Saving and Investment Through Retirement Funds in Israel

Marshall Sarnat

THE MAURICE FALK INSTITUTE FOR ECONOMIC RESEARCH IN ISRAEL

Jerusalem, July 1966

The Maurice Falk Institute for Economic Research in Israel affiliated to the Kaplan School of Economics and Social Sciences is an independent nonprofit organization whose purpose is to encourage research, with particular emphasis on the economy of Israel.

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SYMBOLS AND ABBREVIATIONS

Abstract	Statistical Abstract of Israel
CBS	Central Bureau of Statistics, Prime Minister's Office, Jerusalem
CPI	Consumers' Price Index
. .	Not available
0	Negligible (less than half last digit)
–	Zero

PREFACE

There has been a growing awareness in recent years of the importance for economic development of financial institutions. Fortunately for those interested in their role, the annual statements submitted to the government by retirement funds, which taken together comprise Israel's largest nonmonetary financial intermediary, are available, so that it has been possible to reconstruct a reasonably comprehensive record of the funds' financial transactions.

Since many of the original sources relating to Israel's capital market and retirement funds are available only in Hebrew, I hope that a useful purpose has been served by presenting the findings in English — a language that is more readily accessible to students of finance abroad. Although the study deals with the specifics of retirement savings and their investment in Israel, every attempt has been made to keep this monograph self-contained. No special knowledge of Israeli conditions has been presumed.

My colleagues at the Falk Institute and the Hebrew University provided many helpful suggestions, comments and criticisms during the course of the research, and three successive Directors of Research, Daniel Creamer, Harold Lubell and Don Patinkin, generously contributed of their time to the improvement of the study. I wish to thank Simon Kuznets and Ernst Lehmann, who carefully read the preliminary draft and provided many valuable and stimulating suggestions, and Harold Seligman who served as project supervisor during the initial stage of research. I would also like to acknowledge a disproportionate debt owed to Nadav Halevi with whom I discussed many of the problems arising out of this study and who was a constant source of good advice and encouragement.

The data underlying the study could not have been collected without the cooperation of the Savings Authority, the Registrars of Cooperative Societies and Companies, the Bank of Israel and the managements of numerous pension and provident funds. I am also indebted to Israel Gal-Edd, former Deputy Commissioner of Income Tax, for clarifying the tax treatment of retirement funds in the period before the 1957 Tax Regulations came into force, and to Chaim Levy who provided very efficient statistical assistance and prepared the final tables.

An earlier draft of this study was presented as a doctoral dissertation to the Graduate School of Northwestern University. It is a pleasant duty to express my gratitude to Corliss Anderson, Frank Gane and Donald Jacobs, who served on the dissertation committee, to Robert Clower and Gill Whitaker who joined them on the examining board and to Loring Farwell, Chairman of the Department of Finance. Their helpful criticisms and suggestions have been incorporated on the final draft.

Of course, I bear sole responsibility for all remaining errors of fact or interpretation.

M.S.

Chapter 1

INTRODUCTION

Barriers confronting the promotion of voluntary savings in developing countries suggest that certain forms of involuntary or forced saving, and in particular pre-emptive saving effected through funded retirement plans, may become increasingly important. Serious inflation has been a major deterrent to voluntary saving in many of the developing countries, but since contributions to retirement plans are often tied to wages, inflation tends to increase gross retirement savings along with the rise in nominal wages.

It is against this background that this study analyzes the development of retirement funds in Israel. [1] The choice of this particular facet of institutional saving was prompted by preliminary evidence which suggested that employer and employee contributions to retirement funds constitute a major source of personal savings and of loanable funds in Israel. The choice also reflects the special significance of involuntary savings and their investment during a period marked by severe inflationary pressures.

The chief purpose of the study is to analyze the pattern of saving and investment effected through retirement funds in Israel against the background of prolonged inflation and of a relatively rudimentary capital market. Since the development of the retirement funds has been shaped by growing government regulation, a second purpose is to use the data which have been collected for a critical examination and evaluation of government policy. The results of this evaluation are in turn used to spell out policy changes which past experience suggests may reasonably be expected to improve the effectiveness of the funds as financial intermediaries.

The study covers the decade from 1952 to 1961. Despite its comparative shortness, the period is particularly appropriate to our purposes. It covers an initial period characterized by varying degrees of open inflation and relative freedom from government control, followed by years of comparative price stability accompanied by increasingly rigid regulation. This offers opportunities for investigating changes in the funds' pattern of saving and investment induced by differential inflationary pressures, and for testing the efficacy of the government's attempts to regulate the investment activities of the funds.

Inflation often reduces the incentive to save, but since the flow of contributions to retirement plans is positively correlated with wages, which

1 The study deals only in passing with the social issues that underlie the existence of retirement funds, while broader problems of social security are dealt with only to gain perspective for the analysis of the funds themselves.

tend to rise along with prices, gross retirement fund savings actually grow, often rapidly, during periods of inflation. Inflation, however, creates two distinct problems for retirement funds.

First, since members are able to withdraw some of their accumulated savings by taking loans from their retirement funds, a leakage out of gross saving is created. And since employers can also obtain indirect loans by deferring the actual funding of their retirement plan contributions, yet another leakage is created.

Second, there remains the problem of finding profitable employment for the net savings effected through the funds. Here inflation combines with a rudimentary capital market to limit investment opportunities that offer the prospect of a positive real return. [2]

The study attempts to determine the impact of a prolonged and serious inflationary experience combined with an immature capital market [3] on this form of pre-emptive saving. Gross savings and the direct leakages out of them were estimated for each year from data derived from retirement fund financial statements. The results were then compared for periods of varying degrees of inflation, and at different stages of the development of the capital market. The chief virtue of this approach lies in its being practicable. Its chief shortcoming is that it sheds very little light on the important question of the possible existence of indirect offsets to retirement savings. [4]

Chapter 2 sets out the principal features of retirement funds, and Chapter 3 discusses briefly their evolution in Israel. Chapter 4 is devoted to an examination of the impact of tax policy and government regulation on the financial operations of the funds.

The size of retirement funds, in terms of membership and assets, and their structure, by sector affiliation and industrial branch, are examined in Chapter 5. Estimates of the flow of funds through retirement plans are presented in Chapter 6, and Chapter 7 uses these data to estimate retirement fund savings and leakages out of them during the decade under study.

Chapter 8 analyzes the changing pattern of retirement fund investment against the background of inflation and the emerging capital market. Estimates of the rate of return on retirement fund assets are presented in Chapter 9. Chapter 10 ends the study with a summary of the principal findings and conclusions.

2 The two problems are, of course, connected: the inability to earn adequate returns on investment reinforces the demands of members for loans.

3 The absence of an efficient capital market is fundamental, since there is no a priori reason why inflation as such must reduce the incentive to save. It is only when the capital market or investors fail to adapt themselves to rising prices that the full adverse effect of inflation on the real value of savings will be felt.

4 An alternative method is to make intertemporal comparisons of the consumption-savings behavior of retirement fund members with that of nonmembers under varying conditions of inflation. This has the advantage of permitting an estimate of the degree to which the growth of retirement fund savings represents a net increment to total personal savings. This approach, however, requires data, which were not available, drawn from sample surveys of consumer behavior.

Chapter 2

THE PRINCIPAL FEATURES OF ISRAEL'S RETIREMENT FUNDS

A prominent feature of labor-management relations in Israel and elsewhere has been the vigorous and persistent attack upon the problem of economic insecurity resulting from the termination of a worker's employment. Retirement funds are but one of several manifestations of the perennial quest for economic security in old age. Broadly speaking, the case for retirement funds rests upon a social theory which contends that employers should share responsibility in making provisions for the economic welfare of employees after their retirement.[1] Such funds differ from other efforts to solve this problem through government action or individual prudence in that they are backed by the bargaining power of organized labor.

Retirement funds represent an organized attempt to find an acceptable solution to a basic social problem, but their development has important implications, not only for the insured workers, but for the economy as well. Since we are concerned with the economic and financial, rather than the social, impact of retirement provisions, we focus attention on those retirement plans which involve full or partial advanced funding, i.e., the accumulation of reserves to meet expected future liabilities. Only such plans yield pools of funds for current investment in financial assets. In Israel, these funded schemes comprise the bulk of existing retirement plans, and will undoubtedly continue to constitute the most important form of retirement provision in the immediate future.

Retirement funds in Israel do not constitute a homogeneous population, and in the course of the inquiry we employed a pragmatic approach, taking as a retirement fund any organization listed as such in the files of the Ministries of Labor, Justice, or Finance.

A retirement fund can be more precisely defined as a benefit organization having the following four characteristics: (a) it has formal legal status separate from that of the employing firm; (b) it is funded: employers or employees or both make regular contributions in advance of future benefits; (c) separate

1 Although the social underpinnings of retirement provisions are often accepted uncritically, Milton Friedman has recently pointed out that the social welfare reforms born of nineteenth century liberalism are in themselves infringements of personal freedom (Capitalism and Freedom, University of Chicago Press, 1962, Chapters 1 and 9).

Friedman notes that "the citizen. . . who is compelled by law to devote [a percentage of his income] to the purchase of a particular kind of retirement contract, administered by government, is being deprived of a corresponding part of his personal freedom." (p. 8). Although Friedman is primarily concerned with government plans, the argument can readily be extended to pre-emptive saving plans imposed by unions on workers and employers. It should however be stressed that Friedman explicity states that the number of persons who view compulsory old-age insurance as a deprivation of freedom is presumably small.

accounts are kept for each member to which his own contributions and the part of the employer's contributions which relates to him are regularly credited; (d) there exists a contractual obligation with regard to the payment of benefits; and these benefits take the form of one or more capital (lump sum) or annual (pension) payments, payable to the member upon the termination of his employment.

Using this rather broad definition[2] we include under the heading retirement funds (and therefore in the population) contributory pension, social insurance and provident funds, as well as noncontributory severance pay funds. The self-employed have been granted the limited privilege[3] of deducting (for tax purposes) their contributions to accredited retirement plans which fulfil the above four requirements; provident funds for the self-employed are therefore also included. On the other hand, we exclude statutory superannuation (national insurance), the mutual welfare funds of the Histadrut (General Federation of Labor) such as Matsiv and Dor L'dor, and pensions paid *ex gratia* by employers, as well as savings, pension or dismissal wage schemes effected through the purchase of deferred annuities from insurance companies. Since the government and the armed forces provide for pensions out of current budgets, the pension schemes established for civil servants and army personnel are also excluded from this study.

ESTABLISHMENT AND ADMINISTRATION OF RETIREMENT FUNDS

Retirement funds are essentially depositories for members long-term savings. In Israel, securing such contributory thrift schemes for workers has been primarily the concern of the trade union movement.[4] The establishment of an individual retirement fund is usually the product of collective bargaining between management and the workers represented by the Histadrut. Once agreement is reached on the amount of contributions, the nature of the benefit formula, etc., a charter and by-laws are drawn up (often with the aid of one of the audit unions established for this purpose) and the new fund is registered[5] as an independent cooperative society or limited company.

Although employers are precluded by law from joining their firm's retirement fund as benefit members,[6] they usually share in the administration of the fund's operations; they are represented at quarterly or annual meetings and help to formulate investment policy. A fund's routine operations are carried out either by unpaid volunteer members, or, in the

2 For a somewhat different definition of provident and pension funds, see Report of the Committee on the Taxation Treatment of Provisions for Retirement (Cmd. 9063), HMSO, London, 1954, especially pp. 33-34. This report is referred to below as the Tucker Report.

3 See p. 19, note 8.

4 In the words of the Secretary-General of the Histadrut, "It has always been the policy of the Histadrut to protect its members against hardships resulting from sickness, invalidity or old age, . . . , over and above the basic old-age pension, maternity benefits and other forms of national insurance guaranteed to all workers by the state." See Aharon Becker, "The Work of the General Federation of Labour in Israel," International Labour Review, LXXXI (May 1960), 445.

5 Until 1957 many provident funds, including several of the larger ones, had no separate legal status.

6 Exceptions have been made to this rule; for example, the members of cooperative societies and minority shareholders employed by a firm may be considered employees for the purpose of securing retirement benefits. See Chapter 4, p. 20.

larger funds, by a paid staff. Salaries and other administrative expenses are normally met out of investment income, but some of the funds place special levies on members or employers to help defray operating costs or to cover deficits.

In the case of the large social insurance and several of the pension funds, severence pay schemes and funds for the self-employed, administrative practice is usually quite different: the three social insurance and four central pension funds established by the Histadrut are affiliated to the Department of Pensions of the Histadrut Executive; severance pay funds, if not incorporated into an existing provident fund, are administered by banks acting as trustees or by the employers themselves, while provident funds for the self-employed are usually administered by individual banks or insurance companies.

Table 2-1 presents the distribution of retirement funds by form of administration at the end of 1961. The bulk of retirement funds, comprising 89 per cent of the total population, were administered by their members; although employers usually shared in this task. Another 6 per cent of the funds were administered by banks or insurance companies and 3 per cent were administered by employers. The remaining 2 per cent, consisting of seven very large social insurance and pension funds, were administered directly by the Histadrut's Department of Pensions.

TABLE 2-1. Approved Retirement Funds by Form of Administration: 1961

	Number of funds	Per cent of total
Union	7	2
Bank*	24	6
Employer	11	3
Member	346	89
Total	388	100

* Including insurance companies.

SOURCE: Adapted from Savings Authority, "List of Retirement Funds (Provident, Severance Pay, and Pension), December 31, 1961, "Ministry of Finance, Jerusalem (Hebrew mimeograph, n. d.).

While the typical provident or severance pay fund serves the employees of a single firm,[7] an individual firm may have two or more funds (e. g., one for its office or supervisory staff and another for its plant workers). If the firm is a cooperative society, it is common practice to establish one fund for its members and a separate fund for its hired employees.

Although several large institutions, such as the Hebrew University, Hadassah, and the Egged Bus Cooperative, have established their own pension funds, funded pension schemes have by and large remained the province of the Histadrut's social insurance and central pension funds. These funds have national coverage and embrace the employees of Histadrut-operated enterprises and institutions, as well as other workers in agriculture, construction, industry, and services.

7 Bank-administered central severance pay and provident funds for the self-employed have, by their very nature, national coverage.

BENEFIT FORMULAS

All retirement funds are primarily intended to provide long-term savings for their members, but the type of benefit differs significantly among the various classes of plan. A useful distinction can be made between lump-sum schemes (including provident and severance pay funds) and plans providing benefits in the form of life annuities.

Lump-sum benefits: Upon the termination of his employment a provident fund member may withdraw the accrued contributions and interest that have been credited to his account during his years of service; if, however, he finds work within six months, his provident fund savings are, in accordance with the income tax regulations,[8] transferred to his credit in the provident fund attached to his new place of work.[9] Where the member finds employment with a firm having no retirement plan, or if he retires, he receives his savings in the form of one or more lump-sum cash payments.

The exact composition of the benefit payment depends on the particular formula employed by the fund. In general, a worker who retires because of old age, poor health, or disability, or who is dismissed by his employer, is entitled to withdraw the full amount credited to his provident fund account (i. e., the accumulated employer contributions, as well as his own contributions plus any accrued interest). If he dies, the full amount to his credit is paid to his heirs.

When a member leaves his job voluntarily his claim to the accumulated employer contributions and accrued interest depends upon the benefit formula used. This might specify, for example, that an employee who voluntarily terminates his employment will receive, say, 20 per cent of the accumulated employer contributions for each year of service, the remainder being refunded to the employer or allocated to the provident fund's general reserve. The member, however, always receives the full amount of his own contributions regardless of why he leaves.

Despite the great variety in the details of benefit formulas, provident funds remain conceptually a very simple form of retirement plan. Before 1962,[10] members' claims invariably related to the nominal amounts credited to their accounts, and, barring large capital losses, the benefit obligations of the fund were fully covered at all times. By definition, no actuarial problem existed, and in fact, given the widespread practice of investment in linked securities[11] and the payment of benefits fixed in nominal terms,[12] the funds accumulated reserves in excess of their benefit liabilities.

8 See Chapter 4, pp. 20–22.

9 In practice it was often difficult to follow up individual cases, and some members may have succeeded in withdrawing their savings in cash even though they were re-employed by firms having their own provident funds.

10 Following the devaluation of the Israel pound in February 1962, the Treasury issued instructions that retirement fund assets should be revalued, or members' accounts should be linked to the CPI.

11 See Chapter 8, p. 68.

12 While some funds distributed realized linkage gains to their members, we identified only one fund which allocated unrealized gains to individual accounts.

From a narrow financial viewpoint, the well-defined and fixed nominal liabilities of a provident fund constitute an advantage. But they are also the provident-type plan's greatest weakness in times of rising prices. In Israel, where price inflation has been serious enough to undermine the utility of the currency as an adequate standard of deferred payment,[13] the problem of current retirement benefits, which largely reflect much lower historical wage and price levels, has been particularly acute. Moreover, the common practice of linking part of a fund's investments while leaving the benefits fixed in nominal terms had perverse effects.

A member who retired or left his employment for some other reason, lost his claim to the undistributed linkage gain on the fund's investments. As a result, over the decade under review, there occurred a, presumably unintended, transfer of resources from those who terminated their membership to the remaining members. Even in those funds which distributed realized linkage gains to individual members' accounts, a member who left lost his proportionate share in the imputed (but as yet unrealized) appreciation of the fund's linked assets.

In some provident funds employers make contributions on account of severance pay in addition to their regular contributions towards retirement savings, while in other instances separate severance pay funds have been established by employers. In such cases, workers make no parallel contributions of their own and the receipt of the severance pay (plus accrued interest) is contingent only upon an employee's dismissal or retirement. In theory the employee is not entitled to receive severance pay if he leaves voluntarily, but in practice there is often no clear distinction between 'voluntary' and 'involuntary' termination of employment.

As with provident funds in general, the member's claim is to the nominal amount accumulated in his severance pay account, but employers are usually obligated to pay dismissal wages based on final salary. In the absence of the current funding of the difference resulting from the secular rise in wages and from promotion to higher paid positions, the amounts credited to a worker's severance pay account will not be sufficient to meet the employer's full obligation; this deficiency is met by employers directly out of current budgets.

Pension benefits: There are many variations in the pension benefit formulas currently in use, but the pension funds affiliated to the Histadrut have worked out two alternative pension formulas—'basic' and 'comprehensive'—whose common features can serve as a benchmark for evaluating pension benefits in Israel. In what follows, we shall ignore the differences between these two plans (which relate primarily to the scope and size of the benefit rights of the disabled and of members' survivors)[14] in order to focus attention on those features which have set the general pattern for supplementary pension plans both inside and outside the Histadrut sector.

The size of retirement pensions tends to vary with seniority. Thus, retirement annuities may range from 35-40 per cent to 70 per cent of final salary, depending upon the number of years that a member and his employer

13 The widespread use of index-linked clauses in debt contracts is in itself a symptom of this.

14 Since the comprehensive pension plan provides greater benefits, its rates of contribution are higher than those of the basic pension plan.

have made contributions to the pension fund. The maximum rate is usually reached after 35 years of service, while ten years of membership usually qualifies a member for a minimum welfare annuity.[15] In 1962, this minimum pension was set at 50 per cent of final salary, or at IL 143 monthly per couple, whichever is the lower. In the Histadrut funds, both maximum and minimum pensions include benefits received by the retired member through national insurance. Some funds outside the Histadrut sector have set their maximum pension at 70 per cent and include only 50 per cent of the national insurance benefits.

In practice, the size of pensions is understated, since the benefit formulas are set out in terms of percentages of gross salary. If we express pensions as a percentage of disposable income the effective maximum pension is considerably higher than 70 per cent, because the retired member no longer has to make pension fund and national insurance contributions, which together usually amount to 6 per cent of his gross salary. Moreover, upon reaching the age of sixty-five, individuals receive an additional IL 600 exemption for income tax purposes. Finally, the tax burden on the lower pension income is less (and in some cases much less) than that on the full gross salary. These factors sometimes allow of pensions that represent as much as 80 to 90 per cent of a retired member's former net disposable income.

The most striking feature of retirement pensions in Israel, however, is not the percentage rate of benefits, but the fact that these rates are applied to the superannuated worker's final salary rather than to some measure of his average earnings,[16] adjusted for interest accumulation. Under existing pension plans, two persons who are similar in all relevant respects except in the time pattern of their job promotion are entitled to receive the same pension benefit, despite the fact that the sums available to finance the annuities may differ significantly in the two cases. Since both employer and employee contributions are set as fixed percentages of wages, it is sufficient for this purpose to consider the case of someone who receives promotion (and the concomitant raise in wages) immediately before his retirement.

Moreover, should the basic salary scale for the equivalent grade of work formerly performed by the superannuated member rise subsequent to his retirement, it is the practice of the pension funds to increase the benefit annuity proportionately for the remainder of the member's life. Thus, the connection between the sums accumulated to finance retirement annuities and the amount of a fund's actual obligation to its retiring members is, at best, tenuous. The former are a function of the time pattern of a member's earnings and of the fund's net investment income, while the latter is a function of the retiring member's final salary, adjusted for any subsequent rises in salary scales during the period in which benefits are received.[17]

15 In 1963 the minimum qualifying period was lowered from ten to five years.

16 This is what happens in France, where the pension provided under the National Collective Agreement for supervisory staffs is geared to a proportion of the earnings of the insured throughout his career, while contributions are based on actual salary. The adjustment of pensions to wages from time to time has, however resulted in serious difficulties in guaranteeing the future level of pensions. See "Supplementary Pension Schemes in France," International Labour Review, LXXVI (October 1957), 384-99.

17 To the degree that the pension includes national insurance, the statement is true for a given level of national insurance benefits. Any rise in national insurance annuities serves, *ceteris paribus*, to reduce the effective liability of the funds themselves.

Since almost all wages in Israel are linked to the official cost-of-living index (CPI), and pension benefits are calculated as a given percentage of gross salary net of cost-of-living allowances, it is the common practice to link pension annuities to the Index. A retiring member receives a proportion of his final basic salary plus the cost-of-living allowance currently being paid on wages of the same magnitude. As was true of basic salary, the index linkage continues throughout the period in which the benefits are received. In effect, the supplementary pensions represent a given proportion of a worker's real, rather than of his nominal, income.

Concern with the effects of rising prices on benefits fixed in nominal terms is widespread. A first attempt to guarantee the real value of social security benefits was apparently made in Denmark as early as 1933, and since 1948 several countries including France, Belgium, the Federal Republic of Germany, and the Netherlands have introduced index modulation designed to ensure the stability of the standards of their social security systems.[18] This shift to index pegs for pension benefits did not represent a revolutionary change in the attitude towards superannuation. Retirement benefits have probably always been adjusted, sooner or later, in every country which has experienced a major decline in the purchasing power of its currency.[19]

A notable feature of supplementary pension plans in Israel is that in effect they go beyond the goal of securing the real value of benefits. Since pensions are linked to both basic wages and the CPI, they represent an attempt to preserve the share of a given type of income, in this case the income of the superannuated, in the national product. This system secures for the superannuated a type of 'income parity' (analogous to similar arrangements used in agriculture). By taking as a benchmark a worker's final (and usually maximum) salary, supplementary pensions in Israel emphasize the social significance of consumption, and especially the crucial role played by previously attained peak consumption standards on current consumer behavior.[20] Supplementary pensions in Israel are not designed merely to protect the retired worker from the hardships of old age, but to preserve his income (and presumably his social status, in so far as it is related to income) after he retires.

SUPPLEMENTARY BENEFITS

In addition to their primary task of providing retirement savings, many provident and pension funds also provide life and disability insurance for their members, while several funds purchase life insurance policies for members' spouses as well. Most members of retirement funds in Israel are covered by a mutual insurance plan administered by a special division

18 Elizabeth Liefman-Keil, "Index-Based Adjustments for Social Security Benefits," International Labour Review, LXXIX (May 1959), 488, 497-98.

19 This is apparently so even in the United States, where index modulation is almost unknown, and both social security and supplementary pension benefits have been raised periodically over the past two decades. It can well be assumed that at least part of the increase in benefits was a response to the rise in the price level.

20 Cf. J. S. Duesenberry, Income, Saving and the Theory of Consumer Behavior, Harvard University Press, 1949.

of the Hassneh Insurance Company, although several of the larger funds build up their own internal life insurance reserves. Under the mutual insurance plan, the age and medical condition of the insured are not considered, and there is a uniform premium for all participating members.

The plan originated during the War of Independence, when it was decided to insure members of provident and social insurance funds for one year on a collective and voluntary basis because private insurance companies did not protect their policy holders against war risks. Since it appeared that this type of insurance would prove very reasonable during normal years,[21] it was decided to continue it on a permanent basis.

In addition to providing retirement benefits, the Histadrut's social insurance funds also fund employer contributions for additional fringe benefits such as sick pay, holidays, convalescence and rehabilitation. These additional employer contributions are credited to collective accounts, and members receive benefits according to the particular formula employed by each fund. The social insurance funds also serve as collection agents for employer contributions to the Workers' Sick Fund (Kupat Holim) and to the annual leave funds established under the Annual Leave Law (1951).

VESTING

Vesting refers to an employee's rights to receive all or part of the employer's contributions made on his behalf to a retirement fund, even when he terminates his membership before reaching normal retirement age.[22] In essence, vested rights represent a member's equity in the accumulated employer contributions to the retirement plan.

With the exception of severance pay, which is (at least in theory) contingent upon the nature of dismissal, all lump sum retirement plans in Israel have a vesting provision. And, as we have seen, the degree of vesting usually depends upon seniority.[23] Similarly, members of pension funds are covered by a vesting provision. Within the Histadrut sector, members of one pension fund may transfer their accounts and accumulated pension rights to another fund if they change jobs. Where a member is re-employed by a firm having no pension plan, he may choose to retain his membership in the fund and continue to make contributions until retirement, or, upon leaving, receive the capitalized value of his pension rights. When a member terminates his membership without having become eligible for a pension benefit, he receives a lump-sum payment similar to those paid by provident funds.

21 For a discussion of the comparative costs of mutual and private insurance, see Y. Livyatov, "Insurance and Economic Efficiency," The Economic Quarterly, I (No. 3, January 1954), 222-25 (Hebrew).

22 For a discussion of the vesting arrangements in pension plans in the United States see Charles T. Dearing, Industrial Pensions, The Brookings Institution, Washington D.C., 1954, Chapter 5; and Paul P. Harbrecht, Pension Plans and Economic Power, The Twentieth Century Fund, New York, 1959, Chapter 3.

23 It should be noted that vesting is complete when a member dies; i.e., the deceased member's heirs are entitled to receive the full amount of the employer contributions credited to his account.

Chapter 3

THE EMERGENCE OF THE RETIREMENT FUNDS

THE ADVENT OF PROVIDENT FUNDS

Although the first retirement fund[1] established in Palestine antedates the first world war, it was not until the advent of the British Mandate that a concentrated effort was made to secure retirement benefits for the working population.[2] During the mandatory period the absence of adequate social legislation provided a strong impetus for the development of stop-gap measures until such time as the central government assumed its share of responsibility for the superannuated.

In a country with a strong and articulate labor movement, it is not surprising that the Histadrut should have played a leading role in filling the gap by bargaining with employers to secure retirement plans for their members. During the 1920s, and especially during the 1930s, Histadrut-owned industries, together with producer and service cooperatives, pioneered the establishment of retirement saving plans for their workers. Almost without exception, these retirement provisions took the form of provident funds with both employers and workers contributing from 3 to 5 per cent of wages.

THE IMPACT OF THE SECOND WORLD WAR AND THE ESTABLISHMENT OF THE STATE

The unprecedented expansion of the Palestinian economy during the second world war led to the rapid extension of such thrift plans, and by 1947 there were over 300 provident funds operating in the Jewish sector of the economy.[3] These funds embraced about 40,000 workers, and by the end of 1947 over IL 5 million had been accumulated in the funds with the net annual increment running at about IL 1 million.[4]

Another development during this period was the establishment of the Audit Union for Provident and Pension Funds, in 1945. Its primary task was to advise the funds affiliated to it on the preparation of financial statements and records, as well as to audit their books. In addition, the

1 The provident fund of Bank Leumi (formerly the Anglo-Palestine Bank).

2 See Histadrut, The Central Pension Funds of the Histadrut—the Jewish Federation of Labour, Department of Pensions, Tel Aviv, 1962, p. 5.

3 This figure does not include some thirty funds in the diamond polishing industry which were subsequently liquidated owing to the postwar closing of firms.

4 See Audit Union for Provident and Pension Funds, Provident and Pension Funds in Palestine, Tel Aviv, 1948 (Hebrew).

Audit Union offered advice on various problems concerning administration, insurance, and investment.[5] Newly established funds affiliating themselves to the Audit Union were also assisted in drawing up their charters and by-laws and in registering the funds as cooperative societies.

The rapid growth of provident funds during and following the second world war (as evidenced by the expansion of membership and assets) was not coordinated. Provident funds were established wherever the Histadrut was successful in its negotiations with individual employers. The more favorable economic conditions which prevailed during this period made it much easier to secure employer agreement than during the deflationary prewar years.

On the other hand, the inflation engendered by the war posed some special problems for the Histadrut. Workers became increasingly aware that the real value of their savings in provident funds was being jeopardized by the progressive rise of the general level of prices. In its efforts to establish new funds, the Histadrut was often confronted by the apathy, or even the active opposition, of the workers, who in general appeared to prefer bargaining for direct wage increases rather than for supplementary fringe benefits.[6]

The attitudes of individual workers have not, however, significantly affected the pattern of the funds' development. The Histadrut has assumed responsibility for securing retirement benefits. Although membership in a retirement fund is voluntary, in the sense that no legislation exists compelling workers to join a fund, the Histadrut's collective agreements invariably stipulate that employers and employees must contribute to the appropriate retirement fund.[7]

The War of Independence temporarily halted the expansion of retirement funds. Some enterprises were closed while new ones sprang up in their place, and thousands of members of existing funds left their jobs to serve in the armed forces. But it was the huge wave of immigration to Israel in the years 1948-51 that had the most far-reaching effect on the funds. The increased tempo of immigration, together with a greatly increased investment program, resulted in a sharp expansion of the economy and the labor force. Strong inflationary pressures also built up during this period, and both wages and prices began to move steadily upward, so that by 1952 a severe wage-price spiral was in progress.

The growth in the number, membership, and assets of the funds during the first four years of statehood reflects for the most part the expansion of the economy and the sharp rise in nominal wages. By the end of 1951, there were 426 retirement funds, covering 160,000 workers.[8] During 1951 gross employer and employee contributions to the funds amounted to about IL 14 million and by the end of that year the total assets of retirement funds had reached IL 30 million.

5 There are two other audit unions that perform similar services for a number of provident funds affiliated to producer, service, and credit cooperatives.

6 Audit Union, op. cit., p. 5.

7 Histadrut, The Central Pension Funds... , op. cit., p. 9.

8 This figure reflects the Ministry of Labor's estimate of the total membership of the four social insurance funds—95,000. In 1951, the four funds actually had over 150,000 separate accounts on file, but this conceals many duplications, since in numerous instances two or more accounts were opened for the same person. See Ministry of Labor, "Provident and Insurance Funds 1951," Monthly Review of Labour, V (March 1953) 6 (Hebrew).

CONSOLIDATION AND THE ESTABLISHMENT OF SOCIAL INSURANCE FUNDS

The rapid expansion of retirement funds after the second world war and during the early years of statehood reflected the creation of a large number of relatively small funds, each affiliated to a single employing firm. The Histadrut attempted to amalgamate the smaller funds into larger centralized units, and, in line with this policy, a central provident fund was established in 1945 for workers in the Histradut's dues-collecting offices. Another central fund, covering the employees of consumer cooperatives, was set up in 1946. During the same period centralized funds were also established for teachers, printers, and the employees of the Tnuva marketing cooperative.

This shift to larger centralized funds received its greatest impetus as a by-product of the Histadrut's postwar efforts to secure fringe benefits for workers having no permanent employer affiliation. Since such workers enjoyed almost none of the social benefits common to permanent industrial and white-collar workers in Israel, attempts were made to secure retirement and various additional fringe benefits.

After prolonged bargaining, four social insurance funds were set up, embracing workers in the construction trades and agriculture, as well as part-time employees in industry and commerce. From the outset the social insurance funds were organized on a national multi-firm basis. Strictly speaking, these four funds were a special type of provident fund since they too were designed to receive employer and employee contributions on behalf of retirement savings. As in provident funds in general, these contributions are credited to individual members' accounts, and are received by them upon the termination of employment in the form of lump-sum payments. In the social insurance funds, however, additional fringe benefits are not merely obligations of the employer, but are also funded in advance.

The four funds, in the order of their founding, are the Building Workers' Insurance Fund; the Hired Agricultural Workers' Insurance Fund; the Citrus Packing Workers' Insurance Fund; and Mivtachim.

The Building Workers' Insurance Fund was founded in 1945 with a view to organizing construction workers throughout the country. It was a pioneering effort to secure social benefits from employers who for the most part lagged behind other sectors of the economy in providing for the social welfare of their employees. The general contracting company of the Histadrut, Solel Boneh, helped in the establishment of this fund, and was the first firm to carry out the decision of the national union to provide building workers with retirement and other fringe benefits.[9]

The construction boom which got under way in 1949 played an important role in the rapid expansion of this fund, and by 1951 it embraced over 43,000 members and had accumulated more than IL 6 million in assets. By the end of 1961, 60,000 construction workers were members of the fund and its total assets exceeded IL 81 million. Measured both in terms of membership and total assets, the Building Workers' Insurance Fund is today Israel's third largest retirement fund.

9 Histadrut, The Building Workers' Union in Israel, National Union of Building Workers, Tel Aviv, n.d., p. 14.

The Hired Agricultural Workers' Insurance Fund began operations in 1948. This fund covers employed workers in various branches of agriculture including citrus plantations and the agricultural projects of the government, the Development Authority, the Jewish Agency, and the Jewish National Fund. Many difficulties were encountered in establishing the fund, neither employers nor workers evincing much desire to make contributions [10] even though these were originally set much lower than in the other funds. In 1951 the fund had only 8,000 members and total assets of only IL 700,000, but by the end of 1961 membership had reached 78,000 and assets IL 36 million.

The Citrus Packing Workers' Insurance Fund was founded in 1949 and covered all laborers in the citrus packing industry. Since this is a seasonal industry and workers are employed only during the winter months, the fund also operated on a seasonal basis. In 1951 there were 3,00C members and total assets were IL 100,000. In 1958 the fund was merged with the Hired Agricultural Workers' Fund.

The last of the four funds, Mivtachim, was founded in 1949 and initially covered part-time workers in industry and crafts. Today it embraces a miscellany of industrial workers as well as part-time employees of the government and the army. In 1950 the fund extended its coverage to permanent workers of small industrial firms. Many smaller provident funds have also been absorbed by Mivtachim during the past decade. In 1951 the fund had total assets of about IL 3 million and over 40,000 members. By the end of 1961 it had become the largest retirement fund in Israel, with assets of more than IL 110 million, and its membership was estimated at between 60,000 and 100,000.

CO-ORDINATING THE INVESTMENT FUNCTION

Despite the trend towards centralization, more than 300 provident funds affiliated to single firms continued to operate throughout the 1950s. It was felt, however, that many of the smaller funds were proving inefficient stewards of their members' savings, especially in finding suitable investment outlets. As a result the Histadrut decided as early as 1950 to attempt the coordination of long-term investment of the rapidly increasing assets of retirement funds. It was hoped that by concentrating the investment function in the hands of one central body, the investment portfolio could be more easily diversified so as to minimize the risk of loss through default.[11] It was also argued that the administrators of the smaller provident funds lacked the technical knowledge needed to formulate and carry out an efficient investment policy.

The underlying motive for this attempt was the need to find a way to preserve the real value of the investments. The decade after the outbreak of the second world war had witnessed a three-fold increase in the general level of prices,[12] which, together with the low rate of return earned by the funds on their investments during this period, served to wipe out the greater

10 Histadrut, Insurance Funds, Tel Aviv, 1951, p. 19 (Hebrew).

11 See Audit Union for Provident and Pension Funds, Provident and Pension Funds in Israel 1949-1950, Tel Aviv, 1951 (Hebrew).

12 See, R.R. Nathan, O.Gass, and D. Creamer, Palestine: Problem and Promise, Public Affairs Press, Washington D.C., 1946, p.595; and Don Patinkin, The Israel Economy: The First Decade, Falk Project, Jerusalem, 1960, Chapter 4.

part of the real value of the sums accumulated in retirement funds. The increasing pressure of suppressed inflation during 1949-50, which manifested itself in the formation of black markets and in the progressive decline of the external value of the pound, gave rise to strong expectations of yet another round of price rises. The unsatisfactory investment experience of the previous decade reinforced the argument that efforts were needed to secure investment outlets linked in some manner to an index of purchasing power.

Since it was felt that individual funds, investing independently, would find it difficult to secure such terms, a central investment institution, the Gmul Investment Company, was founded in 1950. Its initial share capital of IL 200,000 was subscribed in equal shares by the Histadrut's Bank Hapoalim and by various retirement funds. Gmul was registered as a limited company in October 1950, and in December of that year the Registrar of Limited Companies granted it permission to commence operations. Gmul has also been approved as a central investment fund under the 1957 Tax Regulations. As such, it is permitted to draw its resources only from member funds, and must distribute to them a minimum of 85 per cent of its annual profits.

Gmul's success as an investment medium for retirement funds has been phenomenal, even for Israel where rapid growth has become almost commonplace. By the end of 1961, there were 168 retirement funds (including the three social insurance funds) associated with Gmul, the company had accumulated IL 107 million of assets,[13] and its gross interest income was IL 7.5 million.

Table 3-1 sets out Gmul's investment portfolio at the end of 1961. True to its original purpose, over 92 per cent of the company's loans and security holdings were linked either to the exchange rate of the dollar or to some price or cost index (usually the CPI). The low proportion of securities in the portfolio reflects the fact that Gmul's investments have generally been directed to the Histadrut sector, and have tended to take the form of direct placements rather than the purchase of marketable bonds.

TABLE 3-1. Investment Portfolio of Gmul Investment Company: December 31, 1961

	IL millions	Per cent of total
Dollar-linked loans	17.1	16.6
Index-linked loans	66.3	64.2
Other loans	4.3	4.2
Total loans	87.7	85.0
Linked bonds	12.0	11.6
Other securities	3.5	3.4
Total securities	15.5	15.0
Total investments	103.2	100.0

SOURCE: Adapted from Gmul Investment Company Ltd, Annual Report for the Year 1961.

13 Gmul Investment Company Ltd, Annual Report for the Year 1961.

The retirement funds participate in Gmul by making deposits with the company or (since 1960) by purchasing bonds issued by Gmul. The linking of Gmul's own investments has enabled it to offer comparable linkage terms to the funds, and 94 per cent of their holdings of bonds or deposits in Gmul were linked by the end of 1961; of these, 75 per cent were linked to cost and price indexes, and 19 per cent to the dollar.[14]

THE TRANSITION TO PENSIONS

Although a central pension fund serving the members of producer and service cooperatives (Magen) had been established as early as 1950, it was not until the middle of the decade that a large scale transition from lump-sum to pension benefits was undertaken. In 1954, the year in which the National Insurance Law was passed, the Histadrut consolidated the numerous provident funds affiliated to its institutions into a central pension fund (Keren Gimlaot) and at the same time converted the provident fund serving white collar workers (Lapakid) into a pension fund. Between 1955 and 1957, three social insurance funds (Mivtachim, Building Workers and Hired Agricultural Workers) were also converted into pension funds,[15] and in the latter year the provident funds serving workers in Histadrut-owned enterprises were also amalgamated into a central pension fund (Nativ).

Thus, seven central pension funds were established by the Histadrut during the 1950s, and since the Department of Pensions exercises authority over all seven in matters "concerning regulation of pension funds, actuarial valuation and the technical and administrative methods of the Funds,"[16] the degree of concentration is even greater than appears at first glance.

This transition to pensions was largely prompted by recognition of the fact that lump-sum benefits paid by provident funds often proved inadequate for the support of a former earner and his family during a prolonged period of inactivity. Moreover, the continuing rise in the general level of prices, which reached serious proportions during the first half of the decade favored the establishment of large centralized pension funds, rather than the conversion of provident funds serving individual firms into separate pension plans. The progressive decline in the real value of members' accrued retirement savings pointed up the need for guaranteeing an income to the superannuated which would reflect changes in the cost of living. It was felt that the goal of providing pensions which guarantee a fixed real income necessitated the formation of centralized funds with a multi-firm coverage, "since no individual [firm] can establish a pension fund of its own owing to the insufficient number of participants."[17]

During the same period several large enterprises and institutions, not directly affiliated to the Histadrut's Department of Pensions, also established funded pension plans for their employees. In addition, some 80,000 employees (e.g., civil servants, and employees of municipalities

14 Ibid. For a more detailed discussion of the role played by value-linked investments, see below, Chapter 8.

15 This conversion has been only partial, and the social insurance funds remain a hybrid pension-provident scheme, with some members enjoying annuity benefits and others being enrolled in a lump-sum provident plan.

16 Histadrut, The Central Pension Funds ..., op. cit., p. 7.

17 Professor M. Beninson quoted in Magen:Central Pension Fund for Producer-Service Cooperatives, Tel Aviv, 1954, p. 4 (Hebrew).

and the national institutions) are covered by budgetary pension plans.[18] In such arrangements, no current contributions are made to build up reserves, 2 and the pensions are paid out of employers' current budgets.

ACTUARIAL VALUATION

Although the problem of guaranteeing pension rights is most acute in the case of nonfunded budgetary schemes, it has been considerably mitigated in Israel by the public nature of most of the institutions providing such benefits. With funded pensions the ultimate ability to discharge all future pension obligations depends upon the accumulation of sufficient reserves (through employer-employee contributions and income earned on investments) during the years of members' employment. As has been noted, the linking of pension benefits to both basic salary scales and the cost-of-living allowance has created serious difficulties in calculating, let alone guaranteeing, the expected future liabilities of pension funds.

Some of the pension funds affiliated to public institutions (such as the Hebrew University) have found a practical, albeit partial, solution to this problem by eliciting explicit guarantees from employers with regard to possible future deficits. In these cases, if the reserves built up over the years of a member's employment prove insufficient to cover the entire pension obligation, the employer continues to pay the full amount of the annuity out of his current budget after the accumulated reserves have been exhausted.

The problem is somewhat different with the seven central pension and social insurance funds directly affiliated to the Histadrut. These plans are based on the principle that the level of pensions is determined by the magnitude of total, rather than individual, contributions and accumulated reserves.[19] Each member's pension is calculated according to a uniform standard, although the standard itself is also a function of the retiring member's final salary and years of prior service.

Although the Department of Pensions each year calculates and publishes the present value of pensions currently being paid,[20] it was not until recently that the problem of the full actuarial valuation of the central funds was broached. The Department of Pensions has appointed an advisory actuarial committee charged with developing the technical basis for the actuarial valuation of the funds.[21] This report, when published, will deal with the influence of various factors, e. g., minimum pensions, national insurance, and the number and age structure of new entrants, on the actuarial solvency of the seven funds.

18 The estimates are based on Histadrut, The Central Pension Funds . . . , op. cit., p. 13. Most employees of local authorities and national institutions are enrolled in provident funds in addition to enjoying budgetary pension benefits.

19 See Histadrut and National Savings Council, Pension Funds, Jerusalem, 1963, p. 9 (Hebrew).

20 Histadrut, The Central Pension Funds . . . , op. cit., p. 17.

21 Ibid., p. 16. Although the findings of the Committee have not yet been published, it appears reasonably certain that a large actuarial deficit has accumulated in the funds on a 'static' basis, i. e., assuming no increase in membership and in future national insurance benefits.

Chapter 4

INCOME TAX TREATMENT AND PUBLIC REGULATION

While the establishment of provident and pension funds has been, for the most part, a by-product of collective bargaining between the Histadrut and individual employers, the structures and policies of the funds have in recent years been shaped by an increasing measure of government influence. Much of this influence can be traced to the impact of tax legislation and regulations specifically relating to provident and pension funds.

Considering the current high rates of taxation, a fund's income tax status is of paramount importance. Since the tax relief afforded to retirement funds by the Income Tax Ordinance is contingent upon their being approved by the Commissioner of Income Tax, the qualifying conditions for such approval constitute what is perhaps the most significant formative influence exercised by an external authority over the funds' activities.

In Israel no separate legislation exists regarding the tax treatment of retirement funds. For a proper understanding of their position one must, therefore, look to the general income tax code [1] and to the relevant income tax regulations [2] issued by the Minister of Finance.

The Income Tax Ordinance grants varying degrees of tax relief to approved [3] retirement funds, the principal matters dealt with being employer contributions, employee contributions, benefit payments and investment income.

CONTRIBUTIONS AND BENEFITS

The ordinary monthly contributions made by an employer to an approved provident or pension fund are regarded as business expenses. A tax deduction is allowed on all such payments not exceeding 5 per cent of wages for retirement savings plus $8\frac{1}{3}$ per cent for severance pay, including the employer contribution to national insurance. [4] With larger contributions or capital payments (e.g., lump-sum payments made by an employer at the inception of a retirement plan), the amount receiving expenses relief is subject to the discretion of the Commissioner of Income Tax. Such capital payments for past service are usually allowed as tax deductions so long as

1 Income Tax Ordinance, 1947, Laws of the State of Israel, New Version (Number 6, Jerusalem, 1961), hereafter referred to as Ordinance.

2 Income Tax Regulations: Rules for Approving Provident, Pension, Severance Pay, and Annual Leave Funds, 1957 (hereafter referred to as Regulations).

3 For a discussion of the qualifying conditions for approval, see pp. 20–22 below.

4 Ordinance, Section 17(5) and Regulations, Section 11.

they do not exceed $13\frac{1}{3}$ per cent of wages for each year of service.[5] The tax relief may be apportioned by the Commissioner over several years, the exact number depending upon revenue considerations. Relief is also given on special lump-sum payments designed to fill the gap between the amount of severance pay actually funded and the amount due to an employee on the basis of his final salary.

Contributions made by an employer to an approved retirement fund are deductible as ordinary and necessary business expenses; however, this type of deduction is always open to employers, since expense relief is accorded to benefits which an employer pays directly out of business resources. It may be assumed that an employer is indifferent to the form which wage payments take, and he could therefore, always add the amount of his contribution on behalf of retirement savings to his direct (and deductible) wage bill.[6] But payments of this type would still be considered part of an employee's taxable income for the current year. Section 17(5) of the Income Tax Ordinance, however, specifically exempts an employee from taxation on his employer's contributions to an approved retirement fund.[7] For tax purposes, an employee's income is calculated net of current and capital contributions made by an employer, on his behalf, to such schemes.

Section 45(a) of the Income Tax Ordinance grants tax relief on employee contributions to approved retirement funds in the form of a 25 per cent tax credit.[8] This tax credit covering employee contributions is included in the normal credit allowed on life insurance premiums, health insurance, medical expenses, donations to public institutions and national insurance payments. The overall tax credit on employee contributions and life insurance premiums is allowed only on that part of the payments not exceeding 20 per cent of taxable income or IL 1,200, whichever is smaller.[9] The credit on medical expenses, donations, etc., is limited to that part not exceeding $12\frac{1}{2}$ per cent of taxable income, or IL 600, whichever is smaller. Thus, if an employee incurs large medical expenses or carries a great deal of life insurance, etc., he may, in effect, receive no tax relief whatsoever on his retirement fund contributions.

Benefits received by an individual in the form of a pension or other annual payment, whether contractual or paid *ex gratia*, are subject to tax.[10]

5 If the payment refers to years of service before 1941, expenses relief is not given, on the grounds that Palestine had no income tax law before that year. For payments relating to later years, relief is granted at the rates of tax applied during the years in question.

6 To the extent that employers are able to defer the actual funding of their contributions, this statement must be qualified. Such deferments constitute a forced loan (often interest free) out of the wage bill. Given the tight conditions and high interest rates which have prevailed in Israel's money markets during recent years, the ability to defer contributions is a significant consideration.

7 Even before the enactment of Section 17(5), it was the Commissioner's practice to deduct employer contributions when calculating an employee's taxable income.

8 Section 47(a) grants a tax deduction on contributions made to provident funds by self-employed persons. This deduction is limited to a maximum of 5 per cent of their taxable income or IL 600, whichever is smaller, although the Minister of Finance is empowered to raise this rate (subject to the approval of the Knesset Finance Committee) for specific classes of persons.

9 The ceiling on the tax credit was subsequently raised.

10 Ordinance, Section 2(5). There are certain exceptions to this rule pertaining to pensions paid to disabled war veterans or to the survivors of soldiers killed in action, etc.; see Section 9(6).

Lump-sum benefits received upon the termination of employment (whether retirement savings or severance pay, or both) are not subject to tax, as long as the Commissioner does not consider them excessive.[11] It should be noted, however, that Section 87 of the Ordinance grants the Minister of Finance broad powers (subject to approval by the Knesset Finance Committee) to tax any benefit payment made by retirement funds which is not in accordance with tax regulations.[12]

INVESTMENT INCOME

In addition to the tax relief granted on employer-employee contributions and lump-sum benefits, the advantages of an approved retirement fund are further enhanced through the exemption of the funds' earnings. Under Section 9(2) of the Ordinance, the income of approved retirement funds (with the exception of earnings derived from the operation or control of a business enterprise) is exempt from tax. Income includes realized gains resulting from the sale of assets as well as the interest, dividends or rent earned from a fund's investment activities.

The Income Tax Ordinance thus grants a blanket once-and-for-all exemption on earnings in the case of lump-sum benefits paid by provident funds. In the case of a pension fund, Section 9(2) in effect defers the tax on earnings until such time as the fund pays out pension benefits to its members.

REQUIREMENTS FOR APPROVAL BEFORE 1957

In order to qualify for the special treatment prescribed by the Income Tax Ordinance, a fund must be approved by the Commissioner of Income Tax. Until 1957, the revenue authorities did not set specific conditions for approval, but in the course of the Commissioner's work a set of *ad hoc* conditions was developed. These qualifying requirements were not published until 1957, when special tax regulations relating to retirement funds were issued.

Between 1941 and 1957, the Commissioner granted approved status to retirement funds, thereby qualifying them for the preferential tax treatment outlined above,[13] if the funds fulfilled a number of conditions relating to internal organization and administration, membership, contributions, and use of assets.

Only funds having separate financial status could qualify for approval, i.e., they could not be under the sole control of the employer. An employer was also precluded from becoming a benefit member of the fund affiliated to his firm. The Commissioner defined an employer as an individual who controls more than 10 per cent of a firm's equity shares. Thus, a cooperative having less than 10 members could not establish an approved fund except for its hired employees. In practice the Commissioner often waived this ruling upon special petition, and permitted several cooperatives with less than ten members to set up an approved fund.

11 Ibid., Section 9(7).

12 The powers inherent in Section 87 have not been exercised by the revenue authorities.

13 No fundamental changes were made in the tax treatment of retirement funds during the period under study, with the exception of the tax credit on employee contributions, which was raised.

Another requirement for approval was the presentation of annual audited financial statements to the Commissioner's office. The funds were not instructed as to the form in which the statements were to be prepared, and practice varied from fund to fund. But in most cases a balance sheet, profit and loss account, and various supplementary statements were prepared.

Employer contributions on behalf of retirement savings and severance pay were limited to a maximum of $13\frac{1}{3}$ per cent of gross wages, and were to be funded within a 'reasonable' period of time. The Commissioner usually interpreted this to mean within six months of the wage-payments, basing this stipulation on the general principle of granting tax deductions only for expenses actually incurred and not for book allocations.[14]

A final condition of approval restricted the funds' use of assets. A provident fund was not allowed to invest in the employing firm or in any of its subsidiaries, nor could loans be given (either directly or indirectly) to employers.[15] In addition, loans to members were permitted only for the purpose of securing housing or establishing a farm, and were limited to the accrued contributions credited to the members' retirement fund account. With these two exceptions, the investment of retirement fund resources was left to the discretion of individual fund managements.

In theory, the Commissioner was responsible for the regulation of retirement funds from 1941, when income tax was introduced. Owing largely to a shortage of trained personnel, such regulation as was attempted was rather ineffective. Approved status was often granted to funds which did not fulfil all of the qualifying conditions, and tax relief was often granted directly by district tax assessors to funds which had not been approved by the Commissioner.

Under the pressure of more urgent duties the Commissioner was not always able to follow up each individual case, and the statistical evidence indicates that the funds, taken as a group, were lax in complying with the conditions of approval relating to the funding of contributions, loans to employers, and the presentation of financial statements. It also appears very doubtful that loans to members were restricted to housing.

It must be emphasized, however, that the Commissioner was not concerned with the regulation and supervision of retirement funds, as such. Many aspects of fund operations, e. g., investment policy, were not supervised by the revenue authorities, and those sections of the Income Tax Ordinance that affected retirement funds were primarily intended to prevent the abuse of tax exemptions.

THE 1957 REGULATIONS: REQUIREMENTS FOR APPROVAL

August 1957 marks a turning point in the public regulation of provident and pension funds. In that month the Ministry of Finance issued a set of comprehensive regulations specifically relating to the approval of retirement funds for tax purposes. At the same time, the Commissioner delegated much of his authority to supervise the funds' activities to the then newly

14 In practice, the funding of contributions lagged by as much as a year.

15 An exception was usually made with respect to the purchase of an employing firm's shares or debentures, if listed on the Tel Aviv Stock Exchange.

established Savings Authority of the Treasury. Since the whole basis of operation of the relevant sections of the Income Tax Ordinance depends upon the prior approval of a fund, special significance attaches to the qualifying conditions set out in the 1957 Regulations.

In large measure the Regulations formalized and expanded the *ad hoc* rules which had been developed during previous years. Under the Regulations (which are still in force) the Commissioner is empowered to approve retirement funds which meet the following conditions:

a. The fund must be organized and registered as a cooperative society or limited company.
b. The fund's charter must preclude the transfer of the benefit rights of one member to another.
c. The fund must be subject to the supervision of an auditing body approved for this purpose by the Commissioner.[16]
d. Previous limitations on the maximum size of employer and employee contributions are retained.[17] The Regulations further specify that employee contributions are to be deducted at source and paid into the fund in cash, while employer contributions are to be funded not later than 42 days after the payment of wages.[18]
e. Another restriction refers to the payment of benefits. Section 24 of the Regulations requires benefits to be paid to a member only upon his retirement, or, if he dies, to his survivors. If employment is terminated voluntarily or if the worker is dismissed, only severance pay is to be withdrawn in cash, retirement savings being retained in the fund for six months. If during the interim period the member is re-employed by a firm affiliated to another provident or pension fund, the member's accumulated retirement savings are to be transferred to his account in the new fund.[19]
f. The requirement to present financial statements has been stiffened. Under the existing regulations, all approved funds must present audited annual financial statements and quarterly reports to the government.[20] Section 26 specifically empowers the Commissioner to lay down the form in which these statements and reports are prepared; this has led to a considerable improvement in the funds' accounting practices.
g. A final condition of approval requires the funds to invest their resources in accordance with the investment rules established by the Regulations.

16 Regulations, Sections 6; 1; 8(a); and 9(a). An audit union (as defined in the Cooperative Societies Ordinance) may serve as the supervisory body of funds registered as cooperative societies. Funds registered as limited companies may use the services of either an audit union or a trust company.

17 See pp. 18–19 above.

18 Regulations, Section 14, and Section 13 as amended in February 1961. The Regulations originally specified funding within 90 days.

19 Ibid., Section 24. This section was amended in 1961 to allow for the retention of a member's savings in his old fund, on condition that the member's benefit rights are preserved.

20 Ibid., Sections 27 and 28. The statements and reports are presented to, and reviewed by, the Savings Authority of the Ministry of Finance.

THE 1957 REGULATIONS: CONTROL OF INVESTMENTS

No provision of the Regulations has had a more far-reaching impact on fund operations, or has stirred up more controversy, than the one that establishes the principles governing the investment policy of approved funds.[21] Until 1957, the fund managements exercised virtually complete authority over their investment decisions; since then, they have been subjected to a large and increasing measure of government supervision and control. While retaining the prohibition on investment in the employing firm,[22] the Regulations grant the government broad powers to place both quantitative and qualitative restrictions on an approved fund's use of its resources; and the government has not been slow to exercise these powers.

The Regulations provide for two broad classes of retirement fund investment: 'recognized' investment and discretionary investment. Sections 17 and 18 of the 1957 Regulations originally stipulated that all of a fund's resources[23] should be placed in so-called recognized investments with two exceptions: loans to members were permitted up to a maximum of 25 per cent of the resources available for investment, and an additional 10 per cent could be used to provide life insurance for members, or for any other investment compatible with a fund's charter and by-laws.

In September 1960, the Regulations were amended,[24] and the minimum share of recognized investments was raised from 65 to 75 per cent.[25] This reduced the share of resources available for discretionary investments, i.e., loans to members, insurance, and other investments, to 25 per cent. Loans to members were further restricted, being allowed only for securing housing or a farm, and minimum rates of interest (6 per cent for direct loans and 5 per cent for loans via financial institutions) were established.[26] In 1961, the Regulations were amended once more to permit loans to members "for other constructive purposes," subject to the approval of the fund's supervisory body.[27]

21 Ibid., Sections 16-23. The definitions of 'recognized' investments and 'approved' securities are to be found in Section 1.

22 Section 22 does allow for the deposit of moneys with the employing firm if it is a bank or financial institution, as well as for the investment in the employer's firm or its subsidiaries, if such an investment is included in the Treasury's list of approved securities.

23 Section 1 of the Regulations currently defines resources available for investment as the total of receipts from employer-employee contributions from the date that the fund commenced operations, less benefit outlays, administrative expenses, transfers to approved pension funds, and allocations to social welfare funds (the latter up to a maximum of 15 per cent of the fund's net income). In order to avoid costly liquidations and to ensure orderly transition, investments in real estate, stocks, and bonds made before the new regulations were issued are considered to be recognized investments.

24 Rules for Approving Provident, Pension, Severance Pay, and Annual Leave Funds (Amendment No. 2), Kovetz Hatakanot, 1050, Jerusalem, September 15, 1960.

25 The figure was later raised to 80 per cent.

26 Regulations, Section 20. Several other conditions relating to maturities, form of repayment, etc. of the loans are also included in Section 20.

27 Rules for Approving Provident, Pension, Severance Pay, and Annual Leave Funds (Amendment), Kovetz Hatakanot, 1110, Jerusalem, February 23, 1961. Since the amendment defines neither 'constructive' nor its antonym, it may be assumed that loans to members may now be granted for all purposes not in direct conflict with a fund's charter and by-laws.

The net effect of the Regulations has been to reduce the discretionary investment management of approved provident and pensions funds to a bare minimum. Since the bulk of retirement fund investment is now directed to recognized investment, its composition is germane to a proper evaluation of the economic impact of the Treasury Regulations.

Recognized investments were originally of two types—approved securities and special deposits [28]—but since the abolition of the latter in February 1961, all recognized investment, as defined by the Regulations, is comprised in the Treasury's list of approved securities.

The list of approved securities was initially composed of securities of the State of Israel, government-guaranteed securities, and securities granted tax reductions under the Law for the Encouragement of Savings, subject to the condition that they be purchased as new issues. In recent years, the list of approved securities has been expanded to include new issues of common and preferred stock, which have been approved for this purpose by the Minister of Finance, [29] as well as stock received through the redemption of approved convertible bonds. On the other hand, several bond issues, including all government premium bonds, have been excluded from the list of approved securities,

In addition to the extension of the approved list, the requirement that the securities be purchased at source was modified in 1960 to allow for the limited purchase of approved securities in the secondary securities market. Today, a fund selling approved securities (previously acquired at source) in the market, can repurchase the same amount of approved securities on the Stock Exchange, and the securities so acquired are considered as recognized investments.

EVALUATION OF THE GOVERNMENT'S TAX POLICIES

The broad principle underlying the tax treatment of pension funds in Israel is that so long as the ensuing benefits are taxable (or would be so if it were not for the personal allowance of the beneficiary), then everything which is paid into the funds may reasonably be permitted to receive tax relief.

Since all fund receipts are eventually subject to tax, it is evident that the ultimate advantage derived from the tax relief granted to approved pension funds depends upon timing; employees are enabled to defer the payment of tax on part of their current income until their retirement, when

28 These were deposits with banking institutions (including the Gmul Investment Company) which entered into agreements with the Treasury regarding the investment of the funds so deposited. The agreements stipulated that the deposits be invested in approved securities or used to grant development loans approved by the Treasury. For a more detailed discussion of the role of special deposits, see below, Chapter 8, p. 70.

29 To the end of 1961, only four stock issues, including the government's secondary distributions of the shares of the Israel Electric Corporation and the Dead Sea Works were included in the list of securities approved for retirement fund investment.

they presumably will be taxed at lower rates.[30] Since the present value of a stream of tax savings on the current build-up of the pension reserve is greater (at any positive interest rate) than the present value of a future stream of nominally equal tax payments on emerging benefits, the deferment of taxes is, in itself, to members' advantage. The possibility that, owing to increased personal exemptions and smaller retirement incomes, the benefits may eventually be taxed at lower rates, merely serves to reinforce this advantage.

This principle does not apply to funds that provide lump-sum retirement benefits—long-term savings, severance pay, or both. While enjoying parallel tax-reductions on contributions and income, the benefits are, in these instances, entirely free of tax. It follows that all members of approved retirement plans do not have the same opportunity to defer part of their current income for use in later life, since a decided tax advantage exists for those employees receiving their retirement benefits in the form of lump-sum, rather than pension payments. This creates the anomalous situation of affording a higher degree of tax relief to—and thus encouraging—funds which provide what is generally considered to constitute inadequate (i. e., lump-sum) retirement benefits.[31]

The inequity inherent in the tax law has been recognized, and from time to time the revenue authorities have proposed that at least severance pay should be taxed in order to provide a partial, and from the fiscal viewpoint a rather neat solution to the problem. But such proposals have met with strong and organized opposition from workers and the Histadrut.[32]

In view of this situation, it might well be recommended that since many employees are able to take their retirement benefits as a tax-free lump sum that this principle be extended (subject to limitations) to funded superannuation plans providing benefits in the form of pensions.[33] Restricting the exemptions to fully funded plans would facilitate the transition from lump-sum provident funds to funds granting life pensions, which providing a strong incentive to employees covered by budgetary schemes to

30 Cf. Paul P. Harbrecht, Pension Funds and Economic Power, The Twentieth Century Fund, New York, 1959, p. 130. Harbrecht extends the advantages to employers as well, since they have "the advantage of paying the cost of future pensions out of income which would otherwise be subject to taxation at current rates . . . ." But this extension is not valid.

While it is true that out of a given income the employer's current tax obligation will be higher in the absence of the deductions on currently funded contributions, this is offset by the employer's 'saving' of the contribution payments themselves. The relevant alternative facing employers is to pay pensions directly out of future budgets. Since the present value of the stream of contribution savings (on an after-tax basis) is greater than the present value of a nominally equal stream of future benefit outlays (on an after-tax basis), the tax advantages to employers are illusory. (The argument can easily be extended to cover cases where the pool of funded contributions earns interest, but since a firm's cost of capital is typically much higher than the rate of return on pension fund investments, the conclusion remains unchanged.) This absence of a true economic advantage to employers provides part of the explanation of why workers and their unions, rather than employers, typically press for funded pension schemes.

31 Cf. Tucker Report, op. cit.

32 Lump-sum severance payments based on salaries of over IL 1,500 a month are now taxable.

33 Recommendations along similar lines were made in England by the Tucker Report (1954) but have not been adopted. See Gordon A. Hosking, Pension Schemes and Retirement Benefits (2nd ed.), London, 1960, p. 194.

bring pressure to bear for their conversion to funded pension plans. The loss of tax revenue may not be too dear a price to pay for the increase in current personal savings engendered by the transition from budgetary to funded pension rights.[34]

A tax policy which provides relief on the contributions and income of retirement funds, and which makes the receipt of this tax relief contingent upon a fund's being approved by the revenue authorities is not unusual. Current Israeli practice relating to the tax treatment of approved funds differs only in detail from that of many Western countries.[35] Nor are the underlying motives for such a policy, the encouragement of savings and protection of member interests, peculiar to Israel. On the contrary, the provision of adequate retirement incomes is considered a desirable goal in almost every modern society.

In Israel, a developing country characterized (throughout the past decade) by significant inflationary pressures, a policy specifically designed to encourage and promote retirement saving[36] highly recommends itself. And in fact, the need and desire to encourage personal saving has provided the *raison d'être* for many of the government's tax policies relating to retirement funds.

From 1957 it became evident that the government was not satisfied with the promotion of saving *per se*, but was also concerned with the utilization of the accumulating reserves. In specifying a legal list of investments, the government appears to have been moved chiefly by a desire to gain access to an increasing share of the flow of investment for its own financing purposes. This is strongly suggested by the composition of the list of approved securities (mostly government or government-guaranteed debentures), and by the specific agreements entered into with various banks, and with financial institutions of the Histadrut.

This *de facto* restriction of retirement fund investment to a rather narrow list of securities stands in sharp contrast to the practice of more developed countries, e.g., England and the United States. While both England and the United States have laws restricting the investment of trusts to a list of authorized securities (the so-called legal lists), these laws do not usually apply to pension trusts, if the trust indenture permits investments outside of the legal list. In England the position of pension funds has been succinctly summarized in the Radcliffe Report: "The pension funds... have received no 'requests' as to how they should employ their resources, and they have neither sought not been offered any guidance on the intentions of the authorities."[37] In the United States the increasing popularity of common

34 Several funds have found a practical solution to the problem of unequal tax treatment of pension and lump-sum benefits. Upon retirement the employee receives all (or part) of his accumulated savings account as a (tax-free) lump sum; he then receives a taxable pension out of the employer's current budget, securing in this manner the best of both the provident and pension fund worlds.

35 Israeli tax law in general, and the retirement fund regulations in particular, appear to have been drafted with English experience in mind; cf. Hosking, op. cit., especially Chapters 18 and 19. The tax treatment of pension funds in the United States is also broadly similar to current Israeli practice; see J. A. Hamilton and D. C. Bronson, Pensions, New York, 1958, Chapter 5, and Harbrecht, op. cit., Chapter 5.

36 The current practice of permitting loans to members constitutes a deviation from the policy of granting tax relief to retirement savings. Owing to the widespread prevalence of such loans, partial relief is also effectively being given to contingency savings, investment in housing, and perhaps to consumption as well (see Chapter 7 below).

37 Report of the Committee on the Working of the Monetary System (Radcliffe Report), HMSO, London, 1959, p. 91.

stock investments for pension trusts bears witness to the wide latitude enjoyed by their investment managers.[38]

One peculiarity of the Israeli restrictions should be noted, namely the Regulations' stipulation that securities included in the approved list be acquired as new issues. Before 1960 this meant, in effect, that the funds (which, taken as a group, constitute Israel's primary investor in securities) were precluded from purchasing securities in the secondary market. But at the same time the Regulations did not prevent the sale of securities in this market. Thus, from 1957 to 1960, retirement funds (as regards their approved investments) were permitted to freely augment the supply side of the secondary market, but were precluded from purchasing securities in it. This served to weaken the already thin structure of Israel's stock exchange and led to the appearance of significant differentials between the yields obtained in the secondary and the new issue markets for debentures.[39]

The rather awkward and partial solution to this problem, which permits funds selling approved securities in the market to repurchase equivalent amounts of approved securities on the exchange, further emphasizes the government's inability (or unwillingness) to recognize the necessary economic relationship connecting the new issue and secondary markets for securities. In particular, the Regulations appear to assume the absence of spill-over effects between the two markets, i. e., that an increase in demand (and prices) for securities on the stock exchange will have no effect on the conditions and terms of sale in the new issue market.

With the government's efforts so largely directed to influencing the direction of retirement fund investment, it is not surprising that insufficient attention was paid to the position of the individual member. The Regulations have indeed corrected many abuses, particularly in relation to the funding of employer contributions, the presentation of adequate financial statements and the payment of benefits before members' actual retirement; on the other hand, it was not until the summer of 1962 (five years and half a dozen amendments after the original promulgation of the Regulations) that an effort was made to secure some degree of index modulation for lump-sum retirement benefits.

Confronted by the large windfall gains which accrued to the funds (via their holdings of dollar-linked securities), following the devaluation of the pound in February 1962, the government instructed the funds to revalue their assets and distribute the capital gain to members' accounts, or to link lump-sum retirement benefits and withdrawals to the CPI.[40] Owing to the absence of such a requirement in the past, large sums representing the linkage gains from the funds' holdings of approved securities accrued to the general reserves of the funds rather than to the accounts of individual members. This problem was, of course, particularly acute in some of the

38 See Eugene Miller, "Trends in Private Pension Funds," The Journal of Finance, XVI (May 1961) 313-28.

39 The secondary market for bonds has been further weakened by the government's refusal to permit redemption of bonds through repurchase in the market. The Securities Committee of the Ministry of Finance has often approved issues on condition that the bonds are redeemed serially or by lottery, but not by repurchase. See E. Lehmann, "Problems of the Stock Exchange," speech at the annual meeting of the Tel Aviv Stock Exchange, December 28th, 1964 (Hebrew).

40 See Ministry of Finance Circular No. 32 (and subsequent additions), Savings Authority, Jerusalem, July 13, 1962 (Hebrew). The linkage is in proportion to the requirements to purchase approved securities, and was made retroactive to January 1962.

very large funds, where there exists an effective and almost complete separation between the professional management and the membership. It is difficult to avoid the conclusion that having 'sold' a fund a linked government bond, the authorities considered their major task accomplished, with the linkage gains sweetening some of the less palatable restrictions imposed by the Regulations.

Chapter 5

SIZE AND STRUCTURE

This study covers the decade from 1952 to 1961. It opens on the eve of one major devaluation of the Israel pound (in February 1952), which was followed by the introduction of a New Economic Policy, and by a period of rapid wage and price rises. It closes on the eve of another devaluation (in February 1962), which was followed by the introduction of yet another New Economic Policy and by a—much more moderate—increase in both wages and prices. This was in many respects a critical period for the development of institutional savings plans in general, and for retirement funds in particular. It opened in an atmosphere of comparative freedom of action, with only a modicum of government intervention and supervision. But after the introduction of special tax regulations in the summer of 1957, the funds further development was conditioned and closely regulated by public authority.

The decade ending in 1961 was a period of rapid expansion coupled with consolidation. It witnessed a remarkable growth in both membership and assets, the extension of funded retirement benefits to the self-employed, and a large-scale attempt to convert lump-sum retirement benefits to funded pension obligations. At the same time, it was a period marked by a sharp contraction in the number of funds and by the emergence of a small group of giant central pension funds.

THE POPULATION

One of the principal difficulties encountered was the lack of adequate information on the number of active funds and their membership, especially before 1958. Since complete data for each of the ten years under review are not available, the analysis is confined to three benchmark years (1952, 1957 and 1961), and to a comparison of the changes in the size and structure of retirement funds between these years.

A master list of funds was compiled for each benchmark year from government and other official sources, as well as through direct contacts with business firms. The listing is complete for funds organized as cooperative societies or limited companies, since all such funds are required by law to register with the appropriate government agency,[1] but it is possible that we did not succeed in identifying every fund that had no separate legal status. The estimates of the number of provident

1 The 1952 population includes two provident funds registered in the United Kingdom, but operating in Israel. They were subsequently liquidated.

funds may therefore be slightly understated, especially for the earlier years.

For inclusion in this study, a fund's financial statements (balance sheet, profit and loss account, and various supplementary accounts) should have been available; in practice, a fund was included if at least its balance sheet was available. These funds are referred to as 'reporting funds' and their total constitutes the reporting population.[2]

On the whole, coverage is better than might appear at first glance. In each of the years surveyed a number of nonreporting funds commenced operations towards the end of the year, so that their absence from the reporting population does not unduly distort the aggregate figures. Moreover, most of the nonreporting funds appear to have been small. The statistics presented below, unless otherwise specified, generally refer to the reporting population, and contain, therefore, a slight downward bias.

MEMBERSHIP SIZE[3]

At the close of 1952 there were some 450 retirement funds[4] operating in Israel with a total membership of 176,000. Between 1952 and 1957, membership rose by 90,000, an increase of 51 per cent, and during the

TABLE 5-1. Number and Membership of Retirement Funds: 1952, 1957 and 1961

	Number of funds*	Membership** (thousands)
End of period		
1952	450	176
1957	419	266
1961	403	385
Change during		
1953-57	-31	90
1958-61	-16	119
1953-61	-47	209

* Reporting funds only.

** Only reporting funds having membership data.

SOURCE: Table 5-2.

2 As a result, the various statistical tables do not all cover the same number of funds. Where necessary, the number of funds included is given. It should also be noted that in the tables (though not always in the text) the term 'retirement funds' is applied to the aggregate of all types of funds; unless otherwise specified, the term 'provident funds' covers provident, pension, and severance pay funds (i.e., all except social insurance funds).

3 For the social insurance funds, the membership figures for the three benchmark years are an estimate of active members only; the number of individual accounts is about one third greater than this estimate.

4 In 1952 there were apparently another 50 funds active, but data are not available. These funds seem to have been very small, and many of them subsequently merged with Mivtachim.

next four years the funds augmented their membership by another 119,000, representing a 45 per cent increase over 1957. Over the entire period membership more than doubled, reaching a total of 385,000 at the end of 1961 (Table 5-1).

This rapid growth in membership was not accompanied by a parallel expansion in the number of active retirement funds. On the contrary, the number of funds fell from 450 in 1952 to 419 in 1957, and dropped again to 403 in 1961. This contraction largely reflects the amalgamation of the numerous provident funds previously affiliated to individual institutions and enterprises into central pension funds.[5] The number of retirement funds did not begin to decline until the beginning of 1954. At that time more than 550 funds were active, so that the total population fell by more than 25 per cent from the end of 1953 to the end of 1961.

The growth in total membership, accompanied by the contraction in the number of funds, also served to change the funds' profile. Some of the expansion in the membership of pension and social insurance funds was at the expense of the lump-sum provident and severance pay funds. Between 1952 and 1957, the number of lump-sum benefit funds dropped, and it appears that their membership also declined. After 1957 the number of funds continued to fall (reaching 377 in 1961, compared with 399 in 1957), while membership rose from about 72,000 in 1957 to 103,000 in 1961. But even this increase was only just sufficient to maintain the relative share of these funds in total membership.

Another significant change in the structure of retirement funds followed the introduction of provident funds for the self-employed in 1957. At the end of 1957 there were 7 such funds, with a membership of 11,000, and by the end of 1961 there were 14, with 26,000 members. These funds comprised 4 per cent of total membership in 1957, with the proportion rising to 7 per cent in 1961.

The rapid expansion of pension funds is also clearly discernible in Table 5-2. While in 1952 only a negligible number of members were covered by pension funds, 33,000 employees (12 per cent of total membership) were organized in 9 pension funds in 1957; in 1961 these 9 funds had over 67,000 members, or about 18 per cent of total retirement fund membership. This transition to pension benefits is even more striking if we consider that the social insurance funds also converted from lump-sum to pension benefits during the latter half of the fifties.

Adding the 188,000 members of the social insurance funds to the membership of the 9 pension funds gives a total of more than a quarter of a million workers. Thus, two thirds of the total retirement fund membership were enrolled in some form of funded pension plan in 1961. The percentage of pension coverage is somewhat higher since a number of provident fund members (e.g., employees of local government authorities and the national institutions) are entitled to budgetary pensions, in addition to the lump sum retirement benefits provided by their provident funds. Moreover, civil servants and regular army personnel, who have no funded retirement plan, are also covered by budgetary pension schemes.

5 It should be noted that the reporting population covers virtually all funds active in 1961, but only about 90 per cent in 1952. Taking nonreporting funds into account would therefore show a greater drop in the number of funds.

TABLE 5-2. Number and Membership of Retirement Funds, by Type of Benefit: 1952, 1957 and 1961

	1952		1957		1961	
	Number of funds	Membership (thousands)	Number of funds	Membership (thousands)	Number of funds	Membership (thousands)
A. Absolute numbers						
Employee funds*						
Provident**	446	82.0	399	71.7	377	103.5
Pension			9	32.9	9	67.3
Social insurance***	4	94.0	4	150.0	3	188.0
Total employee funds	450	176.0	412	254.6	389	358.8
Self-employed—provident	-	-	7	11.4	14	26.1
Total retirement funds†	450	176.0	419	266.0	403	384.9
B. Per cent						
Employee funds*						
Provident**	99.0	46.6	95.2	26.9	93.5	26.9
Pension			2.1	12.4	2.2	17.5
Social insurance***	1.0	53.4	1.0	56.4	0.8	48.3
Total employee funds	100.0	100.0	98.3	95.7	96.5	93.2
Self-employed—provident	-	-	1.7	4.3	3.5	6.8
Total retirement funds†	100.0	100.0	100.0	100.0	100.0	100.0

* Includes members of cooperative enterprises as well as employees.

** Including severance pay.

*** Active members only.

† In this and subsequent tables the term 'retirement funds' is applied to the aggregate of all types of funds. Unless otherwise specified the term 'provident funds' covers provident, pension, and severance pay funds (i. e., all except social insurance funds).

SOURCE: 1952 and 1957—membership estimates were aggregated from the funds' returns to the Registrar of Cooperative Societies, Ministry of Labor; the Registrar of Limited Companies, Ministry of Justice; and the Commissioner of Income Tax, Ministry of Finance.

1961—membership estimates are based on Savings Authority. "List of Retirement Funds (Provident, Severance Pay, and Pension), December 31, 1961," Ministry of Finance, Jerusalem (Hebrew mimeograph, n. d).

As Table 5-3 shows, retirement fund membership grew much faster than the labor force. In 1952, 32 per cent of Israel's employed civilian labor force were covered by some form of funded retirement plan, and this proportion rose to 41 per cent in 1957. By the end of 1961, over half of the labor force were enrolled in retirement benefit funds.

TABLE 5-3. Retirement Fund Membership and Employed Civilian Labor Force: 1952, 1957 and 1961

(thousands)

	1952	1957	1961
1. Retirement fund members	176	266	385
2. Employee funds	172	248	351
3. Self-employed and cooperative member* funds	4	18	34
4. Employed civilian labor force**	542	642	735
5. Wages and salary earners	..	425	495
6. Self-employed	..	217	240
7. Line 1. as per cent of line 4.	32	41	52
8. Line 2. as per cent of line 5.	..	58	71
9. Line 3. as per cent of line 6.	..	8	14

* In Table 5-2 cooperative members are included with employees.

** Annual average data.

SOURCE: Retirement fund membership — See source to Table 5-2.
Labor force — 1952: A. Hovne, The Labor Force in Israel, Falk Project, Jerusalem, 1961, Summary Table, pp. 12-13.
1957: CBS, Abstract 1958/59, No. 10, Table 5, p. 297.
1961: Bank of Israel, Annual Report 1961, Table VIII-2, p. 133 and Table IX-2, p. 140.

Table 5-3 also accentuates the difference between employees and self-employed as regards retirement coverage. By the end of 1961, employee retirement funds embraced 71 per cent of Israel's wage and salary earners. If we eliminate government employees and primary school teachers, who are covered by budgetary pension schemes, the proportion of wage earners covered by some form of funded retirement benefit program rises to well over 80 per cent.[6] As regards the self-employed the picture differs materially. At the end of 1961, only 14 per cent of the self-employed (including the members of cooperatives) were enrolled in funded retirement plans.

The growth in retirement fund membership also had a significant effect on the size distribution of funds and membership. Table 5-4 sets out the

6 In one sense the coverage of retirement funds is overstated. It should be noted, that by their very nature, the social insurance funds (embracing as they do a miscellany of part-time and daily workers) often provide no effective retirement benefits for their members. In some instances employer contributions (especially in the building trades) are not allocated to individual members' accounts, while some members do not appear to be aware of their retirement benefits.

percentage distribution of provident and pension funds and their membership, by fund membership size.[7]

TABLE 5-4. Number and Membership of Provident Funds,* by Membership Size: 1952, 1957 and 1961

(per cent)

Membership size groups	1952		1957		1961	
	Number of funds	Membership	Number of funds	Membership	Number of funds	Membership
0-10	11	0	8	0	9	0
11-50	42	6	37	3	35	2
51-100	17	6	20	5	18	3
101-250	17	14	15	8	17	5
251-500	5	9	9	11	9	6
501-1000	4	14	4	9	4	6
1000 +	4	51	6	64	8	78
Total	100	100	100	100	100	100
Absolute figures	430	82,000	389	116,000	379	197,000
Average membership per fund		190		298		520

* Includes funds for which membership figures were available.

SOURCE: See sources to Table 5-2.

A noteworthy feature of Table 5-4 is the unequal distribution of both funds and membership. In 1952, 53 per cent of the funds had fewer than 50 members, and accounted for only 6 per cent of total membership; while at the other end of the scale, 4 per cent of the funds, each with more than one thousand members, accounted for half the total membership. In 1961, 44 per cent of the funds still had less than 50 members and 62 per cent had a membership of less than 100. This high proportion of smaller funds reflects the fact that many of Israel's enterprises are very small.[8]

Although 44 per cent of the funds still had fewer than 50 members in 1961, the concentration of membership in the very large funds was also pronounced. By 1961, only 8 per cent of the funds had more than 1,000 members, but they accounted for fully 78 per cent of total membership.[9] The growing concentration of membership in the larger funds raised average membership from 190 in 1952 to 520 in 1961. The average membership figures nevertheless still reflect a fairly large number of smaller funds.[10]

7 The very large social insurance funds have been eliminated from Table 5-4 to avoid swamping the smaller funds.

8 It should be noted that very small enterprises (with less than 10 employees) that provide retirement benefits tend to enroll their workers in Mivtachim rather than to establish a separate fund.

9 The degree of concentration is, of course, greater if we include the large social insurance funds. The largest funds would then cover 90 per cent of total membership.

10 Many of the smaller funds serve the members of cooperative societies, which, by their very nature, tend to remain small.

ASSET SIZE

During the period under study, total assets grew faster than membership. Under the influence of sharply rising wage rates, total retirement fund assets increased five-fold between 1952 and 1957, rising from IL 50 million to IL 243 million, and by the end of 1961 had reached IL 639 million. The expansion of assets remains striking even if we eliminate the effects of inflation. Measured in constant (1952) prices, total retirement fund assets tripled between 1952 and 1957, reaching IL 165 million. By the end of 1961, real total assets were IL 360 million, compared with IL 50 million at the end of 1952.

The social insurance funds accounted for about one third of total retirement fund assets throughout the period, and by 1961 they were rapidly approaching assets of a quarter of a billion pounds. A noteworthy feature of Table 5-5, which shows the distribution of funds and assets by type of benefit, is the rapid accumulation of assets in the 9 pension funds. Their assets rose from a negligible sum in 1952 to IL 62 million in 1957, and to IL 210 million at the end of 1961, or 33 per cent of the total. The twelve giants (i. e., including the social insurance funds) held 69 per cent of all retirement fund assets at the end of 1961.

Despite a more than five-fold increase in their assets, provident funds did not keep pace with the rapidly expanding pension and social insurance funds. In 1957, the proportion of total assets held by employee provident funds declined to 40 per cent, and by 1961 their IL 178 million of assets comprised only 28 per cent of total retirement fund assets. Although provident funds for the self-employed embraced 7 per cent of the membership in 1961, their accumulated assets accounted for only 3 per cent of the total. This reflects the comparatively recent emergence of this type of fund, and the fact that the rate of contribution of the self-employed tends to be less than the combined employer-employee contribution to the employee funds.

Table 5-6 presents the percentage distribution of provident and pension funds and their assets by asset size groups in 1952, 1957 and 1961. As was true of the membership distribution there also exists a high concentration of assets in the very large funds. In 1961, 13 per cent of the funds, each having assets in excess of IL 1 million, held 84 per cent of the total assets. The smaller funds (i. e., those having less than IL 100,000 of assets), which comprised 41 per cent of the total number of funds, accounted for only 2 per cent of total assets.

In one sense the concentration of assets has been growing over time. Large funds (assets exceeding IL 300,000) held 55 per cent of total assets in 1952, 83 per cent in 1957, and 93 per cent in 1961. But since the asset size of an individual fund is itself a function of its accumulation over time, the number of large funds has increased sharply since 1952. While in 1952 only 4 per cent of the funds had assets exceeding IL 300,000, in 1962 there were 31 per cent of the funds in this size group. This shifting between groups, however, also reflects the consolidation of smaller funds into central pension funds during the period.

TABLE 5-5. Number of Retirement Funds and Assets, by Type of Fund: 1952, 1957 and 1961

	1952		1957		1961	
	Number of funds	Assets (IL million)	Number of funds	Assets (IL million)	Number of funds	Assets (IL million)
A. Absolute figures						
Employee funds*						
Provident**	446	33.0	399	97.2	377	177.6
Pension			9	61.7	9	209.7
Social insurance	4	17.1	4	82.8	3	230.1
Total employee funds	450	50.1	412	241.7	389	617.4
Self-employed—provident	-	-	7	1.7	14	21.3
Total retirement funds	450	50.1	419	243.4	403	638.7
B. Per cent						
Employee funds*						
Provident**	99.0	66.6	95.2	40.0	93.5	27.8
Pension			2.1	25.3	2.2	32.8
Social insurance	1.0	33.4	1.0	34.0	0.8	36.1
Total employee funds	100.0	100.0	98.3	99.3	96.5	96.7
Self-employed—provident	-	-	1.7	0.7	3.5	3.3
Total retirement funds	100.0	100.0	100.0	100.0	100.0	100.0

* Includes members of cooperative enterprises as well as employees.

** Including severance pay.

SOURCE: Aggregated from audited financial statements.

TABLE 5-6. Number of Provident Funds and Assets, by Asset Size: 1952, 1957 and 1961

(per cent)

Asset size groups (IL thousands)	1952 Number of funds	1952 Assets	1957 Number of funds	1957 Assets	1961 Number of funds	1961 Assets
0-9	36	45	9	0	2	0
10-19	21		14	1	4	0
20-99	32		39	5	35	2
100-299	7		22	11	28	5
300-999	3	22	9	16	18	9
1000 +	1	33	7	67	13	84
Total	100	100	100	100	100	100

SOURCE: Aggregated from audited financial statements.

SECTOR AFFILIATION

Although the Histadrut has been the moving force behind the establishment of retirement funds, it is not valid to assume that all funds should be included in the Histadrut sector of the economy. Since control over a retirement fund's investment policy is typically shared by the members and their employers, we classify retirement funds by the sector affiliation of the employer.

Table 5-7 presents the percentage distribution of retirement fund membership and end-of-year assets by the sector affiliation of the employing firm. Although the social insurance funds embrace the employees of a variety of firms, they are classified in the Histadrut sector since they are administered directly by the Histadrut. Similarly, bank-administered central severance pay funds, as well as funds for the self-employed, are classified by the sector affiliation of the financial institution charged with their administration.

As might be expected, a large proportion of retirement fund membership and assets is accounted for by the Histadrut sector. In 1953 and 1957, this sector included some 70 per cent of the membership and over 60 per cent of the total assets. In 1961, funds affiliated to the Histadrut sector accounted for two thirds of total retirement fund membership and assets.

Despite this concentration of membership and assets, the Histradrut sector included only 14 per cent of the total number of funds in 1953, dropping to 11 per cent in 1957. These low figures reflect the existence of centralized industry-wide funds before 1953, as well as the further consolidation of funds between 1953 and 1957. By 1961, the consolidation of funds within the Histadrut sector was virtually complete; and the Histadrut funds (3 social insurance, 4 central pension, a handful of severance pay funds, and funds for the self-employed administered by Histadrut financial institutions) comprised only 3 per cent of the total number of retirement funds.

While most of the funds were affiliated to firms of the private sector in 1953, 1957, and 1961, they accounted for less than 20 per cent of total

TABLE 5-7. Number, Membership and Assets of Retirement Funds, by Sector Affiliation: 1953, 1957 and 1961

(per cent)

	1953			1957			1961		
	Number of funds	Member-ship	Assets	Number of funds	Member-ship	Assets	Number of funds	Member-ship	Assets
Government and national institutions	12	12	17	12	11	13	13	8	11
Histadrut	14	69	61	11	71	62	3	68	66
Cooperative	17	3	7	17	3	7	14	4	6
Private	56	16	15	57	10	16	67	19	16
Unclassified	1	0	0	3	5	2	3	1	1
Total	100	100	100	100	100	100	100	100	100
Absolute figures*	482	186.4	74.6	419	266	243.4	403	384.9	638.7

* Membership figures in thousands; assets in IL millions.

SOURCES: See source notes to Tables 5–2 and 5–5.

membership and held only 16 per cent of total assets in 1961. The increase in the private sector's share in total membership in 1961 reflects the establishement of bank-administered severance pay plans for the self-employed between 1957 and 1961. Most of these plans are administered by commercial banks of the private sector.[11] The remaining sectors, government and cooperatives, accounted for fairly constant shares of both assets and membership throughout the period.

INDUSTRIAL DISTRIBUTION

The percentage distribution of funds and membership by major industrial branch in 1953 and 1957 is shown in Table 5-8. The distribution remained relatively stable between these years; the decrease in the proportion of funds and membership in manufacturing and services in 1957 followed the consolidation of funds affiliated to Histadrut enterprises and institutions into a central pension fund in 1954. The concomitant increase in 'branch not known' reflects our inability to classify this central fund which embraces a cross section of workers.[12]

TABLE 5-8. Number and Membership of Provident Funds, by Industry: 1953 and 1957

(per cent)

	1953		1957	
	Number of funds	Membership	Number of funds	Membership
Agriculture	1	1	1	-
Manufacturing	39	19	38	14
Construction	4	6	4	6
Public utilities	2	5	2	5
Transport	7	9	7	9
Trade and finance	14	11	14	8
Services	29	38	27	30
Government and national institutions	7	14	7	14
Other services	22	24	20	16
Branch not known and miscellaneous	4	11	7	28
Total	100	100	100	100
Absolute figures	478	86.4*	415	116*

* Thousands.

SOURCES: See sources to Tables 5-2 and 5-5.

11 Bank Leumi has been classified in the private sector owing to the nature of its operations.

12 This problem has been compounded in recent years owing to the emergence of central funds of the self-employed, and the growth of central severance-pay funds. The branch distribution is therefore not given for 1961.

The heaviest concentration of funds was in manufacturing, with almost 40 per cent of the funds, but only 19 per cent of total membership in 1953, and 14 per cent in 1957. This reflects the relatively small scale of manufacturing enterprise in Israel, and the fact that the Histadrut enterprises, which were consolidated after 1954, were larger than the average for manufacturing.

An interesting feature of the branch distribution in both years is the high proportion of both funds and membership in services; this reflects both the high proportion of services in the Israeli economy and the broad coverage of the trade union movement, with a very high proportion of the country's white-collar workers being union members.[13]

13 The exclusion of the social insurance funds from Table 5-8 distorts the distribution. The bulk of wage-earners in agriculture and construction were daily laborers, who were covered by the three social insurance funds serving agricultural and construction workers. Coverage of manufacturing is also understated, since a significant proportion of manufacturing workers were organized in the fourth social insurance fund, Mivtachim.

Chapter 6

THE FLOW OF FUNDS

This chapter deals primarily with the money receipts and outlays of retirement funds in the years 1952-61, and with the resulting accumulation of reserves during the period. It should be emphasized at the outset that neither money contributions nor money outlays provide an adequate measure of the economic cost of providing retirement benefits. Cost in this sense is a function of the real productivity of retirement fund investments, i. e., the extent to which the future claims of retirement fund beneficiaries can be met out of the enhanced flow of goods and services engendered by the productive utilization of the funds accumulating in retirement plans.

CONTRIBUTION RATES

In Israel both employer and employee contributions to retirement funds are calculated as a percentage of the employee's wages. For this purpose, wages are defined to include basic wage plus cost-of-living allowances. Throughout the period under study over two thirds of the funds received member contributions of between 3 and 6 per cent of gross wages. It is apparent from Table 6-1, however, that rates of member contributions tended to decline between 1952 and 1961. At the beginning of the period, only 3 per cent of the funds assessed their members at rates of less than 3 per cent of wages, while in 1961 fully 21 per cent of the funds fall into this category; in 1952, 12 per cent of the funds received contributions from their members of 6 or more per cent of wages and the proportion had fallen to 2 per cent by 1961.

This downward drift in the rate of member contributions reflects neither renegotiation of labor contracts nor the formation of new funds with significantly lower contribution rates. On the contrary, the study of a sample of funds reveals remarkable stability in the rate of member contributions. With the exception of some funds making the transition from lump-sum to annuity benefits, member rates tended to remain constant.

The observed decline in member contribution rates largely reflects the introduction of compulsory national insurance in 1954. Since that year 1 per cent of wages has been transferred by the funds to the National Insurance Institute as employee contributions to government insurance. The rates for 1961 are given net of these transfers, so that the increase in the proportion of funds receiving less than 3 per cent of wages from their members represents, at least in part, a reallocation of given rates, rather than a significant change in the rates themselves. The contrary holds for the decline in the proportion of funds receiving member contributions of over 6 per cent of wages. Since these high rates exceed the current legal maximum, a downward adjustment apparently did take place in many of these funds after the 1957 Income Tax Regulations came into force.

TABLE 6-1. Provident Funds* by Rate of Contribution: 1952 and 1961

(per cent)

Contribution rates**	1952	1961***
Members		
0-2.9	3	21
3-3.9		21
4-4.9	80	19
5-5.9		37
6-7.9	11	2
8+	1	-
Lump sum	1	-
Not known	4	-
Total	100	100
Employers		
0-2.9	1	13
3-4.9	37	15
5-5.9		17
6-8.9	19	18
9-14.9	37	37
15+	1	-
Lump sum	1	-
Not known	4	-
Total	100	100

* See note † to Table 5-2.

** Per cent of wages.

*** Approved funds only.

SOURCES: 1952—aggregated from annual reports of provident and pension funds.
1961—aggregated from Approval Certificates on file at the Savings Authority, Ministry of Finance.

Since 1.5 per cent of wages are deducted from employer contributions to provident and pension funds for national insurance, the rise between 1952 and 1961 in the proportion of funds receiving less that 3 per cent of wages from employers can also be readily explained. Here, however, there appears to have been no parallel decline in contribution rates at the upper end of the scale; increased funding of severance pay benefits since 1952, which raises the percentage rates of employer contributions, served to offset much of the decline due to national insurance.

The percentage distribution of funds by combined rates of contribution in 1952 and 1961 is given in Table 6-2. Combined rates were calculated for each fund by adding the employer rate of contribution to the employee rate, and thus represent the total percentage of an employee's wages transferred to his retirement fund account. In 1961, 36 per cent of approved provident and pension funds received combined employer-member contributions of over 12 per cent of wages, while another 21 per cent of the funds received contributions ranging from 9 to 12 per cent of wages.

TABLE 6-2. Provident Funds by Rates of Contribution (Employer and Member): 1952 and 1961

(per cent)

Combined contribution rates*	1952	1961**
0-2.9	-	1
3-5.9	1	13
6-8.9	18	29
9-11.9	26	21
12-15.9	24	16
16-20	26	20
Lump sum	1	-
Not known	4	-
Total	100	100

* Per cent of wages.

** Approved funds only.

SOURCES: See sources to Table 6-1.

The general pattern of contributions differs in the social insurance funds. Rates of contribution vary considerably among the three insurance funds, and even among individual members of the same fund; Table 6-3 sets out sample contribution rates which reflect the general array of rates applicable in 1962. The high combined contribution rates to these funds, which in many instances exceed twenty per cent of wages, reflect the funding of additional fringe benefits. The high rate of contribution, combined with relatively low benefit ratios, helps to explain the very rapid growth of these funds during the past decade.

The wide variation in rates of contribution reflects the existence of significantly differing types of retirement funds in Israel. Table 6-4 distinguishes four sub-classes of funds, by type of contribution received: pension, savings and severance pay contributions, and combined savings and severance pay contributions. In 1952, approximately 60 per cent of retirement funds received contributions towards long-term savings, while the remaining 40 per cent of the funds received contributions for severance pay as well as savings.[1] Owing to the introduction of separate severance pay funds in 1957, the percentage of funds receiving severance pay or combined severance pay and savings contributions, increased to 43 per cent in 1957, and to 51 per cent in 1961.

TABLE 6-3. Typical Contribution Rates of Social Insurance Funds: 1962

(per cent of wages)

	Members	Employers
Pensions—comprehensive plan*	5.0	11.0
Sickness, accidents	-	2.5-3.0
Annual leave (supplement)	0.5	0.5
Rehabilitation	0.5	1.3
Holidays	-	3.5
Annual leave law	-	4.0

* Of these, 1 per cent and $1\frac{1}{2}$ per cent of wages are paid to the National Insurance Institute out of member and employer contributions respectively. Typical contribution rates for insurance fund members covered by basic pensions of lump-sum provident plans are 5 per cent **plus** 5 per cent in the case of pensions, and 3 per cent **plus** 4.5 per cent in the case of lump-sum benefits.

SOURCE: Adapted from Histadrut, The Central Pension Funds of the Histadrut—The Jewish Federation of Labour, Department of Pensions, Tel Aviv, 1962, Table IV, p.2.

TABLE 6-4. Retirement Funds by Type of Contribution: 1952, 1957 and 1961

(per cent)

	1952	1957	1961*
Pension and social insurance	-	3	3
Savings	60	54	46
Savings plus severance pay	40**	38	38
Severance pay	-	5	13
Total	100	100	100

* Approved funds only.

** Estimated on the assumption that contributions over 8 per cent represent the funding of severance pay as well as savings.

SOURCE: See sources to Table 6-1 (1957 figures are from the 1952 source).

1 If we assume that employer contributions of 0 to 8 per cent represent contributions towards long-term saving, and that higher rates cover both savings and severance pay, we find for 1952 that 60 per cent of the funds (for which data on contribution rates were available) received employer contributions towards savings only, while in the remainder, employers contributed also towards severance pay. As a check on our estimate, this assumption was applied to Ministry of Labour data on 1951 rates of contribution. These indicated that 50 per cent of funds received contributions for both severance pay and savings in that year. This is very close to results obtained by the Ministry from direct questionnaires, which showed 52 per cent. See Ministry of Labour, "Provident and Insurance Funds 1951," Monthly Review of Labour, V (April 1953), 6-7(Hebrew). It appears therefore that our 1952 estimate is reasonably accurate. In making inter-year comparisons caution should be exercised, since the populations used by us and by the Ministry in 1951 are not comparable.

The funding of employers' severance pay obligations has important implications for labor mobility. Where amounts covering future severance pay are regularly paid into a provident or severance pay fund, employers are able to dismiss workers without regard to their firms' liquidity position. This assumes that the build-up in the provident fund over the years has been sufficient to cover the full amount of the employer's severance pay obligation. Since severance pay is usually calculated on the basis of final pay, the amount funded through the years of a worker's employment will generally fall short of the employer's obligation. But even here employers have to pay out of current budgets only the difference between the amount based on the actual dismissal wage and the sums which have accrued in the fund. Since many firms complain of a shortage of working capital, this is not a negligible consideration. It should be emphasized, however, that this is but one of many factors influencing employers in deciding on the dismissal of employees.

RETIREMENT FUND CONTRIBUTIONS

The individual members' retirement savings and pension accounts are built up through monthly contributions received from employers and employees. The former are paid into the fund directly by employers, while the latter are deducted from wages at source by employers and transferred by them to the retirement fund. Both employer and employee contributions are allocated to the accounts of individual members.[2] In addition, all or part of the net income earned from a fund's investment activities is often allocated to the members' individual accounts. Where a fund incurs expenses in excess of its interest income, the resulting deficit is usually covered by making deductions from members' accounts, by depleting reserves, or in some cases through the participation of employers in meeting operating expenses.[3]

The bulk of retirement fund receipts is provided by employer-employee contributions. The magnitude of contributions in a given year largely depends upon the number of workers covered, the percentage rates of contribution, and the amount of wages earned by members. The percentage growth of contributions is, in turn, a function of movements in provident fund membership, rates of contribution, and wage rates. The sharp increase in the amount of annual contributions, as shown in Table 6-5 reflects both the expansion in retirement fund coverage, as well as the rising secular trend of nominal wages in Israel. Contributions to retirement funds averaged somewhat less than IL 2 million per month in 1952, with the rate rising to IL 5.5 million per month in 1957, and to IL 11 million per month in 1961.

2 Since provident funds keep their books on an accrual basis, contributions are credited to members' accounts even where the employer is delinquent in transferring contributions in cash to the fund.

3 In a few instances losses have been handled in a special manner. When a fund expects future earnings to be sufficient to cover the current deficit as well as future operating expenses, the current loss is offset on the fund's books through the creation of a special asset called 'deficit'. If the expected surplus materializes, the past losses are removed by writing down the 'deficit' asset account. While this procedure has roots in English accounting practice, and avoids the expense of deducting a proportionate share of net losses from each individual account, it cannot be recommended. This is especially true where the deficit is large or persists for more than one year.

TABLE 6-5. Annual Contributions* to Retirement Funds: 1952, 1957 and 1961

	1952	1957	1961
A. IL millions			
Employer contributions			
Pension		15.8	35.8
Savings	10.3	11.3	15.9
Severance pay		5.8	16.4
Fringe benefits	4.3	12.3	22.2
Total employer contributions	14.6	45.2	90.3
Member contributions			
Pension	7.4	8.8	24.6
Savings		12.8	21.5
Total employer contributions	7.4	21.6	46.1
Total contributions	22.0	66.8	136.4
B. Per cent			
Employer contributions			
Pension		35.0	39.6
Savings	70.5	25.0	17.6
Severance pay		12.8	18.2
Fringe benefits	29.5	27.2	24.6
Total employer contributions	100.0	100.0	100.0
Member contributions			
Pension	100.0	40.7	53.4
Savings		59.3	46.6
Total member contributions	100.0	100.0	100.0

* Net of transfers among funds.

SOURCE: Appendix Table A-7.

Employee contributions are receipts from members designed to build up their pension or retirement savings accounts. Since the self-employed are members of provident funds, their contributions are classified with employee rather than employer contributions in Table 6-5. Employer contributions, on the other hand, include payments made on behalf of severance pay and other fringe benefits, as well as contributions towards pensions and retirement savings. In each of the three years studied, employers accounted for two thirds, and employees (including the self-employed) for one third, of the tctal contributions to retirement funds.

This stability in the relative shares of employers and members in total contributions did not carry over to the composition of contributions, when classified by type of benefit. Here the data clearly bring out the shift from lump-sum provident savings to pension plans. In 1957, contributions on behalf of pensions accounted for about 41 per cent of total member contributions, and 35 per cent of total employer contributions to retirement funds, with the proportions rising to 53 per cent and 40 per cent respectively in 1961. If fringe benefits are eliminated, the share of pensions in total employer contributions was also over 50 per cent in 1961.[4]

A noteworthy feature of the general pattern of contributions is the relatively high degree of member participation in Israel. In 1961, member contributions to provident and pension funds comprised 38 per cent of total contributions. Table 6-6 compares this rate of member participation for Israel with the pattern of contributions of four other countries for which data were available. Except for the United Kingdom, the comparison is carried out for separately constituted pension funds, i. e., pension plans effected via life insurance companies have been excluded. The share of members in total contributions is significantly higher in Israel than in the Commonwealth countries represented, and very much higher than in the United States, where members account for only 11 per cent of total contributions to pension funds.

TABLE 6-6. Shares of Members and Employers in Total Contributions to Provident and Pension Funds in Five Countries

(per cent)

	Members	Employers	Total
Australia (1952)	30	70	100
Canada (1953)	25	75	100
Israel (1961)	38	62	100
United Kingdom (1953)	29	71	100
United States (1959)	11	89	100

SOURCES: Israel—Calculated from Appendix Table A-7.

United States—Victor L. Andrews, "The Supply of Loanable Funds from Non-Insured Corporate State and City Administered Employee Pension Trusts, "The Journal of Finance, XVI (May 1961), 331.

Other countries—"Cost of Non-Statutory Social Security Schemes," International Labour Review, LXXVIII (October 1958), 388-403.

Much of this higher member participation in Israel can probably be ascribed to the existence of lump-sum provident funds. Unless severance pay is also funded, members and employers typically contribute equal amounts to provident type plans;[5] in the case of the self-employed, no parallel employer contribution is reflected in the Israel statistics. The funding of severance pay, on the other hand, has the opposite effect, since here only employers make contributions.

4 If we eliminate the giant social insurance funds, member and employer contributions on behalf of pensions comprised 45 per cent and 49 per cent of their respective totals in 1961 (see Table A-7).

5 Since 1.5 per cent of wages are deducted from the employer contribution on behalf of national insurance, as compared with only 1 per cent in the case of member contributions, the latter typically (i.e. for the typical 5 per cent contribution) exceed the former by about 15 per cent.

BENEFIT OUTLAYS

The benefit payments of retirement funds take the form of pension annuities, lump-sum savings or severance payments, and various fringe benefits. The latter are almost entirely confined to the social insurance funds. Table 6-7 summarizes the benefit outlays of retirement funds in 1952, 1957 and 1961. As with contributions, the data on benefit outlays also emphasize the shift to pensions. By 1961, pension payments comprised 35 per cent of total benefits paid by the funds; if we exclude fringe benefits, the proportion rises to 51 per cent.

TABLE 6-7. Annual Benefit Outlays of Retirement Funds:* 1952, 1957 and 1961

	1952	1957	1961
A. IL millions			
Pensions		2.7	13.8
Savings	2.0	7.2	9.0
Severance pay			4.0
Fringe benefits	2.1	7.9	12.7
Total benefit payments	4.1	17.8	39.5
B. Per cent			
Pensions		15.2	34.9
Savings	48.8	40.4	22.8
Severance pay			10.1
Fringe benefits	51.2	44.4	32.2
Total benefit payments	100.0	100.0	100.0

* Net of transfers among funds.

SOURCE: Appendix Table A-7.

Pension benefits are however, considerably overstated in Table 6-7. Of the almost IL 14 million paid out of pension accounts in 1961, not more than IL 6 million actually took the form of annuity payments.[6] The remainder represents lump sums paid to members who left the funds, but were not eligible to receive pensions. The seven central pension funds affiliated to the Histadrut (including the three social insurance funds) listed only three thousand pensioners at the end of 1961. This low proportion of pensioners reflects the favorable age distribution of fund membership, while the high proportion of lump sums reflects the mobility of the younger members.[7]

Another feature of the development of benefit outlays over the decade has been the decline in the proportion of fringe benefits. Although fringe benefits increased from IL 2 million in 1952 to almost IL 13 million in 1961,

6 Cf. Histadrut, The Central Pension Funds of the Histadrut—The Jewish Federation of Labour, Department of Pensions, Tel Aviv, 1962, p. 16.

7 Ibid.

their share in total benefit outlays declined from 51 per cent in 1952 to 32 per cent in 1961. This is largely accounted for by the social insurance funds, whose fringe benefits comprised 78 per cent of their total benefit payments in 1952, the proportion falling off to 58 per cent in 1961.[8]

THE FLOW OF FUNDS

In addition to serving as depositories for retirement savings and other fringe benefits, the funds engage in other activities that give rise to receipts or outlays. Most important in this sphere is the role played by retirement funds as financial institutions responsible for the investment of the sums accumulated in their members' accounts. In addition, many of the funds also serve as life insurance agents for their members. Thus, total receipts and outlays reflect current investment income, capital gains, operating expenses and the payment of insurance premiums as well as employer-employee contributions and benefit outlays.

Table 6-8 sets out the flow of funds[9] through retirement plans in 1952, 1957 and 1961, at current and at 1952 prices. The data on receipts and outlays are net of internal allocations from account to account, but include inter-fund transfers. The latter arise when a retirement fund member terminates his employment (and, therefore, his membership in the fund), but finds new employment with a firm that has its own provident fund, or is affiliated with one of the central pension or social insurance funds. In such cases the member's account is transferred directly to his account in the new fund. In the records of the fund making the payment, an outlay item, 'transfers to other retirement funds' is created, while the fund receiving the payment credits it to a receipt item, 'transfers from other retirement funds'.

Conceptually these transfers should cancel one another when data on receipts and outlays are aggregated for all retirement funds. Owing to differences in the accounting periods employed by the various funds, which result in differences in the dating of financial statements,[10] and owing to the fact that one very large fund does not explicitly list them, the inter-fund transfers do not cancel out in practice. For this reason they have been explicitly retained in the flow of funds accounts.

The total gross inflow to retirement funds rose from IL 25 million in 1952 to IL 184.5 million in 1961. Adjusting for nonreporting funds, about 70 per cent of the inflow was retained in each of the years studied, and reached IL 130 million in 1961, compared with IL 17 million in 1952. A striking feature of the inflow to retirement funds has been the sharp increase in income from economic activities. Total investment income, including capital gains, rose from less than IL 1.5 million in 1952 to IL 12 million in 1957 and to IL 38 million in 1961. Total investment income grew much faster than did contribution receipts, and as a result, the proportion of gross receipts accounted for by investment income and capital gains rose

8 See Table A-7.

9 The flow of funds does not purport to represent the actual cash flow. Since retirement funds keep their books on an accrual basis, part of the inflow and outflow represents the net change in creditor or debtor accounts rather than cash receipts or payments.

10 See Appendix, p. 103 below.

sharply during the decade. By 1961, total returns from investments comprised over 20 per cent of retirement fund receipts, compared with 15 per cent in 1957 and only 5.6 per cent in 1952. The sharp increase in capital gains in 1961 represents, for the most part, the rise in realized linkage appreciation.

TABLE 6-8. Inflows and Outflows of Retirement Funds: 1952, 1957 and 1961

(IL millions)

	At current prices			At 1952 prices*		
	1952	1957	1961	1952	1957	1961
Contributions	22.0	66.8	136.4	22.0	38.6	69.0
Investment income	1.4	11.7	30.3	1.4	6.8	15.3
Capital gains		0.5	7.4		0.3	3.8
Other receipts	1.4	2.9	10.4	1.4	1.7	5.3
Total gross inflow	24.8	81.9	184.5	24.8	47.4	93.4
Benefit payments	4.1	17.8	39.5	4.1	10.3	20.0
Operating expenses	1.6	5.1	9.3	1.6	3.0	4.7
Other outlays	1.8	5.7	7.2	1.8	3.3	3.6
Total outflow	7.5	28.6	56.0	7.5	16.6	28.3
Net inflow	17.3	53.3	128.5	17.3	30.8	65.1
Errors and omissions**	0.1	4.3	1.5	0.1	2.5	0.7
Adjusted net inflow **	17.4	57.6	130.0	17.4	33.3	65.8

* Deflated by CPI (calendar year averages).

** Includes the increase in net assets of funds not presenting data on inflows and outflows.

SOURCE: Appendix Table A-7.

On the outlay side, operating expenses also increased, rising from IL 1.6 million in 1952 to IL 9.3 million in 1961. In contrast to income, expenses increased more slowly than gross receipts. While expenses comprised 6.5 per cent of receipts in 1952, the proportion declined to 5 per cent in 1961. If expenses are related to investment income, rather than total receipts, the decline is more pronounced since net income was negative in 1952 (i. e., operating expenses exceeded investment income). The ratio of expenses to current investment income fell to about 43 per cent in 1957 and to 30 per cent in 1961. The decline is even greater if capital gains are taken into account.

The secular rise in receipts and outlays also reflects the general increase in prices during the decade. From 1952 to 1961 the average CPI almost doubled. The rise was most pronounced between 1952 and 1957, when prices rose by almost 73 per cent; the increase between 1957 and 1961 was about 14.5 per cent. Total receipts of retirement funds in 1961 were IL 93 million in real terms, while the real net inflow was IL 65.1 million. It should be noted that even in constant prices the rise in investment income and benefit outlays remains pronounced; the former more than doubled between 1957 and 1961, while the latter just about doubled during the same period.

TABLE 6-9. Inflows and Outflows of Retirement Funds, by Type of Fund: 1952, 1957, and 1961.

(per cent)

	Total retirement funds			Social insurance funds			Provident funds		
	1952	1957	1961	1952	1957	1961	1952	1957	1961
Contributions	88.8	81.6	73.9	90.5	88.3	81.6	87.4	75.6	68.2
Investment income	5.6	14.3	16.4	3.8	9.6	12.3	7.0	18.4	19.5
Capital gains		0.6	4.0		0.3	3.4		0.9	4.4
Other receipts	5.6	3.5	5.7	5.7	1.8	2.7	5.6	5.1	7.9
Total gross inflow	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Benefit payments	16.5	21.7	21.4	25.7	29.9	27.1	9.8	14.5	17.1
Operating expenses	6.5	6.2	5.0	12.4	10.6	8.5	2.1	2.3	2.5
Other outlays	7.2	7.0	3.9	5.7	5.4	3.2	8.4	8.3	4.5
Total outflow	30.2	34.9	30.3	43.8	45.9	38.8	20.3	25.1	24.1
Net inflow	69.8	65.1	69.7	56.2	54.1	61.2	79.7	74.9	75.9
Errors and omissions *	0.4	5.3	0.8	-	-	-	0.7	9.9	1.4
Adjusted net inflow *	70.2	70.4	70.5	56.2	54.1	61.2	80.4	84.8	77.3

* Includes an estimate for the increase in net assets of those funds which did not present data on inflows and outflows.

SOURCE: Appendix Table A-7.

The (adjusted) net annual inflow to the funds in real terms rose by 91 per cent from 1952 to 1957, and by 98 per cent from 1957 to 1961.

In 1961, employer-employee contributions to the giant social insurance funds comprised 47 per cent of total contributions. Owing to their special nature and to their size, Table 6-9 sets out the inflows and outlays of the social insurance and the other retirement funds separately.

Although the share of contributions in total receipts of both social insurance and provident funds declined between 1952 and 1961, there were absolute differences between the two classes of funds throughout the period. In 1961, contributions comprised 68 per cent of the total inflow to provident-pension funds, compared with 82 per cent for the social insurance funds. This was due largely to the fact that income from economic acitivities (investment income plus capital gains) accounted for 24 per cent of the gross receipts in provident and pension funds, as against less than 16 per cent in the social insurance funds. This reflects the fact that the total assets of provident and pension funds were some 80 per cent greater than those of the insurance funds, and since investment income is a function of the stock of invested assets, rather than of annual contributions, investment income comprised a larger proportion of the gross inflows of the provident and pension funds than of the insurance funds.

The difference between the funds can be brought into sharper focus by examining the data on net rather than gross inflows. Provident and pension funds retained 77 per cent of their gross inflow in 1961, while social insurance funds retained only 61 per cent. The variation in the pattern of outlays reflects underlying differences in the benefits provided by the funds. The ratio of benefit payments to receipts is considerably larger in the insurance funds (in 1961, 27 per cent compared with 17 per cent), and reflects their payments of current fringe benefits. The narrowing of the differential, which took place after 1952, reflects the decline in the relative importance of fringe benefits that followed the conversion of the insurance funds into pension funds in the middle of the decade.

Another factor which has affected the percentage of gross receipts retained has been the considerable difference in operating expenses, which were 2 to 2.5 per cent of the gross receipts of provident funds during the decade under study, but over 12 per cent of social insurance fund receipts in 1952, with the proportion dropping off to 8.5 per cent in 1961. Moreover, it should be noted that in both 1952 and 1957 the social insurance funds' net income from investments was negative. The relatively high proportion of operating expenses reflects the size of the social insurance funds, which are national in scope, and the fact that these funds provide current fringe benefits as well as retirement benefits.[11]

RELATION TO NATIONAL INSURANCE

The relative magnitude of the receipts and outlays of retirement funds can be gauged by comparing them with the compulsory national insurance plan established in 1954. Although retirement funds are supplementary to national insurance, their total contributions exceeded those to the National Insurance Institute in both 1957 and 1961 (see Table 6-10).

11 It should also be noted that the members of smaller provident funds often perform administrative functions without remuneration.

TABLE 6-10. Contributions and Benefit Outlays of Retirement Funds and the National Insurance Institute: 1957 and 1961

(IL millions)

	1957	1961
Retirement funds		
Total contributions	66.8	136.4
Pension contributions	15.8	35.8
Total benefit outlays	17.8	39.5
Pension benefits	2.7	13.8
National insurance		
Total contributions	55.9	122.1
Old age and survivor contributions	31.9	80.1
Total benefit outlays	31.6	79.4
Old age and survivor benefits	17.2	44.0

SOURCES: Retirement funds—Appendix A-7.
National insurance —National Insurance Institute, Balance Sheet and Financial Report for 1961/62 Jerusalem, 1962 (Hebrew), and Annual Report 1959/60, Jerusalem, April 1961 (Hebrew).

This relationship between the size of contributions to nonstatutory retirement funds and statutory national insurance is probably peculiar to Israel, and reflects the central role of the Histadrut in the country's economy. In other countries, contributions to nonstatutory schemes range from a high of 63 per cent of statutory plans in the United States, to a low of 6 per cent in West Germany.[12]

If we compare pension contributions to retirement funds with contributions to the National Insurance Institute's old age and survivors pension plan, a different picture emerges: retirement fund pension contributions were only 45 per cent of national insurance pension contributions in 1961.

On the outlay side, both total and pension benefits paid by the National Insurance Institute substantially exceeded those paid by retirement funds. In 1961, total statutory benefits reached IL 79 million, compared with IL 39.5 million for retirement funds; for pensions the figures are IL 44 million and IL 14 million respectively. And, as already noted (p. 48), the figure for actual pension annuities paid by retirement funds in 1961 is closer to IL 6 million, the remaining IL 8 million reflecting the lump-sum payments to members withdrawing from pension funds.

12 Data for other countries are from an ILO study covering Australia, Canada, West Germany, the Netherlands, Sweden, Switzerland, the United Kingdom, and the United States. See "Cost of Non-Statutory Social Security Schemes," International Labour Review, LXXVIII (October 1958), 388-403.

Chapter 7

SAVING THROUGH RETIREMENT FUNDS

The receipts and outlays of retirement funds are of obvious interest and importance to their hundreds of thousands of members. But the magnitude, form, and timing of the flow of funds also have far-reaching implications for the entire economy. From the viewpoint of the economy as a whole, it is the net accumulation of retirement funds, and the manner in which these savings are channeled to other sectors of the economy, which reflect the most important functions of retirement funds. Interest in savings and the saving process stems from the fact that these play a crucial role in the economy. Saving is related to economic welfare, reflecting the ability and willingness of different groups in the population to add to their wealth, while also serving directly or indirectly to finance capital formation. Moreover, the saving (or consumption) decisions made by consumer (and other) units play an important role in the determination of aggregate income.

The saving process is especially significant in developing countries, where a prime goal of economic policy is to secure levels of domestic saving adequate to finance the capital formation required to raise per capita incomes.[1] Despite the massive capital import during the first fifteen years of the State's existence, we may assume that in the long run the development of the economy will be vitally dependent on the emergence of an adequate level of domestic saving.[2]

ALTERNATIVE CONCEPTS OF SAVING

The aggregate saving of an economy is usually defined as the difference between current income and current expenditure.[3] In a sense all saving is done directly or indirectly by individuals, but it has been found convenient for purposes of both analysis and measurement to segregate corporate and government units from the rest of the economy, and we may speak of corporate, government, or personal saving. The following discussion is confined to personal saving.

1 Cf. W. Arthur Lewis, The Theory of Economic Growth, London, 1955, and UN, Domestic Financing of Economic Development, New York, 1951.

2 Don Patinkin, The Israel Economy: The First Decade, Falk Project, Jerusalem, 1960, Chapter 3.

3 A voluminous literature has grown up on the problem of distinguishing current expenditure (i.e., consumption) from capital formation. Any standard textbook of economics provides a discussion of concepts and definitions, while the National Income Supplements to the Survey of Current Business present detailed notes on the sources and methods used by the US Department of Commerce in estimating national income and savings. For alternative definitions of savings used in Israel, see Bank of Israel, Annual Report 1962, Chapter XIX, and Patinkin, op. cit.

The aggregate volume of personal savings during a given period (usually one year) is defined as the difference between the current income and the current expenditure of persons. Using the terminology of the United States Department of Commerce in its national income accounts, personal (or private noncorporate) saving is the excess of personal income over personal consumption expenditures and personal tax payments. Personal saving, as defined by the Department of Commerce, includes the current saving of nonprofit institutions, and private pension, health, welfare, and trust funds, as well as the saving of individuals. It does not, however, include changes in individuals' equity in government insurance; these are classified in the government rather than the personal sector.

Thus retirement funds would be consolidated with individuals in the personal or private noncorporate sector of the national income and product accounts. Employer contributions and property income received by the funds become elements of personal income, and the saving of these funds part of personal savings. Personal income is defined as the current income received by persons from all sources including government and business, but excluding transfers among persons. Since retirement funds are regarded as persons in the national accounts, employee contributions to them, as well as benefit payments made by them, are canceled as constituting transfers within the personal sector.

The saving of an economic unit or sector can also be measured from balance sheet data rather than from income accounts. Derived in this manner, personal saving is equivalent to the increase in personal or private noncorporate assets less the increase in liabilities, excluding gains or losses from the revaluation of assets.[4] This equals the change in net worth or what is often called earned surplus in accounting terminology. It is only the net result of the changes in assets and liabilities which can be used as a measure of saving. Changes in individual assets and liabilities are of interest, from the standpoint of the saving process, primarily in showing the form saving takes.

Personal saving is also frequently divided between contractual (or committed) and noncontractual saving. The former is made up of life insurance premiums, mortgage payments (only part of which represent saving) and contributions to provident or pension funds, etc. This category is usually considered one of the more stable components of personal saving in that individuals contract over relatively long periods of time. Its contractual nature makes it more automatic and less subject to active current decisions than other forms of personal saving. From the individual saver's point of view it restricts freedom of action, particularly when declining income reduces his desire to save. The choice then is often between cutting consumption by more that would otherwise be the case, or concentrating the entire cut in savings in noncontractual forms.

For the purpose of this study retirement funds are considered as a separate sector of the economy. Thus, the effects of inter-fund transfers are netted out of the savings estimates presented below. In order to facilitate the analysis, three alternative definitions of retirement fund saving are used:

a. Gross saving: the increase over time in fund assets **less** the increase in creditor accounts **less** capital gains. This is equivalent to the increase in the adjusted net inflow **less** capital gains.

4 Since capital gains are not included in income they are also excluded from saving.

b. Net saving: gross saving less the net increase in loans to members (i. e. loans outstanding at the close of the period less loans outstanding at the beginning of the period).
c. Net transferable saving: net saving less the net increase in employer debts.

Both loans to members and the increase in employer indebtedness to the funds are treated as leakages out of gross savings, regardless of whether the recipients invested (i. e., saved) the sums so received, or used them to increase current consumption. This treatment of direct or indirect loans to members and employers reflects the special importance of savings during times of inflation.

SAVING AND INFLATION

In analyzing the contribution of saving to the fight against inflation we are primarily interested in those forms of personal saving which do not result in direct capital expenditures by the saver, but which release resources for use elsewhere. For this purpose, expenditures on housing should probably be excluded from the definition of saving. Increased savings contribute to restoring the balance between demand and supply by transferring purchasing power from economic units which spend less than their current income to those which spend more only when they are not invested directly. Although under certain conditions increased saving may prove injurious, any sector of the economy that saves, on balance, at a time when strong demand for limited resources creates an inflationary situation, contributes to the stability of the economy.

Accumulated saving (particularly if held as liquid assets) are a potential threat to stability in a period marked by strong inflationary pressures. Large accumulations of liquid assets enable their holders to increase effective demand substantially by converting liquid into physical assets. Moreover, a rising price level reduces the purchasing power of accumulated savings, and this may act as a deterrent to further saving. This is especially so if the inflationary situation gives rise to expectations of further price increases.[5]

In the case of retirement funds, a member does not normally have access to all of his accumulated savings unless he terminates his employment, so that it is relatively difficult to dissave out of this source. Moreover, since contributions are geared to wage rates, inflation automatically increases the normal amount of current retirement savings. But to the degree that members are able to receive loans from their retirement funds (a widespread practice in Israel), the efficacy of this form of saving during inflation is diminished. These loans increase effective demand,[6] since

5 It can be argued that in the absence of such expectations the reduction in the real value of accumulated savings may lead people to increase their current nominal savings so as to restore the real position that then held before the initial price increase.

6 It could be argued that if these loans serve to cover expenditures which would otherwise have been financed out of bank credit, they are not, on balance, inflationary, since they do not raise effective demand. While this may be true for an individual, it does not hold for the economy as a whole. Since Israel's inflation was accompanied by excess demand for bank credit, and by both quantitative and qualitative restrictions on the expansion of bank loans, retirement fund loans to members have clearly been inflationary in this sense.

they are presumably used to finance capital or consumer expenditures which would not have been made without them, and thereby they augment the inflationary pressures emanating from the household sector.

RETIREMENT FUND SAVINGS: 1952-1961

The periodic deposit of a fixed proportion of income in retirement funds constitutes the largest single component of household savings in Israel. Savings in the form of life insurance is far less popular in this country than in Great Britain and the United States, where it is the most common form of contractual saving.[7] In 1961, the life insurance reserves of companies operating in Israel rose by only IL 10 million, as compared with IL 123 million gross saving through retirement funds (the net figure is IL 102 million). Retirement fund savings also exceeded the increase (IL 79 million) in foreign currency and dollar-linked deposits in 1961.[8]

Table 7-1 summarizes the savings effected through retirement funds during the decade from 1952 to 1961. Gross savings amounted to IL 569.5 million, or, in real terms, to IL 332 million. Roughly one third of this sum was accounted for by the giant social insurance funds.

TABLE 7-1. Savings Through Retirement Funds: 1952-61*

(IL millions)

	At current prices			At 1952 prices**		
	Total retirement funds	Social insurance funds	Provident funds	Total retirement funds	Social insurance funds	Provident funds
1. Gross savings	569.5	196.8	372.7	331.7	114.2	217.5
2. Net savings	470.4	171.1	299.3	272.6	98.8	173.8
3. Net transferable savings	412.6	133.0	279.6	236.8	75.8	161.0
As per cent of gross savings						
4. Net savings (2. ÷ 1.)	83	87	80			
5. Net transferable savings (3. ÷ 1.)	72	68	75			

* See note † to Table 5-2.

** Deflated by CPI (calendar year averages).

SOURCES: Aggregated from Append x Tables A-8 and A-9.

Net savings (gross savings less the increase in loans to members) came to 83 per cent of retirement savings over the decade, while net transferable savings (net savings less the increase in employer indebtedness) was 72 per cent of total gross savings. The proportion of net savings in the social insurance funds was somewhat higher (87 per cent) than in the provident

7 Survey of Family Savings 1957/58 and 1958/59 (preliminary Report), Jerusalem, September 1960. Figures cited in the rest of this paragraph are from Bank of Israel, Annual Report 1962, Table XIX-5, p. 432.

8 These deposits reflect the transfer of personal restitutions from Germany.

and pension funds (80 per cent). This reflects the separation of management and membership in the social insurance funds, which resulted in a lower proportion of member loans. On the other hand, employer debts were proportionately larger in the social insurance funds than in the others. As a result, net transferable savings came to only 68 per cent of total savings in the social insurance funds, compared with 75 per cent in the provident and pension funds.

Since for a variety of reasons savings estimates in Israel are subject to a high degree of error,[9] Table 7-2 places retirement fund savings in perspective by relating this component of national savings to gross domestic capital formation for 1952, 1957 and 1961.[10] Gross savings through retirement funds rose faster than domestic capital formation during the decade, and as a result the ratio of gross retirement fund savings to domestic investment rose from 5.3 per cent in 1952 to 8.4 per cent in 1961. Net and net transferable savings increased even faster,[11] and the proportion of domestic capital formation accounted for by net retirement fund savings rose from 4.2 per cent in 1952 to 6.9 per cent in 1961, while the proportion accounted for by net transferable savings doubled—from 2.9 per cent in 1952 to 6.0 per cent in 1961. This sharp increase reflects, among other things, the relatively high level of loans to members and employers which prevailed in 1952, a year in which the general level of prices rose rapidly.

TABLE 7-2. Gross Domestic Fixed Capital Formation and Retirement Fund Savings: 1952, 1957 and 1961

	1952	1957	1961
A. IL millions			
Gross domestic fixed capital formation	326.7	870.4	1,465.6
Retirement fund savings			
Gross	17.4	64.7	122.6
Net	13.8	45.9	101.6
Net transferable	9.5	33.7	88.4
B. Retirement funds savings as per cent of capital formation			
Gross	5.3	7.4	8.4
Net	4.2	5.3	6.9
Net transferable	2.9	3.9	6.0

SOURCES: Capital formation—CBS, Abstract 1964, No. 15, pp. 146-47.
Retirement funds savings—Appendix Table A-8.

9 Bank of Israel, Annual Report 1962, Chapter XIX, and Patinkin, op. cit., Chapter 3.

10 The comparison is made to gross rather than net capital formation in order to avoid the errors inherent in the measurement of depreciation.

11 If retirement savings are estimated from capital flow accounts rather than from balance sheet changes, the situation is reversed for 1957. Estimated from this source, the ratio of both net and net transferable savings to domestic capital formation was slightly lower in 1957 than in 1952. This reflects a downward bias in the 1956 estimate of total retirement fund assets, resulting in a higher gross savings figure for 1957 when savings are estimated from balance sheet changes. There is no such discrepancy for 1952 and 1961.

The progressive increase in the ratio of net and net transferable savings to gross retirement savings is brought into sharper focus in Table 7-3. During 1952-54, the two leakages out of gross savings averaged 48 per cent of total gross retirement savings. The relevant figures for 1955-57 and 1958-61 are 35 per cent and 21 per cent respectively. As a result of this relative decline in member loans and employer debts, the ratios of both net and net transferable savings to gross savings increased steeply over the decade.[12] Net savings comprised 85 per cent of gross retirement savings during 1958-61, compared with 72 per cent during 1952-54; and net transferable savings accounted for 79 per cent of savings in recent years, compared with only 52 per cent in 1952-54.

TABLE 7-3. Savings Through Retirement Funds: 1952-54, 1955-57 and 1958-61

(IL millions)

	1952-54	1955-57	1958-61
1. Gross savings	63.8	133.7	372.0
2. Net savings	45.7	107.1	317.6
3. Net transferable savings	33.0	86.8	292.8
As per cent of gross savings			
4. Net savings (2. ÷1.)	71.6	80.1	85.4
5. Net transferable savings (3. ÷1.)	51.7	64.9	78.7

SOURCE: Aggregated from Appendix Table A-8.

These shifts in the savings behavior of retirement funds can be traced to the changing economic environment in which the funds operated during the period under study. (The 1957 Tax Regulations should be included as one of the environmental factors for this purpose.) Table 7-4 relates the ratios of net and net transferable savings to gross savings to the annual percentage change in prices during the period 1952 to 1962. Although the annual figures contain a high degree of random variation and a significant degree of statistical error (owing to imperfect comparability between years), the data do serve to emphasize the direct relationship between inflation and leakages out of gross saving. During 1952-54, years of very rapid price increase, the ratio of net to gross savings fell, and both the shares of net and net transferable savings reached a nadir in 1954, when average prices were still rising at a rate of 12 per cent. It should be noted that the relative leakage out of gross saving declined during the following year as the rate of price increase leveled off, and that this recovery is discernible before the Regulations became effective in 1958. The apparent reversal of the savings pattern in 1957 was itself due to the Regulations. Members, and apparently

12 Although savings, as measured in the national accounts, were negative before 1959, a family savings survey showed that wage and salary earners saved about 3 per cent of their disposable income in 1954; a subsequent survey (covering the entire urban population) showed an increase to 5.3 per cent in 1957-58 (cf. Patinkin, op. cit., Chapter 3). In the subsequent period (1959-61), net national savings as measured in the national accounts were positive and rising (see Bank of Israel, Annual Report 1961, Chapter XIX). In this connection, the marked rise in the net saving flow through retirement funds confirms that the domestic saving rate rose during the decade, and, moreover, helps to explain the rise.

employers as well, brought pressure to bear on the funds to increase loans during the period of prolonged and well publicized discussions which preceded the actual issue of the Regulations.[13]

TABLE 7-4. Net Savings Through Retirement Funds and Consumer Prices: 1952-62

(per cent)

	CPI: increase over preceding year*	As per cent of gross savings: Net savings	As per cent of gross savings: Net transferable savings
1952	57.8	79.3	54.6
1953	28.1	76.4	57.7
1954	12.2	61.9	44.3
1955	5.9	81.2	72.2
1956	6.5	92.5	79.4
1957	6.4	70.9	52.0
1958	3.4	84.4	74.7
1959	1.5	85.8	81.2
1960	2.3	88.8	87.5
1961	6.7	82.9	72.1
1962	9.5	80.4	68.6

* Calendar year averages.

SOURCES: Consumer prices—CBS, Abstract 1964, No. 15, p. 231.
Savings—1952-61 calculated from Appendix Table A-8.
1962 calculated from Bank of Israel, Annual Report 1962, p. 402.

The outstanding feature of the funds' savings pattern was the decline in 1961 and in 1962 of both net and net transferable savings ratios. While it can be argued that the Income Tax Regulations, which placed both quantitative and qualitative restrictions on loans to members and employer debts, were responsible for much of the improvement during 1958-60, it should be noted that the past behavior of the funds suggests that some of the decrease in the leakages from savings would have been forthcoming even in the absence of legislation. The decline in the ratios during 1961 and 1962, in response to the break in price stability combined with the expectations engendered by the devaluation of the pound in February 1962, reinforce the argument that shifts in the pattern of savings through retirement funds have tended to be a function of major changes in the economic climate, and not merely a response to direct governmental regulation.

As a result of this shifting pattern in loans to members and employers, net and net transferable savings have tended to fluctuate more sharply than gross savings. While real gross retirement savings declined only slightly

13 This is confirmed by independent contemporary sources. See, for example, the Annual Report of the Tel Aviv Stock Exchange: 1957, Tel Aviv, n.d., p. 1.

during the years of very rapid price increase (1953-54),[14] real net savings fell by about 20 per cent, and real net transferable savings by 24 per cent. The efficacy of retirement savings as an anti-inflationary device was thus considerably impaired during these years, owing to increased dissaving by members. On the other hand, employers were able to defer their contributions, and thereby receive indirect loans from the funds; this undermined the transferable nature of net retirement savings.

THE COMPOSITION OF RETIREMENT SAVINGS

Not all of the saving effected through retirement funds is done directly by members. Some of it represents the excess of investment income over current operating expenses. In essence, this is saving for, rather than by, individuals. This assumes that the share of net income currently retained in undistributed profits or other reserve accounts will eventually be allocated to members' accounts.

In the provident and pension funds the problem posed by the build-up of general reserves has not been too serious, and for our purposes can be ignored. As Table 7-5 shows, 97 per cent of the increase in the net assets of these funds[15] between end-1952 and end-1961 was allocated to individual accounts; the build-up of general reserves and mutual welfare funds accounted for only 3 per cent of the increase.

TABLE 7-5. Net Accumulation in Member, Mutual Welfare and General Reserve Accounts: 1953-61

	Social insurance funds		Provident and pension funds	
	IL millions	Per cent	IL millions	Per cent
Increase in member accounts	161.6	81.1	360.7	96.9
Increase in mutual welfare funds	30.4	15.3	3.2	0.9
Increase in general reserve accounts*	7.2	3.6	8.2	2.2
Total increase in net assets**	199.2	100.0	372.1	100.0

* Including undistributed profits.

** Increase in total assets less increase in creditors account.

SOURCE: Calculated from Appendix Tables A-5 and A-6.

The situation differs materially in the social insurance funds. During the period, these funds accumulated IL 38 million in mutual and general reserve accounts; this represents 19 per cent of the total increase in their net assets. The build-up of reserve accounts can be traced to two principal sources: capital gains and fringe benefits. The social insurance funds did not during this period distribute realized capital gains to members' accounts; and employer contributions on behalf of fringe benefits exceeded the actual benefit payment to members in each of the years under study.

14 The decline in real gross savings in 1954 is illusory, since it reflects the introduction of national insurance in that year.

15 The increase in net assets is not identical with gross savings since the former includes realized capital gains.

Thus, despite the essentially transitory nature of fringe benefits, the policy of systematically accumulating a fraction of the contributions in reserve accounts justifies their inclusion in retirement savings. This argument is reinforced by the actuarial deficit which undoubtedly exists in these funds. The accumulation of funds in social welfare and general reserve accounts can well be regarded as the building up of additional pension reserves[16] designed to meet future discrepancies between pension payments and fund receipts.

A final question to be considered is whether the growth of retirement funds represents merely a reallocation of savings, or whether it is a net addition to current savings.[17] Given the existing data, it is impossible to provide a precise answer, but there are several considerations that favor the view that total personal savings have increased as a result of the rapid expansion of retirement funds.

Since saving through retirement funds is the result of a systematic channeling of a part of labor income into savings before it becomes part of disposable income, members may well disregard this pre-emptive saving when adjusting their savings pattern to changes in disposable income. In addition, most members are probably not aware of the share of net investment income added to their retirement fund accounts and allocated to personal income and savings in the national accounts.

The need for dissaving in emergencies is also likely to be reduced by benefits obtainable from welfare funds which have developed along with retirement funds. On the other hand, an increase in the amounts accumulated in retirement funds may be offset to the extent that it reduces the ability or willingness to save out of a given disposable income. However, it appears unlikely that this would be enough to completely offset the pre-emptive saving.

This conclusion is supported, to some extent, by a study of household saving responses.[18] The preliminary results of this study suggest that, on balance, retirement fund members tend to save more (including their retirement saving) than nonmembers in equivalent income and occupation groups, but that at least part of the retirement saving is offset by a reduction in other forms of voluntary saving. In the case of provident funds for the self-employed, the entire amount of provident fund savings appears to be a net addition to total savings. This is not surprising since such plans for the self-employed represent, in effect, voluntary rather than forced saving.

16 In effect, the indirect build-up of pension reserves has been greater than indicated by Table 7-5, since some of the members' accounts represent unclaimed savings, in the sense that many of the workers on whose behalf the accounts were built up are apparently unaware of their benefit claims on the funds.

17 For a discussion of this point with regard to the growth of pension plans in the United States, see George Garvy, "The Effect of Private Pension Plans on Personal Savings," Review of Economics and Statistics, XXXII (August 1950), 223-26; Victor L. Andrews, "The Supply of Loanable Funds from Non-Insured Corporate State and City Administered Employee Pension Trusts," The Journal of Finance, XVI (May 1961), 341-43; and Roger F. Murray, "The Impact of Pension Funds—Discussion," ibid., 355-59.

18 The rest of this paragraph is based on unpublished worksheets of the Bank of Israel's Research Department, who carried out the study in question.

Chapter 8

RETIREMENT FUND INVESTMENT

Retirement funds have become, and will undoubtedly remain, the financial giant of Israel's capital market. The importance of retirement funds to the economy, like that of most financial institutions, can be measured neither by the income originating in them, nor by their purchases of gross national product. They purchase little new equipment each year, and the wages and salaries they pay are a relatively minor element of personal income. Their economic importance lies in their receiving a large part of consumer savings and transferring this to other economic units to help finance capital formation.

THE PRINCIPLES OF RETIREMENT FUND INVESTMENT

Conceptually, the investment problem confronting retirement funds is well-defined and straightforward. Both provident and pension funds receive contributions from their members repayable under stipulated contractual conditions. In the case of provident funds, which operate on a full advanced funded basis, the sums accumulated during a member's employment are sufficient to meet his full benefit claim. As regards funds paying life pensions to members and their survivors, an actuarial problem arises, especially in view of the conditional nature of the pension claim (i.e., linkage to final basic salary and the cost-of-living allowance).[1] In both instances the funds are characterized by the relatively long period of accumulations that precedes benefit outlays. Given the growth of the economy over time, at least a substantial part of this accumulation will go on indefinitely.

Since the inflow to retirement funds can be expected to exceed the outflow substantially, a considerable increase in retirement reserves is in prospect. Moreover, the funds are not normally faced by sudden withdrawal demands, and can well afford to place greater emphasis upon prospective yield[2] including capital appreciation, and less upon short-run market value, than can other financial institutions.[3] The funds have little need for liquidity since even payment to leaving members fall due only six months after

1 See pp. 6–9 above.

2 Since in Israel approved retirement funds are fully exempt from taxation on their current and capital incomes, it is the pretax yield which is relevant. Safety of principal, which constitutes one of the traditional canons of pension fund investment, is of course one of the factors determining the prospective return on an investment portfolio.

3 For an interesting discussion of the importance of return in the formulation of pension fund investment policy, see Paul L. Howell, "A Re-examination of Pension Fund Investment Policies," The Journal of Finance, XIII (May 1958), 261-74.

termination of membership, and can readily be met out of the normal interim inflow. The size and regularity of the inflow also reduces to a bare minimum the need for cash reserves to meet operating expenses. Thus the very nature of the inflows and outflows through retirement funds makes them a potentially important source of long-term capital.

INVESTMENTS: 1953-1961

The regularity of the inflow to retirement funds creates the problem of finding a steady supply of investment outlets. Owing to serious inflation and the rudimentary character of the capital market, Israel's retirement funds were, in the early 1950s, often confronted with a shortage of investment opportunities offering a positive real return.[4] The problem was also considerably aggravated by the failure of many funds to adapt their own investment concepts to changing economic conditions; they were often limited by custom or policy to certain forms of investment, e.g., to fixed-interest bearing securities or loans.[5]

TABLE 8-1. Composition of Retirement Fund* Assets: 1952, 1954, 1957 and 1961

(per cent)

	1952	1954	1957	1961
Cash and current account	6.6	3.9	1.9	1.5
Investment	56.5	52.2	59.8	70.6
Time deposits	16.8	18.9	12.5	4.0
'Special' deposits	-	-	-	15.1
Deposits in and loans through the Gmul Investment Company	12.2	15.1	16.7	- **
Securities	11.5	7.1	18.9	46.6
Loans to enterprises and institutions	8.0	4.9	7.5	1.4
Real estate	8.0	6.2	4.2	3.5
Loans to members	15.0	21.9	20.0	16.1
Employer debts	18.4	17.5	15.6	9.8
Other Assets	3.5	4.5	2.7	2.0
Total Assets	100.0	100.0	100.0	100.0
Total Assets (IL millions)	50.1	100.4	243.4	638.7

* See note † to Table 5-2.

** In 1961 retirement fund investment in Gmul is included in time deposits and special deposits.

SOURCE: Appendix Table A-1.

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4 See Chapter 9, pp. 94, 96 below.

5 As late as 1948, the funds were still being advised to eschew investment in common stocks and real estate. See, for example, E.S. Hoofien, "Provident Fund Investments and the Palestinian Economy," in Provident and Pension Funds in Palestine, Audit Union for Provident and Pension Funds, Tel Aviv, 1948, pp. 9-14 (Hebrew).

Table 8-1 sets out the asset structure of retirement funds at the end of 1952, 1954, 1957 and 1961. While all assets represent the use of retirement fund resources, four items (cash and current deposits, loans to members, employer debts, and miscellaneous assets) are not included in investments. Cash and demand deposits and miscellaneous assets have been excluded because they are not primarily held as earning assets. The exclusion of employer debts and member loans, however, demands further explanation.

Employer debts result from the lag in the transfer of contributions to the funds, and are not usually an outcome of investment policy: the funds themselves generally exercise little or no control over this item. Moreover, an examination of individual cases revealed that little or no compensation was received from employers in the form of interest.[6]

The case for excluding loans to members appears to be less straightforward. Fund managements did exercise a degree of discretion over the granting of such loans, and interest was typically charged on them. But income was not a significant factor in the decision to grant the loans: with few exceptions, the rates of interest charged (4 to 6 per cent) were considerably below the rates obtaining in the open market.[7]

The actual investment portfolio of retirement funds can be divided into four broad classes: time deposits in banks and financial institutions, securities, private placements, and real estate. Before 1958, time deposits in the Gmul Investment Company are accorded separate treatment, since unlike bank deposits, a significant proportion of the funds' deposits in Gmul were linked to various cost indexes. This differentiation disappeared after the 1957 Tax Regulations came into effect, and deposits in Gmul are included under the general headings of time or special deposits from 1958 onwards.

Since the asset structure of retirement funds at any particular point in time reflects the cumulative effect of past investments, the changing pattern of investment can more clearly be discerned by examining the changes in assets. Table 8-2 sets out the net changes in retirement fund assets between the end of 1952 and the end of 1961. Three periods are distinguished: 1953 and 1954 — years of open inflation; 1955 through 1957—a period representing a dampening of inflationary pressures; and 1958 through 1961—when retirement fund investment was subject to an increasing degree of government regulation.

1953-1954: Between the end of 1952 and the end of 1954, retirement fund assets increased by IL 50 million, thus doubling their assets during the two years. This rapid increase reflects the inflation,[8] and the resulting rise in nominal wages, of the period. A marked trend during these years was the low porportion of investments: less than half of the increment to total assets was invested during those years. While almost 17 per cent of the incremental flow is accounted for by the increase in employer indebtedness to the funds, the most prominent feature of the period is the fact that almost 29 per cent of the asset increment went to augment loans to members.

6 In 1952, for example, 240 funds reported no income on the employer debts listed in their balance sheets. Cf. also S. Raif, "Shifts in the Investments of the Funds," in Investment Problems of Provident, Pension and Severance Pay Funds, Savings Authority, Jerusalem, 1959, p.26 (Hebrew).

7 The underpricing of loans to members came to an end in 1963, when the funds were instructed by the Treasury to link them to the CPI.

8 In constant December 1952 prices, total retirement fund assets rose by IL 28 million during the two years.

TABLE 8-2. The Change in Retirement Fund Assets: 1953-54, 1955-57 and 1958-61 *

(per cent)

	1953-54			1955-57			1958-61		
	Total retirement funds	Social insurance funds	Provident funds	Total retirement funds	Social insurance funds	Provident funds	Total retirement funds	Social insurance funds	Provident funds
Cash and current account	1.2	0.6	1.5	0.5	1.0	0.2	1.2	0.1	1.9
Investments	47.9	55.8	43.8	65.2	62.7	66.5	77.2	73.5	79.4
Time deposits	21.0	32.6	15.1	8.1	8.3	8.1	-1.2	-3.4	-0.1
'Special' deposits	-	-	-	-	-	-	24.3	22.2	25.6
Deposits in and loans through the Gmul Investment Company	18.1	11.6	21.5	17.8	19.8	16.7	-10.3**	-9.2**	-10.9**
Securities	2.6	-1.2	4.5	27.1	22.9	29.3	63.7	57.5	67.5
Loands to enterprises and institutions	1.8	5.2	–	9.3	7.4	10.3	-2.4	-0.7	-3.4
Real estate	4.4	7.6	2.7	2.9	4.3	2.1	3.1	7.1	0.7
Loans to members	28.8	14.5	36.3	18.6	9.3	23.4	13.8	11.7	15.0
Employer debts	16.7	24.4	12.7	14.2	24.7	8.8	6.3	13.4	2.0
Other assets	5.4	4.7	5.7	1.5	2.3	1.0	1.5	1.3	1.8
Total assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total assets (IL millions)	50.3	17.2	33.1	143.0	48.5	94.5	395.3	147.3	248.0

* Figures may not add to 100 owing to rounding.

** See note * to Table 9-1.

SOURCE: Calculated from Appendix Tables A-1, A-2 and A-3.

The low proportion of investment was also accompanied by a marked change in the composition of investments. Time deposits with banks became the most popular form of retirement fund investment. Since such deposits earned a negative real return during these years, their popularity may reflect the existence of 'third-party' loan deposits. Such deposits represent indirect loans to members or to employers rather than bank deposits as such, and holding them was not inconsistent with a sharply rising price level. Moreover, many funds favored time deposits because of their lack of familiarity with other forms of investment, or for lack of suitable alternatives. This is also apparent from the fact that less than 3 per cent of the increment to assets was invested in securities. Since retirement funds traditionally invested much higher proportions in securities, the low proportion of portfolio investment during 1953 and 1954 reflects the failure of the securities market to offer investment opportunities with a hedge against inflation. The relatively high proportion of placements in Gmul (18 per cent of the increment to assets) reflects the partial linking which this company was able to offer.

Since real estate is usually considered a prime inflation-proof investment, the failure of the funds to invest in it more heavily during a period of very rapid price increase also requires explanation; the more so as the bulk of the investment in real estate represents the acquisition of office space by the social insurance funds rather than the conscious investment in real property. The provident funds, taken alone, invested less than 3 per cent of the increment to their total assets in real estate during 1953 and 1954.

Three factors help to explain the failure of the funds to shift to real property during this period (and later, for that matter). First, it may be assumed that many funds rejected such investment purely on ideological grounds; land speculation has traditionally been a target for attack by the Histadrut and other labor organizations. The second consideration stems from the nature of fund benefit payments at this time. In the absence of current revaluation of assets, members leaving the funds did not share in the capital appreciation of real estate holdings. Finally, owing to government rent controls, investment in income yielding rental properties was difficult, and in any case most funds lacked the managerial skills and facilities needed to administer them.

The flight from financial assets, which characterized fund investments during 1953 and 1954, took the form of increased member loans. This is readily understandable considering the inflationary background. Prices, as measured by the CPI rose by 28 per cent during these years. It should also be recalled, that the Index had already doubled between December 1950 and December 1952,[9] and that this drastic fall in the internal purchasing power of the pound was accompanied by a devaluation of its external value in February 1952. In fact, given the magnitude of the inflationary pressures, the expectations of further price increases which they undoubtedly engendered and the lack of alternative investment opportunities, one would have expected an even greater share of the funds' resources to be shunted to members to finance the acquisition of housing and other durable goods.

9 Since price controls were in effect during this period, and the CPI did not reflect the free market prices for many items, the decline in purchasing power is understated.

If the social insurance funds are segregated from the provident funds, a clearer picture emerges. In the provident funds, the increase in member loans accounted for over one third of the increment in assets, while the partial linkage offered by Gmul attracted an additional 21 per cent of the increment. In the social insurance funds, the increase in member loans was held to less than 15 per cent of the increment to total assets; this reflects the separation of management and membership in these funds. Employer debts, on the other hand, accounted for almost one quarter of the incremental flow; this reflects the fact that a substantial part of these indirect loans went to firms of the Histadrut sector. The same can be said for the 33 per cent of the increment represented by the increase in time deposits. These deposits were often placed with financial institutions within the Histadrut sector, and were ultimately used to finance Histadrut-owned companies and institutions. Thus, during this period the investment policies of both the provident and social insurance funds were marked by a relative absence of money illusion; the differences in their reaction to inflation reflecting structural differences among the funds more than a failure to react to the rising price level.

1955-1957: From the end of 1954 to the end of 1957 inflationary pressures declined and prices rose by only 15 per cent over the three years. Although this hardly constitutes price stability, it does represent a substantial improvement over the preceding years. But from the viewpoint of retirement funds, the most far-reaching change during these years took place in the domestic capital market. Index-linked bonds were introduced in 1955, and dollar-linked debentures were also issued after a lapse of several years. From 1955, a supply of investments offering a substantial hedge against inflation became generally available to the public.

The retirement funds responded promptly to the changed economic and financial environment. During this period 65 per cent of the increment to assets was invested, compared with only 48 per cent for the preceding years. This increase in investment is, of course, the obverse of the decline in the leakages out of savings, the reduction in the share of increment going to member loans being particularly noteworthy.

Perhaps the most striking feature was the change in the structure of investments. During this period 27 per cent of the asset increment was invested in securities compared with less than 3 per cent during 1953-54. This shift to securities (mostly linked bonds), was largely at the expense of time deposits, which accounted for only 8 per cent of the asset increment. The decline in the popularity of time deposits as an investment medium was particularly strong in the social insurance funds. It should be recalled in this context that the partial conversion of these funds to pension benefits during these same years enhanced the need for linking investments. As a result, 43 per cent of the increment to social insurance fund assets was invested in securities or in Gmul, investments that were almost invariably linked either to the CPI or to the exchange rate for the US dollar.

Another factor which may affect an individual fund's investment policy is its sector affiliation. Table 8-3 sets out the percentage distribution of asset changes between end-1953 and end-1957, by sector, for 303 provident and pension funds which had commenced operations before 1953 and were still active at the end of 1957.

TABLE 8-3. The Change in Veteran Provident Fund* Assets by Sector Affiliation:** 1954-57

(per cent)

	Total funds	Public***	Histadrut	Cooperative	Private	Sector not known
Cash and current account	-0.5	-0.3	-0.4	-3.9	0.2	3.8
Investments	58.1	50.9	66.1	51.1	58.9	60.4
Time deposits	10.4	2.7	17.7	14.9	8.6	0.7
Deposits in and loans through the Gmul Investment Company	15.0	11.6	24.7	12.3	8.8	6.7
Securities	24.5	28.3	16.7	18.0	30.8	53.0
Loans to enterprises and institutions	4.2	2.9	6.6	-	4.6	-
Real estate	4.0	5.4	0.4	5.9	6.1	-
Loans to members	33.7	39.0	26.8	44.1	32.1	33.5
Employer debts	7.3	8.5	6.8	7.2	7.0	1.0
Other assets	1.4	1.9	0.7	1.5	1.8	1.3
Total assets	100.0	100.0	100.0	100.0	100.0	100.0
Total assets (IL millions)	63.9	18.4	20.4	6.6	17.8	0.7

* Includes 303 provident and pension funds which presented financial statements in both 1953 and 1957. The social insurance funds are excluded.

** Funds are classified by the sector affiliation of the employing firms.

*** Government and national institutions.

SOURCE: Aggregated from funds' financial statements.

Here again, variations in the pattern of investment can be traced to the differential impact of member loans. As might be expected, funds affiliated to cooperatives tended to devote a larger proportion of the increase in their resources to member loans. The lowest proportion of such loans is found in the Histadrut sector; the funds of this sector directed a relatively larger proportion of their net receipts to Gmul and to time deposits in banks. This reflects the tendency of these funds to invest their resources within the Histadrut sector. Funds affiliated to firms of the public and private sectors favored investment in securities.

1958-1961: The discretionary investment of retirement funds was greatly reduced when the Tax Regulations were issued in the summer of 1957. From 1958, the funds were subjected to an increasing degree of government control, and the effects of this regulation can be discerned in the radically changed pattern of investment. During the period, 77 per cent of the increment to retirement fund assets was invested. Particularly striking was the increased tempo of investment in securities, the net increase in the securities portfolio accounting for 64 per cent of the increment to total assets. By the end of 1961, almost half of total retirement fund assets was invested in securities, and an additional 15 per cent in the special deposits created under the Regulations. The shift to securities reflects a reduction in the proportion of investment in all classes of deposits with banks and other financial institutions (including Gmul), as well as an actual switch out of private placements. The latter declined in absolute terms during the period, since loans granted directly to enterprises and institutions after 1957 were not considered recognized investments under the new Regulations.

Care should be exercised in interpreting these figures, especially with respect to the increased investment in securities. Between the end of 1957 and the end of 1960, retirement fund investments in special deposits exceeded the net purchase of securities. This is not surprising since the special deposits, created under the Regulations, were in effect close substitutes for linked bonds, offering roughly comparable interest and linkage terms. In fact, towards the end of the period the $6\frac{1}{2}$ per cent interest paid on them actually exceeded the yields available on new bond issues; and since the deposits were of short duration (typically 3 years), their lack of marketability was not a serious drawback. On the contrary, given the usual expectation that the effective rate of interest on dollar-linked obligations would rise sharply after a devaluation, the short maturities of the deposits were a desirable feature to more sophisticated investors. The popularity of special deposits also indicates that before 1961 they were the principal vehicle for transferring retirement savings to investment in the Histadrut sector.[10]

A significant part of the increase in securities holdings reflects the conversion of special deposits in Histadrut-owned financial institutions to debentures, issued for this purpose, by the same (or closely related) institutions after the deposits were removed from the list of recognized investments in 1961. It should also be noted that a marked trend to securities is already discernible before the appearance of the Tax Regulations. This was a response to the reduction in inflationary pressures, and the appearance, on a large scale, of linked bonds. The funds' increasing need for linkage, following the transition to pension benefits during the second half of the 1950s, also raises a question as to how far the Regulations actually changed the pattern of retirement fund investment.

The true impact of the Regulations is probably better reflected in the increase in overall investment, i. e., the rise in the proportion of the asset increment going to investments. This reflects the drop in the share of resources devoted to member loans and employer debts after 1957.[11]

10 This is reflected in the agreement between the Ministry of Finance and the Histadrut's two primary financial institutions. In accordance with the agreement, 50 per cent of the special deposits were to be granted as loans, presumably within the Histadrut sector, and the remaining half invested in approved securities. In practice these deposits appear to have been used almost exclusively to grant loans; the offsetting 50 per cent being made up of bonds sold directly to the funds themselves. This interpretation of the agreement, and the fact that private commercial banks were required to receive separate approval for each loan granted out of special deposits, led to the abolition of the special deposits at the beginning of 1961.

11 The situation was reversed in the social insurance funds, and the share of member loans in total assets rose during the period. In this case, the relatively high ceiling imposed by the Regulations on loans may have weakened the ability of fund managements to resist members' demands.

Although the decline in the rate of increase of member loans can in part be attributed to changing economic conditions, the sharp fall in the proportion of employer debts is a direct and important result of the Regulations; government intervention was undoubtedly necessary in this sphere, since the funds were apparently unable to bring sufficient pressure to bear on the employing firms.

THE DEVELOPMENT OF THE CAPITAL MARKET [12]

While both inflation and direct government regulation have influenced the flow of retirement fund investment, the investment policies of the funds cannot be fully comprehended without considering the structure of Israel's capital market. This is particularly important since the decade under study was marked not only by the emergence of the funds as the country's largest financial institution, but also by the creation of a broad public market for securities.

The existence of an organized securities market is a recent phenomenon in Israel: for all practical purposes there was no such market before 1933, when a large immigration of German Jews took place following the rise of Hitler to power. In 1935 the Tel Aviv Securities Clearing House was established [13] and daily trading commenced on a modest scale. The market remained narrow and the volume of transactions small, with a marked preference for fixed-interest bearing securities. The closing years of the second world war witnessed a sharp expansion of activity in the local capital market, and by the end of 1946, the total market value of the securities listed with the Tel Aviv Securities Clearing House reached LP 16.5 million.[14]

The degree of inflation permitted to exist in Israel during the first five years of statehood was hardly conducive to the raising of capital by means of fixed-interest bearing securities, and the diversion of purchasing power from the public by conventional means became increasingly difficult. New government issues declined sharply during the period and by 1954 the market for government bonds was at a virtual standstill. The progressive decline and final collapse of the market for government bonds plainly reflects the inflationary character of the period. The extent of the impact of inflation on the private capital market can best be gauged from the fact that from 1950 to 1954 no long-term conventional bond issues were floated by Israeli corporations, nor were there any public issues of conventional preference shares.

Despite this, new corporate securities totalling IL 7.8 million were floated during 1950-54;[15] of these, IL 3.3 million were ordinary shares, while IL 2.3 million were debentures carrying conversion rights to common stock. Since convertible bonds are probably better considered equity rather

12 For a more detailed survey of the development of the domestic capital market see M. Sarnat, The Development of the Securities Market in Israel, List Institute, Basle, in press.

13 In 1953, the Clearing House was formally reorganized and the present Tel Aviv Stock Exchange was founded.

14 Anglo-Palestine Bank Ltd, Handbook of Palestinian Securities, Tel Aviv, 1947.

15 Aggregated from Official Stock Exchange Yearbook 1955-56, Jerusalem, 1956; Israel Companies and Cooperative Societies Yearbook 1953, Jerusalem, 1953; and Israel Economist Annuals.

than debt capital,[16] new equity financing accounted for over 70 per cent of the nominal value of new issues.

The shift to equity financing, however, was short-lived. New issues of ordinary shares tapered off after 1952, and only one issue was placed in 1953-54. The next issues did not take place until 1956, when two oil companies offered a total of IL 700 thousand in shares to the public,[17] and it was not until the revival of the stock market in 1959 that another issue of common stock was successfully floated in the market.[18]

The inability of the capital market to meet the challenge of inflation by conventional means led to the introduction of a new investment medium: value-linked bonds. With the possible exception of Finland, no country has experimented with value-linked investment on a more comprehensive scale than Israel. But perhaps the most striking feature of the creation of a market for value-linked loans in Israel is not its scope, but the fact that the introduction of linked investments was not the responsibility of government alone. To a significant degree, the emergence of such debt contracts in the first half of the 1950s reflects the initiative taken by other sectors of the economy.

Before 1955, the government floated several dollar-linked bond issues. However, with the possible exception of the dollar-linked savings bonds issued in 1951 none of these flotations can be interpreted as primarily reflecting a conscious policy decision to use value linkage as a means of promoting investment in securities.[19] But even here, an equivocal attitude towards value linkage is evidenced by the government's refusal to apply the IL 1.00/$1.00 rate to its linked obligations after the 1952 devaluation.

The first issue of linked bonds by a corporation in Israel was that of the Israel Land Development Company in 1951; these bonds were convertible to common stock or to land. This was followed by a series of bond issues of the Nesher Cement Company starting in 1952. These bonds are of considerable interest since they constitute the first attempt at price linkage in Israel, in this case not to a general index, but to the price of a specific commodity. Nesher, which is jointly owned by the Histadrut and the Palestine Central Trade and Investment Company, linked both the principal and interest of these bonds to the official price of cement.[20] Again at the

16 For a justification of this view, see J.C. Pilcher, Raising Capital With Convertible Securities, University of Michigan, Ann Arbor, 1955.

17 Both of these issues failed: one in the sense that its market price soon dropped below the subscription price, while the second was from the outset not fully subscribed.

18 See p. 74 below.

19 The linking of other issues to the dollar reflected special circumstances:
(a) the dollar-linked National Loan was issued on the eve of statehood before the decision as to the new State's monetary unit had been taken. (b) Tavei-dollar bonds were issued as compensation to citizens whose foreign securities were requisitioned by the government, or to the former holders of the Palestine Electric Corporation's common stock at the time of the government's purchase of that company. See M. Sarnat, op. cit., Chapter 3.

20 The coupons of one of these series also entitled their holders to purchase cement, not subject to official price control, at a fixed price; see "Purchasing Power Guaranteed Securities in Israel," Bank of Israel, Bulletin No. 3 (July 1956), 26.

begining of 1955, the linkage of real estate was tried by two companies,[21] and the issues were readily absorbed in an otherwise dull market.

In 1955 came a major turning point in the government's attitude towards value linkage. In the summer of 1955 the Palestine Electric Corporation (by then a government company) floated an IL 10 million issue of $6\frac{1}{2}$ per cent linked debentures, fully guaranteed by the State. This issue was the forerunner of a spate of linked bond issues which in less than five years reshaped the structure of Israel's securities market. The terms of this issue were very attractive compared with what had previously been available in the market; they earned a relatively high rate of nominal interest and, owing to tax concessions, the net interest rate to investors in high marginal tax brackets represented an even more substantial increase over previous issues. But, without doubt, the linking option offered was the most important feature of the new bonds: bondholders had the option of linking principal and interest payments either to the CPI or to the official exchange rate for the US dollar.[22]

In effect, the Electric Corporation issue marks the first widespread use of index linkage in Israel, and its terms set the general pattern for linked bond flotations until the end of 1959 when the 'pure' dollar-linkage option was discontinued.[23] From the end of 1959 to the devaluation of the pound in February 1962, investors had the choice between pure index linkage or mixed dollar-index linkage on a fifty-fifty basis, although some dollar-linked bonds were issued to special classes of investors. After the 1962 devaluation, dollar linkage was discontinued in Israel, not only for bonds, but for other classes of deferred payments as well.

Value linkage played a crucial part in the expansion of the bond market after 1954. From 1955 to 1961 gross new issues of bonds totalled IL 589 million, IL 502 million of which were linked either to the dollar exchange rate or to the CPI (Table 8-4). Linked bonds comprised 85 per cent of the total volume of all gross bond issues during this period, and the share of linkage in long-term issues was even greater. If we eliminate the 5-year unlinked Housing Loan savings bonds[24] (redeemable at a reduced interest rate after six months) and the government's short-term 91 and 182 day loans,[25] the share of linked issues in the total volume of long-term bond

21 Mehadrin Ltd issued IL 250 thousand worth of bonds convertible into ordinary shares or citrus orchards; and 'Isras' Israel Rassco Investment Company floated an IL 220 thousand issue of convertible bonds which had the additional option of allowing the bondholders to purchase apartments in 1957/58, at prices fixed in advance.

22 The linkage, in both cases, contained a 'floor clause', i.e., if the official exchange rate for the dollar were to fall below the base rate (IL 1.80/ 1.00), or the CPI below the base rate of 233 points, the full nominal value of interest and capital would be paid.

23 Except for minor variations in interest rates and maturity dates (and of course the above-mentioned change in linkage terms), linked bonds have been a homogeneous debt instrument.

24 The Housing Loan saving bonds were issued from the end of 1957, principally to recipients of German restitution payments, who were entitled to receive a 20 per cent premium when selling foreign currency to the Treasury. The premium via bonds was employed to preserve the official rate of exchange: after the 1962 devaluation premium payments were discontinued.

25 The sale of short-term loans began in 1960 and increased sharply in 1962 and 1963 after devaluation. In the two years the net increase in these short-term bonds totalled IL 184 million. In 1963 the maturities offered were lengthened to 182, 364 and 546 days. See Bank of Israel, Annual Report 1963, p. 443.

issues rises to 97 per cent! The remaining 3 per cent represents the sale of small amounts of unlinked lottery bonds. From 1955, the market for bonds in Israel has been primarily a market for value-linked long-term debentures and short-term unlinked issues.

TABLE 8-4. Gross New Domestic Issues of Bonds:* 1955-61

(IL millions)

	Total bond issues	Linked bond issues	Linked as per cent of total
1955	12	10	83
1956	44	42	95
1957	61	59	97
1958	79	55	70
1959	137	122	89
1960	79	57	72
1961	177	157	89
Total 1955-61	589	502	85

* At par value.

SOURCE: Aggregated from Annual Reports of the Bank of Israel.

In April 1959 the stock market turned round, and after a five-year decline prices of ordinary shares began to rise.[26] New issues also accelerated greatly after 1959, and 34 common stock issues were floated in the market in 1960 and 1961. After a decline in 1962, the market absorbed an unprecedented 41 issues in 1963. Over the entire 1959-63 period, 90 issues of common stock were placed in the domestic market, totalling more than IL 250 million at issue price (see Table 8-5). In order to put these figures into historical perspective, it should be noted that only eleven new issues of common stock, totalling slightly more than IL 3 million, were floated from

TABLE 8-5. Number and Volume of Domestic Public Issues of Ordinary Shares:* 1959-63

	Number of issues		Volume at issue price	
	Absolute	Per cent	IL millions	Per cent
1959	3	3	2.0	1
1960	14	16	20.5	8
1961	20	22	47.2	17
1962	12	13	33.9	12
1963	41	46	169.6	62
Total 1959-63	90	100	273.2	100

* Listed shares only.

SOURCE: Compiled from approval certificates on file at the Ministry of Finance.

26 For an analysis of the factors influencing this revival of the stock market, see M. Sarnat, loc. cit.

1950 to 1954, while from 1955 to 1958 the market was, for all practical purposes, dormant.

The salient feature of the revival of the new issue market is the magnitude of new issues in 1963. Almost half of all of the issues offered to the public during 1959-63 were floated in 1963, and they account for more than 60 per cent of the total volume of capital raised during the period. The IL 170 million of new equity capital raised in 1963 marks the shift of the securities market's center of gravity from bonds to common stock.

The development of the securities market is summarized in Table 8-6 which compares new issues of securities with gross domestic fixed capital formation in 1950-63. Although new issues for 1950-54 are overstated since they are given gross of redemptions, the average level of new issues relative to capital formation (9 per cent) was clearly much higher in 1950-51 than during the following seven years, even if redemptions could be deducted. This relatively high ratio of securities issues reflects the government's ability to float new bond issues during these years, as well as a relatively high level of activity in the new issue market for corporate securities.

TABLE 8-6. Net New Issues of Securities and Gross Domestic Fixed Capital Formation: 1950-63

(IL millions)

	Net* new issues of securities (1)	Gross domestic fixed capital formation (2)	Net new issues as per cent of capital formation (1) ÷ (2) (3)
1950	12	139	8.6
1951	21	226	9.3
1952	6	327	2.1
1953	6	376	1.6
1954	5	480	1.3
1955	9	637	1.4
1956	40	701	5.7
1957	49	870	5.6
1958	44	941	4.7
1959	100	1,036	9.7
1960	57	1,124	5.4
1961	177	1,466	12.1
1962	229	1,974	11.3
1963	447	2,126	21.0

* For 1950-54, gross issues.

SOURCES: Column (1)—Aggregated from Bank of Israel, Annual Reports; Israel Economist Annuals; and Official Stock Exchange Yearbooks. Column (2)—CBS, Abstract 1964, No. 15, pp. 146-47

The steep fall in the ratio of new securities issues to total capital formation in 1952-55 resulted from the inability of the securities market to cope with the magnitude of inflation which characterized this period. These were the years before index linkage was introduced in the securities market; the first issue of index-linked bonds did not take place until the summer of 1955. The very low ratio of new issues to capital formation during the period accurately reflects the stagnation of the securities market throughout almost all of these four years.

During the next four years, 1956-59, the ratio of new securities issues to capital formation rose, and averaged slightly less than $6\frac{1}{2}$ per cent. If we allow for the upward bias in the figures for new issues in the early 1950s, this amounts to a return to the relative level of 1950-51.[27] The recovery of the new issue market in real terms, i. e., relative to capital formation, reflects the introduction of value-linked securities on a large scale during this period. The sharp rise in both new issues and the ratio of new issues to capital formation in 1959 resulted from the increased demand for dollar-linked bonds, perhaps as a result of speculation regarding a possible devaluation of the pound following the general elections.

The next period, from 1960 to 1963, coincides with the resurgence of the new issue market for common stock. After a temporary setback in 1960 the ratio of new issues to capital formation reached 12 per cent in 1961 and 11 per cent in 1962. In 1963, under the impact of a sharp rise in equity issues the ratio almost doubled, and new securities accounted for 21 per cent of gross capital formation.[28]

RETIREMENT FUNDS AND THE CAPITAL MARKET

The breakdown of retirement fund security holdings at the end of 1953, 1957 and 1960 is given in Table 8-7. At the end of 1953, the funds' portfolio of IL 6.8 million comprised 6 per cent of the nominal value of all securities listed on the Tel Aviv Stock Exchange. By the end of 1957 the funds' portfolio of bonds and shares reached IL 46 million, and comprised 21 per cent of the nominal value of all listed securities, with the proportion rising to 39 per cent at the end of 1960.[29]

Retirement funds appear to have always favored investment in fixed-interest bearing securities—bonds constituted 88 per cent of their security holdings even in 1953. Since then their securities investments have been dominated by bonds, which exceeded 95 per cent of the portfolio in both 1957 and 1960.

Table 8-8 sets out the percentage composition of the funds' net investment in bonds both before and after the issue of the Treasury Regulations. No significant differences can be discerned in the pattern of bond purchases; the funds purchased mostly public sector bonds, both before and after the government's intervention. In this context, no real importance attaches to the distinction between the government and national institutions, and public sector companies, since the bonds of the latter were guaranteed by the government or by the national institutions and offered the same terms as government bonds.

27 Since all figures are in current prices, changes in absolute level reflect the secular rise in the price level; only the ratio should be considered when evaluating changes over time.

28 The ratio was 13 per cent in 1964. This reflects the decline in new equity issues following the slump in the stock market.

29 The nominal value of listed securities at the end of 1953 was IL 114 million; see Tel Aviv Stock Exchange, First Bi-Annual Report, 1954-55, Tel Aviv, n.d., p. 1.
At the end of 1957, total nominal value of listed securities was IL 219 million, and at the end of 1960, IL 444 million; see Bank of Israel, Annual Report 1960, Table XXI-1, p. 376.

TABLE 8-7. Retirement Fund Securities Portfolio: 1953, 1957 and 1960

(per cent)

	1953	1957	1960
Bonds			
Government and national institutions	51.5	60.8	50.4
Public enterprises	2.4	12.8	23.8
Histadrut enterprises and institutions	20.1	13.3	12.1
Private enterprises	11.2	3.7	8.1
Unspecified	2.7	5.4	0.9
Total bonds	87.9	96.0	95.3
Shares			
Public enterprises	4.8	0.3	1.5
Histadrut enterprises and institutions	2.9	1.5	2.3
Private enterprises	3.9	2.2	0.2
Unspecified	0.5	-	0.7
Total shares	12.1	4.0	4.7
Total securities	100.0	100.0	100.0
Total securities (IL millions)*	6.8	45.9	171.0

* End of year book value.

SOURCE: Appendix Table A-10.

TABLE 8-8. Net change in Retirement Fund Bond Holdings: 1954-57 and 1958-60

(per cent)

	1954-57	1958-60
Government and national institutions	64	49
Public enterprises	16	29
Histadrut enterprises and institutions	12	12
Private enterprises	2	10
Unspecified	6	-
Total	100	100
Total (IL millions)*	38.0	118.8

* Book value.

SOURCE: Calculated from Table 8-7.

Some idea of the impact of the funds upon the capital market can be gained from Table 8-9, which relates the net portfolio investment of retirement funds to net new issues of securities during the periods 1954-57 and 1958-60. It is apparent that by 1957 the funds had already become an important, if not the most important, single factor in the domestic securities market. During 1954-57, the increase in retirement fund bond holdings comprised 38 per cent of total net new bond issues.[30]

TABLE 8-9. Net Change in Retirement Fund Securities Holdings and New Issues of Securities: 1954-57 and 1958-60

(IL millions)

	1954-57	1958-60
1. Increase in retirement fund bond holdings	38.1	118.8
2. Increase in retirement fund holdings of shares	1.0	6.3
3. Increase in retirement fund securities holdings	39.1	125.1
4. New issues of bonds (net)	100.0	177.5
5. New issues of shares	1.2	26.5
6. New issues of securities (net)	101.2*	204.0
7. Line 1. as per cent of line 4.	38	67
8. Line 2. as per cent of line 5.	83	24
9. Line 3. as per cent of line 6.	39	61

* Includes unsegregable redemptions.

SOURCES: Line 1.—Table 8-8.
Lines 2, and 3—Appendix Table A-10.
Lines 4., 5., and 6.—1954-57 aggregated from Tel Aviv Stock Exchange, Annual Reports and Official Israel Stock Exchange Yearbook 1955-56, Jerusalem, 1956; and Bank Leumi Le-Israel, Israel Companies and Cooperative Societies Yearbook 1953, Jerusalem.
1958/60 aggregated from Bank of Israel, Annual Reports.

The most surprising feature of this period relates to the funds' net investment in equities. The modest increase in fund holdings of shares (IL 1 million compared with IL 38 million of bonds) during these years was equivalent to over 80 per cent of total new share issues on the Tel Aviv Stock Exchange. Two factors help to explain the weight of fund activities in the equity market. First, a significant portion of their net investment in shares took the form of purchases of unlisted securities—principally the acquisition of the common stock of the Gmul Investment Company. The more important consideration, however, relates to the stock market itself. The years 1954-57 mark a period of prolonged depression in the market and the almost complete cessation of new issues. Under these conditions even small increases in investment loom large. It is noteworthy that no switch out of equities into bonds took place during these years; the increase in fund bond purchases reflected a channeling of a high proportion of new money into bonds. Thus the change in fund investment policy, characterized by a preference for linked bonds, did not directly exert pressure on the equity market.[31]

30 Not including compulsory loans. The figure understates the weight of the funds, since the estimate of net new issues has an upward bias owing to difficulties in identifying bond redemptions before 1957.

31 Since data on retirement fund acquisitions of shares before 1953 are not available, it is impossible to estimate the indirect effect that a possible reduction in the rate of stock purchases may have had during the period in question.

During the following three years (1958-60), the funds greatly accelerated their securities purchases. Since securities approved under the Tax Regulations consisted largely of new issues of linked bonds, and retirement funds were required to invest 65 per cent (and later 75 per cent) of their net receipts in approved securities or special deposits, it is not surprising that the relative importance of the funds in the bond market should have materially increased during this period. This is brought out in Table 8-9 which indicates that the net investment in bonds by the funds comprised 67 per cent of total net new bond issues during these years. At the beginning of 1961 the special deposits were taken off the approved list and converted into bonds as they matured; the share of retirement funds in new bond issues appears to have risen substantially since then. In fact the data available for 1961 suggest that the funds may have taken up as much as 90 per cent of the net new bond issues in that year.[32]

As was true of the preceding period, the magnitude of retirement fund investment in equities relative to the total new issues of shares during 1958-60 requires special interpretation. Here again the acquisition by the funds of the unlisted shares of Gmul accounts for much, possibly half, of their net investment in shares. Moreover, during this period the funds purchased a large block of the shares issued by the Electric Corporation since this issue was included in the list of approved securities.[33] Allowing for these factors, the funds' modest acquisitions of other listed shares after 1957 had a much weaker impact on the equity market than the data of Table 8-9 might suggest.

The absence of any marked trend to equities stands in sharp contrast to the investment practice of pension funds in other countries. Largely under the influence of inflation, pension funds in the United States and Great Britain, for example, have significantly shifted their investments in the direction of common stock.[34] In 1957 US pension funds invested 36 per cent of their net receipts in common stock,[35] while in the same year British superannuation and pension funds directed 37 per cent of the net addition to their assets to common stock.[36] Even if we eliminate the influence of member loans and employer debts as being peculiar to Israel, no similar trend can be discerned: between 1954 and 1957, net investment in equities comprised only one per cent of retirement fund total net investment. It should be recalled in this context that inflationary pressures in Israel were certainly much stronger than in either the United States or Great Britain.

32 The comparison for a single year is difficult since many funds date their financial statements March rather than December. Thus part of the increase in bond portfolios in, say, 1961, represents acquisitions made during the first quarter of 1962. As the period studied is lengthened the distorting effects of this differential dating are mitigated. During the first quarter of 1962, moreover, the pound was devalued, and some of the increase in bond holdings may represent capital gains on dollar-linked bonds.

33 The increase in retirement fund holdings of equities since 1960 can also be traced to their acquisition of other issues which were included in the Treasury list. For example, the funds acquired about IL 4 million of the Dead Sea Works issue in 1961.

34 For the United States, see Eugene Miller, "Trends in Private Pension Funds," The Journal of Finance, XVI (May 1961) 313-28; for Great Britain, see Radcliffe Report, p. 89.

35 Eugene Miller, op. cit., p. 323.

36 Radcliffe Report, loc. cit.

The contribution of retirement funds to the development of the capital market was not limited to the essentially passive role of acting as its chief customer. A significant role in the transition to value-linked investment during the first half of the 1950s was played by retirement funds. By their very nature, provident and pension funds, designed to serve as depositories for their members' retirement savings, were very sensitive to inflation, and the conversion, in 1954, of the individual provident funds affiliated to Histadrut institutions into a central pension fund providing linked retirement annuities created an even stronger demand for index-linked bonds.

By the end of 1953 the funds held IL 2.4 million of value-linked bonds. More significant, and quantitatively more important, were the private placements made by Gmul, on behalf of participating provident and pension funds, in individual companies and institutions. In the early 1950s, linked loans were granted directly to Solel Boneh (the Histadrut's general contracting company), the Jewish National Fund, and other companies. By the end of 1953 more than IL 5 million of such linked loans had been granted.[37] Retirement funds also developed a special type of indirect linkage by granting loans to popular rest homes. In addition to interest, the funds received accommodation for their members, often at reduced rates, and at a time when there existed an excess demand for such vacation facilities.

This active intervention of retirement funds in the capital market came to a virtual end in 1957. Since then they have constituted a sort of captive audience. They were not of major importance in the revival of the stock market in the summer and fall of 1959, nor have they participated to a significant extent in the unprecedented expansion of the equity market since then. It should be noted that the 10 per cent of resources originally left free for discretionary investment was removed in September 1960, when the required proportion of recognized investment was raised from 65 to 75 per cent. As a result, Israel's largest institutional investors have been isolated from the equity market; their active participation in this market being limited to a handful of new issues included in the Treasury list.

THE DESTINATION OF RETIREMENT FUND INVESTMENT

Considerable importance attaches to the direction of retirement fund investment. Table 8-10 sets out the percentage distribution of the net flow of investment in securities, Gmul, and private placements, classified by the economic branch of the recipient.[38]

Until 1957, retirement funds directed the bulk of their investments to two branches—banking and finance, and government and national institutions.

37 It is significant that such participations in linked loans make their appearance in retirement fund financial statements as early as 1951. See also Gmul Investment Company, Tenth Annual Report, Tel Aviv, 1961.

38 Investments are classified by major economic activity; where a firm was engaged in more than one field of enterprise, the entire amount of the investment was allocated to its chief line of endeavor. In the case of Gmul, retirement fund participations in individual loans via that company are classified by the economic branch of the recipient of the loan; deposits in Gmul are included in 'banking and finance'.

This classification is not directly comparable to the sector breakdown appearing in Table 8-7, where the criterion used is that of ownership.

Financial institutions account for 35 per cent of the flow of investments between the end of 1953 and the end of 1957, while an additional 29 per cent was directed to government and national institutions. The share of the financial sector is understated however, since time deposits in banks are not included in Table 8-10. If time deposits are included, the share of finance and banking in total investments outstanding at the end of 1953 rises to 60 per cent. But since deposits increased relatively slowly during the succeeding period, the share of financial institutions in the incremental flow of investment during 1954-57 was only 45 per cent.

TABLE 8-10. Retirement Fund Investments,* by Industry: End of 1953 and 1957

(per cent)

	1953	1957	Change 1954-57
Agriculture	2.0	2.7	2.9
Manufacturing	5.1	3.5	3.1
Construction	19.5	8.5	5.7
Public utilities and transport	3.5	5.9	6.5
Government and national institutions**	23.6	28.1	29.2
Banking and finance	31.7	34.6	35.4
Trade and services	10.8	5.7	4.4
Branch not known	3.8	11.0	12.8
Total	100.0	100.0	100.0
Total (IL millions)	21.5	104.7	83.2

* Includes investments in securities, Gmul Investment Company and direct loans to enterprises and institutions; time deposits and real estate are excluded.

** Investments in public sector firms are included in the appropriate economic branch.

SOURCE: Compiled from financial statements.

The regulation of retirement fund investment since 1957 appears to have intensified this concentration.[39] By the end of 1960, the proportion of retirement fund investments in financial institutions (including time deposits) had risen to 62 per cent, with an additional 25 per cent invested in government and the national institutions. While the high proportion of investment in the finance sector reflects the popularity of special deposits, it should be noted that the conversion of part of these deposits to bonds in 1961 did not alter the pattern of investment by economic branch since the conversion was almost invariably to bonds issued by financial institutions.

This concentration of investments in the finance and public sectors reflected the structure of the capital market itself during much of this period, and represents a separation of the saving-investment functions.

39 Since Gmul no longer offers participations in specific loans, all deposits in this company are classified in 'banking and finance' in 1960. In addition, the rather large percentage of unidentified investments in 1957 precludes the drawing of absolute conclusions regarding the increase in the flow of investment to the financial sector during the subsequent period.

Chapter 9

THE RATE OF RETURN ON RETIREMENT FUND ASSETS

The efficiency of retirement funds as financial intermediaries (i. e., in channeling of members' savings to other sectors of the economy) has been dependent on their ability to earn adequate rates of return. In this chapter an attempt is made to analyze and compare the economic performance of retirement funds; for this purpose the ratio of earnings to assets will be taken as the indicator of their economic performance.

By emphasizing the role of the return earned on assets, attention is also focussed on an aspect of retirement fund operations which is of paramount importance to the funds themselves. In the case of lump-sum provident plans, the size of future benefit payments is a function, ***inter alia,*** of the net rate of return. The distribution of net profits to individual members' accounts serves to augment their accumulated savings and thereby influences the magnitude of their benefit claims. Such allocations clearly and directly depend on the ability of the funds to earn returns above and beyond the expenditures necessary to carry on their operations. Similarly, the prospective net return is one of the components in the actuarial computation of the size of future pension annuities. Even in the case of the mutual benefits paid by the Histadrut's pension funds it can be argued that the future level of benefits ultimately will reflect the ability of these funds to earn positive net returns on their accumulating assets.

MEASURING THE RATE OF RETURN

Many retirement funds enter a miscellany of receipts and outlays in their profit and loss statements.[1] Membership dues, refunds of life insurance premiums and participation of employers or members in covering expenses are often listed as income; while payments of life insurance premiums, gifts and charitable grants are entered as expenses. In this chapter, the definition of net income is restricted to those items representing the gross return earned from the use of assets less the outlays incurred in carrying on normal day-to-day operations. Income includes interest, dividends and rent earned on investments and loans;[2] nonoperating expenses are excluded from outlays. The net rate of return is calculated for each fund

1 The practice of including nonincome items in profit and loss statements is of no immediate concern to the funds themselves, since all approved retirement funds are fully exempt from the payment of income tax.

2 Interest on employer debts is included since these interest bearing delinquencies in the funding of contributions constitute a form of concealed loan. Commissions received from insurance companies are excluded, however, on the grounds that they are better viewed as economies of group insurance rather than as investment income.

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SOURCE: Compiled from financial statements.

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This concentration of investments in the finance and public sectors reflected the structure of the capital market itself during much of this period, and represents a separation of the saving-investment functions.

39 Since Gmul no longer offers participations in specific loans, all deposits in this company are classified in 'banking and finance' in 1960. In addition, the rather large percentage of unidentified investments in 1957 precludes the drawing of absolute conclusions regarding the increase in the flow of investment to the financial sector during the subsequent period.

Directing the flow of investment to other financial intermediaries, in effect transfers responsibility for the allocation of retirement savings to their ultimate users, from the funds themselves to specialized financial institutions. In this context we might view the government itself as a type of financial intermediary, since it too, through its development budget, allocates funds to the various branches of the economy.

The emergence of a viable stock market in 1959-60, and its continued and rapid expansion in subsequent years, might well have changed this pattern of retirement fund investment, since an increasing number of firms has turned to the public for part of their capital requirements. However, the strict regulation of retirement fund investment in recent years has greatly reduced the impact of changing market conditions on their investment habits and practices.

An alternative classification of investment by destination is of particular interest for Israel. We refer to the flow of retirement fund investment to the three major sectors of the Israel economy: public, Histadrut and private (Table 8-11). Here investments are classified by the sector affiliation of the recipient firm or institution; where ownership is mixed, the firm has been included within the sector holding the controlling interest.

TABLE 8-11. Flow of Retirement Fund Investments,* by Sector Affiliation and by Destination: 1954-57 and 1958-60

(per cent)

Destination	Affiliation					
	1954-57			1958-60		
	Total retirement funds	Funds affiliated to the Histadrut	Other provident and pension funds	Total retirement funds	Funds affiliated to the Histadrut**	Other provident and pension funds
Public	37.2	24.8	61.0	48.1	41.8	59.6
Histadrut***	47.8	60.2	23.9	49.8	57.9	35.2
Private	2.3	0.8	5.3	5.6	0.9	14.0
Sector not known	12.7	14.2	9.8	-3.5	-0.6	-8.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (IL millions)	83.2	54.8	28.4	215.8	138.9	76.9

* See note * to Table 8-10. For 1958-60, time and special deposits are included.

** Includes four pension and three social insurance funds.

*** Includes loans to cooperative societies.

SOURCE: Compiled from financial statements.

Contrary to popular opinion, retirement funds did not constitute, before 1957, a sort of private Histadrut preserve. While it is true that at least 48 per cent of their net investment (excluding time deposits) between 1953 and 1957 was directed to the Histadrut sector, 37 per cent was placed within the public sector, hardly a negligible proportion. This pattern constitutes a break with earlier investment practices: in 1953, 61 per cent of the funds' outstanding investments were in the Histadrut sector and only

26 per cent in the public sector. By 1957 the proportions had shifted, with the Histadrut share falling off to 50 per cent while the public sector share rose to 35 per cent. The shift in the flow of investment to the public sector reflects the fact that the government, the national institutions, and firms affiliated to the public sector were the principal issuers of linked bonds during 1954-57. The negligible share of the private sector, on the other hand, can be traced to the fact that in this period the market for linked debts was almost completely dominated by the public and Histadrut sectors.

Table 8-11 also emphasizes the differential investment behavior of funds affiliated to Histadrut firms and institutions (including the social insurance funds), and those affiliated to other sectors. The former directed 60 per cent of their investment to the Histadrut sector and 25 per cent to the public sector; these proportions are almost exactly reversed in the non-Histadrut funds.

Since one of the objectives of the regulation imposed on retirement funds was to secure a greater degree of control over the flow of investment, changes in the sectoral destination of investment after 1957 are of especial significance. The observed change in the pattern of investment from the end of 1957 to the end of 1960 is not extreme, the share of the public sector rising from 37 to 48 per cent. However, 12 per cent of the investments of the previous period could not be identified, so that no hard and fast conclusions can be drawn. It should be emphasized that the observed change in the flow of investment to the public sector constitutes a maximum estimate, since it implicitly assumes that none of the unidentified pre-1957 investments were placed in the public sector, and this is unlikely. At the other extreme, if one assumes that most or all of the unidentified investments during 1954-57 were directed to the public sector, no significant change in the destination of retirement fund investment took place after 1957.

The true change in the flow of investment probably lies somewhere between these extremes, and the influence of direct government intervention on the pattern of investment appears to have been somewhat smaller than might have been expected. Nor is the magnitude of even the maximum observed shift in retirement fund investment to the public sector inconsistent with the general trend to linked bonds already discernible during the years immediately before the Regulations came into force. In view of the public sector's domination of the linked bond market, any continuation of this trend would, in all likelihood, have raised the public sector's share in retirement fund investment, even in the absence of explicit legislation.

Chapter 9

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The efficiency of retirement funds as financial intermediaries (i. e., in channeling of members' savings to other sectors of the economy) has been dependent on their ability to earn adequate rates of return. In this chapter an attempt is made to analyze and compare the economic performance of retirement funds; for this purpose the ratio of earnings to assets will be taken as the indicator of their economic performance.

By emphasizing the role of the return earned on assets, attention is also focussed on an aspect of retirement fund operations which is of paramount importance to the funds themselves. In the case of lump-sum provident plans, the size of future benefit payments is a function, *inter alia,* of the net rate of return. The distribution of net profits to individual members' accounts serves to augment their accumulated savings and thereby influences the magnitude of their benefit claims. Such allocations clearly and directly depend on the ability of the funds to earn returns above and beyond the expenditures necessary to carry on their operations. Similarly, the prospective net return is one of the components in the actuarial computation of the size of future pension annuities. Even in the case of the mutual benefits paid by the Histadrut's pension funds it can be argued that the future level of benefits ultimately will reflect the ability of these funds to earn positive net returns on their accumulating assets.

MEASURING THE RATE OF RETURN

Many retirement funds enter a miscellany of receipts and outlays in their profit and loss statements.[1] Membership dues, refunds of life insurance premiums and participation of employers or members in covering expenses are often listed as income; while payments of life insurance premiums, gifts and charitable grants are entered as expenses. In this chapter, the definition of net income is restricted to those items representing the gross return earned from the use of assets less the outlays incurred in carrying on normal day-to-day operations. Income includes interest, dividends and rent earned on investments and loans;[2] nonoperating expenses are excluded from outlays. The net rate of return is calculated for each fund

1 The practice of including nonincome items in profit and loss statements is of no immediate concern to the funds themselves, since all approved retirement funds are fully exempt from the payment of income tax.

2 Interest on employer debts is included since these interest bearing delinquencies in the funding of contributions constitute a form of concealed loan. Commissions received from insurance companies are excluded, however, on the grounds that they are better viewed as economies of group insurance rather than as investment income.

by dividing net income (as here defined) by the average of beginning- and end-of-year assets;[3] the resulting quotient, expressed as a percentage, constitutes the indicator of a fund's economic performance in a given year.[4]

It might be argued that investment income should be related to the average investment portfolio rather than to average total assets. But this contention cannot be accepted. The two indicators differ conceptually: the former measures the return from existing investments, while the latter is concerned with the return on the total pool of resources available for investment, whether they were actually invested or not. It must be emphasized that the percentage return on assets is a truer indicator of the economic efficiency of retirement funds. Only the ratio of earnings to assets adequately reflects one of the basic problems confronting the funds, i. e., the problem of finding suitable investment outlets for the increasing flow of employer-employee contributions. For retirement funds the task of 'loaning up' has been no less important than the problem of earning adequate yields on investment portfolios.

Another objection might stem from the decision to employ rates of return as indicators of economic performance. It could be argued that the definition should be modified so as to take account of those objectives which may result in sacrificing income. For example, a fund might prefer granting low-interest loans to members to more profitable investments.

Although it is undoubtedly true that for a variety of reasons many retirement funds have consciously sacrificed current income, this does not necessarily conflict with our performance indicator. Numerous factors affect the rate of return earned by retirement funds, and among these are policies involving deliberate reductions in income. The task remains to determine the effects of such policies, and to estimate the degree to which the economic performance of the funds has been dependent upon them. The classification of retirement funds by rates of return does not purport to express a value judgement. It is designed to provide a convenient conceptual framework within which the funds' economic activities can be analyzed.

An important and valid criticism, however, stems from the fact that the performance indicator (as defined above) reflects only a portion (and not always the major portion) of the economic benefits accruing to the funds from their investments. The rate of return, based as it is on current income, ignores capital appreciation in general, and, more important, it does not reflect the capital appreciation of value-linked investments. Given the rising prices of the 1950s, it is obvious that an investment whose principal was linked to, say, the CPI was preferable to unlinked investments bearing even relatively high current yields in several of the years studied.

3 Average assets are employed as the base in calculating the rate of return, since funds acquired towards the end of a year, even if invested promptly, cannot be expected to have much effect on the income of the same year. On the other hand, using assets at the beginning of the year as the base would completely ignore the problem of earning a return on current increments to assets.

4 Since many random factors affect both income and expenses in any one year, the two-year average rate of return was calculated for 1952-53; absence of 1956 income data, however, precluded such a calculation for 1957.

We should have preferred to recast the definition of the rate of return so as to reflect fully the changes in capital value as well as in current income. However, data considerations precluded making the necessary income adjustments; individual linked investments could not always be identified, and even in cases where this was possible, it proved difficult to determine the exact date on which the investment was made and the terms of the linking contract (e. g. , linkage to the index or to the dollar exchange rate). Similar problems arose with regard to fund holdings of common stock and real estate, although in these cases the distortion is relatively unimportant since they represent a fairly small fraction of total assets.

Fortunately, for the purposes at hand, most linked investments tended to earn current returns which exceeded the current yield on unlinked investments during most of the period under study.[5] Thus, while ignoring capital appreciation understates the absolute level of a fund's income,[6] it probably does not greatly distort the ranking of those funds which succeeded in linking a significant portion of their investment portfolios. As far as their linked investments go, these funds still tend to fall into the higher rate of return groups.

THE RATE OF RETURN: 1953-1960

The far-reaching changes which characterized the evolution of retirement fund investment policies during the 1950s had an impact on the rate of return. Table 9-1 sets out the rates of return on average assets for social insurance and provident and pension funds in 1953, 1957 and 1960.

TABLE 9-1. Rate of Return* on Average Assets: 1953, 1957 and 1960

(per cent)

	Social insurance funds	Provident funds**
Rate of return—current income		
1953	-4.6	3.8
1957	-0.3	4.9
1960	1.7	5.6
Rate of return—current income plus capital gains		
1953	-4.0	3.8
1957	-0.2	5.3
1960	2.2	6.6

* Weighted by assets.

** See note † to Table 5-2.

5 As a rule, retirement funds did not avail themselves of investment opportunities in the black market for credit where interest rates on loans were often more than 20 per cent during the period under study.

6 Overall rates of return which reflect both current income and capital appreciation have been calculated for various classes of fund investments. These rates provide a much better estimate of the absolute level of fund income, and are used to make temporal comparisons of the rate of return (see pp. 93-95 below).

A striking feature of the development of fund earnings has been the large difference between the social insurance funds and the others. The former earned a negative rate of return in 1953 and again in 1957, while the positive return on their assets in 1960 was only at about one third of the level in the provident and pension funds (1.7 per cent compared with 5.6 per cent). This large and persistent differential is largely a function of the social insurance funds' high level of operating expenses, and reflects their different mode of operations.

The small magnitude of provident and pension fund average nominal rate of return in 1953 is also noteworthy. Since prices, as measured by the CPI, rose by 28 per cent in 1953 and only a negligible proportion of fund assets were (formally or informally[7]) linked, the 3.8 per cent rate of return on average assets represents a negative real return. Nor did this occur only in 1953. An examination of the 1952 data suggests that the nominal rate of return on provident and pension fund assets was somewhat smaller before 1953, and since the CPI rose at a compounded annual rate of 33 per cent between December 1950 and December 1953, the real rate of return on retirement fund assets was negative and large in previous years as well. It is probably correct to assume that these negative real returns and the concomitant attrition of the real value of members' accumulated provident savings, provided an important motive for the conversion of the Histadrut's lump-sum retirement plans to linked pension annuities in 1954.[8]

By 1957 the rate of return had risen to almost 5 per cent and, if realized capital gains are included, the rate of return on average assets slightly exceeded 5 per cent. In essence the rise in the rate of return is understated. Firstly, over one third of fund assets were linked in 1957,[9] while the annual rise in prices had fallen off to about 6 per cent. Thus, in 1957, the funds, taking linkage differentials into account, probably earned a small, but positive, real rate of return. In 1960 the rate of return on assets reached 5.6 per cent (6.6 per cent including realized capital gains). But the proportion of linked assets rose to 55 per cent[10] while the rise in prices was only 2 per cent in 1960; this indicates a substantial rise in the real rate of return.

The rise in the average rate of return reflected for the most part underlying market forces, and was widespread among all classes of retirement funds. Table 9-2 highlights the shift in the distribution of funds, assets and membership by rate of return groups. In 1953, 19 per cent of the funds, accounting for 35 per cent of total assets and one quarter of the total membership, earned returns exceeding 4 per cent on average assets. By 1957 over half the funds, with 83 per cent of total assets and embracing 77 per cent of the total membership of provident and pension funds, enjoyed rates of return of over 4 per cent, and this trend continued into 1960.

7 Informal linkage refers to investments in real estate and common stock.

8 This was reinforced by the fact that the absolute fall in the real value of savings was greatest in the case of veteran members of the Histadrut. The latter probably exercised a disproportionate influence on the Histadrut, where, as in many organizations, key posts tend to be held by members approaching pensionable age.

9 The estimate is that of the Savings Authority, Ministry of Finance and includes real estate.

10 Savings Authority estimate.

TABLE 9-2. Number, Membership* and Assets of Provident Funds, by Rate of Return: 1953, 1957 and 1961

(per cent)

Rate of Return Groups** (per cent)	1953			1957			1961	
	Number of funds	Assets	Membership	Number of funds	Assets	Membership	Number of funds	Assets
Negative-0.99	18.5	4.5	16.0	8.3	0.9	1.2	1.2	0.4
1.00-3.99	62.8	60.3	58.6	38.8	16.4	21.5	14.0	14.7
4.00-5.99	18.7	35.2	25.4	34.3	61.3	63.6	47.7	26.0
6.00-7.99				13.6	15.3	11.8	27.4	54.4
8.00+	-	-	-	5.0	6.1	1.9	9.7	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Absolute figures								
Total number of funds		384			397		321	
Total assets (IL millions)		44.1			158.3		300.2	
Total membership (thousands)		81.0			96.2		. .	

* Excludes funds for which income and outlay data were not available.

** In 1953 funds are classified by the average rate of return for 1952-53; in 1957 and 1960 they are classified by the rate of return for each year.

SOURCE: Compiled from financial statements.

Particularly striking is the rise in the proportion of funds earning more than 6 per cent on assets in 1960. Also important is the sharp decline in the proportion of funds earning rates of return of less than 1 per cent: by 1960 there was a bare handful of such funds, and for all practical purposes they can be ignored.

The unequal distribution of funds and assets by rate of return groups suggests the possibility of a systematic relationship between the rate of earnings and the size of retirement funds. The correlation between rates of return and size of funds (in terms of average assets) was examined for a sample of funds (excluding the social insurance funds) during each of the years represented in Table 9-2. The coefficients of correlation are:[11] 1960—0.2199; 1957—0.3871; and 1952-53—0.2770. It should be emphasized, however, that only the 1957 correlation is significant at the 5 per cent confidence level. The correlation coefficients for 1960 and 1952-53 do not significantly differ from zero at this level.

At first glance, the existence of even a small positive correlation between asset size and rates of return in 1957, coupled with the absence of correlation in 1952-53 and 1960, appears somewhat paradoxical. On further reflection, however, such a finding might well have been expected. Given the rudimentary character of the capital market during the early 1950s and the resulting shortage of investment outlets, not much scope remained for economies of scale in carrying out the investment function. This is reflected in the absence of statistically significant correlation between asset size and the rate of earnings in 1952-53. While the capital market did offer a variety of investment opportunities in 1960, the absence of correlation in that year reflects the inhibiting influence of the Treasury Regulations. As was pointed out in Chapter 8, the funds were, in effect, confronted by a choice between index-linked and dollar-linked bonds (special deposits being equivalent to short-term linked bonds for our purposes). The rate of return on these did not differ much in 1960, and the Regulations stipulated that a fixed proportion of total assets be invested. All of this combined to remove any influence of size on investment performance during that year. Of the three years examined, only 1957 was marked by a variety of investment outlets, and what is more important, by comparative freedom of investment choice, which taken together help account for the observed relationship between asset size and the rate of return in that year.

Since the rate of return is calculated on a net basis, it is affected by the level of operating expenses as well as by investment income. Real provident and pension fund operating expenses per member (in 1952 prices) were as follows: 1952—IL 2.7; 1957—IL 5.6; and 1960—IL 6.7.[12] There was a sharp increase between 1952 and 1957, but the increase in 1960 is not significant at the 5 per cent confidence level. The rise between 1952 and 1957 may reflect a tendency for the absolute increase in fund size during this period to reduce the proportion of voluntary services contributed by members. This was almost certainly so where smaller provident funds were consolidated into large central pension funds after 1954.

11 The current rate of return was used in the calculation, but substituting the rate of return including capital gains does not change the conclusions.

12 Excluding social insurance funds. The data for 1952 and 1957 are based on the entire population; the data for 1960 were drawn from a sample of funds.

As a further check of this hypothesis, the relationship between nominal expenses per member and membership size was examined in each of these years. No significant tendency for the level of per member expenses to be related to the size of funds could be discerned. Provident and pension funds would appear to enjoy no economies of scale in the usual sense. (In fact the 1960 correlation coefficient was positive.)

INVESTMENT POLICY AND THE RATE OF RETURN

No single factor can be expected to exert a greater influence on the rate of return than investment policies. In an effort to assess their differential impact, Table 9-3 sets out the asset structure of provident and pension funds, classified by rate of return groups, for the end of 1953. It should be noted at the outset, however, that the data contain an unavoidable degree of random variation.[13] By its very nature, the classification of funds (or economic units in general) into high and low earning groups can be expected to suffer from the well known bias that in any given year the 'high' group will tend to include a number of funds whose earnings were unusually high or whose expenses were unusually low in that year. And conversely for the low earnings group. Despite these shortcomings, the data on asset structure do shed important light on the general investment practices of fund managements.

TABLE 9-3. Composition of Provident Fund Assets, by Rate of Return: 1953

(per cent)

	Rate of return groups* (per cent)				
	Negative -0.99	1.00-1.99	2.00-2.99	3.00-3.99	4.00-6.99
Cash and current account	12.0	5.0	10.3	4.0	9.4
Investments	46.6	64.9	38.7	56.3	48.6
Time deposits	19.6	31.6	14.3	15.6	9.5
Deposits in and loans through the Gmul Investment Company	9.0	15.5	8.8	20.3	18.9
Securities	10.9	15.0	8.4	7.0	13.3
Loans to enterprises and institutions	4.0	2.0	4.5	5.7	5.6
Real estate	3.1	0.8	2.7	7.7	1.3
Loans to members	11.6	8.0	22.1	23.3	28.2
Employer debts	23.7	20.3	22.3	12.5	11.7
Other assets	6.1	1.8	6.6	3.9	2.1
Total Assets	100.0	100.0	100.0	100.0	100.0
Total Assets (IL millions)	2.0	5.7	8.9	12.0	15.5

* Funds are classified by the 1952-53 average rate of return.

SOURCE: Compiled from financial statements.

13 This becomes apparent when rank correlation methods are applied to the data.

Perhaps the most striking feature of the 1953 asset distribution is the apparent absence of a clear-cut relationship between the proportions going to what we have defined as investment and the rates of return. To a large extent this can be accounted for by examining the proportion of assets represented by member loans. Funds in the upper three earnings groups (2 per cent and over) tended to devote much larger proportions of their assets for this purpose than did funds in the lowest two groups. Since the rates of interest typically charged on member loans in the early 1950s compared favorably with many of the alternative investment opportunities confronting the funds, the substitution of member loans for 'investments' did not markedly reduce the rate of return. Table 9-4, which presents the funds' income statements by rate of return groups for 1953, lends support to this contention. Despite the high proportion of unidentified interest income, all classes of funds reported substantial earnings from member loans.[14]

TABLE 9-4. Composition of Provident Fund Investment Income, by Rate of Return: 1953*

(per cent)

	Rate of return groups** (per cent)				
	Negative -0.99	1.00-1.99	2.00-2.99	3.00-3.99	4.00-6.99
Interest on bank deposits	19.0	34.1	16.0	15.2	9.6
Interest and dividents on investments	28.6	40.7	18.6	37.7	30.4
Interest on member loans	14.3	8.9	26.2	19.0	20.3
Interest from employers	9.5	4.5	16.6	11.5	7.1
Miscellaneous income	28.6	11.8	22.6	16.4	32.6
Total income	100.0	100.0	100.0	100.0	100.0
Total income (IL thousands)	42	135	344	486	764

* Figures may not add to 100 owing to rounding.

** See note * to Table 9-3.

SOURCE: Compiled from financial statements.

To find a factor with a pronounced inverse relationship to the rate of return, one must turn to an item which was not subject to the full discretionary control of fund managements—employer debts. Not only did the proportion of assets devoted to employer debts tend to be significantly lower, on the average, for funds in the highest earning categories, but an examination of the income data suggests that relatively high proportions of employer debts in the lower categories earned little or no interest.

The 1957 composition of assets by rate of return (Table 9-5) stands in sharp contrast to that of 1953.[15] Developments in the capital market after

14 Owing to the high proportion of unidentified income, care must be exercised in comparing the magnitude of observed income and individual classes of investments.

15 Owing to the secular growth of the funds and to the fact that many of the investments in 1953 had short maturities, the data for 1953 and 1957 are reasonably independent of one another.

1955 and the concomitant rise in investment returns, make for a much sharper picture in 1957. Here the effects of investment in earning assets on the rate of return are much more pronounced than in 1953, and the ratio of investments to total assets rises significantly as one moves from lower to higher earnings groups. The only exception is the highest rate of return group, and this deviation is readily explained. These funds, taken as a group, granted a high proportion of indirect loans to employers, apparently at relatively high rates of interest (see Table 9-6). More efficient investment management is also reflected in the lower proportion of cash assets held by funds in the higher earnings categories.

TABLE 9-5. Composition of Provident Fund Assets, by Rate of Return: 1957

(per cent)

	Rate of return groups* (per cent)				
	Negative -0.99	1.00-3.99	4.00-5.99	6.00-7.99	8.00+
Cash and current account	10.8	4.7	1.8	1.6	2.0
Investments	19.0	43.4	62.1	68.4	56.0
Time deposits	6.2	9.8	11.0	17.2	0.6
Deposits in and loans through the Gmul Investment Company	0.2	6.2	22.0	15.2	4.1
Securities	7.8	23.1	18.0	26.2	30.2
Loans to enterprises and institutions	0.6	1.4	9.5	6.6	8.0
Real estate	4.2	2.9	1.6	3.2	13.1
Loans to members	18.9	28.8	26.4	19.1	20.4
Employer debts	42.3	21.7	6.8	8.7	20.2
Other assets	9.0	1.4	2.9	2.2	1.4
Total assets	100.0	100.0	100.0	100.0	100.0
Total assets (IL millions)	1.4	25.9	97.0	24.3	9.7

* See note * to Table 9-3.

SOURCE: Compiled from financial statements.

If we exclude the higher rate-of-return groups, the dampening effect of employer debts on earnings is clearly discernible in 1957. For funds earning less than 4 per cent on assets, employer debts account for a significantly higher proportion of total assets than in the higher earnings group. In fact, in 1957, the lowest earnings group appears to have consisted, to a large extent, of funds which represent book allocations of employers rather than advance funded retirement plans. Employer debts and member withdrawals accounted for 60 per cent of the total assets of these funds. For all practical purposes no compensation for these debts was received from employers, while the interest charged on member loans appears to have been significantly lower than in the higher earnings categories.

TABLE 9-6. Composition of Provident Fund Investment Income, by Rate of Return: 1957

(per cent)

	Rate of return groups* (per cent)				
	Negative -0.99	1.00-3.99	4.00-5.99	6.00-7.99	8.00+
Interest on bank deposits	20.8	13.4	17.1	2.6	1.9
Interest from Gmul Investment Company	1.8	7.2	24.6	18.0	0.7
Interest and dividends from securities	14.3	13.2	17.0	17.1	16.2
Interest on private placements	-	0.8	6.1	4.2	14.4
Rent	-	4.4	0.9	3.6	17.1
Interest on member loans	37.5	32.3	13.8	13.4	14.5
Interest from employers	0.7	6.4	3.6	8.0	20.2
Miscellaneous income	23.7	21.4	11.9	29.3	10.4
Total current income	98.8	99.1	95.0	96.2	95.4
Capital gains	1.2	0.9	5.0	3.8	4.6
Total income	100.0	100.0	100.0	100.0	100.0
Total income (IL thousands)	15	928	4,989	1,563	854

* See note * to Table 9-3.

SOURCE: Compiled from financial statements.

The influence of changing market conditions can be clearly seen from the data on loans to members. In 1953 the proportion of member loans in total assets was relatively higher for the upper earnings groups. This pattern was reversed in 1957, when funds earning rates of return of over 6 per cent tended to devote a smaller share of their resources to member loans (about 20 per cent) than did funds earning returns between 1 and 6 per cent, where loans to members accounted for about 27 per cent of total assets. This shift reflects the fact that in terms of forgone income the alternative cost of such loans rose sharply between 1953 and 1957. This cost was considerably higher for funds in the two highest earnings categories, and is reflected in the fact that funds earning more than a 6 per cent rate of return not only granted proportionately fewer loans to members, but apparently also tended to charge higher rates of interest on them.

THE RATE OF RETURN ON ALTERNATIVE INVESTMENTS

The investment policies and economic performance of retirement funds reflect the underlying conditions of the capital market. In order to facilitate the analysis of changing market conditions, overall rates of return have been calculated for the major investment opportunities which the market offered to retirement funds during the period under study.

Overall rates of return have been defined so as to reflect both dividend (interest) income and capital appreciation or depreciation. The annual rates are based on the reinvestment of cash dividends, stock dividends, and the market value of rights as they were received.[16] Thus, the overall rate of return for the year is readily calculated by comparing the end-of-year market value of the investment with its initial value, and dividing the difference by the initial value.[17] For investment periods longer than one year, the compounded annual average rate of return is calculated by taking the geometric average.[18]

Table 9-7 presents the overall rates of return on common stock and Tavei Dollar (dollar-linked bonds) during the period 1952-57. The impact of inflation on investment returns is clearly discernible from this table. Prices, as measured by the CPI, rose at a compounded annual rate of 16 per cent from 1952 to 1957. As a result, the real return on investments in common stock was negative in each of the six years surveyed; for the period as a whole the compounded rate of return on equities was a negative 15 per cent per annum.

TABLE 9-7. Nominal and Real Overall Rates of Return on Common Stock* and Tavei-Dollar Bonds: 1952-57

(per cent)

	Nominal rate of return		CPI — per cent increase during the year**	Real rates of return	
	Common stock	Tavei-dollar bonds		Common stock	Tavei-dollar bonds
1952	-4.8	25.0	66.4	-42.8	-24.9
1953	18.9	103.7	19.1	-0.2	71.0
1954	3.8	-3.5	7.5	-3.4	-10.2
1955	-4.1	0.4	4.8	-8.5	-4.2
1956	-14.9	8.8	4.6	-18.6	4.0
1957	-3.4	20.7	5.2	-8.2	14.7
Average 1952-57***	-1.3	21.6	16.2	-15.1	4.7

* Based on sample of 10 companies.

** Calculated from end-of-period figures.

*** Geometric average. The average real rates are calculated by deflating by the compounded rate of CPI increase.

SOURCE: Rate of return — M. Sarnat, The Development of the Securities Market in Israel, forthcoming. Consumers' Price Index — CBS, Abstract 1964, No.15, p. 231.

Much the same can be deduced for retirement fund direct placements and bank deposits during this period. The maximum legal rate of interest during these years was 9 per cent, and since retirement funds did not as a rule

16 In the case of bonds, including serial redemptions.

17 The overall rate of return is calculated from the formula:

$$r = \frac{V_1 - V_0}{V_0}$$

where V_0 is the initial market value of the original investment; V_1 is the market value of the investment at the end of the year (number of shares in closing portfolio multiplied by the end-of-year market price); and r is the overall rate of return for the year.

18 For n years the formula becomes: $\bar{r} = \sqrt[n]{\prod_{i=1}^{n} (1 + r_i)} - 1 = \sqrt[n]{\frac{V_n}{V_0}} - 1.$

TABLE 9-8. Nominal and Real Overall Rates of Return on Common Stock,* Dollar-linked Bonds** and Index-Linked Bonds:*** 1958-62

(per cent)

	Nominal rates of return			CPI - per cent increase during the year †	Real rates of return		
	Common stock	Dollar-linked bonds	Index-linked bonds		Common stock	Dollar-linked bonds	Index-linked bonds
1958	7.6	16.7	10.5	4.2	3.3	12.0	6.0
1959	94.3	3.4	4.5	2.1	90.3	1.3	2.4
1960	130.8	-0.1	10.7	3.4	123.2	-3.4	7.1
1961	-9.5	8.8	15.8	9.0	-17.0	-0.2	6.2
1962	32.1	59.2	18.2	10.2	19.9	44.5	7.3
Average 1958-62 ††	42.0	15.9	11.6	5.7	34.3	9.6	5.6

* All listed common stocks.

** Average of four dollar-linked bonds.

*** Average of three index-linked bonds.

† See note ** to Table 9-7.

†† See note *** to Table 9-7.

SOURCES: Rate of return—H. Ben-Shahar and M. Sarnat, "New Issues and Profitability of Investment in Common Stock, 1959-62," Bank of Israel Bulletin, No.22 (December 1964), pp.49, 85.
Consumers' Price Index—CBS, Abstract 1964, No.15, p.231.

grant loans in the black market for credit, the real return on their unlinked deposits and loans was also negative.

As for Tavei Dollar bonds, the real rate of return during this period was positive (4.7 per cent). It should be noted that in three out of the four years between 1952 and 1955, the return on Tavei Dollar bonds was negative; the exception was 1953, when the holders of these dollar-linked bonds were belatedly awarded the windfall gain stemming from the 1952 devaluation. In general, it was not until 1955, with the introduction of index-linked bonds offering a $6\frac{1}{2}$ per cent real return, that the capital market was able to provide an investment medium offering a positive real rate of return to retirement funds.

After 1957, retirement fund investment policies were shaped to a very large extent by direct government regulation. Since the Treasury Regulations directed retirement fund investment, in large measure, to linked bonds (or deposits), their impact can best be gauged by examining the overall rates of return on such investments from 1958 onwards. As the devaluation of the pound in February 1962 had a considerable impact on investment returns in general, and on linked bonds in particular, the period is extended to include 1962.

Table 9-8 presents overall rates of return for various classes of bonds and on common stock for each year from 1958 to 1962, and the compounded annual average rate of return over the entire period. The compounded real annual rate of return on dollar-linked bonds was 9.6 per cent and this exceeded the 5.6 per cent return on index-linked bonds.

It should be noted that index bonds earned a higher return than dollar-linked bonds between 1959 and 1961, but that the 1962 devaluation windfall gains were sufficient to raise the period-average of the latter above that of the former.

The most striking feature of Table 9-8 is the magnitude of the overall rate of return on common stock. The data clearly reflect the emergence of the stock market in 1959-60. Following a real return to investors of 3 per cent in 1958, the real overall return on common stock reached 90 per cent in 1959 and 123 per cent in 1960. After a recession in 1961, in which the rate of return was negative (-17 per cent), a real rate of return of 20 per cent was earned in 1962. Over the entire five year period, the compounded average annual real rate of return on common stock was 34 per cent,[19] i.e., over three times the rate on dollar-linked bonds, and this despite the fact that the full impact of the devaluation has been included.[20]

Since the government actively encouraged the stock market during these years, the *de facto* exclusion of retirement funds from the equity market is difficult to comprehend.[21] The data on rates of return indicate that to the extent that retirement funds were actually dissuaded from investing in common stock, owing to government regulation, they earned lower rates of return than they would have enjoyed from the investment in a mixed portfolio.

19 This is the average for all listed stocks with each stock receiving an equal weight. The rate of return for selected branches, e.g. finance and real estate, materially exceeded this rate.

20 The rate of return on common stock was considerably higher than the return on linked bonds in 1963 as well. The 1964 stock market recession resulted in a negative return on common stock, but even if these losses are included, the average rate of return for the period 1958-64 remains significantly higher than the period average rate for both dollar-linked and index-linked bonds. See Marshall Sarnat, The Development of the Securities Market in Israel, List Institute, Basle, in press, Chapter 4.

21 One possible explanation stems from the fact that the government exercises virtually complete control over the new issue market for bonds.

Chapter 10

SUMMARY AND CONCLUSIONS

STRUCTURE

In Israel it is the trade union movement that has been the principal promoter of advance-funded retirement plans for workers. Although all retirement funds serve as depositories for long-term savings, two classes can be distinguished: provident and severance pay plans, which provide lump-sum benefits upon retirement or termination of employment, and pension plans whose retirement benefits take the form of life annuities. The decade ending in 1961 witnessed a rapid expansion of retirement fund membership, a large-scale transition from lump sums to pension benefits, and the extension of funded retirement schemes to the self-employed.

In 1952 there were 176,000 workers organized in some 450 retirement funds, which, with a few minor exceptions, provided lump-sum benefits; by 1961 the number of funds had dropped to 400, while membership had more than doubled, reaching 385,000. This growth in total membership, accompanied by the contraction in the number of funds, radically changed the funds' cross-section profile.

In 1961, about 18 per cent (67,000 workers) of the total membership were organized in 9 pension funds. This does not include the Histadrut's three social insurance funds which also converted from lump sums to pension benefits during this period, and their 188,000 members bring the total to more than a quarter of a million. Thus, in 1961 two thirds of all retirement fund members were enrolled in some form of funded pension plan.

Another significant change in the structure of retirement funds was the introduction in 1957 of provident funds for the self-employed. By the end of 1961, 14 such funds, embracing 26,000 members, had been established.

The growth in membership also had a pronounced effect on the size distribution of the funds. Average membership (not including the giant social insurance funds) rose from 190 in 1952 to 520 in 1961. This increase in average membership reflects the growing concentration in large central pension funds. In 1961, the 8 largest retirement funds, each with over 1,000 members, accounted for 78 per cent of total membership, compared with 51 per cent in 1952. If we include the social insurance funds, over 90 per cent of retirement fund members were organized in 11 central funds in 1961. But despite this concentration, a large number of small funds continued to operate; in 1961, 62 per cent of retirement funds still had less than 100 members, and this reflects the small size of many of the country's enterprises.

The retirement funds grew faster than employment. In 1952, 32 per cent of the employed civilian labor force were members of retirement funds; by 1961, the proportion had risen to over 50 per cent. If we exclude the self-employed, retirement funds for employees covered over 70 per cent of wage and salary earners in 1961; and if we eliminate civil servants, who are covered by budgetary pension schemes, over 80 per cent of the remaining wage earners participated in some form of funded retirement benefit plan in 1961.

The relative magnitude of retirement funds is also reflected in the fact that total contributions to them exceeded national insurance contributions in both 1957 and 1961. This relationship between statutory national insurance and supplementary retirement plans is probably peculiar to Israel and reflects the broad coverage of retirement plans as well as the central role of the Histadrut in providing social welfare benefits both before and after the establishment of the State of Israel.

THE FLOW OF FUNDS

The bulk of retirement fund receipts is provided by employer-employee contributions for pensions, provident savings and severance pay. The growth of retirement fund membership, the rise in contribution rates following the transition to pensions, and the rising secular trend in wages combined to raise total contributions during the decade under study from IL 22 million in 1952 to IL 136 million (IL 69 million at 1952 prices) in 1961.

Benefit payments rose more sharply during the period, from IL 4.1 million to IL 39.5 million (IL 20 million at 1952 prices). The net accumulation of retirement funds remained 70 per cent of gross inflows throughout the decade; the disproportionate rise in benefit outlays was offset by an even more rapid rise in investment income. As a result, the net inflow to retirement funds rose (in constant prices) from IL 17.4 million in 1952 to almost IL 66 million in 1961.

RETIREMENT FUND SAVINGS AND INFLATION

Unlike in the United States and Great Britain, where life insurance is the most common form of contractual saving, the periodic deposit of a fixed proportion of income in retirement funds is in Israel the largest single component of household savings. Annual gross retirement savings rose steeply during the decade, from IL 17 million in 1952 to IL 123 million (IL 62 million at 1952 prices) in 1961. This was faster than the growth of domestic capital formation, so that the ratio of gross retirement savings to capital formation rose from 5.3 per cent in 1952 to 8.4 per cent in 1961. Net savings (gross savings less the increase in member loans) and net transferable savings (net savings less the increase in employer indebtedness to the funds) rose even faster: the ratio of net retirement savings to capital formation rose from 4.2 per cent in 1952 to 6.9 per cent in 1961, and the net transferable savings ratio doubled—from 2.9 per cent in 1952 to 6.9 per cent in 1961. It should be noted that the marked rise in net savings flowing through retirement funds was an important component of the increase in national savings during the period.

Inflation has had a noteworthy impact on the pattern of saving effected through retirement funds. Although the direct influence of rising prices and wages has been to increase gross retirement savings, the magnitude of leakages (i. e. ,the increase in member loans and employer debts) has tended to vary with changes in the rate of price increase. During years of very rapid price rises the ratio of net (and net transferable) savings to gross savings fell, reaching a nadir in 1954, when average prices were still rising rapidly. Correspondingly, the relative leakage out of gross savings tended to decline as the rate of price increase levelled off.

It is particularly significant that the annual percentage increase in members' borrowing back was highest during the early years of the period, when the rise in prices was most pronounced. To the extent that these loans were used (as they often were) to finance the acquisition of housing, the overall level of savings in the economy was not affected. In essence, there was a shift in the asset composition of members' savings from financial assets to real estate—a most understandable development during an inflationary period.

A similar pattern can be discerned in the case of employer indebtedness to retirement funds. Indirect loans to employers (often interest free) were also proportionately higher in the early years of the period. As a result, the proportion of gross retirement savings available for transfer to other sectors of the economy was reduced during years of serious price instability. Taken together, these leakages undermined the transferable nature of retirement savings and thereby impaired the efficiency of retirement plans in times of inflation.

THE RATE OF RETURN

The increased leakage from gross retirement savings in the early years of the period can be traced to the relatively low nominal (and negative real) rates of return earned on portfolio investments in the early 1950s. The alternative cost of member and employer loans was lowest (in terms of forgone income) at the very time that inflationary pressures were greatest. This greatly weakened the ability of fund managements to withstand the increasing demands of employers for indirect loans, and reinforced members' demands for loans out of their retirement fund savings.[1]

The inability of the funds to protect their members against inflation and the resulting decline in the real value of their accumulated savings, did more than any other factor to shape retirement fund investment policies in the early 1950s. Provident and pension funds earned, on the average, a negative real return on assets in this period. By 1957 the nominal rate of return had risen to 5 per cent, and if unrealized linkage gains are included this represents a positive, if modest, real rate of return. In 1960 the nominal rate of return rose to 5.6 per cent, and since 55 per cent of fund assets were linked in 1960 (compared with one third in 1957), and prices rose by only 2 per cent (compared with 6 per cent in 1957), this indicates a substantial rise in the real rate of return in 1960.[2]

The rise in rates of return was common to all types of retirement fund: in 1953, only 19 per cent of funds earned returns of more than 4 per cent; by 1957 the proportion was over half, and it reached 85 per cent in 1960. This improvement in economic performance reflects the availability from

1 It might also be noted that the policy of granting loans to members at interest rates significantly below market rates has also kept the demand for these loans at unduly high levels.

2 The social insurance funds earned negative rates of return on assets in 1953 and 1957, and a small but positive nominal return in 1960. These relatively low rates of return reflect a high level of operating expenses.

1955 onwards of relatively high-yielding linked bonds, and the tendency of the funds to place an increasing proportion of their assets in such investments.

RETIREMENT FUND INVESTMENT AND THE DEVELOPMENT OF THE SECURITIES MARKET

By 1957 retirement funds had already become the country's largest institutional investor. During 1954-57, the increase in the funds' bond portfolio accounts for 38 per cent of total net new bond issues floated in the period. The composition of the funds' portfolio of ordinary shares at the end of 1953 also suggests that they had been an important factor in the equity market as well; the subsequent decline in the proportion of shares in their portfolios reflects the general stagnation of the equity market from 1954 until its revival in 1959.

In connection with the development of the capital market, it should be emphasized that before direct government controls were imposed, the role of the funds was not limited to acting as the market's chief customer. As early as 1951, the funds, acting separately or through their central investment company, were instrumental in inducing firms and institutions to introduce value-linkage clauses into their debt contracts. The 1957 Treasury Regulations put an effective stop to the innovating influence of retirement funds, and, taken as a group, they were only a negligible factor in the recent shift to equities.

Following the issue of the Treasury Regulations, fund bond purchases accelerated. An interesting finding of the analysis of the flow of investment after 1957, however, is the surprisingly modest degree to which direct government controls actually changed the pattern of investment.[3] To a large extent the direction taken by government regulation appears to have confirmed, rather than altered, trends that are already clearly discernible before the issue of the 1957 Regulations. In particular, the increased proportion of portfolio investments appears to have been a direct result of the transition from nominal lump-sum to linked pension benefits, and of the emergence of a viable securities market which made available a supply of investments offering a reasonable hedge against the attrition of inflation.

During 1958-60 the increase in retirement fund bond holdings accounted for 67 per cent of total net new bond issues, and the proportion has since increased. But the ratio of bond purchases to new issues is a rather poor measure of the actual impact of the funds on the development of the securities market. The stipulation that the bulk of the funds' approved bonds must be acquired as new issues has effectively isolated them from the secondary market, weakening thereby that market's already thin structure. It has also resulted in significant differentials in the yields obtaining in the new issue and secondary markets for bonds.

In addition, the failure to include many common stocks in the approved list may have deprived the equities market of a much-needed stabilizing element during its formative years. This contrasts sharply with the government's active role in promoting the development of the stock market.

3 In recent years the comparative isolation of the funds from both the new issue and the secondary markets for common stock may well have truncated any major trend to equities which the change in yield patterns might have called forth in the absence of controls.

Here again, the insistence that such equity investments as were approved should be made in the new issue market had perverse effects. Some retirement funds were induced to purchase and hold nonapproved shares in the three-month intervals between the required quarterly reports to the Treasury, thereby intensifying the already highly speculative character of Israel's stock exchange.

GOVERNMENT REGULATION

Since 1957 the economic activities of retirement funds have been subjected to an increasing degree of government regulation. The Treasury Regulations currently in force contain provisions (ceilings on employer debts and member loans) designed to raise the proportion of net receipts going to investment. They also contain provisions giving the government direct control over the composition of retirement fund investment portfolios.

A strong argument can be made in favor of the control at present excercised by government over employer debts and member loans. From a purely social viewpoint, loans to employers constitute an undesirable use of fund assets since they forge a link between members' retirement benefits and the future solvency of the employing firms. Where such loans are considerable workers could conceivably lose their jobs and some of their retirement savings at the same time. As for member loans, it should be emphasized that they are a legally recognized abuse of the tax credits granted on retirement savings.

A more controversial issue is raised by the direct control exercised by the government over the composition of retirement fund investments. Two arguments are often used to justify such control: (a) that the regulation is for the funds' 'own good', and (b) that since the funds benefit from tax concessions they should be required to make at least part of their investment for the benefit of the public as a whole. The first argument is very popular in Israel [4] and seems to rest upon the assumption that the public authorities have a monopoly of investment acumen. The experience in Israel, and in other countries for that matter, does not lend serious support to this contention. Nor does the available evidence support the view that the protection of members' interests was in itself the major consideration in the formulation of the investment restrictions.[5]

The second line of argument, i. e., that retirement fund investment should be guided by some standard of social benefit, expresses a value judgement, and as such cannot be refuted by recourse to facts.[6] Essentially, this argument states that the funds should be required to sacrifice prospective yield, if necessary, and that nonmarket considerations should govern at least some of their investment decisions. In Israel the argument

4 See for example Savings Authority, Investment Problems of Provident, Pension and Severance Pay Funds, Ministry of Finance, Jerusalem, 1959, p. 5 (Hebrew).

5 The government does not appear to have given serious attention to the actuarial problem arising out of the discrepancy between the linkage base for bonds (CPI) and that for pensions (basic salary including CPI linkage). Owing to the secular rise in basic wage levels, pension liabilities tend to increase faster than the Index.

6 Curiously enough, the two principal competitors for retirement fund investments, the government and the Histadrut, appear to share this viewpoint, although they often differ over the definition of socially desirable investment.
For a concise statement of the opposing view, with reference to pension funds in the United States, see R. F. Murray, "The Impact of Pension Funds—Discussion, 'The Journal of Finance, XVI (May 1961), 357.

is reinforced by the fact that the government already exercises stringent control over the capital market in general. With minor exceptions, all public issues and private placements of stocks and bonds must be approved by the Treasury.[7] It might therefore be argued that the restrictions imposed on retirement fund investment are consistent with this general policy.

The existence of comprehensive controls over the capital market actually provides an argument for abolishing most of the current restrictions imposed on retirement fund investments—on the ground that they are redundant.[8] A similar degree of *de facto* control over investment could be obtained within a much simpler framework. The cumbersome list of approved securities, and the stipulations regarding purchase at source could be replaced by two administrative orders: (a) retirement funds would be instructed to invest their resources in listed securities, and (b) these securities could be acquired at 'arm's length', i. e., in the new issue market or on the Stock Exchange.[9] This would restore to the funds, which as a group are the country's largest institutional investor in securities, the freedom of choice which is after all a necessary condition for the development of a viable capital market. It would also remove the distortions inherent in the existing regulations, at the same time doing away with the anomaly of government approval of selected common stocks.[10]

The suggested course is in keeping with the stated overall objectives of government policy for the development of the market as a mechanism for allocating investment funds. As for the implication that common stocks may be an acceptable investment medium for retirement funds, this reflects the underlying economic fact that, given the current provisions of pension benefits, index-linked bonds do not provide a comprehensive solution for the funds' investment problems.[11] The dependence of pension benefits on future wage levels is not fully reflected in index linkage. In the past, the funds had recourse to dollar-linked bonds; the next decade may see a partial shift to common stock. Since government fiat cannot easily change the direction of underlying economic forces, the purposes of both government and retirement funds may well be served by allowing the funds the freedom to seek the solution to their investment prcblems in the capital market.

7 The control of capital issues is based on the Defense Regulations (Finance) 1941. These regulations were issued by the mandatory authorities during the second world war and are still in force. Stock issues of companies whose paid-up capital does not exceed IL 100,000 (including the proposed issue) are exempt from government approval; such issues are, however, irrelevant to this discussion.

8 We refer here to the direct restriction on the composition of investment, and not to other provisions of the Regulations.

9 New issues include, for this purpose, private placements.

10 The very concept of approved common stocks appears to be ill-founded and ignores the basic differences between debt obligations and equities. Approving the essentially riskless bonds of the public and Histadrut sectors is one thing; the approval of the shares of even the largest industrial concerns would seem to imply a commitment by government regarding income (and perhaps capital value) which should not, and indeed cannot, be undertaken.

11 Since this chapter was written the regulations have been relaxed, and the government has permitted the funds to invest 10 per cent of their resources in common stocks. In 1965 a public committee went so far as to suggest that retirement funds should be required to devote 5 per cent of their resources to the purchase of stocks. The abrupt change in policy can readily be traced to the deepening stock market recession in the latter part of 1964 and in 1965, and under the circumstances it is not surprising that the funds did not respond. Given the underlying motives for the change in attitude, one is tempted to speculate about the regulatory authority's possible course of action should the stock market revive.

APPENDIX: SOURCES AND METHODS

Sources

The statistical findings are based on data derived from audited financial statements and official reports on file at various government agencies. These agencies include the Savings Authority of the Ministry of Finance, the Registrar of Limited Companies of the Ministry of Justice and the Registrar of Cooperative Societies of the Ministry of Labor. In addition, work sheets of the Research Department of the Bank of Israel have been used. When public sources proved inadequate for our purposes, individual retirement funds were contacted directly.

The data for 1952, 1953, and 1957 were aggregated from the financial statements of individual funds, and constitute a census of retirement fund financial accounts in those years. The collection of primary data was necessary for 1952 and 1953, since no independent estimates for the entire population of retirement funds are available for these years. The census of retirement funds for 1957 was carried out in order to provide comparable figures for the analysis of fund activities between 1952 and 1957. For the remaining years in the series, the estimates of the Savings Authority and the Bank of Israel have been used as a base. These estimates have been adjusted for the years 1958-61, to include funds which were not included in the source material. For the years 1954-56, no parallel adjustment was possible since the original worksheets were not preserved. The estimates for these years (and especially for 1955 and 1956) contain, therefore, a downward bias and are not strictly comparable with other years in the series.

Dating

In Israel financial statements are usually prepared at the end of the calendar year (December 31) or fiscal year (March 31). For our purposes, a given year has been defined to include financial statements dated during the period from June of that year through May of the following year.

Loans to Members

Retirement funds often grant loans to their members by means of third-party bank deposits. This has been especially true of the large social insurance funds. Before the issue of the Treasury Regulations these loans were often recorded under the general heading 'time deposits' in the funds' original statements. From 1958, however, third-party loans are listed, in accordance with the Regulations, under the heading 'loans to members'. Since third-party loans constitute a significant proportion of total member loans in all years, this differential treatment leads to serious lack of comparability between 1952-57 and 1958-61.

In order to circumvent this problem, adjustments were made for the earlier period. The adjustments were carried out for the four social insurance funds which accounted for the bulk of third-party loan deposits during these years.[1] For 1957, such loans were identified by examining the reclassified 1957 figures which appear in the funds' 1958 statements. For 1952-56, third-party loands were estimated from data on member participation in interest expenses on such loans. The average relationship between participations and total third-party loans outstanding for the years following 1957 was determined for each fund. This relationship was used to estimate third-party loans in years for which there were no data on such loans. These third-party loans, in turn, were deducted from time deposits and added to loans to members.

Employer Debts

Before 1958 employer debts were often listed in the original accounts under the heading 'notes receivable'. This is apparent, once again, from a comparison of the original 1957 statements with the reclassified statements for the same year which appear in the funds' 1958 balance sheets. For years before 1958, the notes receivable of the social insurance funds have been included under the heading employer debts. No parallel adjustment, however, could be carried out for provident and pension funds, and as a result employer debts may be slightly understated for years before 1958.[2]

Receipts and Outlays

For 1952 and 1957 receipts and outlays were aggregated from the income-expenditure accounts of individual funds; for 1961 the estimates of the Savings Authority and the Bank of Israel (adjusted for nonreporting funds) were used. The data on retirement fund receipts and outlays are presented net of internal transfers from account to account. Data on income and administrative expenses were adjusted to exclude items which reflect capital rather than income flows; the latter are included under the appropriate heading or as miscellaneous receipts or outlays. For the reasons given in Chapter 6 data on receipts and outlays are gross of inter-fund transfers.

Flow of Funds

In the case of funds which presented balance sheets, but did not present capital-income flow accounts, an adjustment has been made. The increase in assets (net of the increase in creditor accounts) was aggregated for these funds and appears in the 'omissions and errors' line of the flow of funds.

1 A complete adjustment could not be made for provident and pension funds since in many instances it proved impossible to identify indirect loans. In these funds, however, the proportion of indirect loans appears to have been small.

2 The 'receivables' of these funds were relatively small in all of the years covered and appear as 'other assets' in the appendix tables. Any downward bias resulting from a failure to identify employer debts from this source is presumably very small.

No attempt has been made to allocate this adjustment among individual receipt and outlay items.

Branch Classification

Retirement funds and their investments have been classified by major economic branch. The groupings are based on the branch classification used in Daniel Creamer's Provisional Estimates of Israel's National Income 1952-1953 (Falk Project and CBS Special Series No. 29, Jerusalem, 1955). Funds are classified according to the economic activity of the parent firm. Where an enterprise is engaged in more than one line of activity, the firm is classified according to its predominant activity. In this classification, government or Histadrut-owned enterprises are classified in accordance with their economic operations rather than ownership. A similar procedure has been adopted with regard to the classification of investments by branch of destination.

Sector Classification

The sector classification of funds and investments is based on ownership rather than economic activity. Where ownership is mixed, the firm is classified within the sector holding the controlling interest. An exception has been made with regard to the Bank Leumi group which is controlled by the Jewish Agency. Owing to the character of their operations, these firms (and their affiliated retirement funds) have been classified in the private sector. Although numerous firms are affiliated to the social insurance funds, the latter are classified in the Histadrut sector since effective control over their operations is exercised by the Histadrut's Department of Pensions.

Membership

Retirement fund membership is given as of the end of their financial years. The estimates are based on membership reports of individual funds to the Savings Authority and on membership data appended to the funds' annual financial statements. When data were not available from these sources, funds were contacted directly. In a few cases (especially for earlier years) membership was estimated as follows:

a. The total annual wage bill for a fund was calculated as total employer contribution in IL ÷ per cent rate of employer contribution.
b. Membership was estimated by dividing the wage bill thus computed by the average annual wage of the industry in question.

Membership in the social insurance funds presents a peculiar problem. These funds report on the number of accounts, rather than on the number of members. In some cases considerable duplication exists. In other instances the accounts represent 'dead' accounts of workers who are no longer employed in the industry in question, and who were apparently unaware of their benefit rights in the social insurance funds. The membership figures for these funds used in this report are based on estimates of the number of active members, but some degree of imprecision remains.

TABLE A-1. Composition of Retirement Fund Assets: 1952-61

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
A. IL millions										
Cash and current account	3.3	4.1	3.9	6.3	6.7	4.6	5.7	5.5	9.4	9.4
Investments	28.3	41.4	52.4	67.2	103.7	145.6	194.1	269.0	357.2	450.8
Time deposits	8.4	14.7	19.0	17.6	23.8	30.6	45.7	40.5	20.5	25.5
'Special' deposits	-	-	-	-	-	-	52.9	89.6	140.2	96.2
Deposits in and loans through Gmul Investment Company	6.1	10.1	15.2	23.0	33.6	40.6	-	-	-	-
Securities	5.8	6.8	7.1	12.0	27.9	45.9	73.7	115.2	171.0	297.9
Loans to enterprises and institutions	4.0	4.5	4.9	7.3	9.9	18.2	9.5	8.2	8.3	8.7
Real estate	4.0	5.3	6.2	7.3	8.5	10.3	12.3	15.5	17.2	22.5
Loans to members	7.5	12.7	22.0	26.4	29.8	48.6	59.0	71.1	82.0	103.0
Employer debts	9.2	13.3	17.6	19.7	25.7	37.9	44.3	48.2	49.5	62.7
Other assets	1.8	3.1	4.5	7.3	9.8	6.5	6.4	8.6	9.3	12.8
Total Assets*	50.1	74.6	100.4	126.9	175.6	243.4	309.5	402.4	507.6	638.7
B. Per cent										
Cash and current account	6.6	5.5	3.9	5.0	3.8	1.9	1.8	1.4	1.9	1.5
Investments	56.5	55.5	52.2	52.9	59.0	59.8	62.7	66.8	70.4	70.6
Time deposits	16.8	19.7	18.9	13.9	13.5	12.5	14.7	10.1	4.1	4.0
'Special' deposits	-	-	-	-	-	-	17.1	22.2	27.6	15.1
Deposits in and loans through Gmul Investment Company	12.2	13.5	15.1	18.1	19.1	16.7	-	-	-	-
Securities	11.5	9.1	7.1	9.5	15.9	18.9	23.8	28.6	33.7	46.6
Loans to enterprises and institutions	8.0	6.1	4.9	5.7	5.7	7.5	3.1	2.0	1.6	1.4
Real estate	8.0	7.1	6.2	5.7	4.8	4.2	4.0	3.9	3.4	3.5
Loans to members	15.0	17.0	21.9	20.8	17.0	20.0	19.1	17.7	16.2	16.1
Employer debts	18.4	17.8	17.5	15.6	14.6	15.6	14.3	12.0	9.7	9.8
Other assets	3.5	4.2	4.5	5.7	5.6	2.7	2.1	2.1	1.8	2.0
Total assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Detail may not add to total owing to rounding.

TABLE A-2. Composition of Social Insurance Fund Assets: 1952-61

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
A. IL millions										
Cash and current account	0.3	0.3	0.4	0.5	1.0	0.9	1.2	1.1	1.0	1.0
Investments	11.2	16.9	20.8	27.4	37.1	51.2	67.8	95.5	125.8	159.5
Time deposits	3.4	6.9	9.0	9.1	10.7	13.0	3.3	4.3	6.6	8.0
'Special' deposits	-	-	-	-	-	-	30.0	38.6	44.8	32.8
Deposits in and loans through the Gmul Investment Company	2.0	2.7	4.0	8.3	9.5	13.6	-	-	-	-
Securities	1.6	1.7	1.4	1.9	6.5	12.5	20.0	36.5	54.3	97.2
Loans to enterprises and institutions	1.7	2.0	2.6	3.6	5.5	6.2	6.5	5.9	6.7	5.1
Real estate	2.5	3.6	3.8	4.5	4.9	5.9	8.0	10.2	13.4	16.4
Loans to members	1.6	2.3	4.1	4.7	5.2	8.6	12.7	17.6	20.1	25.8
Employer debts	3.4	4.7	7.6	10.9	14.4	19.6	23.8	27.4	31.1	39.4
Other assets	0.6	1.2	1.4	2.4	3.1	2.5	2.9	4.0	3.3	4.4
Total Assets	17.1	25.4	34.3	45.9	60.8	82.8	108.4	145.6	181.3	230.1
B. Per cent										
Cash and current accounts	1.7	1.2	1.1	1.1	1.7	1.1	1.1	0.7	0.5	0.5
Investments	65.4	66.5	60.7	59.7	61.0	61.8	62.5	65.6	69.4	69.3
Time deposits	19.9	27.1	26.2	19.9	17.6	15.7	3.0	2.9	3.6	3.5
'Special' deposits	-	-	-	-	-	-	27.7	26.5	24.7	14.3
Deposits in and loans through the Gmul Investment Company	11.7	10.6	11.7	18.1	15.6	16.4	-	-	-	-
Securities	9.3	6.7	4.1	4.1	10.7	15.1	18.5	25.1	30.0	42.2
Loans to enterprises and institutions	9.9	7.9	7.6	7.8	9.1	7.5	6.0	4.1	3.7	2.2
Real estate	14.6	14.2	11.1	9.8	8.0	7.1	7.3	7.0	7.4	7.1
Loans to members	9.4	9.1	11.9	10.2	8.5	10.4	11.7	12.1	11.1	11.2
Employer debts	19.9	18.5	22.2	23.8	23.7	23.7	22.0	18.8	17.2	17.1
Other assets	3.6	4.7	4.1	5.2	5.1	3.0	2.7	2.8	1.8	1.9
Total Assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A-3. Composition of Provident Fund Assets: 1952-61

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
A. IL millions										
Cash and current account	3.0	3.8	3.5	5.8	5.7	3.7	4.5	4.4	8.4	8.4
Investments	17.1	24.5	31.6	29.8	66.6	94.4	126.3	173.5	231.4	291.3
Time deposits	5.0	7.8	10.0	8.5	13.1	17.6	42.4	36.2	13.9	17.5
'Special' deposits	-	-	-	-	-	-	22.9	51.0	95.4	63.4
Deposits in and loans through the Gmul Investment Company	4.1	7.4	11.2	14.7	24.1	27.0	-	-	-	-
Securities	4.2	5.1	5.7	10.1	21.4	33.4	53.7	78.7	116.7	200.7
Loans to enterprises and institutions	2.3	2.5	2.3	3.7	4.4	12.0	3.0	2.3	1.6	3.6
Real estate	1.5	1.7	2.4	2.8	3.6	4.4	4.3	5.3	3.8	6.1
Loans to members	5.9	10.4	17.9	21.7	24.6	40.0	46.3	53.5	61.9	77.2
Employer debts	5.8	8.6	10.0	8.8	11.3	18.3	20.5	20.8	18.4	23.3
Other assets	1.2	1.9	3.1	4.9	6.7	4.0	3.5	4.6	6.0	8.4
Total Assets*	33.0	49.2	66.1	81.0	114.8	160.6	201.1	256.8	326.3	408.6
B. Per cent										
Cash and current account	9.1	7.7	5.3	7.2	5.0	2.3	2.2	1.7	2.6	2.0
Investments	51.8	49.8	47.8	49.1	57.9	58.8	62.8	67.6	71.0	71.3
Time deposits	15.2	15.8	15.1	10.5	11.4	11.0	21.1	14.1	4.2	4.3
'Special' deposits	-	-	-	-	-	-	11.4	19.9	29.3	15.5
Deposits in and loans through the Gmul Investment Company	12.4	15.0	16.9	18.2	21.0	16.8	-	-	-	-
Securities	12.7	10.4	8.7	12.5	18.6	20.8	26.7	30.6	35.8	49.1
Loans to enterprises and institutions	7.0	5.1	3.5	4.5	3.8	7.5	1.5	0.9	0.5	0.9
Real estate	4.5	3.5	3.6	3.4	3.1	2.7	2.1	2.1	1.2	1.5
Loans to members	17.9	21.1	27.1	26.8	21.4	24.9	23.0	20.8	19.0	18.9
Employer debts	17.6	17.5	15.1	10.9	9.8	11.5	10.2	8.1	5.6	5.7
Other assets	3.6	3.9	4.7	6.0	5.9	2.5	1.8	1.8	1.8	2.1
Total Assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Detail may not add to totals owing to rounding.

TABLE A-4. Combined Capital Account of Retirement Funds: 1952, 1953 and 1957-61

	1952	1953	1957	1958	1959	1960	1961
A. IL millions							
Pension capital	. .	. .	. .	126.7	182.1	236.9	304.8
Savings capital	. .	. .	. .	114.5	127.6	152.4	185.6
Severance pay capital	. .	. .	. .	27.5	38.4	54.1	70.4
Subtotal	38.5	60.8	205.8	268.7	348.1	443.4	560.8
Mutual welfare funds	4.6	5.1	15.8	18.9	26.1	32.0	38.2
Reserve funds	3.3	2.8	4.7	5.8	8.9	8.1	10.7
Undistributed profits	0.5	0.5	2.4	3.0	3.7	4.7	8.5
Creditors	3.2	5.4	14.7	13.1	15.6	19.4	20.5
Total liabilities and capital	50.1	74.6	243.4	309.5	402.4	507.6	638.7
B. Per cent							
Pension capital	. .	. .	. .	40.9	45.3	46.7	47.7
Savings capital	. .	. .	. .	37.0	31.7	30.0	29.1
Severance pay capital	. .	. .	. .	8.9	9.5	10.7	11.0
Subtotal	76.8	81.5	84.6	86.8	86.5	87.4	87.8
Mutual welfare funds	9.2	6.8	6.5	6.1	6.5	6.3	6.0
Reserve funds	6.6	3.8	1.9	1.9	2.2	1.6	1.7
Undistributed profits	1.0	0.7	1.0	1.0	0.9	0.9	1.3
Creditors	6.4	7.2	6.0	4.2	3.9	3.8	3.2
Total liabilities and capital	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A-5. Combined Capital Account of Social Insurance Funds: 1952-61

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
A. IL millions										
Pension, savings, and severance pay capital	10.3	16.4	22.9	29.8	41.4	58.6	79.3	106.8	136.1	171.9
Mutual welfare funds	4.2	4.6	5.7	8.2	11.1	14.2	18.0	24.6	29.5	34.6
Reserve funds	0.6	0.9	1.1	1.3	1.0	1.3	2.1	4.1	4.0	7.9
Undistributed profits	0.1	-	0.1	-	0.1	0.1	0.2	-	-	-
Creditors	1.9	3.5	4.5	6.6	7.2	8.6	8.8	10.1	11.7	15.7
Total liabilities and capital	17.1	25.4	34.3	45.9	60.8	82.8	108.4	145.6	181.3	230.1
B. Per cent										
Pension, savings, and severance pay capital	60.2	64.6	66.8	64.9	68.1	70.8	73.2	73.4	75.0	74.7
Mutual welfare funds	24.5	18.1	16.6	17.9	18.3	17.1	16.6	16.9	16.3	15.0
Reserve funds	3.6	3.5	3.2	2.8	1.6	1.6	1.9	2.8	2.2	3.5
Undistributed profits	0.6	-	0.3	-	0.2	0.1	0.2	-	-	-
Creditors	11.1	13.8	13.1	14.4	11.8	10.4	8.1	6.9	6.5	6.8
Total liabilities and capital	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A-6. Combined Capital Account of Provident Funds: 1952, 1953 and 1957-61

	1952	1953	1957	1958	1959	1960	1961
A. IL millions							
Total pension, savings and severance pay capital	28.2	44.4	147.2	189.4	241.3	307.3	388.9
Mutual welfare funds	0.4	0.5	1.6	0.9	1.5	2.5	3.6
Reserve funds	2.7	1.9	3.4	3.7	4.8	4.1	2.8
Undistributed profits	0.4	0.5	2.3	2.8	3.7	4.7	8.5
Creditors	1.3	1.9	6.1	4.3	5.5	7.7	4.8
Total liabilities and capital	33.0	49.2	160.6	201.1	256.8	326.3	408.6
B. Per Cent							
Total pension, savings and severance pay capital	85.5	90.2	91.7	94.2	94.0	94.2	95.2
Mutual welfare funds	1.2	1.0	1.0	0.5	0.6	0.8	0.9
Reserve funds	8.2	3.9	2.1	1.8	1.9	1.2	0.7
Undistributed profits	1.2	1.0	1.4	1.4	1.4	1.4	2.0
Creditors	3.9	3.9	3.8	2.1	2.1	2.4	1.2
Total liabilities and capital	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A-7. Gross Receipts and Outlays of Retirement Funds: 1952, 1957 and 1961

(IL millions)

	1952			1957			1961		
	Retirement funds	Social insurance funds	Provident funds	Retirement funds	Social insurance funds	Provident funds	Retirement funds	Social insurance funds	Provident funds
A. Receipts									
Employer contributions	14.6	7.0	7.6	45.2	24.2	21.0	90.3	45.4	44.9
Pension				15.8	5.4	10.4	35.8	13.6	22.2
Savings	10.3	2.7	7.6	11.3	3.6	7.7	15.9	4.2	11.7
Severance pay				5.8	2.9	2.9	16.4	6.0	10.4
Fringe benefits	4.3	4.3	-	12.3	12.3	-	22.2	21.6	0.6
Member contributions	7.4	2.5	4.9	21.6	9.8	11.8	46.1	19.0	27.1
Pension	7.4	2.5	4.9	8.8	4.1	4.7	24.6	12.4	12.2
Savings				12.8	5.7	7.1	21.5	6.6	14.9
Transfers from other funds	0.2	. .	0.2	0.9	0.1	0.8	7.3	0.9	6.4
Investment income	1.4	0.4	1.0	11.7	3.7	8.0	30.3	9.7	20.6
Capital gains				0.5	0.1	0.4	7.4	2.7	4.7
Miscellaneous receipts	1.2	0.6	0.6	2.0	0.6	1.4	3.1	1.2	1.9
Total receipts	24.8	10.5	14.3	81.9	38.5	43.4	184.5	78.9	105.6
B. Outlays									
Benefit payments	4.1	2.7	1.4	17.8	11.5	6.3	39.5	21.4	18.1
Pension				2.7	1.0	1.7	13.8	4.9	8.9
Savings	2.0	0.6	1.4	7.2	2.0	4.6	9.0	2.4	6.6
Severance Pay					0.6		4.0	1.6	2.4
Fringe benefits	2.1	2.1	-	7.9	7.9	-	12.7	12.5	0.2
Insurance premiums	1.0	0.2	0.8	1.9	0.5	1.4	2.3	-	2.3
Administrative expenses	1.6	1.3	0.3	5.1	4.1	1.0	9.3	6.7	2.6
Transfers to other funds	0.5	0.2	0.3	2.3	0.9	1.4	3.0	1.8	1.2
Miscellaneous outlays	0.3	0.2	0.1	1.5	0.7	0.8	1.9	0.7	1.2
Total outlays	7.5	4.6	2.9	28.6	17.7	10.9	56.0	30.6	25.4

TABLE A-8. Savings Through Retirement Funds: 1952-61

(IL millions)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
A. Total retirement funds										
1. Net change in total assets	20.1	24.5	25.8	26.5	48.7	67.8	66.1	92.9	105.2	131.1
2. Capital gains	. .	0.3	. .	0.5	0.5	0.5	1.2	5.1	3.8	7.4
3. Net change in creditors account	2.7	2.2	1.4	2.6	2.6	2.6	-1.6	2.5	3.8	1.1
4. Gross saving [1. -(2. +3.)]	17.4	22.0	24.4	23.4	45.6	64.7	66.5	85.3	97.6	122.6
5. Net change in loans to members	3.6	5.2	9.3	4.4	3.4	18.8	10.4	12.1	10.9	21.0
6. Net savings (4. -5.)	13.8	16.8	15.1	19.0	42.2	45.9	56.1	73.2	86.7	101.6
7. Net change in employer debts	4.3	4.1	4.3	2.1	6.0	12.2	6.4	3.9	1.3	13.2
8. Net transferable savings (6.-7.)	9.5	12.7	10.8	16.9	36.2	33.7	49.7	69.3	85.4	88.4
B. Social insurance funds										
1. Net change in total assets	7.8	8.3	8.9	11.6	14.9	22.0	25.6	37.2	35.7	48.8
2. Capital gains	. .	0.3	. .	0.5	0.5	0.5	1.2	1.7	0.9	2.7
3. Net change in creditors account	1.9	1.6	1.0	2.1	0.6	1.4	0.2	1.3	1.6	4.0
4. Gross saving [1. -(2. +3.)]	5.9	6.4	7.9	9.0	13.8	20.1	24.2	34.2	33.2	42.1
5. Net change in loans to members	1.5	0.7	1.8	0.6	0.5	3.4	4.1	4.9	2.5	5.7
6. Net savings (4. -5.)	4.4	5.7	6.1	8.4	13.3	16.7	20.1	29.3	30.7	36.4
7. Net change in employer debts	2.1	1.3	2.9	3.3	3.5	5.2	4.2	3.6	3.7	8.3
8. Net transferable savings (6. -7.)	2.3	4.4	3.2	5.1	9.8	11.5	15.9	25.7	27.0	28.1
C. Provident funds										
1. Net change in total assets	12.3	16.2	16.9	14.9	33.8	45.8	40.5	55.7	69.5	82.3
2. Capital gains	. .	. .	. .	. .	. .	. .	. .	3.4	2.9	4.7
3. Net change in creditors account	0.8	0.6	0.4	0.5	2.0	1.2	-1.8	1.2	2.2	-2.9
4. Gross saving [1. -(2. +3.)]	11.5	15.6	16.5	14.4	31.8	44.6	42.3	51.1	64.4	80.5
5. Net change in loans to members	2.1	4.5	7.5	3.8	2.9	15.4	6.3	7.2	8.4	15.3
6. Net savings (4. -5.)	9.4	11.1	9.0	10.6	28.9	29.2	36.0	43.9	56.0	65.2
7. Net change in employer debts	2.2	2.8	1.4	-1.2	2.5	7.0	2.2	0.3	-2.4	4.9
8. Net transferable savings (6. -7.)	7.2	8.3	7.6	11.8	26.4	22.2	33.8	43.6	58.4	60.3

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TABLE A-9. Savings Through Retirement Funds at Constant Prices:* 1952-61

(millions of 1952 IL)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
A. Total retirement funds										
1. Net change in total assets	20.1	19.1	17.9	17.4	30.0	39.3	37.0	51.3	56.8	66.3
2. Gross savings	17.4	17.2	17.0	15.4	28.1	37.5	37.3	47.1	52.7	62.0
3. Net change in member loans	3.6	4.1	6.5	2.9	2.1	10.9	5.8	6.7	5.9	10.6
4. Net savings (2. -3.)	13.8	13.1	10.5	12.5	26.0	26.6	31.5	40.4	46.8	51.4
5. Net change in employer debts	4.3	3.2	3.0	1.4	3.7	7.1	3.6	2.1	0.7	6.7
6. Net transferable savings (4. -5.)	9.5	9.9	7.5	11.1	22.3	19.5	27.9	38.3	46.1	44.7
B. Social insurance funds										
1. Net change in total assets	7.8	6.5	6.1	7.6	9.1	12.8	14.3	20.5	19.3	24.7
2. Gross savings	5.9	5.0	5.5	5.9	8.5	11.7	13.6	18.9	17.9	21.3
3. Net change in member loans	1.5	0.6	1.3	0.4	0.3	2.0	2.3	2.7	1.4	2.9
4. Net savings (2. -3.)	4.4	4.4	4.2	5.5	8.2	9.7	11.3	16.2	16.5	18.4
5. Net change in employer debts	2.1	1.0	2.0	2.2	2.2	3.0	2.4	1.9	2.0	4.2
6. Net transferable savings (4. -5.)	2.3	3.4	2.2	3.3	6.0	6.7	8.9	14.3	14.5	14.2
C. Provident funds										
1. Net change in total assets	12.3	12.6	11.8	9.8	20.9	26.5	22.7	30.8	37.5	41.6
2. Gross savings	11.5	12.2	11.5	9.5	19.6	25.8	23.7	28.2	34.8	40.7
3. Net change in member loans	2.1	3.5	5.2	2.5	1.8	8.9	3.5	4.0	4.5	7.7
4. Net savings (2. -3.)	9.4	8.7	6.3	7.0	17.8	16.9	20.2	24.2	30.3	33.0
5. Net change in employer debts	2.2	2.2	1.0	-0.8	1.5	4.1	1.2	0.2	-1.3	2.5
6. Net transferable savings (4.-5.)	7.2	6.5	5.3	7.8	16.3	12.8	19.0	24.0	31.6	30.5

* Deflated by Consumers' Price Index.

TABLE A-10. Retirement Fund Securities Portfolio: 1953, 1957 and 1961

(IL millions)

	1953	1957	1960
Bonds			
Government and national institutions	3.5	27.9	86.1
Public enterprises	0.2	5.9	40.7
Histadrut enterprises	1.4	6.1	20.6
Private enterprises	0.8	1.7	13.9
Unspecified	0.2	2.5	1.6
Total bonds*	6.0	44.1	162.9
Shares			
Public enterprises	0.3	0.1	2.7
Histadrut enterprises	0.2	0.7	3.7
Private enterprises	0.3	1.0	0.4
Unspecified	-	-	1.3
Total shares	0.8	1.8	8.1
Total securities	6.8	45.9	171.0

* Detail may not add to total owing to rounding.

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