ACCOUNTABILITY AND CONFIDENTIALITY IN ISRAELI MILITARY PROCUREMENT

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ABSTRACT

The complex relationship between bureaucracy and democracy is particularly salient in the area of defense and national security. In general, and specifically in Israel, much of the decision making process in this sector takes place in closed frameworks, protected by a high level of secrecy. For many years, the IDF and Ministry of Defense have enjoyed a high level of autonomy, allowing political interest groups and “old boy networks”, particularly in the military industries, to play a central role. These factors explain, in large part, the failed decision making in the case of the Lavi combat aircraft (that was canceled in 1987, after 8 years of R&D), long-hidden corruption as evidenced in the “Dotan affair”, and the inability to implement policies to reform the defense industries.

In the past decade, and, in large part, as a result of the Lavi, the Dotan-IAF corruption case, and other failures, a combination of different external institutions, including the State Auditor, the Knesset Committee on Defense and Foreign Affairs, and the press have brought about some changes in the process. They have led to more openness and, to a limited degree, changed the nature of decision making. This paper will examine the changes in the decision making process in these policy arenas, the role of interest groups and domestic politics, and the growth and limits of external of checks and balances.

1Acknowledgements: This paper is an extension of the Project on Comparative Procurement Decision Making, initiated by the Stockholm Institute for Peace Research International, under the direction of Ravi Singh. Papers presented in the Israeli workshop on Arms Procurement Decision Making in Israel, held on 9 January 1995 at Bar Ilan University, under the co-sponsorship of the Center for Defense and Peace Economics and the Begin-Sadat Center for Strategic Studies, on January 9 1995, were also used in preparing this paper. The final report of this project is scheduled to be published by Oxford University Press in 1997.
ACCOUNTABILITY AND CONFIDENTIALITY IN DECISION MAKING FOR THE DEFENSE INDUSTRIES IN ISRAEL

The Israeli security environment is very complex and in many ways, unique. The long history of intense conflict, the difficulties encountered with respect to weapons procurement (both imports and indigenous production), the unprecedented role of US military assistance ($1.8 billion annually), and other factors all contribute to this complexity and uniqueness.

In other respects, however, the Israeli decision making structure has much in common with other industrialized states and democratic systems. Defense procurement decision making in Israel is strongly influenced by interest groups and domestic political considerations. Within the military establishment, there is a high degree of autonomy, allowing particular interests to magnify their influence, and creating an environment in which corruption can remain hidden. There are some formal institutional checks and balances, in the form of the State Auditor, legislative oversight, and the press, but their roles have historically been quite limited.

Given the importance and emphasis on secrecy in national security, the balance between accountability and confidentiality in the decision making process is particularly important in the Israeli case. Historically, secrecy has been the dominant factor. Some aggregate budgetary data regarding procurement is published in official documents, such as the annual reports of the Bank of Israel and the budget presented to the Knesset. The unclassified reports of the State Auditor occasionally provide sketchy information on selected procurement-related issues. However, there are no unclassified White Papers and few other public documents that provide more specific
and systematic information on the procurement decision making process, and in most cases, little public controversy. While there are often intense conflicts regarding procurement priorities and allocations within the military, these conflicts have rarely spilled-over into the public sphere.

At the same time, however, defense constitutes a major share of government expenditures, and the decisions made in determining the level and nature of funding in this sector have fundamental impacts on the economy and on security policies. The budget consists of personnel costs (salaries and benefits, retirement, etc.) and hardware costs (procurement, spare parts, and research and development.). While information on personnel costs is relatively available, and the level of spending is subject to public debate\(^2\), information regarding procurement and research and development is closely held. Many of the key decisions are made in closed forums and the details are secret.

In most countries, including Western democracies, military procurement decisions are often taken in relative secrecy. Even in the United States, which has one of the most open decision making systems and the highest level of accountability in the world, there are a number of “black” programs involving large sums of money and major procurement decisions.\(^3\) Due to Israel’s security environment, and the sensitive nature of all military-relevant information, the level of secrecy surrounding defense procurement in Israel is very high. The combination of secrecy and the influence of interest groups in the political system highlights the importance of oversight and the nature of the checks and balances.


\(^3\) For example, the multi-billion dollar satellite reconnaissance program, and the the development of stealth aircraft
Nevertheless, the level of secrecy and its impact on decision making is coming under increasing scrutiny as the political, economic and military environments for defense procurement change. The combination of the changes in the international environment and region since the end of the Cold War, the beginning of the Middle East peace process, and related changes in economic policy (coupled with the large scale immigration) have begun to alter the strategic and political framework for weapons procurement decision making. Since the late 1980s, the IDF General Staff has pursued efforts to create a “leaner and smarter” force, with changes in structure, missions, conscription policy, and budgeting. The environment for the defense industries has also changed significantly, and as local purchases and export markets have declined, these industries have required increasingly higher government subsidies.

The events surrounding the Lavi combat aircraft project also altered the Israeli decision making environment. This project began in 1979, in part as a continuation of IAI’s effort to develop and maintain an advanced combat aircraft design and production capability, and, in part, in response to the IAF’s requirement for a replacement for aging aircraft. Eight years later, after over $2 billion had been spent on research and development (mostly from US aid), and the first test flights had taken place, the project was canceled by the Cabinet. The cancellation was based on the assessment that the costs of production would be too high, and that aircraft available from the United States (F-16 or F-18), would be less costly and no less effective. For the first time, there was an intense public debate over a military procurement decision, and the State Controller released a report that was critical of the process as well as the

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substance of decision-making throughout the project’s lifetime. The direct involvement of the Cabinet, and the fact that the fate of this project was determined by a majority vote of this body, is a unique case in Israeli procurement decision making. (At the time, key ministers complained that over the previous 8 years, they had never received a comprehensive briefing or written evaluation of the options and independent cost estimates.\(^5\))

This process, and the criticism that it engendered, contributed to the increased scrutiny of defense procurement decision making, the structure of the defense industry, and the role of interest groups in this process. In the early 1990s, the Dotan affair, in which a high ranking Air Force officer responsible for acquisition, was caught, tried, and imprisoned for corruption, reinforced these changes. However, the Dotan case also illustrates the limits of the changes to date. His illegal activities were exposed as a result of an investigation in the US, and many aspects of his activities are still secret. For many months, he maintained his position, despite evidence of irregularities, due to the support of friends and associates in the military (including the CGS and head of the IAF). In addition, although the committee investigating this case submitted recommendations for major organizational change, very little of this has been implemented.

The prolonged crisis in the Israeli defense industries can also be characterized in terms of decision making failure, in large part due to the combination of alliances between interests groups and bureaucracy, and a high level of secrecy. After tremendous growth from the late 1950s through the 1970s, in the mid-1980s, it became clear that Israel does not have the economic resources to maintain a large and

diverse indigenous defense production capability. In contrast to the grandiose
dreams of the 1960s and 1970s, almost all major platforms, including combat aircraft,
naval ships and armored vehicles are imported (with the exception of the locally made
Merkava tank), in most cases, from the United States. In 1987, as noted above, the
government ended the Lavi aircraft project. Expected increases in export earnings did
not develop (in part, due to the end of the Cold War), and the levels of employment in
the primary defense firms decreased by a factor of one-third to one-half. However,
calls for changes in the decision making process and for calls for fundamental
restructuring of this sector have been ineffective. The power of the interests groups
and the secrecy in which the decision making takes place have played a major role in
blocking this restructuring. Thus, as will be demonstrated in this paper, although there
is some increase in the degree of openness and accountability, this is still very limited.

**The Major Bureaucratic Actors**

In general, weapons procurement decision making involves the commanders of
the military branches, the IDF General Staff, the Ministry of Defense (usually the
Minister, Director-General, and Economic Advisor), the heads of the local defense
industries, the Finance Ministry, and the Prime Minister.

In military and defense issues, the MOD is the leading civilian actor. In
addition to the Minister of Defense, (in many cases, this position has been held by the
Prime Minister), the Director General of the Defense Ministry generally plays an

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important procurement decision-making role. In recent years, the Director General has been a former military officer, and General (Ret.) David Ivri, who resigned as DG in 1996, also served as head of the Israeli Air Force and held a number of other military and defense-industry positions. His successor (Biran) is also a retired officer. Within the MOD, the Directorate for Procurement (MANHAR), and Directorate for Research and Development (MAFAT), as well as the Assistant to the Minister for Defense for Industries are involved in the procurement process. The MANHAR, which has a major procurement mission in New York and is responsible for managing over $1.4 billion in US military assistance, is responsible for placing orders and purchasing goods from funds provided by US military assistance as well as Israeli domestic orders.8

Historically, the MOD has been bureaucratically weak, and lacks an independent planning staff. As Ben Meir notes, “almost all states (with the odd exception of Israel) have established staff and planning facilities to deal with national security at the highest government level.”9 The MOD has no independent staff for strategic planning or for the provision or evaluation of intelligence and threat assessment.10

As a result, the IDF is the dominant institutional decision maker. As a military organization, the IDF has a clearly defined and hierarchical structure for decision making and planning. Although, as Stuart Cohen notes, “the members of the military elite have always respected the state’s democratic institutions and character”,

8 Klieman A. and Pedatzur R., Rearming Israel: Israeli Defense Procurement Through the 1990s, Jerusalem Post Publication, 1991, p.108; In 1996, this directorate placed over 19,000 orders for equipment, including approximately 1 billion NIS (US$330 million) for domestic orders in regions of the country that are defined as “areas of national priority”. Amnon Barzalia, “MOD procurement orders in 1996: 4.7 billion NIS”, Haaretz, February 12 1997, p.2C
10Ibid, p. 94
nevertheless, “they have often exerted a critical leverage on decision-making”\textsuperscript{11}. This is particularly the case with respect to procurement. The General Staff, which consists of officers from different branches (but, in contrast to the US Joint Chiefs of Staff, are not assigned to represent those branches), is responsible for procurement, training, force structure, etc. The IDF’s Planning Division (AGAT) is a relatively large office, with significant analytic capabilities, and also plays a major role in many aspects of decision making.

Former IDF officials who have been interviewed on this topic generally note that the relatively greater resources of the IDF in planning and assessment gives the military a great deal of independence in presenting its needs and priorities, and incorporating them in budget requests and official planning documents. In contrast, although the MOD technically controls the IDF, limited planning resources usually forces the MOD to follow the recommendations of the IDF.

According to Emanuel Wald, who served as a staff officer in the IDF and wrote a very critical analysis of the Israeli military, "the General Staff has for years carried on 'preparatory meetings', during which sporadic and contradictory ad hoc decisions on weapons procurement and development are made. Meanwhile, the overall view and integrative, multi-year planning of force construction are neglected to the point where they do not exist at all."\textsuperscript{12} This problem has been addressed, at least formally, with the implementation of the Merkam five-year planning process, but the results, to date, are unclear (see analysis below).


For major “big-ticket” R&D and production projects, the IDF creates a dedicated Special Projects Office (SPO), responsible for managing the process. SPOs were developed for the Lavi, Merkava, and Homa ATBM (including the Arrow) programs. In the decision making process, SPOs provide an additional source of power and act as an interest group, defending the project against critics. The high level of funding available to the SPO serves to increase its power, and its resistance to criticism, both within the IDF, and, more importantly, outside. In the case of the Lavi, once the SPO had been created, it took an unprecedented cabinet debate and final decision to end this project.

The last of the procurement triad is the defense-industrial sector, consisting of state-owned firms and private industry. The former includes three key organizations: Israel Aircraft Industries (IAI), founded in 1951; Ta'as (formerly Israeli Military Industries); and Rafael (National Development Authority). Together, these firms develop and produce a significant proportion of Israeli weapons and technology, including the Merkava main battle tanks, tactical missiles, upgrade packages for American combat aircraft, avionics, electronics, radar systems, communications, etc. These firms are also major contractors in the development of advanced technologies such as the Arrow ballistic missile defense system.

The three state-owned firms are owned and controlled by the MOD. Rafael is formally a subunit of the MOD, budgeted according to projects ordered by the IDF and approved by the MOD, while IAI and Ta’as are government owned firms operated by directorates appointed by the MOD, and budgets based on revenues and special subsidies. The status of Ta’as changed from a unit of the MOD to a state-owned firm
in 1990\(^{13}\), and in 1995, the government formally decided to change Rafael’s status to match that of IAI and Ta’as. As of early 1997, this decision had not been implemented, due to the objections of the employees, who fear that this would lead to more layoffs and reduced compensation. Privately-owned firms played a smaller role historically, but since the mid-1980s, their share of the market has increased. Major firms in this group include Elbit, El-op, and Tadiran, as well as over 100 smaller entities.

The various actors often have contrasting priorities in the procurement decision making process. In some cases, the different institutional objectives of the MOD and IDF lead to conflict over specific procurement decisions. In the 1950s, Minister of Defense Lavon and CGS Dayan clashed over the procurement of French versus American tanks.\(^{14}\) In the early 1960s, during the period of the alliance with France, Defense Minister Pinhas Lavon argued against the position of MOD Director General Shimon Peres, who favored large scale investment in industry to produce weapons platforms in all areas. In the mid-1970s through 1987, and the end of the Lavi project (see below) Peres supported local production of expensive platforms, in opposition to Yitzchak Rabin.\(^{15}\)

The late Mordechai Gur, who served as CGS and also Deputy Minister of Defense, stated that the IDF seeks to determine not only its weapons requirements, but also “to dictate the source and the specific supplier, because the IDF officers, as professional soldiers and as the ultimate users, know best which source is preferable

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\(^{13}\) The transition was analysed in a report by the State Controller (June 1994). The report charged that the management of Ta’as and the Director General of the MOD had concealed information regarding the losses of the firm between 1985 and 1991, thereby interfering with the transition process and related transfer of fund between the Treasury and the MOD. A judicial investigation is under way, and could lead to charges against the people involved. *Haaretz*, 21 Dec. 1995

\(^{14}\) Ben Meir, p. 89, based on an interview with Yitzhak Rabin

\(^{15}\) Mintz, 1987, p.15
and which supplier has the best product.”\textsuperscript{16} Similarly, Ivri has stated that “There are times when the IDF tries to intervene in matters in which it has no business, such as procurement, or negotiations with foreign firms. ... We are dealing with [what should be] a clear-cut division of authority and responsibility with regard to procurement and development of future weapons systems.”\textsuperscript{17}

Historically, the military leadership has placed highest priority on short-term threats in the procurement process, and emphasizes proven off-the-shelf-weapons, and local add-ons (missiles, electronics, avionics, etc.), upgrading and maintenance. The General Staff and individual military branch commanders place a high priority on ready access to weapons, with lesser emphasis on long-term threat scenarios and research and development, which involve a high degree of uncertainty. In contrast, the Ministry of Defense tends to reverse these emphases, giving priority to research and development and responses to long-term threats. The civilian and political heads of the MOD, including the Minister, and in some cases, the Director General, have also had an interest in advancing local production, infrastructure development, and employment. This is particularly true for the periods in which Shimon Peres served in these positions.

As the economic importance of this sector has grown, decision making has increasingly included broader factors, such as creating employment, regional development (particularly in the peripheral and undeveloped areas of the country), the development and maintenance of the industrial infrastructure, and export income. When exports and local sales decreased drastically in the late 1980s, the MOD enacted a number of policy measures to encourage local defense production, and also

\textsuperscript{16}Ben Meir, p. 89
encouraged the state to provide direct subsidies.\textsuperscript{18} Between 1991 and 1994, the government allocated $1.3 billion in direct and indirect assistance to the three major state-owned defense firms. The IDF, however, has generally viewed this as a civilian issue, and has resisted efforts to divert part of its budget to these objectives.

**The Impact of IDF-MOD Relations On Procurement**

Israeli civil-military relations in general are quite complex, and the boundaries between the authority of the IDF and MOD are often ambiguous.\textsuperscript{19} This ambiguity and complexity applies to procurement decisions as well. In a recent study, Yehuda Ben-Meir concluded that, “Although there is no question that, from a formal point of view, the Israeli government exercises civilian control over the IDF, new evidence ... seems to indicate that behind the scenes it is the IDF that calls the shots.”\textsuperscript{20} Although “it would be simplistic and far from accurate” to conclude that “the IDF determines Israeli national security policy with the government acting merely as a rubber stamp”, the protracted conflict has given the military extensive powers, particularly with respect to the defense industries and procurement.

In 1981, Defense Minister Ariel Sharon proposed a broad program of reorganization in the procurement process. This proposal included combining the separate MOD and IDF research and development units, the procurement functions of the MOD, and parts of the logistics branch of the IDF “into one large integrated unit

\textsuperscript{17}Interview with David Ivri, *Yediot Aharonot*, April 29, 1990, magazine section, p.4, cited by Ben Meir, p. 91, fn. 43
\textsuperscript{18}(For purchases financed from the Israeli defense budget, and not from American aid, local producers are given preference, and may charge up to 15% above the equivalent CIF cost of similar imported systems. Similarly, under MOD regulation 40.06, a producer located in a development zone can receive a contract if its bid is up to 15% above the bid of non-development zone firms, but these discounts cannot be combined.) Zvi Tropp, presentation at the workshop on Arms Procurement Decision Making in Israel, Bar Ilan University, 9 January 1995.
that would deal with all aspects of acquisition from R&D, through local production, to procurement.” The full program was never implemented, in part, due to conflicts between the MOD and IDF over ultimate authority. The separate R&D operations were combined, and the joint R&D unit (MAFAT) constitutes the most important organization innovation in the procurement decision making process over the past twenty years. However, this was still an internal reorganization within the defense establishment, and did not encourage or consider the role of outside actors or a systems of checks and balances designed to ensure internal efficiency and prevent corruption.

**PROCUREMENT BUDGETING**

Decision making for the defense budget and procurement differs sharply from the procedures used in other sectors. In most areas, the Finance Ministry and Prime Minister’s office determine budgetary shares, and the representatives of the various ministries do not have a major role in the decision making processes. However, in the case of the military, the influence of the MOF is very limited, and senior representatives of the defense establishment (IDF and MOD) are active participants in the Cabinet meetings in which budgets are discussed. This access provides the military with a unique opportunity to exert direct influence in weapons procurement allocations.

Within the defense establishment, there are two financial advisors. The primary advisor is an IDF officer, while his deputy is a civilian, and both report to the IDF and the MOD. The staff is largely military, rather than civilian, allowing IDF to

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21 Ben Meir, p. 93
dominate and preserve its preeminent position.\textsuperscript{22} In order to offset this advantage for the military, in 1979, the MOD created an independent position of Economic Advisor, who provides the MOD with independent analysis, but this position lacks the staff or the power of its military counterpart.

For the past decade, procurement has been based on multi-year planning and budgeting processes (MERKAM), while the state budget cycle is strictly annual. Thus, the defense sector (IDF in particular) can make commitments that the Ministry of Finance is essentially unable to alter. Similarly, the Knesset, which formally approves all allocations, has a minimal impact (see discussion below).

Unlike most other sectors in the defense budget, the allocation of local procurement and R&D expenditures is subject to some public debate and controversy. R&D, which is funded through the central defense budget (rather than being allocated to the individual branches and divisions, as in the case of many other defense budget sectors), has been reduced by 43\% over the past ten years.\textsuperscript{23} Critics such as Dr. Zeev Bonen, former head of Rafael, argue that decisions on the future of projects and technological centers are taken without consideration of the long-term impact on the military and economic technological infrastructure. Bonen claims that the reduction of the military R&D budget has "endangered core military R&D competencies and caused great difficulties in the nurturing of new, innovative ideas."\textsuperscript{24}

Similar debates have taken place in connection with 'make or buy' decisions, and attempts to introduce internal market mechanisms in the defense industrial sector. In the early stages, due to limited capacity in the relatively undeveloped industrial sector, special units in the armed forces (\textit{Heyl Hatachzoka} and \textit{Heyl HaHimush}) were

\textsuperscript{22}Ben Meir, p. 91-92
\textsuperscript{23}State Controller Report #44, 199, pp. 1028-1030
created to upgrade and maintain weapons, rehabilitate of ammunition, and, in some cases, assemble and produce complete weapons and platforms. (These units are like ordinance manufacturing groups in other military forces.) At first, the funding for these units was centrally budgeted in the overall IDF allocation; and the various military ‘consumers’ considered these services to be free goods. Later, in order to improve budgetary efficiency, these units were organized as ‘independent’ profit centers, and the costs of goods and services were allocated to the military branches.

The Merkava tank is the most prominent weapons system designed and produced under the framework of the IDF. The project was conceived and led by Gen. Israel Tal, who is highly respected and able to influence the decision making progress, and to overcome the opposition or skepticism of many IDF and MOD officials. Sub-contractors included firms such as Ta’as, Urdan, Elbit, El-op, Ashot-Ashkelon, and Spectronics. Assembly and other critical aspects of production were undertaken within the IDF Ordnance Corps (Heyl HaHimush). This unit also produces tactical weapons and components, but the recent “Make or Buy” study by the MOD has recommended greatly limiting the internal procurement of weapons in the IDF in order to increase efficiency, while contracting most such projects to the civil sector.\(^\text{25}\)

Civilian officials in the Ministry of Defense and in the political hierarchy have generally sought to use allocations from the military budget for the development of domestic defense industries. This group was led by Shimon Peres, who served as Director General of the MOD in the 1950s. This group saw the defense sector as leading industrial development by bringing in technology, production and managerial skills, and creating jobs. In contrast, the military leadership emphasized current

\(^{24}\text{Dr. Zeev Bonen, presentation at the workshop on Arms Procurement Decision Making in Israel, 9 January 1995.}\)
readiness (operations, maintenance, war reserves, etc.), and consequently preferred the acquisition of proven weapon systems from abroad over local and technologically uncertain R&D projects. In general, the industrial development approach was dominant in the 1960s and 1970s, while the second (military) perspective dominated during the 1980s and 1990s.

INTEREST GROUPS AND DOMESTIC POLITICS

In any setting, powerful economic, bureaucratic and political interests (often linked to each other) can and usually do have a major impact on decision making processes, particularly when these are linked to allocation of public funds. When the decisions are made in an atmosphere of secrecy, as is generally the case for security-related allocations in Israel, the propensity for interest groups to exert an undue influence on decision making processes increases. Secrecy makes the application of checks and balances in such processes extremely difficult, as will be seen in this section.

As number of analysts, including Ben Meir, Perlmutter, and Peri have noted, the Israeli military constitutes a powerful pressure group. Ben Meir argues that “the IDF itself is becoming more and more corporate” and that “many a defense minister finds it necessary to represent the IDF and advocate its positions in the councils of state.” As noted above, the resources and prestige of the IDF often provide a major advantage over the MOD and other civilian institutions. The military plays a dominant role in the structure of the Israeli elite, as this dominance is seen in all aspects of government policy. According to analysts such as Mintz and Etzioni-

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25 “Make or Buy?”, Report to the Ministry of Defense, Tel Aviv, 1993
26 refs in Ben-Meir, fn 3
27 Ben-Meir, p.xvii
28 Ben-Meir, p.42
Halevy, Israel lacks the separation between the government/political elite and the military elite commonly found in Western democracies.\textsuperscript{29}

However, it would be inaccurate to view this elite as monolithic, and in many ways, there is greater conflict between elements and interests between the constituent factors (IDF, MOD, industry), and within each, and this conflict influences the procurement decision making process. Within the IDF, there is intense competition for resources between the different branches. The Israeli Air Force has enjoyed increasing power, and a growing share of procurement resources, and, as former IDF Chief of Staff Dan Shomron has noted, “the IAF”s relationship with the IDF resembled that of “a foreign army but a friendly one.”\textsuperscript{30}

The concept of a military-industrial complex, which was developed in the context of the United States, has been used widely to analyze the links between the military, the political leadership, and the defense industries.\textsuperscript{31} In Israel, the military is a dominant political force, and the close links between the political leadership, many of whom are retired senior officers, the current military leadership, and the heads of the defense industries, (who are also often drawn from the military) have created powerful interest groups, which have important impact on procurement decision making.\textsuperscript{32}


\textsuperscript{30}cited by Ben Meir, p. 82


\textsuperscript{32}See, for example, Mintz A, \textit{The Military-Industrial Complex: The Israeli Case"}, \textit{Journal of Strategic Studies}, Vol. 6, No.3, 103-127; Mintz A. “An Empirical Study of Military-Industrial Linkages in Israel”, \textit{Armed Forces and Society}, v.12, No. 1, pp 9-27
However, as noted, there are significant divisions within the military elite, and, with respect to procurement decision making, this group cannot be viewed as a united entity with common interests and perceptions. There are sharp differences in policy, ideology, political affiliation, and institutional interests.

**The Military Industries**

The political system and the structure of the defense industries distinguish the Israeli situation from that of the United States. In Israel, the electoral system and Knesset are based on a single national constituency, and as a result, the type of local pressures to channel contracts and funding to local industries that takes place in the US is less significant in Israel.\(^{33}\) In addition, while the US system is based on publicly owned weapons industries, in Israel the dominant firms are state-owned and under the control of the Ministry of Defense.

The state-owned defense industries can be analyzed in terms of interest group models. These firms employ tens of thousands of workers, have a great deal of political leverage, and represent a powerful lobby. The major Israeli defense firms are Israel Aircraft Industries, Ta’as (formerly Israel Military Industries), and Rafael (the National Weapons Development Authority).\(^{34}\) According to government statistics, more than half of the military production sector’s personnel are employed by these three firms. (In the 1980s, they accounted for 40% of the work force in the large state-industrial.\(^{35}\)) They also account for approximately 70% of the total sales. The three firms are government-owned, and, as such, are less concerned with profits than with maintaining employment, budgets and influence.\(^{36}\)

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\(^{33}\)The development of regional primary elections among most political parties in Israel in the 1990s may lead to a change in this situation.

\(^{34}\)Ibid., p.129

\(^{35}\)Mintz, 1987, p.17

\(^{36}\)Sadeh, S., ---
These employees and managers of the firms act interest groups (and, sometimes, a single group), pressuring IDF and MOD decision-makers to maintain or increase budgets, missions, and employment. This influence is based on four factors:

1. An extensive network of personal alliances between industry, military officers and high-ranking defense personnel.
2. The size of the industry, the tens of thousands of workers employed, and their political impact and power.
3. Government and Defense Ministry control of the defense industries, providing the managers with direct access to key decision makers.
4. Control over information.

Because of the formal control exercised by the MOD over the government-owned defense firms, as well as close personal ties, the boundaries between these two sectors are unclear. This allows the producers to indirectly influence the procurement policy making process. According to critics, such as Pedatzur, the defense industry constitutes a very powerful interest group which enjoys unparalleled preeminence over other lobbies and easy access to decision makers.

Historically, the major state-owned firms have been given preference in funding and contracts over privately-owned companies. As sales declined, and these firms entered a protracted crisis, employees sought to increase contracts and state subsidies through demonstrations and lobbying. Direct access to the government and top decision makers provides the employees and managers of these three firms with

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37 Alon Pinkus, presentation at the workshop on Arms Procurement Decision Making in Israel, Bar Ilan University, 9 January 1995.
extraordinary influence, and has allowed them to avoid substantial reorganization to
date.

In Israel, as in the US and other Western nations, senior officers and their
former commanders or colleagues, who have established new careers in politics or as
executives within defense industries, maintain close contact, forming an Israeli
"military-industrial elite". This social network includes the defense industries, the
Defense Ministry, and the representatives of privately owned-arms manufacturers in
Israel and the US.\textsuperscript{40} For example, when General Dan Shomron finished his term as
IDF Chief of Staff, he was appointed the Chairman of Ta’as (despite his lack of
business experience). The board of directors included four additional former generals,
and many attribute the crisis in Ta’as to the failures of these individuals.\textsuperscript{41} (In 1995,
Shomron was replaced by Yaakov Lifshitz, an economist and former Director General
of the Finance Ministry.) Gen. (Res.) Yanosh Ben Gal, who had served as head of the
Northern Command, was appointed to head the IAI Board of Directors in 1995.

In the late of the 1980s, the sales and revenues of the three major state-owned
military industries, IAI, Ta’as, and Rafael, began to decline, leading to reduced
employment, and initiating a crisis in this sector. The end of the Cold War and other
external factors have also led to reduced exports, spurring proposals for the
reorganization of these firms.

The possibilities under consideration include privatization, combining the
three firms into a single mega-firm, and the creation of smaller units based on the

\textsuperscript{39}Mintz A, The Military-Industrial Complex: The American Idea and the Israeli Reality \textit{Medinah, Minshal
\textsuperscript{40}Etzioni-Halevy, p.16 draft
\textsuperscript{41}According to the State Controller, despite the heavy losses, Ta’as expanded its workforce during this
period, and did not provide accurate financial records to the Ministry of Defense. “The request of the
financial comptroller of the Defense Ministry to Ta’as for substantive answers and statistics on the basis
of real assessments was not answered.” (Israel Government Controller Report #44, Jerusalem, 1994)
integration and merger of the related operating sections of these companies. However, precisely because the firms are owned by the state, there is strong domestic political resistance to restructuring.

In 1987, IAI workers, then numbering over 20,000, organized mass demonstrations and engaged in civil disobedience in the effort to prevent the cancellation of the Lavi aircraft. While they failed in this regard, they did succeed in gaining pledges from the government for replacement projects. Workers from Rafael and Ta’as have blocked government plans to reduce the workforce of these firms. The employees of Israel Shipyards sought to prevent the government from privatizing this enterprise. In the 1992 elections, a leader of the IAI worker's organization (Yaakov Shefi) won a position on the Labor Party's list of candidates for the Knesset and was elected. It is difficult for any government to ignore such large, powerful, and well-organized institutions. Although there have been some reforms and reductions in force, these have come through costly early retirement and voluntary programs, subsidized through special government allocations.

**CORRUPTION**

In general, the combination of a high level of secrecy and large sums of money allow for and can even be said to invite corruption. Bribery and corruption scandals have plagued arms acquisition in many countries, including most of the advanced industrial states. The import and export of weapons, as well as domestic production contracts have been accompanied by bribery in the US, Japan, Sweden, France, and many other countries, and this is also the case in Israel.

The largest such case is known as the Dotan affair. Air Force Brigadier-General Rami Dotan, who was responsible for equipment and acquisition, was arrested in October 1990. He was convicted in 1991 over for receiving over $10
million in illegal payoffs in connection with the procurement of aircraft engines from the United States. In his decision, the judge in the case described the improprieties committed by Dotan as “without precedent in their severity and magnitude in IDF history.”

The extreme secrecy of the defense procurement process clearly contributed to the ease with which Dotan was able to receive these payments, and the MOD appointed a committee to investigate the organizational aspects of the process in order to prevent recurrences. The Flomin committee was appointed in March of 1991 and presented its report in July. The recommendations included a call for the creation of a professional civilian procurement advisory office in the MOD, to oversee IDF procurement. In addition, the members proposed the establishment of a civilian police unit within the military police, charged with the investigation of IDF fraud.

In 1993, the State Controller reviewed the implementation of the recommendations in the Flomin report. The report noted that as of its investigation, almost a year and a half after the Flomin report was presented, the IDF had not implemented most of these recommendations. Although press coverage and the report of the State Controller did put some pressure on the military establishment to open the procurement process to greater external scrutiny, this pressure decreased over time, although additional cases continue to appear. In late 1996, another case of suspected corruption in military procurement surfaced, this time involving the purchase of Panther helicopters for the Israeli Navy. As in the Dotan case, this case was uncovered by American investigators looking into allegations of impropriety by

43 State Comptroller Annual Report, no. 44 for 1994, pp.992-993
senior personnel of the Eurocopter Corporation, the manufacturer of the Panther helicopter.  

**EXTERNAL CHECKS AND BALANCES**

Normatively, in democratic systems, emphasis on civilian control of the military leads to a formal system of checks and balances. However, the normative approach often underestimates the role of informal links and power relationships. As Ben Meir notes, “Concern in the West today is not over possible military coups or unauthorized military intervention but rather about the growing influence of the military-industrial complex and the undue emphasis the civilian political leadership places on military solutions to diplomatic and political problems.”

The high level of secrecy that is a central factor in Israel’s military strategy, has slowed the development of effective checks and balances on the decision making processes and the role of interest groups. In Israel, there are three major external actors; the State Controller, the Knesset, and the press. Historically, their role has been very limited, particularly in comparison with other industrial democracies. Although this situation has changed to some degree, as will be seen, the impact of these three actors is still very limited.

**The State Controller**

The State Controller is responsible for auditing all aspects of public policy, including the defense sector, weapons development, and procurement. The Controller reports to the Knesset and, in most cases, issues reports that are available to the public.

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45 Amnon Barzilai, “Tat Aluf Eyal will be investigated with a lie detector in the case of the additional costs in the purchase of Panther Helicopters for the Navy”, Haaretz, 27 Jan. 1997, p. 14a

46 Ben Meir p. 4

47 This section is based on part on the presentation of Gen. (Res.) Aviezer Yaari at the workshop on Arms Procurement Decision Making in Israel, Bar Ilan University, 9 January 1995.
The analysis focuses principally on economic aspects of acquisition or development, the state-owned defense industries, the allocation of US aid, corruption and inefficiencies in the process, and the multi-year budgeting process.

In general, the power and independence of the defense bureaucracy have traditionally limited the role of the State Controller. However, since the late 1980s, (and the crisis over the Lavi project) the scope and impact of the Controller with respect to defense procurement have expanded significantly. The report on the Lavi influenced the government’s decision to cancel this project. Other impacts are reflected in the changes made to the IDF’s multi-year plan, research and development, the decision making process for the development of naval weapons, the Merkava III tank, decision making with respect to procurement of American weapons such as the Apache helicopter and the F-16 combat aircraft, and the defense industries. Broader issues, such as the impact of changes in available technology in the post-Cold War era and the impact of the political changes in the Middle East on force structures are also addressed. In examining specific local procurement decision making, the auditing process covers the primary contractor, the project leadership, the project administration (usually in the IDF, SPO, or a specific military unit), and the role of management in production. In addition, as noted, accounting

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48 Given the highly sensitive nature of military auditing in general, and procurement auditing in particular, many reports are kept secret for a specified time period.

49 Yaari, A., Iyunim BiBikoret HaMedina, 1995 (Hebrew)

50 Report No.44 (1994) and 45 (1995)


57 Havens H.S, "What We Are and Who We Were" Armed Forces Controller, Summer 1990.

procedures and the potential for corruption are also considered, as in the case of the
report on the implementation of the Flomin report after the Dotan affair.

Since the Lavi case in 1987, audits are increasingly conducted during the
procurement and development process, in contrast to post-facto analysis. The analysis
of the decision making process in the case of Israel’s naval procurement program took
place during the debate within the defense establishment. (However, in contrast to the
report on the Lavi, this report remained classified, and was designed to influence the
internal debate only.)

In a general sense, the impact of the auditing process on decision making for
defense procurement in Israel is still limited, but growing. Despite the exceptions
noted above, the investigations and preparation of reports by the State Controller are
often “after the fact” and ineffective in changing decision making procedures or
challenging powerful interest groups and bureaucratic structures. The “intrusion” of
the auditors is still resisted by military commanders and political leaders, such as the
Minister of Defense. In many cases, the reports of the State Controllers are published
and given prominent coverage in the press, but the power relationships involving the
MOD, IDF, and defense firms are not affected. For example, a number of reports on
the management and the economic problems of IMI/Ta’as have been published over a
five-year period, but the evidence indicates that these reports did not change the
decision making process.

The Knesset Committee on Foreign Affairs and Defense

In parliamentary democracies, the legislature is expected to play a major role
in the context of checks and balances, particularly with respect to military allocations,

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59 This section is based in part on the paper prepared by MK Binyamin Zeev Begin for the project on Arms
Procurement Decision Making in Israel.
including defense procurement. The Knesset has historically been relatively weak with respect to oversight of the military, but, over the past two decades, it has slowly increased its role and influence. 60

The Knesset Committee on Foreign Affairs and Defense monitors the activities of the Ministry of Defense and the IDF. The defense budget is discussed by the Knesset Defense Budget subcommittee composed of members from the Committee on Foreign Affairs and Defense, and the Finance Committee. (This unit was initially chaired by the head of the Finance Committee, but following the 1973 war, an opposition member has headed the subcommittee.) 61 As in other areas under its jurisdiction, the activities of this special subcommittee are confidential (see detailed discussion below). Although the budget is presented in detail, including line-item listings of expenditures, few changes are introduced in this process. According to Ben Meir, “The subcommittee holds many meetings and extensive discussions on a wide range of topics ... but in the end, it invariably approves the proposed budget with little if any change.” The results which are brought to the full Knesset for approval are encompassed in a few aggregate figures, and there is little public debate on the defense budget or procurement decisions. “It is as though there were a gentleman’s agreement by which the defense establishment satisfies the curiosity of the legislators while they, in turn, rubber-stamp the budget.” 62

For many years, procurement issues were not a central focus of the overall committee or the other subcommittees, but this situation has changed since the mid-

60 Ben Meir suggests that the relative inactivity of the Knesset in the area of defense and security would support the concept, proposed by Dan Horowitz, of a “schizophrenic society”, in which the civil and military spheres are subject to two distinct sets of rules.” Ben Meir, p.2, citing Dan Horowitz, “Is Israel a Garrison State,” The Jerusalem Quarterly, No. 4, summer 1977, 58-65
61 Ben Meir, p. 47
62 Ben Meir, p. 47. In 1976, three committee members attempted to increase the defense budget by $100 million, but after an appeal by the Prime minister, the committee backed down. (p.48)
1980s. The Subcommittee on Research and Development and the Defense Industries is increasingly active, and the establishment of the special subcommittee on Israel’s Defense Doctrine in 1986 was a major change. Under Chairman MK Dan Meridor, the committee held more than 50 hearings, with testimony from officers from all the branches of the IDF, former officers, and civilians specializing in advanced technology. The 32-page Meridor Report was completed in 1987, and remains classified. (Only few copies were printed.) The report also addressed the IDF decision making process, the interaction between the political and military establishments, and the economic aspects of the force structure. The report was relatively critical of the IDF, and some of its recommendations, including those concerning procurement, were adopted by the IDF.63

In the wake of the Meridor report, the Procurement Subcommittee was renamed the “Subcommittee on Defense Policy and IDF Buildup was established”. This wider mandate was a recognition of the dependency between procurement and wider issues of defense policy, strategy, and tactics. In addition to procurement, the subcommittee sought to follow-up on the Meridor Report, update it periodically, and supervise the IDF General Staff’s procurement policy in light of the strategic doctrine. It generally meets to receive and discuss semi-annual reports from the heads of the land, air and naval forces, the head of military R&D, and the government-owned defense firms. In addition, various ad-hoc topics are discussed, including 'Computer Systems in the Military', 'New Developments in the Field of Armor and Anti-Armor', or 'Command and Control'. In 1995, a special committee was established to examine the impact (both direct and indirect) of defense spending on the Israeli economy.

63Begin; Ben Meir, p. 51
Since 1988, the subcommittee has held about 150 hearings (averaging approximately 2 per month). The protocols constitute a unique, comprehensive, (and highly classified) body of data on strategic issues and procurement. In addition, the subcommittee conducts visits to military installations and defense industry facilities.

There is a high degree of coordination between the military and the subcommittee. A representative of the General Staff Planning Department participates in all meetings, providing continuity, and communicating the policies and responses of the General Staff. The officials and officers range from the commanding generals, the heads of departments within the MOD and the Chief Scientist, to colonels or even captains in charge of specific programs or subunits. (Their presentations are approved by the Deputy Chief of Staff.)

The subcommittee also focuses on specific procurement issues. For example, in 1994, the Air Force considered three American aircraft (the F-15E, F-16 and F-18) for its front-line future fixed-wing combat platform. Although this decision had very important strategic and budgetary implications, there was no debate in the full Knesset. However, the subcommittee considered the issue after the decision was made, and asked the Air Force to explain the rational behind its choice. When the decision to procure the Apache attack helicopter was made, the Air Force did not present an alternative, and the subcommittee initiated a closed hearing to discuss other possible options. Similarly, when the Navy presented its decision to procure the Dolphin submarine, the subcommittee raised an alternative which was then considered.

Thus, the subcommittee’s major contribution comes from its role in providing an independent body to which government and military officials must report and justify their procurement decisions. Minutes are taken, questions are asked, and there
is a follow-up discussion regarding implementation. In some cases, the very fact that
the subcommittee asks for a report compels the military to look into an issue in
broader terms and to examine basic assumptions. With its professionalism, and non-
partisan nature (both unusual in the Israeli context), the subcommittee has gained a
high level of respect among the government and military.

However, there are also a number of significant limitations. First, there are
only five members in this Subcommittee, and while this allows for efficient
deliberations, resources and time are limited and the issues are complex. To
compensate for the limited time of the committee members, experts can be used as
permanent advisers. However, in the Israeli Knesset, resources for this task are almost
non-existent. No budget has been allocated for professional staff members, and at
best, the subcommittee has been able to get assistance on a voluntary basis.

The high level of secrecy which characterizes the subcommittee’s activities is
also a significant limitation in its regulation role. In Israel, as noted, there is almost no
history of open, public discussion of major weapons procurement issues. Such
discussion could be important in providing alternative analyses and information,
thereby balancing the ‘defense establishment’, and the bureaucratic interests and
organizational inertia. However, secrecy is seen as essential in maintaining the
cooperation of the Minister of Defense, IDF, and other actors with respect to the
subcommittees. Not only are the contents of the meetings classified, but even the
topics and the participating guests are generally not made public.

Critics, such as MK and Minister of the Environment Yosi Sarid, who served
as a member of the full committee, charge that the secrecy allows the committee be
manipulated by interest groups in the military and defense establishment.\(^{64}\) In Sarid’s view, as well as that of other analysts, including Pedatzur, the members of the committee tend to support the military and defense establishment, and do not, in reality, serve as an independent check on its activities, including procurement decision making. The Knesset did not have an impact in the case of the Lavi, and there is no independent assessment of the role of the Meridor Report and other actions of the Subcommittee. Neither the Subcommittee nor the full Committee have been effective in influencing policy with respect to the defense industries.

**The Role of the Press**

In any democratic system, the role of the press is important in stimulating public debate and oversight with respect to government decision making, in general, and major defense procurement decisions, in particular. However, the degree of transparency and accountability in Israel has always been limited by the emphasis on military secrecy which has been deemed necessary in national defense. This has been changing over the past few years, as the society, in general, has become more willing to criticize “sacred cows”, including the IDF and defense establishment. Stuart Cohen notes that this period has been marked by “the gradual erosion in the domestic public status of the IDF itself”, the armed services “have increasingly become objects of more mature public scrutiny,” and “operational deficiencies have been subjected to intense press coverage.”\(^{65}\)

Similarly, in the past decade, and particularly after the cancellation of the Lavi program in 1987 and the intense and largely public debate that took place during this period, the press has also played a greater role in covering defense procurement.

decisions. As note above, the Arrow ABM development program has been discussed in significant detail in the press. The crisis in the defense industries has also been covered in great detail, and relatively more reports of the State Controller are now published, while a smaller percentage remain classified. These reports are covered extensively in the press, and the combination of the State Controller and the press constitute an increasingly important source of external control on the defense procurement process.

In contrast, procurement decisions regarding imported weapons systems (largely from the US) are not generally discussed until the decisions are announced. The internal debates regarding tradeoffs and the implications of certain purchases (such as decisions to acquire F-15 combat aircraft instead of a larger number of less expensive planes, the future of the Arrow program, or the distribution of procurement funds among the different services) are rarely discussed in the press. Exceptions occur when leaks from participants in the internal debates within the IDF or MOD are published, and these leaks lead to wider discussion and analysis. However, any system of review that relies on sporadic leaks from the press to provide external review and public debate cannot be considered reliable.

ANALYSIS AND RECOMMENDATIONS

The political, military, technological, and economic changes of the past decade have affected the nature of weapons procurement, the parameters of decision making processes, and the structure of the defense industries. However, the institutional checks and balances with respect to the defense-industrial sector are still relatively weak. Although the issues are discussed in the press, and in the Knesset Foreign

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Affairs and Defense Committee, and there have been some analyses by academics, the process is still dominated by particular interests, and decisions are largely taken by small groups within the IDF and MOD. No public inquiries have been conducted, and no “White Papers” have been published. This reflects the structural and institutional limitations of the policy reform process in Israel, particularly in the defense industrial sector.

Although the IDF has made significant changes in personnel structures, and reduced the size of the military, while increasing the emphasis on the professionalism of the standing army, there has been no similar coordinated effort to restructure the procurement process or the defense industries. As far as is publicly known, there have been no detailed studies of possible mergers and reorganizations of the state-owned defense firms. Instead, as noted throughout this study, changes have been minimal, largely ad-hoc, and responses to pressures and crises.

While the defense establishment, in general, is becoming increasingly open, and public discussion and debate is growing, the process is still quite closed with only a small number of participants in decision making. As noted throughout this study, the issue of public accountability is complex. Israel is a democratic state, and its institutions, including the military and MOD, are accountable to the public. The State Controller and Knesset Committee on Foreign and Defense Policy exercise this oversight function, and the press has become increasingly critical of decision making.

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66 See, for example, discussion of the State Controller’s report (1995) on Taas, Sharon Sadeh, Ha'aretz, January 18, 1996.
68 See, for example, Gerald Steinberg and Eta Bick, Resisting Reform, University Press of America 1994.
processes. Articles on the problems of the major defense firms are published regularly, and the major newspapers have correspondents who specialize in these issues.

However the high level of secrecy continues to limit the extent of discussion, and open and public debate involving the decision makers themselves is still quite rare. For example, the future of the Arrow (Hetz) Ballistic Missile Defense System and very costly military space projects are the subject of some journalistic analyses, but there are no White Papers or public hearings.

The small number and limited nature of independent and professional bodies to evaluate critical procurement decisions impedes informed discussion. The defense establishment and the military censor control the flow of information in this process, and even though the role of the censor is decreasing, systematic analysis is limited.

Various proposals for the establishment of external bodies to provide independent sources of information and analysis in areas of national security have been proposed over the past two decades. MK Begin authored legislation to establish a National Security Council, and while this legislation was voted into law (as part of the Basic Law; the Government), and some efforts were made in this direction by the late Prime Minister Rabin in 1992, this plan was never fully implemented. Such groups would provide checks and balances, but political resistance to independent bodies and the loss of power they would cause among interest groups is still strong.

Some actors and analysts argue that the nature of Israeli society, in itself, constitutes a significant check on the military. A very large percentage of the Israeli adult population is involved in the military; a major share of men aged 18 and above spend over 30 years of their lives in the regular military and reserves, and participate annually in training and operations. This gives them first-hand knowledge of major defense issues, and is a counterbalance to the power of the military establishment.
It would be misleading to claim that there is a great public demand for greater openness or accountability in this area. In the first place, the Israeli political system is already overloaded with complex and critical issues, including the risks and benefits of the peace process and territorial withdrawal. Defense and national security questions are of major concern to the public, and are given extensive coverage and are widely debated. Specific procurement issues are occasionally included in these debates, as in the case of the Lavi and Arrow. However, the general tendency to support the IDF leadership, and leave ultimate responsibility in the hands of the Chief of Staff and the Defense Minister remains very strong.

The continued importance of secrecy in national security and military procurement is also an important factor. For the general public, as well as the decision-making elite, the dominant perception of Israel is still of a small country under siege. Although the prestige of the military has declined somewhat since the 1973 Yom Kippur and 1982 Lebanon Wars, the IDF is still largely independent.

In addition, decision making in the IDF and MOD is highly centralized, particularly with respect to procurement of major weapons systems. Decision making structures are usually based on small homogeneous groups. New processes in which the role of outsiders is greatly amplified are not likely to be readily accepted. The obstacles to the implementation of rational decision making processes, and to decreasing the role of interest groups and external factors, are most prominent with respect to the Israeli defense industries. Policy making in this sector continues to be ad-hoc, generally in response to specific financial crises in each of the individual organizations.

The inefficiencies and distortions in this process are costly, both in terms of economics and military capability. The maintenance of the current structure has
become an end in itself, rather than a means to achieving the objectives of national security. By reducing the impact and power of these interests, and opening up decision making to external scrutiny, particularly regarding the organization of the defense industries, the procurement process can become more efficient and responsive.
### Table 1. Israel’s Defense Industry: Sales and Exports in Current US Dollars

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Sales</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>not available</td>
<td>$668 Million</td>
</tr>
<tr>
<td>1983</td>
<td>not available</td>
<td>$730 Million</td>
</tr>
<tr>
<td>1988: $ 1.3 Billion</td>
<td>$ 781 Million (60.1 per cent)</td>
<td></td>
</tr>
<tr>
<td>1990: $ 1.6 Billion</td>
<td>$ 930 Million (59.2 per cent)</td>
<td></td>
</tr>
<tr>
<td>1992: $ 1.6 Billion</td>
<td>$ 824 Million (52.1 per cent)</td>
<td></td>
</tr>
<tr>
<td>1993: $ 1.7 Billion</td>
<td>$ 944 Million (56.6 per cent)</td>
<td></td>
</tr>
<tr>
<td>1995: $ 2 Billion (est)</td>
<td>$1,200 Million*</td>
<td></td>
</tr>
</tbody>
</table>

Notes: The difference between total sales and exports is the amount of local procurement.

* Total export contracts signed, as reported in Haaretz, 6 February 1996. The other data was provided by Moshe Ortas, at the workshop on Arms Procurement decision Making in Israel, Bar Ilan University, 9 January 1995.

### Table 2: The Share of Defense Expenditure in the Israeli GNP, a Multi-Year Average

<table>
<thead>
<tr>
<th>% of Defense Expenditure in the GNP</th>
<th>Direct Defense Imports</th>
<th>Indirect Defense Imports</th>
<th>Local Defense Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>8.3</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1950-55</td>
<td>10.1</td>
<td>3.5</td>
<td>1.2</td>
</tr>
<tr>
<td>1956</td>
<td>15.6</td>
<td>8.6</td>
<td>3.0</td>
</tr>
<tr>
<td>1962-61</td>
<td>21.7</td>
<td>16.0</td>
<td>16.8</td>
</tr>
<tr>
<td>1967</td>
<td>26.6</td>
<td>11.4</td>
<td>15.2</td>
</tr>
<tr>
<td>1973-5</td>
<td>27.8</td>
<td>12.4</td>
<td>4.2</td>
</tr>
<tr>
<td>1976-9</td>
<td>23.2</td>
<td>8.1</td>
<td>14.3</td>
</tr>
<tr>
<td>1981-5</td>
<td>18.8</td>
<td>7.3</td>
<td>11.5</td>
</tr>
<tr>
<td>1985-8</td>
<td>14.0</td>
<td>2.5</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Table 3. DEFENSE BUDGET BY CATEGORIES (IN CURRENT MILLIONS OF NEW ISRAELI SHEKELS)

<table>
<thead>
<tr>
<th>Direct Defense Imports</th>
<th>Local Purchases</th>
<th>Manpower</th>
<th>Defense Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2842</td>
<td>4334</td>
<td>4232</td>
<td>11,351</td>
</tr>
<tr>
<td>3737</td>
<td>5124</td>
<td>5023</td>
<td>13,819</td>
</tr>
<tr>
<td>5067</td>
<td>5740</td>
<td>6123</td>
<td>16,866</td>
</tr>
<tr>
<td>5870*</td>
<td>5060*</td>
<td>6274*</td>
<td>20,240</td>
</tr>
</tbody>
</table>


Table 4. COMPARATIVE DEFENSE EXPENDITURES BY CATEGORIES (PERCENT OF TOTAL DEFENSE. BUDGET)

<table>
<thead>
<tr>
<th>1995</th>
<th>MAN POWER</th>
<th>EQUIPMENT</th>
<th>1991</th>
<th>MAN POWER</th>
<th>EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED STATES*</td>
<td>39.4</td>
<td>27.7</td>
<td>43.2</td>
<td>27.3</td>
<td></td>
</tr>
<tr>
<td>UNITED KINGDOM*</td>
<td>40.9</td>
<td>40.9</td>
<td>41.7</td>
<td>19.4</td>
<td></td>
</tr>
<tr>
<td>NETHERLANDS*</td>
<td>58.6</td>
<td>15.1</td>
<td>55.2</td>
<td>15.6</td>
<td></td>
</tr>
<tr>
<td>GREECE*</td>
<td>63.3</td>
<td>63.3</td>
<td>64.4</td>
<td>20.3</td>
<td></td>
</tr>
<tr>
<td>TURKEY*</td>
<td>43.0</td>
<td>22.7</td>
<td>48.5</td>
<td>22.7</td>
<td></td>
</tr>
<tr>
<td>ISRAEL**</td>
<td>NA</td>
<td>40 (est)</td>
<td>36.3</td>
<td>40 (est.)</td>
<td></td>
</tr>
</tbody>
</table>

Sources:
*Table 5, Distribution of total defense expenditures by category, Defense Expenditures Of NATO Countries, 1975-1995, NATO, Brussels, 1996;

Table 5: Defense Expenditures as % of GNP in Israel and its neighboring countries, 1954-83

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>6.1</td>
<td>10.0</td>
<td>18.1</td>
<td>11.5</td>
<td>7.4</td>
<td>7.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Syria</td>
<td>4.2</td>
<td>9.6</td>
<td>15.8</td>
<td>24.7</td>
<td>17.3</td>
<td>13.7</td>
<td>14.9</td>
</tr>
<tr>
<td>Jordan</td>
<td>20.0</td>
<td>15.8</td>
<td>16.4</td>
<td>14.8</td>
<td>12.5</td>
<td>11.3</td>
<td>11.4</td>
</tr>
<tr>
<td>Average-Three Nations</td>
<td>6.4</td>
<td>10.3</td>
<td>17.4</td>
<td>15.7</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Israel</td>
<td>6.3</td>
<td>10.8</td>
<td>20.8</td>
<td>21.0</td>
<td>24.0</td>
<td>23.0</td>
<td>17.3</td>
</tr>
<tr>
<td>Iraq</td>
<td>5.7</td>
<td>10.0</td>
<td>12.3</td>
<td>9.0</td>
<td>7.4</td>
<td>29.7</td>
<td>38.5</td>
</tr>
</tbody>
</table>


Table 6 1994 ISRAELI DEFENSE ALLOCATIONS (in millions of New Israeli Shekels, at 3.33 NIS/US$)

| Local currency allocations               | 13,629 m NIS |
| US FMA ($1.8 billion)                    | 6,105 m NIS  |
| Foreign currency allocation from local sources | 506 m NIS |
| Total                                   | 20,240 m NIS |

Source: Government of Israel, Ikaray Hatakziv (Fundamentals of the Budget), 1994, p.63; actual spending may include emergency allocations not included in budget.
### Table 7. Domestic Defense Purchases and Consumption (percentages, in 1980 constant prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>Defense consumption index total</th>
<th>Domestic Consumption</th>
<th>Defense consumption</th>
<th>Domestic defense consumption</th>
<th>Domestic and import purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>100</td>
<td>100</td>
<td>36</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>1975</td>
<td>587</td>
<td>454</td>
<td>35</td>
<td>70</td>
<td>41</td>
</tr>
<tr>
<td>1986</td>
<td>388</td>
<td>420</td>
<td>42</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>1993</td>
<td>430</td>
<td>492</td>
<td>37</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: Bank of Israel Annual Reports

### Table 8. Israel’s defense Expenditures, Averages -1980-9 (% at current price)

<table>
<thead>
<tr>
<th>Wages in Defense Sector as a % of Total Wages Outlay</th>
<th>Domestic Defense Expenditure-Free currency and Debt Servicing</th>
<th>Domestic Defense Consumption</th>
<th>Net Total Defense Consumption Less Defense Grants</th>
<th>Defense Consumption as a % of Gross Income From all Sources</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.4</td>
<td>18.2</td>
<td>14.3</td>
<td>19.2</td>
<td>19.9</td>
<td>1980-84</td>
</tr>
<tr>
<td>9.4</td>
<td>15.4</td>
<td>11.5</td>
<td>12.6</td>
<td>16.4</td>
<td>1985-88</td>
</tr>
<tr>
<td>9.6</td>
<td>13.3</td>
<td>10.5</td>
<td>12.9</td>
<td>12.7</td>
<td>1989</td>
</tr>
</tbody>
</table>


**Notes:**
- a Excluding soldiers in conscription service.
- b GNP+ unilateral transfers by effective rate of exchange.
- c Gross domestic consumption less domestic sales.
- d Debt servicing includes both interest and principal paid for military loans of the US Government.
### Table 9. IAI Employees 1987-1995

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>20,270</td>
</tr>
<tr>
<td>1988</td>
<td>17,291</td>
</tr>
<tr>
<td>1989</td>
<td>16,612</td>
</tr>
<tr>
<td>1990</td>
<td>16,904</td>
</tr>
<tr>
<td>1991</td>
<td>17,213</td>
</tr>
<tr>
<td>1992</td>
<td>17,240</td>
</tr>
<tr>
<td>1993</td>
<td>16,450</td>
</tr>
<tr>
<td>1994</td>
<td>14,200</td>
</tr>
<tr>
<td>1995</td>
<td>13,201</td>
</tr>
</tbody>
</table>

Source: *Haaretz*, 3 Nov 1995; Sharone Sadeh


*In millions of dollars (US)*

<table>
<thead>
<tr>
<th></th>
<th>IAI</th>
<th>Taas</th>
<th>Rafael</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeted transfers</td>
<td>535</td>
<td>376</td>
<td>35</td>
<td>946</td>
</tr>
<tr>
<td>Loan Guarantees</td>
<td>200</td>
<td>76</td>
<td>--</td>
<td>276</td>
</tr>
<tr>
<td>Return of dividends, payments</td>
<td>30</td>
<td>35</td>
<td>--</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>765</td>
<td>487</td>
<td>35</td>
<td>1287</td>
</tr>
</tbody>
</table>

Sources: Office of Economic Advisor, MOD