, p. 57.
25. Aharoni, pp. 167-168. Note that a separate agreement was signed by which the West German government paid additional private restitution either in lump sum payments or in pensions to Holocaust survivors and their descendants living in Israel. Such payments ranged in the hundreds of millions of dollars and easily total several billion dollars.
26. *Ibid*, p.278.
27. *Ibid*, pp.74-75.
28. Moshe Sanbar, ed. Economic and Social Policy in Israel (MD: University Press of America, Lanham, 1990), p.13.
29. *Ibid*, p.15.
30. Neuman, pp.33-34.
31. Aharoni, p.74.
32. Horowitz, xii-xiii.
33. Most of Israel's military research and development, as well as production, has historically taken place in state-owned firms connected to the Defense Ministry. These firms are Israel Aircraft Industries, Israel Military Industries, and Rafael.
34. Sharon Sadeh, "Israel's Beleaguered Defense Industry," *Middle East Review of Foreign Affairs (MERIA) Journal*, Vol. 5, No.1 (March 2001), p.1.
35. David Kochav, "The Influence of Defense Expenditure on the Israel Economy," in Sanbar,

- p.41.
36. Ibid.
37. Kochav, p.30.
38. Sadeh, p.6.
39. Kochav, p.31.
40. Ibid, p.34.
41. Ibid, p.31.
42. Neuman, p.36.
43. Aharoni, p.85.
44. Neuman, p.15. Note that that number of former Soviet immigrants has since surpassed one million.
45. Ibid, p.21.
46. 1993 was an exception with 3.5 percent growth. Ibid, p.36.
47. Cohen, MFA website.
48. Uri Ram, "The Promised Land of Business Opportunities: Liberal Post-Zionism in the Global Age," in Gershon Shafir and Yoav Peled, The New Israel: Peacemaking and Liberalization (Boulder: Westview Press, 2000), p.222.
49. Dan Peled, "Defense R&D and Economic Growth in Israel: A Research Agenda," paper prepared for Samuel Neaman Institute for Advanced Studies in Science and Technology, Technion-Israel Institute of Technology (March 2001), p.18
50. Henry and Springborg, p.203.
51. The \$5 billion figure comes from Dani Wasser, "The Effects of Current Events on the Israeli Economy and Investments," Power Point Presentation, Investment Promotion Center, Ministry of Industry and Trade, April 4, 2002. For a closer examination of FDI to Israel, see Michael Shalev, "Liberalization and the Transformation of the Political Economy," in Shafir and Peled, pp.139-140.
52. Cohen, MFA website.
53. Henry and Springborg, p.203.
54. Eliyahu Kanovsky, "The Middle East Economies: The Impact of Domestic and International Politics," monograph, Security and Policy Studies No. 31 (February 1997), Begin-Sadat Center for Strategic Studies, Bar-Ilan University, Ramat Gan, Israel.
55. According to the CIA World Fact Book, military spending for 1992 was \$5.3 billion; for 1995, \$6.5 billion; for 1997, \$9.3 billion; and for 1999, \$8.7 billion.
56. Stuart Cohen, Eliyahu Kanovsky, and Efraim Inbar, Military, Economic and Strategic Aspects of the Middle East Peace Process, Security and Policy Studies No. 24 (December 1995), Begin-Sadat Center for Strategic Studies, Bar-Ilan University, Ramat Gan, Israel.
57. Ministry of Foreign Affairs Background Paper on Terrorism and the Peace Process, September 14, 1998, available at <http://www.israel.org/mfa/go.asp?MFAH02lm0>.
58. Report on Israel's Economic Outlook, Israel Ministry of Finance, Director General's Office, Economics and Research Department, August 2002, available at <http://www.mof.gov.il/englishframe.htm>.
59. See <http://news.bbc.co.uk/1/hi/business/1827484.stm>.
60. Donna De Marco, "Israel's Tourism Suffers," *Washington Times*, April 5, 2002.
61. David Simons, "Cold Calculation of Terror," *Forbes*, May 28, 2002 available at <http://www.forbes.com/markets/stocks/2002/05/28/0529simons.html>
62. "Israel's Economy: As if the Intifada Weren't Enough..." *Businessweek Online*, June 18, 2001 available at [http://www.businessweek.com/magazine/content/01\\_25/b3737159.html](http://www.businessweek.com/magazine/content/01_25/b3737159.html) Also, Shahr Ginosar, "Am Bchira: Totzaot ha-Emet" *Yediot Achronot*, August 2, 2002, "7 Days" section, pp. 22, 86.
63. Simons, Forbes.
64. Reuters reported in August that polished diamond exports rose 14 percent in July 2002 partly because Israeli diamond merchants were forced to export their goods because fewer buyers were coming to Israel. See "Polished Diamond Exports Up 14% in July," reproduced in *Ha'aretz*, August 7, 2002.
65. Haim Shapiro, "Hotel Association Warns of



Hotels Going Bankrupt,” *Jerusalem Post*, August 7, 2002.

66. Wasser presentation.

67. Aharoni, p.255.

68. D. Peled, p.5.

69. Aharoni, p.278.

70. Henry and Springborg, Table 4.2, p.104.

71. Ultra-Orthodox seminary students – currently almost 10 percent of the military age population – are exempt from army service, as are other individuals on a case-by-case basis.

72. Aharoni, p.81.

73. Elizur, p.123.

74. Note that the boycott is still formally in effect, though only Iraq, Syria, Libya and Saudi Arabia pay it any attention today. Saudi Arabia in particular has stepped up its boycott efforts since the second intifada began, recently banning 200 companies from doing business in Saudi Arabia for exporting more than \$150 million of Israeli products into the kingdom.

See a report by the Associated Press reproduced in *Ha'aretz*, August 5, 2002.

75. Elizur, p.126.

76. *Ibid*, p.149.

77. Shafir and Peled, p.8.

78. Sanbar, preface.

79. Most of the information for this section is derived from two conversations that took place in March-April 2002 with Zohar Perry of the Economic Affairs Department of Israel's consulate in New York.

80. Neuman, p.14.

81. Shafir, p.6.

82. Kochav in Sanbar, p.37.

83. Sadeh, p.7.

84. Shalev in Shafir, p.138.

85. Sadeh, p.1.

86. D. Peled, p.5.

87. Sadeh, p.6.

88. Aharoni, p.266-67.

89. D. Peled, p. 5.

90. *Ibid*.

91. *Ibid*.

92. See David Lake, “Powerful Pacifists:

Democratic States and War,” *The American Political Science Review*, Vol. 86, No. 1 (March 1992).

93. For more on social capital, see R.D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton, NJ: Princeton University Press, 1993)