Corporate Governance in an Emerging Market: The Case of Israel

by

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Discussion Paper No. 97.08

December 1997

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I. Introduction

A considerable amount of research has been devoted in recent years to the role of corporate governance and the ways in which corporate managers are monitored. Most have studied countries with relatively developed financial markets such as the US, the UK, Germany, and Japan, often focusing on the differences between them.[1] It is important, however, to develop a better understanding of corporate governance in emerging markets because of their growing share in world markets and since, in recent years, US and other foreign investors have earmarked increasing amounts of funds to portfolio investment in emerging markets. In 1996, such investment exceeded 90 billion dollars, a sum 15 times greater than in 1990. During this period, the foreign stock component of US investors' portfolios doubled from 3 to 6 percent.[2]

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[1] A notable exception is the La Porta, Lopez de Silanes, Shleifer, and Vishny (1997) survey of corporate governance in several dozen countries, classified according to their legal tradition.

[2] Cochrane, Shapiro, and Tobin (1996), and The World Bank, Global Development Finance, 1997.

The large increase in foreign portfolio investment in emerging markets, among them Israel, has been attributed to several factors. First, returns have been relatively high and are expected by many to remain high, on average. Moreover, portfolio investors can reduce risk by diversifying into emerging markets since their returns are poorly correlated with those of developed markets.[3] Second, there has been a move toward less stringent capital controls in many emerging market countries, thereby facilitating foreign inflows. Third, as a result of stock offerings and new listings, stock exchanges in emerging market countries have grown considerably. Fourth, privatization of large state-owned enterprises (SOE's), often through equity issues, has further increased the supply of shares of well-known companies available to foreign investors on the local exchanges.

In recent years, the Israeli stock market has produced good returns and diversification for foreign investors, and yet, even though many capital controls have been lifted, most foreign investment on the Tel Aviv Stock Exchange (TASE) has been in the form of controlling interests. By contrast, passive portfolio investments have been relatively small, totaling just $335 million in 1996 and $760 million in 1997.[4] Indeed, as opposed to most emerging markets where foreign portfolio investors have purchased locally traded shares, they tended to limit their

[3] International Finance Corporation, Emerging Stock Markets Factbook, 1997.
[4] Annual Reports of the Supervision of Foreign Currency, Bank of Israel.

purchases of Israeli companies to those listed on the NASDAQ (and to a lesser degree on the New York Stock Exchange and the British AIM), not on the TASE. Over 50 Israeli firms went public on the NASDAQ from 1990 through 1996, and as a result the number of Israeli firms listed on that exchange (usually non-ADR shares not dually listed in New York and in Tel Aviv) is greater than that of any foreign country other than Canada.

To understand the corporate governance mechanisms in Israel, we first provide an overview of the evolution of Israeli capital markets in recent years. The government initiated many reforms in the mid-1980s that reduced its intervention in credit and financial markets and allowed firms to raise funds. The government and the banks, however, continue to dominate financial markets, with banks playing an even greater role than that of their counterparts in bank-dominated European countries.

Next, we study the institutional investors, such as mutual, pension, and retirement provident funds,[5] finding that they operate in an environment that discourages their providing adequate monitoring of firm managers.

We then analyze ownership patterns of publicly traded firms on the TASE. The main findings are that ownership concentration in these firms is extremely

[5] Provident and pension funds are based on employee and employer contributions, much like 401k and 403b plans in the US, and enjoy very generous tax benefits.

high and that banks and affiliated institutional investors hold a substantial portion of the publicly traded shares not held by insiders, while the stakes of the public at large, (the "free float"), are even lower than in Continental Europe. As a consequence, the takeover market is very thin, notwithstanding a regulatory environment (disclosure regulations, legal treatment of minority shareholders) similar to the US.

Lastly, we describe the IPO wave of Israeli companies in the US, comparing it to the wave on the TASE where the banks operated as lenders, underwriters, brokers, investment advisors, and subscribers. That involvement underscores a key theme--that despite the very important reforms, banks still play an unusually dominant role in Israeli financial markets. Moreover, the fact that there have been many IPOs in Israel does not indicate that corporate governance has improved, nor does it show that Israel's financial system is no longer bank-oriented. The reason is that, as opposed to many other countries, the wave of new offerings did not create a diverse ownership structure, nor did it reduce the firms' dependence on banks, since the latter were heavily involved in the IPO process.

While there may be economic efficiencies associated with a bank-based financial system--e.g. better monitoring of firm managers, bank assistance during financial distress, or more informed underwriting by bank-affiliated investment houses--there are also drawbacks, such as potential conflicts of interest and the lack of a takeover market. The drawbacks are exacerbated by the Israeli banks' extensive market and political power.

The decision by many Israeli firms to list their securities on the NASDAQ and not at home may be driven, in part, by their desire to raise funds and establish a liquid market for their shares outside the realm of influence of the Israeli banks. Listing abroad may also serve as a quality signal to foreign investors and customers. Furthermore, it is plausible that foreign portfolio investors shied away from the Israeli stock market, focusing instead on Israeli companies listed on the NASDAQ, because of corporate governance problems characterizing the TASE.

II. Reforms and Non-Reforms

Several welcome capital market developments have occurred over the past twelve years. In the past, the government issued special subsidized and illiquid bonds to pension and retirement provident funds. The government decided to stop selling these securities to the provident funds in the mid-80's as part of a fiscal package in which structural budget deficits were cut. Furthermore, in the past, the banks were required to hand over to the government most of the funds that they received from depositors. The government, in turn, provided subsidized loans to certain industries. The banks are no longer required to deposit these funds with the Treasury and are now permitted to extend loans directly to the business sector with little government intervention. In addition, corporations have been allowed to issue bonds without explicit Treasury approval on an issue-by-issue basis as in the past, many foreign currency restrictions have been removed, and access to capital markets abroad has been eased. In particular, firms are allowed to raise equity capital on overseas stock exchanges and to borrow from foreign banks. The Tel Aviv Stock Exchange grew significantly (from a very small initial base), and many Israeli firms, mainly specializing in high-tech, have issued equity in the United States.

These accomplishments have contributed to a more developed and competitive financial system. Several impediments, however, continue to block the development of capital markets in Israel, among them banking structure and the continued dominant government role. A small number of commercial banks, the largest of which are partially owned by the government,[6] provide virtually all bank credit. The two largest banks' assets constitute almost three quarters of total bank assets! Indeed, the reforms which reduced the government role as a financial intermediary have actually increased the banks' role in allocating credit and consequently enhanced their influence. The banks' role is not limited to commercial

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[6] The government became the owner of most of the banking system following the 1983 stock market crash. For the most part, it has not interfered with bank operations (except for the appointment of senior managers and directors and in some debt

operations. They also operate as merchant banks and, through pyramidal structures of ownership, control large segments of manufacturing, construction, insurance, and services. Moreover, the banks dominate all facets of the capital market, including underwriting, brokerage, investment advice, and mutual and provident fund management. There has been no new entry into commercial banking, neither by foreign banks nor by other entities.

Israeli capital market assets - primarily government bonds - totaled approximately $110 billion at the end of 1996.[7] Two thirds of these assets are held by institutional investors such as bank-managed provident and mutual funds, pensions, and life insurance programs. Direct household holdings are minimal. The government plays a dominant role in capital markets - government bonds account for two thirds of all capital market assets (and 96% of all bonds). Savings channeled into government bonds have then been used to finance or subsidize economic activity and capital projects -- and not into stocks and corporate bonds. The large share of government debt in the market, although smaller than in the past, reflects the size of its past budget deficits: had expenditures not been so large, the need to issue government bonds would have been obviated.

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restructuring plans), and is now in the process of privatizing the banks; see Blass and Grossman (1996).

[7] The figure does not include foreign debt and government-owned shares.

The government's role in the market is further extended since it owns parts of the large commercial banks as well as many other large companies: public utilities, defense, infrastructure, and transportation companies, in addition to the port, airport, construction authorities, and hospitals. Selling SOE's to the public via the TASE, using the proceeds to retire government debt, would reduce the share of government debt in the market while raising the share of publicly traded equity, thereby broadening the appeal of the TASE. Selling SOE's is also important to improve corporate governance, since many are inherently inefficient. Often, managers owe their position to patronage, not competence, while employment policies result in over-staffing. Some enterprises are never forced to meet financial and budgetary constraints: when faced with losses, they lobby for subsidies or help in keeping competition out. Privatization of SOE's is currently under way, but the pace until very recently has been slow.

In order to reduce the banks' involvement in capital markets, a number of mild reforms have been proposed by several recent government-appointed blue ribbon committees, although few of their recommendations have been implemented. One reform relates to the issue of bank holdings of large equity blocks in non-financial firms. On the one hand, this may have advantages (better monitoring, assistance during financial distress, informed underwriting), but it can also lead to distortions. For example, a bank's fund management subsidiary might purchase shares of a company, part of whose equity is owned by the parent bank, even if it were not in the best interest of the funds that it manages. That would be especially true in a public offering of stock if purchases made by the investment funds affect the price of the public offering. The bank will have an incentive to use investors' money to support a higher offering price for the shares that it owns, even if shares of other corporations represent superior investment opportunities. In the secondary market, a bank can also affect its control of a company by buying additional shares through its fund subsidiaries, even though such purchases may not be in the best interests of investors.[8]

The banks' credit operations can, in principle, also lead to conflicts of interest with its underwriting, fund management and investment advisory roles. For example, a bank concerned that a company to which it loaned funds was about to default might persuade the company to issue stock through its underwriting subsidiary. Moreover, the bank would know that its fund management subsidiary would purchase shares on behalf of the funds that it manages. The bank would thereby effectively transfer the credit risk associated with a bad loan away from its commercial banking department and on to investors in its fund management

[8] While investment funds in Israel are prohibited from investing in the shares of the parent bank in Israel, the potential for other distortions related to purchasers of subsidiaries and controlled affiliates is generally unfettered. Empirical evidence can be found in Blass (1996) and Ber, Yafeh, and Yosha (1997).

subsidiaries. Recent empirical work by Ber, Yafeh, and Yosha (1997), however, suggests that banks in Israel underwrite companies with above average post-IPO accounting performance, so that there are informational advantages associated with bank affiliated underwriting. They find, however, that the benefits from these issues do not accrue to investors, but to the banks who tend to overprice these issues, causing subscribers to subsequently realize relatively large capital losses.

Another distortion related to credit operations is that a bank may extend credit on preferred terms to customers who accept its investment advice and purchase shares of bank-affiliated mutual funds or bank-underwritten IPO's, thereby generating additional fees for its affiliates. That might be especially true since the banks also act as brokers and investment advisors to most households and firms. Instances of these abuses are well documented. For example, the commercial banks provided high-percentage margin loans to clients in the early 1990s on condition that they invest the proceeds in bank-managed mutual funds.[9]

Finally, it should be mentioned that the aforementioned combination of universal banking, extensive ownership of firms, and market concentration results in substantial political influence for bank managers and directors which they have used to forestall competitive reforms.

[9] See Supervisor of Banks Reports, Bank of Israel.

III. Corporate Governance - The Institutional Investors: Provident, Mutual and Pension Funds

The provident funds are by far the largest institutional group, and investments through the funds have in the past accounted for approximately 30-40 percent of overall household savings. These funds are long term saving instruments enjoying tax benefits, that can be redeemed after a period of no less than 15 years. The funds are mostly bank managed (about 95 percent) with the three largest banks controlling about 75 percent of this market (Blass, 1996). Commission income from provident funds constituted about 4 percent of total bank revenue in 1995 and fund management profits represent a large share of overall profits.

Provident funds are organized as defined contribution plans so that the proceeds received upon retirement depend on fund performance and are not pre-determined as in a pension plan. The funds hold few corporate bonds, stocks, and foreign securities and invest mostly in illiquid deposits and government bonds (Figure 1). The share of government bonds in provident funds holdings has declined, however, in recent years. Indeed, in the past, most fund holdings consisted of illiquid special-issue government bonds bearing above-market rates of interest. The government stopped issuing those bonds to the provident funds in the mid-1980s, and subsequently changed the investment guidelines so that fund managers could invest greater portions of their holdings in non-governmental financial assets. As a result, new inflows, as well as proceeds from maturing bonds were invested in negotiable (mostly government) bonds and stocks (and also in bank deposits), thereby providing much of the impetus for the IPO wave of the 1990's.

The provident funds' performance since the government stopped issuing the special bonds has been poor: Not only were fund returns low; volatility has been relatively high. The average returns for all funds from 1987 through 1994 were lower than those of <u>any</u> of the main asset classes in which they invest. Virtually all the funds underperformed (Blass, 1996). The underperformance can be explained by poor selections of individual securities and a poor allocation of investments between bonds, stocks, and deposits. Another explanation is that the funds trade excessively to generate fees for their brokerage affiliates. In addition, management fees are high. Finally, it is also possible that funds choose investments that are not necessarily in the best interests of fund holders--perhaps as a result of their affiliation with the large banks.

The performance results raise the question of why there has been little entry of new provident fund firms producing better results than the bank-managed funds. A number of barriers have prevented entry: New entrants are required to pay discriminatory bank commissions when investors transfer funds, whereas bank-affiliated provident funds are not required to pay fees. The tax code also makes fund-to-fund transfers unduly burdensome. A corporate entity with an ongoing relationship with a commercial bank might not find it in its interest to transfer a provident fund retirement plan away from a bank-controlled fund. In fact, there is a strong tendency for corporations controlled by bank affiliates to invest in provident funds run by the same bank, suggesting that commercial banking relationships indeed influence the choice of provident fund.

Similar arguments apply to the smaller mutual funds, which typically invest a larger proportion of their assets in equities. More than 75 percent of mutual fund assets are managed by the three largest banks, and 12 additional percent are managed by four other banks. The concentration in mutual funds is, therefore, also very high. Similar to the bank-run provident funds, the bank-affiliated mutual funds have also generally underperformed.

The conclusion from this analysis is that provident and mutual funds are not likely to act as monitors of firm managers. Indeed, recent legislation has attempted to partially address the problem by requiring mutual fund representatives to attend and vote at shareholders meetings. Moreover, the funds' affiliation with commercial banks constitutes a continuing source of potential conflicts of interest.

In light of these conflicts, some economists have suggested that the banks should be required to spin-off their fund management operations and further prohibited from running provident funds in the future. Yosha (1995) focuses on the effect of such a structural change on the degree of competition in the banking sector, taking into account lost potential economies of scale and scope if funds were spun-off. A central argument against such a reform set forth by banks and some regulators is that the banks would lose a major profit center that provides both generous returns as well as diversification (with the banks' credit operations) and as a result, spinning-off the funds might impair bank stability. We now turn to the pension funds.

Pension fund assets represent more than one-fifth of all capital market assets in Israel. Virtually all of the funds are run by the Histadrut Trade Union and 95 percent of assets are invested in subsidized bonds, which the government continues to issue to the pension funds. In addition to the subsidies and tax benefits (that exceed those in most other countries), the government has agreed to cover the substantial actuarial deficits accrued over time. The cumulative effect of the benefits and guarantees is that the government has promised real double-digit rates of return to Union-affiliated pension fund holders, thus distorting the relation between risk and return (Blass, 1997). In addition, the pension funds cannot serve as useful intermediaries between household savers and business because their investments are channeled in full into government bonds.

IV. Corporate Governance - Ownership Concentration and the Equity Market

The picture that emerges is that the Israeli capital market is still dominated by the government and the banks, corporate debt and equity holdings remain relatively small, and institutional investors do not adequately monitor corporate performance. Moreover, while the banks who often hold significant equity blocks could theoretically monitor firm managers, there is little evidence of such monitoring. Still, it would be worthwhile to establish whether the equity market, perhaps via other mechanisms, serves as a vehicle through which managers can be monitored.

According to some measures, corporate governance in the Israel stock market would appear to be satisfactory. Volume and turnover ratios are reasonable, while the underlying legislation and the powers of the regulatory bodies are modeled on the SEC. Almost all listed companies have moved to one class of shares. Disclosure and accounting rules are also strict.

Share ownership patterns, however, point in another direction. The ownership distribution of the $50 billion Israeli market is different from that of most countries: The government's stake is high--over 18 percent; the ownership stakes of other publicly-traded corporations and the banks are also significant (22 and 5 percent respectively), while the share of the investing public-at-large is relatively limited (Figure 2).

Of the 40 percent market capitalization of the ten largest companies, eight are controlled either by the government or by the IDB group. Of the largest 25 companies accounting for approximately 60 percent of market value, ownership is truly disperse in only one - "Teva" (the largest of the 25). The rest are controlled by nine different groups--the government, four banks, and four conglomerates. The top 100 companies representing more than 81 percent of market value are overwhelmingly controlled by 8 key groups (Table 1), mostly government or bank related. Moreover, in 99 of the 100 (and 243 of the top 250) strategic investors control at least 25 percent of outstanding stock, while in 88 they control at least 50 percent. These figures are extreme even in comparison to "insider markets" such as Germany and France (Franks and Mayer, 1997).

For a typical listed industrial firm, 80 percent of its shares are held by "large shareholders (Ber, Yafeh, and Yosha, 1997). Again, this seems to be far higher than in most developed economies, including Germany and France. Ber (1997) reports that individuals, often belonging to the founding family, hold directly about 40 percent of the equity, non-financial corporations hold another 25 percent, while banks own (directly and through mutual and provident funds) at least 15 percent.

Institutional shareholders, other than bank-managed funds, play a relatively small role in the ownership of Israeli manufacturing firms, in part because, as noted above, pension funds as well as life insurance programs are almost fully invested in subsidized government bonds (Figure 1). This situation is not conducive to the operation of an active market for takeovers, which until now has been virtually non-existent.

The privatization process, instead of attempting to remedy this situation by creating a more disperse stock ownership distribution has, in many cases, exacerbated the problem due to the official government strategy of selling blocks of SOE shares to "strategic investors," most of whom already control other large corporations.

A highly concentrated ownership structure can create incentives for large shareholders to monitor firms. However, there are fairly frequent newspaper reports on losses suffered by minority shareholders due to appropriation of firm rents by large shareholders, although direct evidence is hard to find. While Ber, Yafeh, and Yosha (1997) document a decrease in accounting profits following an IPO in Israel, which could indicate that monitoring declines after firms go public, they also detect a positive correlation between the change in accounting profits for these firms and the level of ownership concentration, which suggests that concentration induces better monitoring. It is not clear, however, whether ownership concentration improves performance due to mitigation of managerial moral hazard problems, or if instead, original owners tend to keep higher stakes in "good" firms. There is also some doubt whether shifts in accounting profits accurately reflect corresponding shifts in economic profits.

There is ample evidence suggesting that managerial compensation and incentive schemes are not used in Israel to motivate efficient management as intensively as in the US. For example, Bar-Yossef and Talmor (1997) find that various measures of firm performance are not strongly correlated with managerial compensation. Instead, managerial compensation seems to be more strongly influenced by firm size and the manager's family ties with the block.

V. Israeli IPOs at home and in the US

The recent IPO wave on the TASE was impressive by OECD standards. From 1990 through 1996 more than one hundred and sixty Israeli manufacturing and software corporations and three hundred firms in real estate and services issued stock through IPOs, while most previously-listed firms sold additional shares. As a result of the stock offerings and new listings, Israel has been one of the fastest growing equity markets in the world over the last decade. The number of listed companies is now approximately 700, and market capitalization grew to more than $50 billion today from $7 billion in 1989. The amount of funds raised through stock offerings was also substantial, financing a third of all equipment purchases in Israel, an exceedingly high ratio compared to other countries such as the US, the UK, or Germany (Mayer 1990).

Most firms sold no more than 20 percent of their equity in the IPO, thus keeping post-IPO ownership extremely concentrated. Moreover, the bank-controlled provident and mutual funds purchased most of these shares: in about 30 percent of the IPOs, a single bank-controlled provident or mutual fund affiliate acquired at least 5 percent of the company's equity (Ber, Yafeh and Yosha, 1997).

As in many countries, the IPOs (as well as the seasoned offerings) were facilitated by a rising stock market: from 1991 through 1993 Israeli stock market prices rose at a real annual average rate of 43 percent. The large scale immigration from the former Soviet Union that began in 1989 and prospects of a "peace dividend" following the 1991 Madrid Conference and the 1993 Oslo Accords led many to believe that the economy might grow rapidly for several years. Previous work has shown, however, that growth rates required to support the run-up were much higher than those predicted by most observers and probably were not plausibly attainable (Blass, 1994). The subsequent stock market decline from 1994 through 1996 suggests that, in retrospect, greater emphasis should have been placed on economic fundamentals.

Despite the large number of IPOs on the TASE in recent years and the growth of its market value, most foreign portfolio investors stayed away from the TASE, purchasing instead Israeli shares listed on the US exchanges (usually non-ADR shares). Indeed, there are more Israeli firms listed on the NASDAQ than firms from any other foreign country, except Canada. With few exceptions, Israeli firms in New York are quite different than Israeli IPOs in Tel Aviv: The Israeli IPO's in New York are relatively young (on average 9 years old) and virtually all are high-tech oriented in the electronics or software industries (compared to one-third of TASE industrial IPO's in high-tech). Their pre-IPO operating margins are lower than TASE pre-IPO margins but their revenue, on average, doubles every two years. Firms that list in the US spend relatively large amounts of money on R&D and marketing and more than three quarters of their revenue is derived from exports (Table 2). By contrast, Tel-Aviv IPO's derive only a quarter of their income from exports. Indeed, half of the TASE IPO's in the electronics and software industries have no export income at all!

Another difference between Israeli IPO's in New York and Tel Aviv is that the ownership structure of US IPO's is typically more diverse before they go public and even more so afterwards, since US underwriters usually offer relatively large amounts of new stock, thereby further diluting strategic investors' stakes. Indeed, portfolio investors on average own 35% of US issuers after they go public, and in half of the IPO's they own more than that amount. By contrast, in only one TASE industrial offering did portfolio investors collectively attain a 35% stake.

Regarding post-IPO stock performance, Blass and Yafeh (1997) find a substantial difference between TASE and US IPOs. US issues are underpriced, generating first day returns of almost 20 percent. They also exhibit relatively high (albeit statistically insignificant) market returns for another 18 months after the IPO (Figure 3).[10] By contrast, local IPOs do not exhibit positive first day returns and over time significantly underperform the market; this seems to be an especially pronounced phenomenon if conflict of interests are involved. Indeed, Ber, Yafeh, and Yosha (1997) show that performance was poorest (i.e. the issue was overpriced) when the same bank performed three roles: when it was a major lender to the issuing firm; when it was a lead underwriter; and when its provident or mutual funds purchased a significant part of the offered equity. In other words, the poor performance of provident funds discussed earlier is, at least in part, due to the fact that they purchased overvalued offerings from affiliated underwriters.

The superior performance of US IPOs suggest that, in general, high quality firms issue shares in the United States, while low quality firms issue shares on the TASE. Although the shares of US issuers are typically underpriced since one-day

[10] These results are different from Ritter (1991) who shows that investors purchasing IPO shares at the closing market price on the first day of trading realize significantly relatively low returns over time.

returns re abnormally high, offering prices may still be higher than those that could have been attained had the shares been issued in Israel. That could be because issuing stock in the US might enhance firm value. Benefits from underwriting and listing in the US may include investor recognition--thereby gaining continued access to a large financial market--as well as visibility and name recognition among potential clients, many of whom are in the US. More generally, listing and underwriting in the US under the auspices of well-known US investment banks may signal that the firm is of high quality and expects to grow rapidly and provide investors with substantial returns over time.[11] That would explain why foreign portfolio investors prefer to purchase new Israeli shares listed on the NASDAQ and not on the TASE, where new listings tend to underperform significantly following their public offering.

Israeli portfolio investors might continue to invest locally, either because of conflicts of interest or because they are not able to evaluate Israeli firms with relatively large amounts of intangible assets that list in the US. In addition, foreign currency regulations and tax distortions have limited the ability of provident funds and other institutional investors to invest abroad.

[11] Listing abroad to signal quality is described in Cheung and Park (1995). In their model, however, the signal is broadcast by additional disclosure costs associated with listing in the US.

VI. Concluding Remarks

We have argued that the financial system in Israel is dominated by banks and bank-affiliated institutions, and that the government continues to play an important role. Ownership of publicly traded companies tends to be extremely concentrated. As a result, several important mechanisms of corporate governance are missing: a market for corporate control does not exist, and institutional investors have little incentive to monitor managers, whose compensation is often not related to firm performance. There is no clear evidence for the existence of bank monitoring, and while large shareholders may, in principle, improve firm performance, they have often acted against minority shareholder interests.

To improve corporate governance in Israel, further reduction in government involvement in capital markets is essential. If, for example, government debt is reduced, corporate securities markets will become "thicker", so that investors will be able to monitor managers more effectively. Government debt can be ultimately reduced, however, only if fiscal discipline is maintained. Privatization through sales of stock to the public at large could also add to the "thickness" of the equity market, and further improve market discipline. Reforms that would induce pension funds to invest in equity rather than rely on non-tradable government bonds are also likely to contribute to the development of governance mechanisms.

Other measures to improve corporate governance should address the structure of the financial system. For example, if provident and mutual funds were made independent of bank control (either through legislation or if the government, as a majority shareholder in some banks, decided to spin-off the funds), both the banks and the funds would have clearer incentives to monitor the firms to which they lend or whose equity they hold. If such changes take place, they are likely to affect patterns of foreign investment in Israel: rather than focus on purchasing controlling interests, or buying shares of Israeli firms issued in New York, investors are likely to include in their portfolio small stakes of Israeli firms traded in Tel Aviv.

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Table 1 - Control Patterns of 100 Largest Companies Traded on TASE*
(end of year 1995 figures)

	Number of Companies Controlled by Group	% of Market Value that these Companies Constitute
IDB Group**	29	26.0%
Bank Hapoalim***/Koor	14	20.2%
Eisenberg Group	8	9.4%
Bank Leumi***	4	9.3%
Teva****	1	8.8%
Other Government Co's	2	7.5%
Zelkind	6	3.7%
Saffra	3	3.2%
Others	33	12.0%

Source: Tel Aviv Stock Exchange Publications and calculations of the Research Department, Bank of Israel.

* representing 81.5% of total market value

** IDB is controlled by the Recanati family and holds a 13 percent stake in the third largest bank.

*** controlled by the government

**** the only company among the largest 100 with disperse ownership

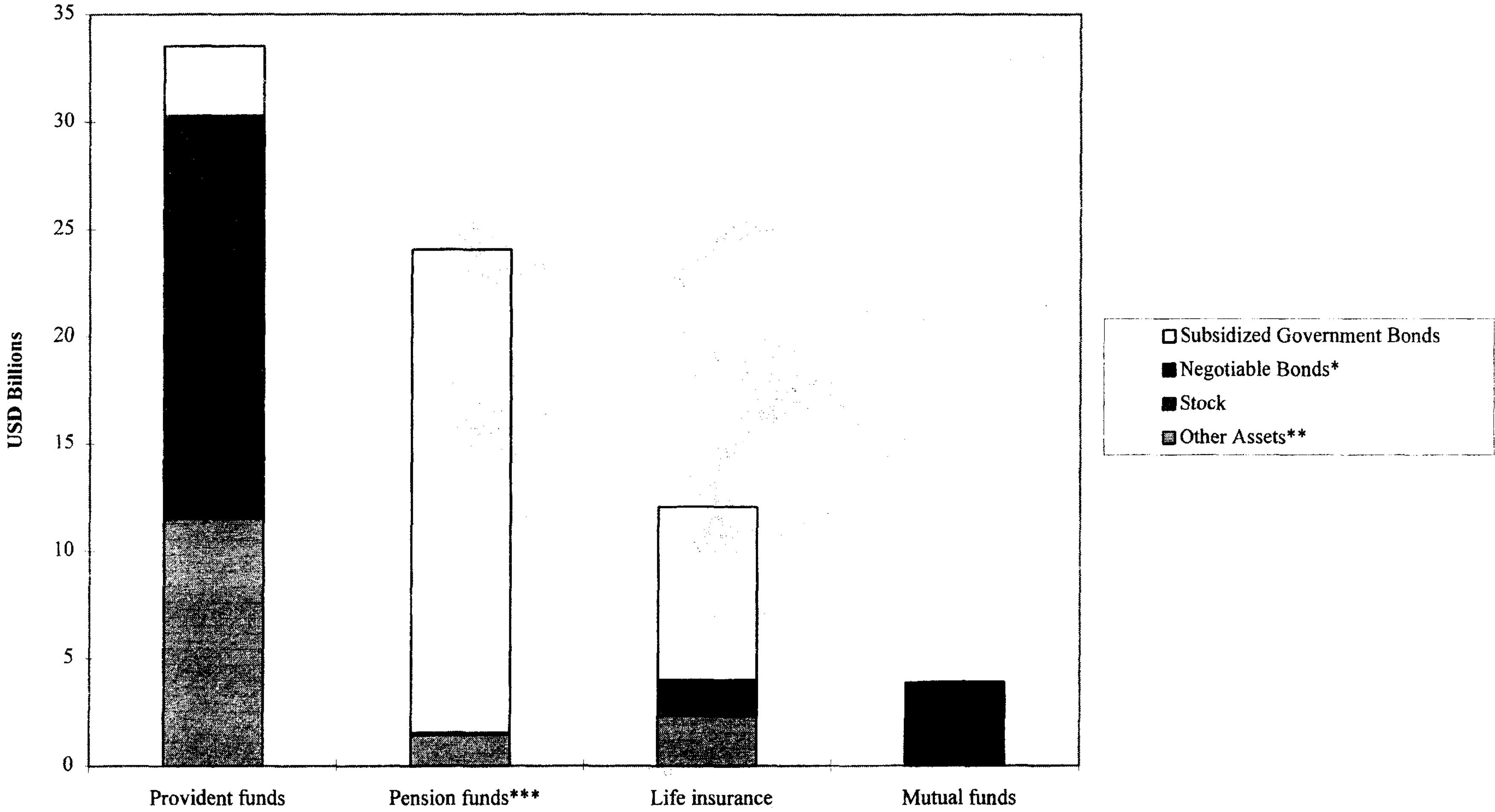
Table 2: Israeli Industrial IPOs in Tel Aviv and in New York 1990-1996

	Tel Aviv IPOs	Tel Aviv IPOs in Electronics and Software	New York IPOs
Pre-Issue Balance Sheet Total (mil $)			
Mean	14.3	6.3	25.3
Median	6.2	3.7	5.4
Age (Years)	21	16	9
Ownership Concentration*	4,900	4,950	2,900
Exports as a % of Revenue:			
Mean	24%	27%	77%
Median	2%	2%	90%
% of IPO Proceeds Designated for R&D	1%	3%	15%
% of IPO Proceeds Designated for Marketing	1%	1%	16%
Operating Margins (median)**	17%	19%	10%
Annual Revenue Growth (%)**	18%	23%	38%
% Employees in R&D:			
Mean	12%	30%	45%
Median	3%	24%	47%
Number of Employees (median)	93	69	86
Number of Observations	163	56	52

* Herfindahl Index
** Pre-IPO

Source: Blass and Yafeh (1997).

Figure 1: Institutional Investors Holdings
(year end 1996)

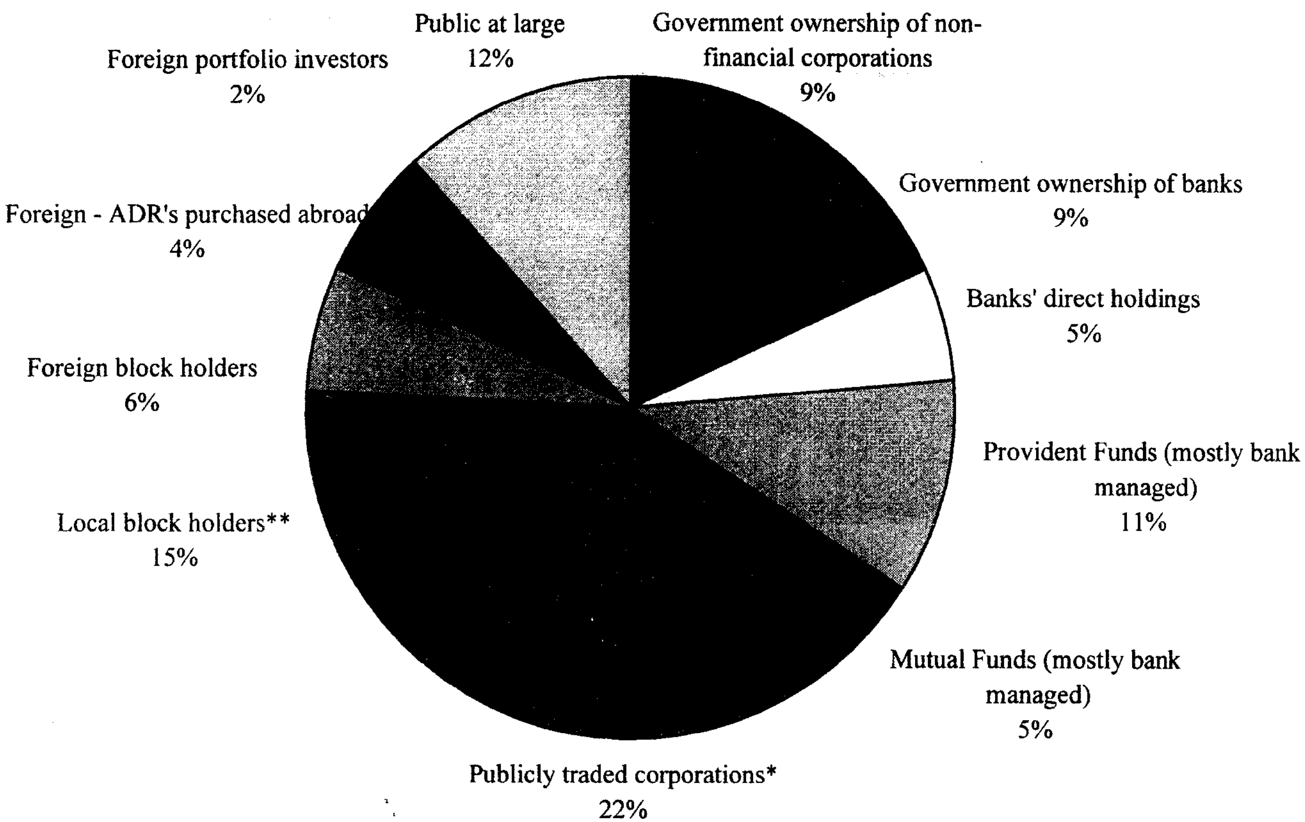


* 94% of negotiable bonds are government-bonds.

** Mostly bank deposits.

*** Does not include the government guarantee of benefits conservatively estimated at $20 billion.

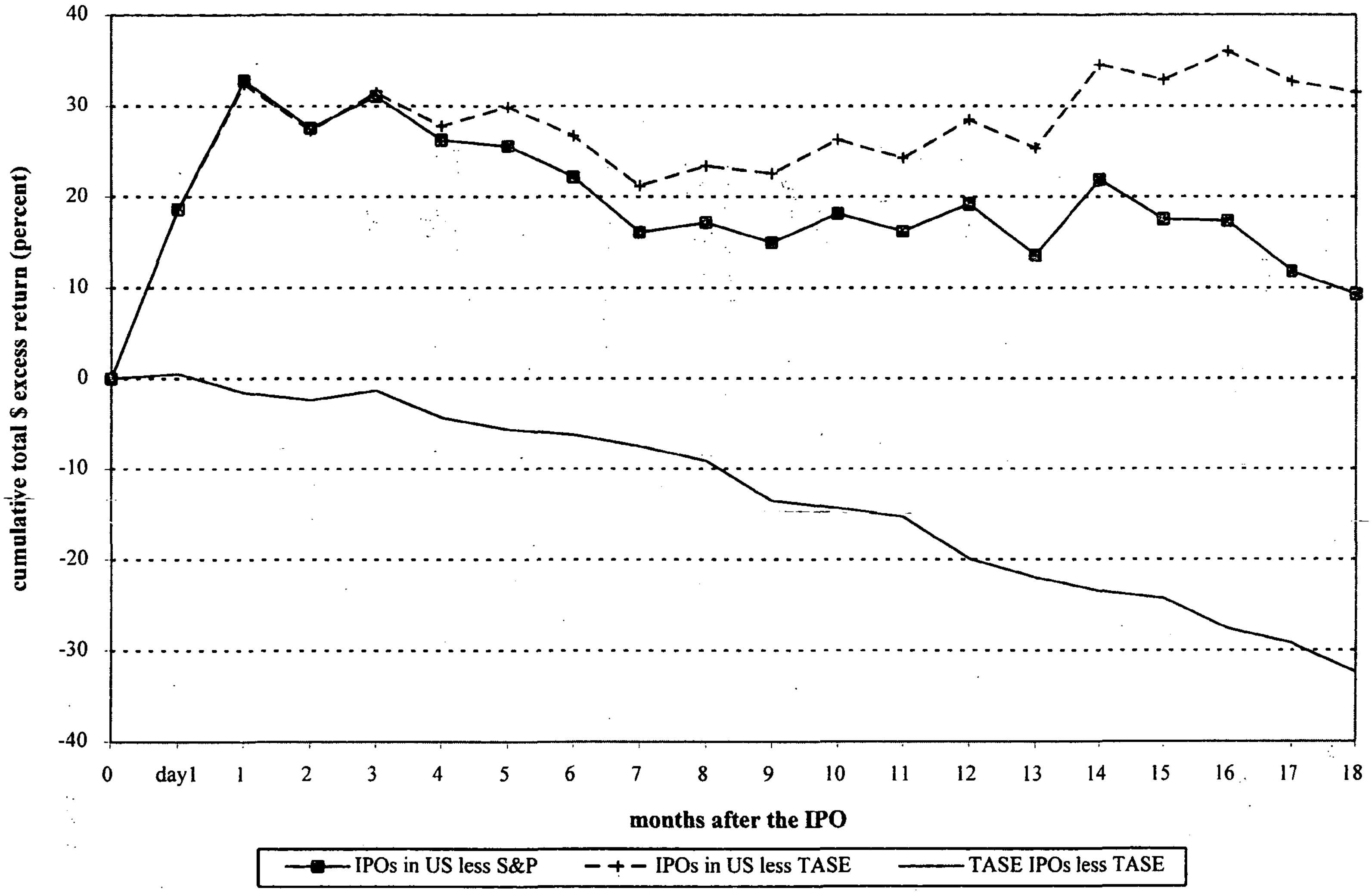
Figure 2: Distribution of Ownership on the TASE
(year end 1995)



* other than banks and government subsidiaries

** other than the government, banks, publicly traded corporations, and financial institutions

Figure 3: Excess Returns of Israeli IPO's in US and TASE 1990-1996



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