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1987 ANNUAL REPORT

MINNESOTA STATE BOARD OF INVESTMENT

645 State Office Building Saint Paul, Minnesota 55155

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MINNESOTA STATE BOARD OF INVESTMENT

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STATE OF MINNESOTA STATE BOARD OF INVESTMENT

Room 105, MEA Building 55 Sherburne Avenue Saint Paul 55155 (612) 296-3328

The Minnesota State Board of Investment is pleased to submit its 1987 Annual Report.

Fiscal year 1987 results represent the third consecutive year of exceptionally strong performance in the capital markets. Over this period, declining interest rates, low inflation, and steady economic growth have produced extraordinary returns on financial assets. To a great extent, the performance of the individual funds presented in this report reflect the favorable opportunities available in the capital markets.

Several items should be highlighted as major accomplishments for the year:

- The Basic Retirement Funds, the largest group of funds managed by the Board, produced a total rate of return of 14.5%. Over the last three years the Basic Funds have generated a cumulative return of 92%, excluding alternative assets. These advances were largely the result of the Board's asset allocation policy, which allowed the Basic Funds to take full advantage of the superior returns available in the capital markets. (Refer to page 7.)
- The Post Retirement Fund generated earnings that will provide a permanent benefit increase of slightly more than 8% for eligible retirees. This is more than double the fiscal year 1987 inflation rate. The Post Fund continued to benefit from the high inflation-adjusted yields available in the bond market during recent years. (Refer to page 29.)
- The Board obtained new investment authority under legislation adopted during the 1987 legislative session. By raising the maximum allowable exposure to common stock and alternative investments, the Legislature gave the Board additional flexibility in designing investment strategies for the funds under its control. (Refer to page 77.)
- The Board undertook a comprehensive review of the investment program established for the Basic Retirement Funds. The resulting investment policy statement will guide the management of the Basic Funds in the coming years. The recommendations emerging from the study will not greatly affect the investment objectives or asset allocation previously established for the Basic Funds. However, important features will be introduced in the investment management structure utilized by the Funds. These new features will include a completeness fund in the common stock segment of the Basic Funds and a

passively managed component in the bond segment of the Funds. (Refer to page 79.)

- Benchmark portfolios and performance based fees were implemented during fiscal year 1987. Each of the Board's external common stock managers is now evaluated and compensated based on their actual performance against a benchmark portfolio that reflects the manager's particular investment style. (Refer to page 81.)
- Pooled investment vehicles were introduced in the management of the State's cash accounts. These pools will provide greater operating efficiencies and should generate higher returns for the many small, individual accounts managed by the Board. (Refer to page 84.)

On June 30, 1987, the Board's portfolio totaled \$12 billion. This amount is actually a composite of several separate pension funds, trust funds and cash accounts, each with differing investment objectives. In establishing a comprehensive management program, the Board develops an investment strategy for each fund which reflects its unique needs. The primary purpose of this annual report is to clearly communicate the investment goals, policies, and performance of the various funds managed by the Board.

Through the investment programs presented in this report, the Minnesota State Board of Investment will continue to enhance the management and investment performance of the funds under its control.

Sincerely,

Howard Bieker

Howard J. Bicker Executive Director

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PART TWO of the Minnesota State Board of Investment's 1987 Annual Report contains financial statements and accounting data.

INTRODUCTION

Authorized

Investments

Investment

Policies

All investments undertaken by the Minnesota State Board of Investment (SBI) are governed by the common law prudent person rule and other standards codified in Chapter 11A of the Minnesota Statutes.

PrudentThe prudent person rule requires all members of the
Board, Investment Advisory Council, and SBI staff to "...act
in good faith and exercise that degree of judgment and care,
under circumstances then prevailing, which persons of
prudence, discretion and intelligence exercise in the
management of their own affairs, not for speculation, but for
investment, considering the probable safety of their capital as
well as the probable income to be derived therefrom."

In addition to the prudent person rule, the Minnesota Statutes contain a specific list of asset classes available for investment, including common stocks, bonds, short term securities, real estate, venture capital, and resource funds. The statutes prescribe the maximum percentage of fund assets that may be invested in each asset class and contain specific restrictions to ensure the quality of the investments.

Within the requirements defined by state law, the State Board of Investment, in conjunction with SBI staff and the Investment Advisory Council, establishes investment policies for all funds under its management. These investment policies are tailored to the particular needs of each fund and specify investment objectives, risk tolerance, policy asset mix, and investment management structure.

In recent years, the Board, its staff, and the Investment Advisory Council have conducted detailed analyses of the investment policies of the Basic Retirement Funds, the Post Retirement Investment Fund, the Supplemental Investment Fund, and the Permanent School fund. The results of these studies represent the "roadmap" by which the SBI manages

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INTRODUCTION

these funds. The Board intends periodically to revise the investment policy established for each fund. Most recently, the Basic Retirement Funds' investment policy was thoroughly reviewed and updated.

The annual report is divided into two separate publications:

- This volume contains the text of the annual report. It describes the investment policies and performance for each of the funds managed by the SBI. It also contains statistical data on the Board's managers.
- The second volume contains financial statements and accounting data.

FUNDS UNDER MANAGEMENT

BASIC RETIREMENT FUNDS POST RETIREMENT FUND SUPPLEMENTAL INVESTMENT FUND VARIABLE ANNUITY FUND STATE CASH ACCOUNTS PERMANENT SCHOOL FUND

FUNDS UNDER MANAGEMENT

FUND COMPOSITION

Fiscal Year 1987



FUNDS UNDER MANAGEMENT

	· · · · · · · · · · · · · · · · · · ·		
			Market Value June 30, 1987
The working	Retirement Funds Basic Retirement Funds contain the pension g participants in six major statewide retiremen Teachers Retirement Fund Public Employees Retirement Fund State Employees Retirement Fund Public Employees Police and Fire Fund Highway Patrol Retirement Fund Judges Retirement Fund		\$ 5.1 billion
The retirem retirem	etirement Investment Fund Post Retirement Investment Fund is component benefits to be paid to currently retired ent benefit increases are permitted based on the set of the set	mployees. Permanent	\$ 4.0 billion
The comper program state. P	mental Investment Fund Supplemental Investment Fund includes the insation plan, supplemental benefit arrangem ins for local police and firefighters, and the u articipants have a choice among seven separ tent emphases designed to meet a wide rang	ents, various retirement nclassified employees of the ate accounts with different	\$ 0.4 billion
•	Income Share Account Growth Share Account Common Stock Index Account Bond Market Account Money Market Account Guaranteed Return Account Bond Account	\$ 214 million 90 million 2 million 1 million 77 million 4 million 12 million	
The commo	le Annuity Fund Variable Annuity Fund is an investment opt on stocks which formerly was offered to mem nent Association. It is not available to new m	bers of the Teachers	\$ 0.2 billion
Thes They in	ash Accounts se accounts are composed of high quality, sho clude the Invested Treasurers Cash Fund, tr miscellaneous cash accounts.		\$ 2.0 billion
The	nent School Fund Permanent School fund is a trust established	for the benefit of	\$ 0.4 billion
Minnes	ota public schools.		\$12.1 billion

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INVESTMENT OBJECTIVES

ASSET ALLOCATION

INVESTMENT MANAGEMENT

INVESTMENT PERFORMANCE

COMPOSITION BY FUND

Fiscal Year 1987



The \$5.1 billion Basic Retirement Funds are composed of the retirement assets for currently working participants in six major statewide retirement funds.

The figure on page 8 identifies the individual statewide retirement funds which comprise the Basic Funds. The Basic Funds serve as accumulation pools in which the pension contributions of public employees and their employers are placed during the employees' years of active service. Approximately 200,000 public employees participate in the Basic Funds.

INVESTMENT OBJECTIVES

The State Board of Investment (SBI) pursues several investment objectives in the management of the Basic Funds' assets. In order of importance, those objectives are:

- To secure the benefits promised public employees covered by the statewide retirement funds
- To reduce employer/employee contributions and/or increase promised benefits
- To avoid excessive volatility in portfolio returns over the short-run

The Board's primary responsibility is to ensure that sufficient funds are available to finance promised benefits. However, other investment objectives are also important. Based upon the Basic Funds' adequate funding levels and participant demographics, its investment time horizon is quite long. This extended time horizon permits the Board to take advantage of the long-run return opportunities offered

1987 FISCAL YEAR-END ASSET MIX

Percent of Market Value



Bonds - 19.8%

	\$MILLION	ACTUAL	POLICY
COMMON STOCKS	\$3,070	59.8%	60.0%
BONDS CASH EQUIVALENTS*	1,016 506	19.8 9.8	22.0 3.0
CASH EQUIVALENTS.	500	9.0	5.0
ALTERNATIVE ASSETS:			
Real Estate	396	7.7	10.0
Venture Capital	86	1.7	2.5
Resource Funds	63	1.2	2.5
TOTAL	\$5,137	100.0%	100.0%

*includes cash uncommitted to long-term assets plus cash held by all external managers

by the capital markets. Historical evidence strongly supports the position that long-run investment results are highly correlated with short-run volatility of returns. Thus, the Board seeks to reduce the cost of pension funding through an aggressive, high expected return investment policy which incorporates a sizable equity component. The Board is cognizant, however, that excessive short-run return volatility is undesirable. As a result, the Basic Funds' investment policy also is designed to limit extreme portfolio return results.

ASSET ALLOCATION

The allocation of assets among common stocks, bonds, cash equivalents, and alternative investments can have a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio. Consequently, the Board has focused considerable attention on the selection of an appropriate long-term asset mix for the Basic Funds.

Based on the Basic Funds' investment objectives and the expected long-run performance of the capital markets, the Board has adopted the following policy (long term) asset allocation for the Basic Funds:

۲	Common Stocks	60.0%
•	Bonds	22.0%
•	Cash Equivalents	3.0%
	Real Estate	10.0%
۲	Venture Capital	2.5%
•	Resource Funds	2.5%

The figure on page 10 presents the actual asset allocation of the Basic Funds at the end of the 1987 fiscal year. Historical data on the Basic Funds' actual asset mix over the last five years are also displayed in the figure on page 12.

Policy Asset Mix



HISTORICAL ASSET MIX Percent of Market Value Fiscal Year-End Allocations

*includes cash uncommitted to long-term assets plus cash held by all external managers

Total Return The SBI invests the majority of the Basic Funds' assets in Vehicles common stocks. This large allocation is consistent with the investment time horizon of the Basic Funds and the advantageous long-term risk-return characteristics of common stocks. The rationale underlying the venture capital allocation is similar. However, the relatively small size of the venture capital market limits the allocation to this asset class.

> The Board recognizes that this sizable policy allocation to common stock and venture capital likely will produce more volatile portfolio returns than a more conservative, higher fixed income allocation policy. It is understood that this policy may result in quarters or even years of disappointing results. Nevertheless, the long-run return benefits of this policy are expected to more than compensate for the additional volatility.

The Board includes other asset classes in the Basic Funds' asset mix both to protect against debilitating economic environments and to diversify the portfolio sufficiently to avoid excessive return volatility. Real estate and resource fund investments provide an inflation hedge that other financial assets cannot offer. In a period of rapidly rising prices, these "hard" assets can be expected to appreciate in value at a rate at least equal to the inflation rate. Further, even under normal financial conditions, the returns on these assets are not highly correlated with common stocks. Thus, their inclusion in the portfolio serves to dampen return volatility.

The fixed income component of the Basic Funds' total portfolio (bonds and cash equivalents) acts as a hedge against a deflationary economic environment. In the event of a major deflation, high-quality fixed income assets, particularly long-term bonds, will not only protect principal but generate significant capital gains as well. And, like real estate and resource funds, under normal financial conditions fixed income securities help to diversify the Basic Funds' total portfolio, thereby controlling return volatility.

Inflation Hedge

Deflation Hedge

INVESTMENT MANAGEMENT

The SBI utilizes a two-part approach to the management of the Basic Funds' \$3.2 billion common stock portfolio:

- a large passive portfolio (i.e., an index fund)
- a smaller group of non-diversified actively managed portfolios

An **index fund** is a well-diversified portfolio of common stocks designed to match the rate of return performance of a predetermined stock market index. The index fund utilized by the SBI tracks the Wilshire 5000, a broad-based equity market indicator composed of the common stocks of all U.S.-domiciled corporations for which daily prices are available. In effect, the Wilshire 5000 represents virtually the entire domestic common stock market.

The Board's decision to utilize an index fund is based on the inherent difficulty of actively managing a multi-billion dollar common stock portfolio. The Board has chosen to accept market returns on a substantial portion of its common stock portfolio through the utilization of an index fund. The Board seeks above-market returns through the active management of the remaining common stock assets.

The actively managed segment of the Basic Funds' common stock portfolio is designed to complement the core index fund. With the index fund providing adequate diversification for the Basic Funds' total portfolio, the active managers are expected to add incremental value over the long-run through aggressive investment management decisions.

A comprehensive monitoring system has been established to ensure that the many elements of the common stock portfolio conform to the Basic Funds' investment policy. **Performance benchmarks** have been

Common Stock Segment

established for each of the Board's managers. These benchmarks enable the SBI to more effectively evaluate the managers' decision-making, both individually and in aggregate, with respect to risk incurred and returns achieved.

A description of each common stock manager's investment approach is included in the Manager Summary section. Their portfolio characteristics are included in the Statistical Data Appendix.

The Basic Funds' \$1.1 billion bond portfolio is managed by six external bond managers. This group of bond managers was selected for its blend of investment styles. Each of the managers invests in high-quality, fixed income securities. The managers vary, however, in the emphasis they place on interest rate anticipation and in the manner in which they approach issue selection and sector weighting decisions.

In keeping with the objective of utilizing the bond portfolio as a deflation hedge, the managers are restricted regarding the minimum average life of their portfolios. This requirement is designed to prevent the Basic Funds' total bond portfolio from assuming an excessively short-lived position and thus, severely diluting its deflation hedge capacity. Further, the bond managers are permitted to hold only high-quality (BAA or better) fixed income assets. In addition, to avoid extreme variability in total bond portfolio returns, the Board also constrains the maximum average life of the managers' portfolios.

All of the SBI's bond managers pursue active investment approaches. However, the Board has approved the use of passive management in the Basic Funds' bond portfolio. The SBI expects to construct a bond index fund during fiscal year 1988.

A description of each bond manager's investment approach is included in the Manager Summary section. Their portfolio characteristics are presented in the Statistical Data Appendix.

Bond Segment

The long-term asset mix of the Basic Funds targets a 3% allocation to cash equivalents. Given the long-run objectives of the Basic Funds and their limited liquidity needs, the Board believes that a minimal commitment to short-term investments is most appropriate. The cash equivalents allocation is based on the expectation that at any given time it is quite likely that some cash reserves will be present in the Basic Funds' total portfolio. Cash equivalent holdings are derived from two sources:

- New contributions provided by the retirement funds which have yet to be allocated to a specific long-term asset segment
- External investment managers, who are permitted to hold cash as part of their own individual short-run asset mix strategies

Cash reserves are invested in a short-term investment fund (STIF) managed by State Street Bank and Trust, the Basic Funds' master custodian. The STIF is a separate account invested under the same state statutes which guide all of the SBI's short-term investments.

Real Estate Investments

Cash

Equivalents

The Board allocates 10% of the Basic Funds for investment in real estate. State law authorizes the SBI to invest in real estate through commingled funds, limited partnerships, and trusts. Each of the Board's real estate investments involve at least four other participants. In addition, the Board's investment may not exceed 20% of a given commingled fund, partnership, or trust. State statutes do not permit investment in real estate through direct investments, separate accounts, or individual transactions.

The Board has adopted a three-part program to implement the real estate policy allocation:

• 30-40% of the real estate portfolio is invested in open-end diversified commingled funds

- 30-40% is invested in closed-end diversified commingled funds
- 20-30% is placed in less diversified, more focused commingled funds

The objective of the first two parts of the SBI's real estate program is to create a large core portfolio that is broadly diversified by property type, location, and financing structure. The core portfolio is designed to reflect the composition of the aggregate U.S. real estate market and, as such, is expected to earn at least market returns. The broad diversification of the core portfolio enables the SBI to implement the third part of the real estate program, the selection of less diversified, special orientation managers. With their more focused approach to real estate management, these funds offer the ability to enhance the return earned by the core portfolio.

Prospective real estate managers are reviewed and selected based on the managers' experience, investment strategy, and performance history.

The SBI continued to make progress toward its policy allocation to real estate during fiscal year 1987. New commitments were made to three closed-end commingled funds in both the diversified and specialty segments of the portfolio. The Board will continue to review and add new real estate investments to the portfolio, as needed, to fulfill the target 10% allocation. Future commitments likely will be in the form of follow-on funds with existing managers.

A description of each real estate manager's investment approach is included in the Manager Summary section.

Venture Capital Investments The Board allocates 2.5% of the Basic Funds to investment in venture capital. Under state law, the SBI is authorized to invest in venture capital through limited partnerships and corporations. As with real estate investments, each venture capital investment must involve at least four other investors. Further, the Board's maximum

investment size is 20% of a particular limited partnership or corporation.

Like the real estate portfolio, the SBI maintains a broadly diversified venture capital portfolio. It consists primarily of participations in venture capital partnerships and is diversified across three dimensions: location, industry type, and stage of corporate development of individual portfolio companies.

Prospective venture capital managers are reviewed and selected based primarily on the managers' experience, investment strategy, diversification potential, and performance history.

The Board's policy allocation to venture capital essentially was attained in fiscal year 1986. The Board intends to make additional commitments in future years as the growth of the Basic Retirement Funds warrants the expansion of the venture capital portfolio, and as the existing commitments begin to generate cash distributions.

A description of each venture capital manager's investment approach is included in the Manager Summary section.

The Board allocates 2.5% of the Basic Funds' assets for investment in oil and gas partnerships. The SBI invests in partnerships structured specifically for tax-exempt investors. Again, there must be four other participants in each of the SBI's resource investments and the Board may invest no more than 20% of a partnership's total capital. The resource partnerships in which the Board invests concentrate their investments in producing properties and royalty interests that are diversified geographically and/or geologically.

Resource investments are selected through procedures similar to those used to evaluate real estate and venture capital investments.

Resource Fund Investments

PERFORMANCE OF CAPITAL MARKETS

Cumulative Returns

1977 - 1987



*Merrill Lynch Master Index through 12/79; Salomon Broad Investment Grade Bond Index 1/80 - 6/87

During the 1987 fiscal year, the Board continued to search for new resource investments. Only one of several possible investments was selected. The considerable uncertainty in the energy market and the financial shake-out which has been occurring there for several years has created the potential for profitable investment opportunities. However, the Board found it difficult to identify investments whose terms and assumptions properly reflected the decline in energy prices. The Board plans to continue to review quality resource investments for possible inclusion in the Basic Funds' portfolio.

A description of each resource fund manager's investment approach is included in the Manager Summary section.

INVESTMENT PERFORMANCE

The Board has adopted performance objectives which are consistent with the objectives of the Basic Funds and realistic in the sense that they are both attainable and measurable. The evaluation of performance outcomes relative to established policy is an integral part of the SBI's investment program.

Given the long-term investment time horizon of the Basic Funds, the performance evaluation time period is necessarily long-term as well. Recognizing that excessive attention to performance in the short-run can be counterproductive. the SBI evaluates investment performance over a time horizon of approximately three to five years (roughly corresponding to a typical market cycle). While performance is measured and reviewed quarterly to identify trends and control extreme underperformance, decisions regarding the effectiveness of the Board's investment program are made over a considerably longer period.

TOTAL FUND PERFORMANCE

Fiscal Years 1983 - 1987



	1983	1984	1985	1986	1987	(Annu 3 YR.	alized) 5 YR.
TOTAL FUND (incl.)* (excl.)	40.5% 42.1	-5.5% -6.3	26.8% 28.4	26.2% 29.0	14.5% 15.8	22.4% 24.3	19.5% 20.6
Median Fund**	41.3	-2.1	26.3	25.1	13.1	22.8	20.6
Composite***	50.3	-4.7	29.8	29.2	15.4	24.6	22.6
Inflation	2.6	4.2	3.7	1.7	3.7	3.1	3.2

* includes alternative assets: real estate, venture capital and resource funds

** Wilshire Assoc. Trust Universe Comparison Service (TUCS) median tax-exempt balanced portfolio

*** 50/45/5 Wilshire 5000/Salomon Broad Investment Grade Bond Index/91 Day T-Bills composite through 12-31-82, 65/30/5 composite thereafter

Risk-Return Objectives	 The Basic Funds' multi-manager structure requires that investment performance be evaluated on two distinct levels: Total Fund. The use of total fund risk-return targets ensures that long-run strategic decisions which affect the total performance of the Basic Funds are implemented in a manner consistent with their investment policy. Individual Managers. Risk-return objectives for the individual managers are designed to ensure that their
	individual managers are designed to ensure that they adhere to their assigned investment roles and to permit an evaluation of the value they add to the SBI's investment program.
Total Fund Risk-Return Objectives	To a significant degree, the risk level of the total fund is set implicitly when the policy asset mix and investment management structure are determined. Given the adequate funding levels and long-term investment time horizons of the Basic Funds, the Board believes an above-average risk posture is appropriate.
	The Board's objective is to take advantage of the established relationship between risk and return. Higher risk investment strategies have been shown to offer higher long-run returns than lower risk strategies. The SBI's risk target is implemented through the long-term commitment of a sizable portion of the Basic Funds' assets to common stocks.
2	The Basic Funds' long-term rate of return performance is evaluated relative to two specific benchmarks:
	• Composite Index. The returns produced by the total portfolio are expected to exceed those derived from a composite of market indices, weighted in the same proportion as the Basic Funds' policy asset allocation. Because comprehensive data is available for only the stock, bond and cash equivalents markets, the composite index is weighted 65% stocks, 30% bonds, 5% cash equivalents.

• Median Tax-Exempt Fund. The Basic Funds' portfolio is expected to outperform the median return produced by a representative sample of other public and private tax-exempt balanced funds.

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Individual Manager Risk-Return Objectives Two primary long-run risk objectives have been established for the Basic Funds' **common stock** managers. The first objective is based on each manager's individual investment approach. Each manager (active or passive) is expected to hold a portfolio that is consistent, in terms of risk characteristics, with the manager's stated investment approach. The second objective relates to the managers' levels of diversification. The active common stock managers are expected to hold highly non-diversified portfolios, while the index fund manger is expected to hold a well-diversified portfolio. In the short-run, the active common stock managers may depart from these two risk targets as part of their specific investment strategies.

The SBI evaluates the common stock managers' returns against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The **benchmark portfolios** take into account the equity market forces that at times favorably or unfavorably impact certain investment styles. Thus, the benchmarks are more appropriate bogeys against which to judge the managers' performances than are broad market indices.

The SBI constrains the risk of the **bond** managers' portfolios to ensure that they fulfill their deflation hedge and total fund diversification roles. The bond managers are restricted in terms of the average life (i.e., the durations) of their portfolios and the quality of their fixed income investments.

The bond managers' investment styles are more broad-based than those of the common stock managers. Thus, the benchmark portfolio currently used to evaluate the bond mangers is the Salomon Broad Investment Grade Bond Index, which represents the performance of essentially the entire investment-grade bond market.

At this time, specific performance objectives have not been established for the **alternative investment** managers. The long-term nature of their investments and the lack of comprehensive data on the returns provided by the real estate, resource, and venture capital markets precludes



COMMON STOCK SEGMENT PERFORMANCE Fiscal Years 1983 - 1987

							(Annualized)	
	1983	1984	1985	1986	1987	3 YR.	5 YR.	
STOCK SEGMENT	54.1%	-11.1%	30.9%	33.8%	19.4%	27.9%	23.4%	
Wilshire 5000	66.5	-8.7	31.2	35.3	20.1	28.6	26.5	

BOND SEGMENT PERFORMANCE Fiscal Years 1983 - 1987



* Salomon Broad Investment Grade Bond Index 24

Total Fund

Performance

effective performance evaluation. In the future, as markets for these assets become more institutionalized, the SBI will fully integrate these assets into its performance analysis.

The Basic Funds' **risk objectives** are implicitly met by attaining the targeted policy asset mix. Progress toward fulfillment of the Board's policy asset mix target continued during fiscal year 1987. The common stock and bond targets have been achieved. Primary activity has centered around the Basic Funds' alternative investment programs. New commitments were made to real estate and resource investments during the year. With alternative investments near their policy asset allocation, only moderate additional activity is expected over the next several years.

With respect to **return objectives**, fiscal year 1987 was an excellent period of performance for the Basic Funds, primarily due to the strong returns of the stock market. The stock market, as represented by the Wilshire 5000, moved to record highs, generating a 20.1% total return for the year. The bond market, hindered by rising interest rates in the latter half of the fiscal year, produced mediocre returns. For the year, the bond market, as represented by the Salomon Broad Investment Grade Bond Index, generated a 5.6% total rate of return.

The Basic Funds' total portfolio generated a 14.5% total rate of return for fiscal year 1987. (Excluding alternative investments, the portfolio produced a 15.8% return). Fiscal year 1987 results represent the third consecutive year of exceptionally strong performance. Over this period, declining interest rates, low inflation, and steady if produced have unspectacular economic growth Excluding extraordinary returns on financial assets. alternative investments, the Basic Funds' cumulative three-year return is 91.8%.

Relative to established total fund performance objectives, the Basic Funds performed well. The Basic Funds' portfolio return substantially surpassed the return on the median tax-exempt fund. Further, the Basic Funds slightly exceeded the return on its policy asset mix performance target.

MANAGER PERFORMANCE

Fiscal Year 1987

TOTAL PORTFOLIO RETURN

COMMON STOCK MANAGERS	
Fred Alger	7.1%
Alliance Capital	23.6
Beutel Goodman	17.1
BMI Capital	20.7
Forstmann Leff	12.3
Hellman Jordan	23.1
IDS Advisory	19.3
Investment Advisers	18.1
Lieber & Company	7.3
Peregrine Capital	18.3
Waddell & Reed	19.3
Internal Manager	26.3
Wilshire Associates (Index Fund)	20.3
Basic Funds' Common Stock Segment	19.4%
Stock Segment Performance Standards	
Wilshire 5000	20.1%
TUCS Median Managed Equity Portfolio	19.4
Inflation	3.7
BOND MANAGERS	
Investment Advisers	5.2%
Lehman Management	5.2
Miller, Anderson & Sherrerd	14.0*
Morgan Stanley	7.4
Peregrine Capital	7.3
Western Asset	6.2
Basic Funds' Bond Segment	7.9%

Bond Segment Performance Standards	
Salomon Broad Investment Grade Bond Index	5.6%
TUCS Median Managed Bond Portfolio	5.8
Inflation	3.7

* performance reflects positive impact of pricing adjustment in 4Q 1986.

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Performance relative to total fund targets is presented on page 21.

Individual Manager Performance The external **common stock managers** successfully fulfilled their long-term risk objectives during fiscal year 1987. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained appropriate levels of diversification.

From a return perspective, the active common stock managers' results were mixed. In aggregate, the managers added modest value to their individual benchmarks. Most managers performed in a relatively narrow band around their benchmarks. Two managers (Alliance Capital and BMI Capital) experienced very strong results and two managers (Fred Alger Management and Beutel Goodman Capital) produced very weak performance relative to their benchmarks. As expected, the index fund essentially matched the performance of the Wilshire 5000 for the year.

During fiscal year 1987, the **bond managers** fulfilled their assigned long-term risk targets. Portfolio quality and maturities were maintained in the specified ranges.

The bond managers' rate of return results were generally favorable during the fiscal year. In aggregate, they outperformed their benchmark by a substantial margin. Aggregate returns were somewhat overstated due to a pricing adjustment in the Miller Anderson account. Nevertheless, the defensive stance held by most of the managers paid off during the latter half of the year when interest rates rose.

Performance data for the individual common stock and bond managers are presented on page 26.



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POST RETIREMENT FUND

INVESTMENT OBJECTIVES

ASSET ALLOCATION

INVESTMENT MANAGEMENT

INVESTMENT PERFORMANCE


The Post Retirement Investment Fund contains the pension assets of retired public employees covered by seven statewide retirement plans (i.e. the Basic Retirement Funds and the Legislative & Survivors Retirement Fund).

The assets of the Post Fund finance monthly annuities paid to retirees. These annuities may be adjusted upwards based on the earnings of the Post Fund. On June 30, 1987, the Post Fund had a market value of \$4.0 billion and over 50,000 retiree participants.

INVESTMENT OBJECTIVES

Public employees participating in the statewide retirement plans are promised benefits based on their total years of service and their "high five" average salaries. Upon the employees' retirement, sums of money sufficient to finance fixed monthly annuities are transferred from accumulation pools in the Basic Funds to the Post Fund. In order to support promised benefits, the Post Fund must "earn" at least 5% on its invested assets each year. If the Post Fund exceeds this earnings rate, excess earnings are used to finance permanent benefit increases for eligible retirees.

The State Board of Investment (SBI) pursues two investment goals for the Post Fund:

- To produce annual earnings sufficient to maintain promised benefits at current levels
- To generate additional earnings which allow benefits to be increased at a rate which compensates, to some degree, for inflation

1987 FISCAL YEAR-END ASSET MIX

Percent of Market Value



	\$MILLION	PERCENT
COMMON STOCKS	\$673	16.8%
BONDS	2,965	74.2
CASH EQUIVALENTS	359	9.0
TOTAL	3,997	100.0%

The Board views the first of these two objectives as being of primary importance. Furthermore, to achieve these two objectives, the SBI recognizes that the Post Fund requires a completely different investment approach than that applied to the Basic Retirement Funds.

The ability of the Post Fund to maintain current benefit levels and provide future benefit increases depends upon its earnings. State statutes define earnings for the Post Fund as interest and dividend income as well as realized equity and fixed income capital gains (or losses). Unrealized capital gains (or losses) have no direct impact on the benefits paid out to retirees. Unrealized capital gains (or losses) are excluded from defined earnings in order to make benefit payments largely insensitive to near-term fluctuations in the capital markets.

As a result, the Post Fund is not oriented toward long-term total rate of return maximization. Rather, the SBI attempts to generate a high, consistent stream of earnings for the Post Fund that will maintain current benefits, as well as produce benefit increases over time.

ASSET ALLOCATION

The Board has designed the asset mix of the Post Fund to generate the sizable stable earnings stream referred to in the previous section. The Post Fund's year-end asset mix, as well as its historical asset allocation data, are presented on pages 32 and 34.

The SBI invests the majority of the Post Fund's assets in a dedicated bond portfolio. A dedicated bond portfolio is a collection of various maturity, high-quality bonds which generate cash flows from income and principal payments that match a specific stream of liabilities. The highly predictable benefits owed to the Post Fund's retired participants and the high real interest rates that have existed in recent years have created an ideal situation to employ a dedicated bond portfolio.

Dedicated Bond Portfolio





2*	1983	1984	1985	1986	1987
COMMON STOCKS					
\$Million	693.0	657.0	733.0	681.0	673.0
Percent	39.5	35.5	27.1	18.6	16.8
BONDS					
\$Million	903.0	951.0	1,780.0	2,457.0	2,965.0
Percent	51.5	51.4	65.7	67.2	74.2
CASH EQUIVALENTS					
\$Million	157.0	243.0	196.0	520.0	359.0
Percent	9.0	13.1	7.2	14.2	9.0
TOTAL FUND					
\$Million	1,753.0	1,851.0	2,709.0	3,658.0	3,997.0
Percent	100.0	100.0	100.0	100.0	100.0

	The dedicated bond portfolio facilitates the attainment of the Post Fund's two objectives. Most importantly, it ensures that funds are available at the required times to meet promised benefit payments. Also, the dedicated bond portfolio consistently earns enough additional interest income to permit a minimum annual benefit increase of 3%, provided the portfolio yields at least 8% on a annual basis. If the Post Fund's other investments do well, as has been the case in recent years, the Post Fund can offer eligible retirees even more than this floor benefit increase.
Common Stocks	While bonds represent the largest asset class in the Post Fund's total portfolio, common stocks also play an important role. Common stocks provide the Post Fund with a source of long-run earnings growth not available from fixed income investments. In recent years, realized gains on common stocks have contributed importantly to the large benefit increases.
Cash Equivalents	Cash equivalents make up the remainder of the Post Fund's portfolio. Because the Post Fund's liquidity needs are very predictable, the SBI generally maintains a very small cash equivalents allocation. However, large cash flows into the Post Fund, which frequently occur at fiscal year-end, give a distorted view of the Post Fund's normal allocation to the segment.
Changes in Asset Mix	During fiscal year 1987, the asset mix of the Post Fund continued to shift toward bonds and away from common stocks. The substantial interest rate decline of recent years necessitated an increase in the size of the dedicated bond portfolio and a concomitant reduction in the size of the common stock portfolio. With lower interest rates, new cash flows into the Post Fund are invested at lower yields than in the recent past. If interest rates remain at relatively low levels, the size of the common stock portfolio will continue to shrink slowly as the dedicated bond portfolio grows larger.
•	 into the Post Fund, which frequently occur at fise year-end, give a distorted view of the Post Fund's norm allocation to the segment. During fiscal year 1987, the asset mix of the Post Fund's norm stocks. The substantial interest rate decline of recent year necessitated an increase in the size of the dedicated box portfolio and a concomitant reduction in the size of t common stock portfolio. With lower interest rates, new car flows into the Post Fund are invested at lower yields than the recent past. If interest rates remain at relatively le levels, the size of the common stock portfolio group of the size of the dedicated box portfolio will continue to shrink slowly as the dedicated bond portfolio group.

INVESTMENT MANAGEMENT

The Post Fund is managed solely by SBI staff. The Board employs this management structure for two reasons:

BENEFIT INCREASES VERSUS INFLATION

Fiscal Years 1983 - 1987



	1983	1984	1985	1986	1987	(Annua 3 YR.	lized) 5 YR.
BENEFIT INCREASE	7.5%	6.9%	7.9%	9.8%	8.1%	8.6%	8.0%
50% Inflation Rate	1.3	2.1	1.9	0.9	1.9	1.6	1.6

- Dedicated Bond Portfolio. The low turnover, limited discretion nature of the dedicated bond portfolio makes bond management by SBI staff cost effective.
- Investment Constraints. With respect to common stock management, the Post Fund's equity managers must be concerned with generating current income and avoiding realized losses. Most external investment managers are not used to functioning under the Post Fund's unique investment requirements. SBI staff, on the other hand, has operated under these constraints since the Post Fund's inception.

As described earlier, the dedicated bond portfolio represents the bulk of the Post Fund's assets. Staff constructs the lowest cost portfolio, within established constraints, that produces sufficient cash flows to fund promised benefit payments and maintains adequate quality levels.

Bond The management of the dedicated bond portfolio Management The management of the State's actuary supply SBI staff with forecasts of benefit payments expected to be paid over a twenty-five year horizon. Based upon these forecasts, a computer program generates a list of bonds that will meet these forecasted benefits. Staff then attempts to purchase the recommended issues. If these bonds are not available, substitute bonds are purchased. Staff rebalances the dedicated bond portfolio annually following the receipt of the benefit projections from the State's actuary.

Common Stock Management The focus of SBI staff's common stock management is long-term, value-based stock selection. Staff generally implements less aggressive investment strategies than those utilized by the Basic Retirement Funds' external equity managers. As the only common stock manager for the Post Fund, staff recognizes the diversification requirements of the Post Fund's stock portfolio. Further, SBI staff is aware of the Post Fund's need to avoid investment strategies which generate high portfolio turnover and which, at times, could result in sizable realized losses.

COMMON STOCK SEGMENT PERFORMANCE

Fiscal Years 1983 - 1987



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SBI staff attempts to identify stocks that have attractive expected returns, yet do not possess significantly high levels of market volatility. Staff uses recommendations generated by quantitative valuation models as the primary source of investment candidates. Staff always maintains a fully invested position in the equity portfolio.

INVESTMENT PERFORMANCE

Because of its focus on generating current income, the risk composition of the Post Fund's investment portfolio is conservatively structured. The majority of the Post Fund's assets are invested in high-quality bonds. Further, the Post Fund's equity portfolio maintains a relatively high level of diversification and a moderate level of relative market volatility.

In terms of long-term rate of return objectives, the Fund's investment results are compared to three standards:

- Actuarial Assumptions. In order to finance promised benefit payments, the Post Fund must generate a level of interest and dividend income which, combined with realized net capital gains, meets the Post Fund's actuarial assumptions of 5% per year.
- Benefit Increase Level. The Post Fund is expected to produce additional earnings sufficient to allow benefits to increase at a rate equal to at least one-half of the inflation rate.
- Common Stock Rate of Return. The total rate of return on the Post Fund's actively managed common stock portfolio is expected to exceed the performance of the Wilshire 5000.

The Post Fund's total portfolio met all of the prescribed risk targets during the 1987 fiscal year. The Post Fund was approximately 75% invested in fixed income assets, with an average quality rating of AAA. The Post Fund's common stock portfolio maintained a slightly above average level of

Total Fund Risk-Return Objectives

Total Fund Performance

relative market volatility and was consistently well-diversified.

Overall, investment returns relative to performance objectives were satisfactory for the 1987 fiscal year. The Post Fund generated income and realized net capital gains in excess of the amount needed to fund promised benefits. The surplus earnings will permit a benefit increase of 8.1%, considerably above the fiscal year 1987 inflation rate of 3.7%.

Common stock performance, on a relative basis, was disappointing. The contrarian value style pursued by the Post Fund's internal equity manager did not perform well. For the fiscal year, the common stock component failed to outperform its benchmark, the Wilshire 5000.

As shown on page 36, the Post Fund has generated benefit increases of 8.0% on an annualized basis for the last five years. During this period, investment returns were high compared to inflation, which increased at an annualized rate of 3.2%. The formula used to compute benefit increases was revised in 1980. During the eight years since the revised formula was instituted, benefit increases have been 7.2% on an annualized basis. This compares to an annualized inflation rate of 5.8% for the same period.

Post Fund performance data for the most recent fiscal year, as well as the last five years, are presented on pages 36 and 38.

INCOME SHARE ACCOUNT

GROWTH SHARE ACCOUNT

COMMON STOCK INDEX ACCOUNT

BOND MARKET ACCOUNT

MONEY MARKET ACCOUNT

GUARANTEED RETURN ACCOUNT

BOND ACCOUNT

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The Minnesota Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. The different participating groups use the Supplemental Fund for a variety of purposes:

- It functions as the investment manager for all assets of the Unclassified Employees Retirement Plan.
- It acts as the investment manager for all assets of the supplemental retirement programs for state university and community college teachers and for Hennepin County Employees.
- It is one investment vehicle offered to public employees as part of the state's Deferred Compensation Plan.
- It serves as an external money manager for a portion of some local police and firefighter retirement plans.

The Supplemental Investment Fund serves more than 14,000 individuals. On June 30, 1987, the market value of the entire fund was \$401 million.

A wide diversity of investment goals exists among the Supplemental Fund's participants. In order to meet those needs, the Supplemental Fund has been structured much like a "family of mutual funds." Participants may allocate their investments among one or more accounts that are appropriate for their needs, within statutory requirements and rules established by the participating organizations. Participation in the Supplemental Fund is accomplished through the purchase or sale of shares in each account.

Fund Structure

Range of Investment	In previous years, most participants in the Supplemental Fund had three different investment options:				
Options	 Income Share Account, a balanced portfolio of stocks and bonds 				
	• Growth Share Account, a portfolio consisting entirely of common stocks				
	• one of two debt-related accounts, the Fixed Return Account for individuals, or the Bond Account for retirement plans				
	At the request of the State Board of Investment (SBI), legislation was passed during the 1986 legislative session to expand the range of options available to participants. As a result, three new accounts were available to most participants beginning in fiscal year 1987:				
	• Common Stock Index Account, a passively managed common stock portfolio				
	• Bond Market Account, an actively managed fixed income portfolio				
	• Guaranteed Return Account, an investment option utilizing guaranteed investment contracts (GIC's)				
эк 4	In addition, the Fixed Return Account was converted to the Money Market Account, reflecting modifications in investment objectives.				
Share Values	Each account in the Supplemental Fund establishes a share value and participants may buy or sell shares monthly, based on the most recent unit value.				
	In the Income Share Account, the Growth Share Account, the Common Stock Index Account, and the Bond Market Account, shares are priced monthly based on the market value of the entire account. Individuals measure the performance of these accounts by changes in the account's share value, which in turn is a function of the income and capital appreciation (or depreciation) generated by the securities in the account.				

44

In the Money Market Account, the Bond Account, and the Guaranteed Return Account, share values remain constant and the accrued interest income is credited to the accounts through the purchase of additional shares at predetermined intervals.

The investment returns shown in this report are calculated using a time-weighted rate of return formula. These returns may differ slightly from calculations based on share values, due to the movement of cash flows in and out of the accounts.

FundIn many cases, the Supplemental Fund shares investmentManagementmanagers with the Basic Retirement Funds through
participation in the Combined Investment Funds. The
Combined Investment Funds are pools of assets invested in
equities, fixed income securities and other asset classes
utilized by the SBI. Participation in the Combined
Investment Funds provides the Supplemental Fund with the
same flexibility and efficiency of investment management
afforded the Basic Funds.

The investment objectives, asset allocation, investment management and investment performance of each existing account in the Supplemental Fund are explained in the following sections.

INCOME SHARE ACCOUNT

The \$214 million Income Share Account resembles the Basic Retirement Funds in terms of investment objectives. The Income Share Account seeks to maximize long-term inflation-adjusted rates of return. The Income Share Account pursues this objective within the constraints of protecting against disastrous financial environments and limiting short-run portfolio return volatility.

To achieve this objective, the SBI invests the Income Share Account in a balanced portfolio of common stocks and fixed income securities. The Income Share Account's

Investment Objectives

INCOME SHARE ACCOUNT

Total Account Performance Fiscal Years 1983 - 1987



* TUCS Median tax-exempt balanced portfolio

29.7

Bond Index***

** 50/45/5 Wilshire 5000/Salomon Broad Investment Grade Bond Index/91 day T-Bills Composite through 12-31-82, 60/35/5 Composite thereafter

1.8

*** Salomon Broad Investment Grade Bond Index

29.9

19.9

5.6

18.0

16.8

policy asset allocation calls for the following long-term asset mix:

- 60% common stocks
- 35% bonds
- 5% cash equivalents

Common stocks provide the potential for significant long-term capital appreciation, while bonds provide both a hedge against deflation and the diversification needed to limit excessive portfolio return volatility.

Investment Management The Income Share Account's investment management Approximately three-quarters of the common stock segment is passively managed by an external money manager. SBI staff actively manages the balance of the common stock segment and all of the fixed income component.

> Wilshire Associates, the Board's index fund manager, manages the passive component of the common stock segment. The Income Share Account participates in the index fund segment of the Combined Investment Funds. As discussed in the Basic Funds section, an index fund is designed to match the performance of a broad market index. Staff manages the internal portion of the common stock portfolio with a value-oriented approach, under which quantitative valuation models are used to determine stock selection.

InvestmentSimilar to the other SBI funds which utilize a
multi-manager investment structure, the Board evaluates
the performance of the Income Share Account on two
levels:

• Total Account. The Income Share Account is expected to exceed the returns of a composite of market indices weighted in the same proportion as its policy asset allocation. In addition, the Income Share Account's performance is expected to exceed the performance of the median fund from a universe of other balanced funds. • Individual Manager. The passive stock manager is expected to track closely the performance of the Wilshire 5000. Performance objectives for the internal stock manager are described in the Post Retirement Investment Fund discussion. The internal bond manager of the Income Share Account is expected to exceed the performance of the Salomon Broad Investment Grade Bond Index.

On a total account basis, the Income Share Account exceeded the performance of the median balanced fund manager but failed to outperform its market index composite. The index fund manager met its performance objectives. The internal bond manager surpassed its performance target, but the internal common stock manager underperformed its performance target. Total account results are presented on page 46.

GROWTH SHARE ACCOUNT

The Board has established above-average capital appreciation as the primary investment objective of the \$90 million Growth Share Account. To achieve this objective, the Account maintains a large equity exposure. The Growth Share Account's policy asset allocation calls for a large equity exposure:

- 95% common stocks
- 5% cash equivalents

The small cash equivalents component represents the normal cash reserves held by the Growth Share Account as a result of new contributions not yet allocated to common stocks. The Growth Share Account's asset mix may vary from its assigned policy allocation at times, depending on the Account managers' near-term outlook for the capital markets.

Investment Objectives

GROWTH SHARE ACCOUNT

Total Account Performance Fiscal Years 1983 - 1987



* TUCS Median Managed Equity Portfolio ** 95/5 Wilshire 5000/91 Day T-Bills Composite

Because of its substantial common stock policy allocation, the Growth Share Account's returns are more variable than those of the balanced Income Share Account. The Board expects higher long-run returns from the Growth Share Account's investments to compensate for the additional variability of returns.

Investment Management Management The SBI has assigned approximately two-thirds of the Growth Share Account's common stock portfolio to external managers and one-third to SBI staff. The staff manages the internal component with a long-term, value-oriented approach. The externally managed assets are managed by the Board's active equity managers through the Growth Share Account's participation in the common stock segment of the Board's Combined Investment Funds.

> The allocation of externally-managed assets to active common stock managers, as opposed to an index fund, reflects the more aggressive investment policy of the Growth Share Account.

InvestmentLike the Income Share Account, the Board evaluates the
performancePerformanceperformance of the Growth Share Account on two levels:

- Total Account. The Growth Share Account is expected to exceed the returns of a composite of market indices weighted in the same proportion as its policy asset allocation. The Account's performance is also expected to surpass the performance of the median portfolio from a universe of managed equity portfolios.
- Individual Manager. Performance objectives for the external managers are described in the Basic Retirement Funds discussion. Performance objectives for the internal manager are included in the Post Retirement Fund discussion.

The Growth Share Account failed to meet its total account and individual manager performance targets in fiscal year 1987. Total account results are shown on page 49.

COMMON STOCK INDEX ACCOUNT

The Common Stock Index Account is a new investment option for participants in the Supplemental Fund. The Common Stock Index Account began accepting contributions in July, 1986. At the end of fiscal year 1987, it had a market value of \$1.9 million.

Investment Objectives The investment objective of the Common Stock Index Account is to generate returns that match the performance of the common stock market, as represented by the Wilshire 5000. To accomplish this objective, the SBI allocates all of the Common Stock Index Account's assets to passively managed equities.

> This 100% common stock allocation means that the Common Stock Index Account's returns, like those of the Growth Share Account, are more variable than the returns produced by the balanced Income Share Account. The Board expects that this greater variability in returns will be compensated over the long-run by higher returns.

The Common Stock Index Account is invested entirely by Wilshire Associates, the SBI's passive equity manager. The Common Stock Index Account participates in the index fund segment of the Combined Investment Funds and thus shares Wilshire Associates as a passive manager with the Basic Retirement Funds and the Income Share Account.

The performance objectives of the Common Stock Index Account are straightforward. The Account is expected to track closely the performance of the Wilshire 5000. The SBI recognizes that the Account's returns may deviate slightly from those of the Wilshire 5000 due to the effects of management fees, new contributions, dividend flows, etc.

During fiscal year 1987, the Common Stock Index Account met its performance objectives, producing a 20.7% return versus a 20.1% return for the Wilshire 5000.

Investment Management

Investment Performance

BOND MARKET ACCOUNT

The Bond Market Account is also a new option for Supplemental Fund participants. It, too, began accepting contributions in July, 1986. At the end of fiscal year 1987, the market value of the Bond Market Account was \$800,000.

Investment Objectives The Bond Market Account offers participants a means of adding a fixed income component to their set of investments. The Bond Market Account is invested entirely in investment-grade government and corporate bonds with intermediate to long maturities.

> The Bond Market Account earns investment returns through interest income and capital appreciation. Because bond prices move inversely with interest rates, the Bond Market Account entails some risk for investors. However, it represents a lower risk alternative than the all-common stock investment options.

Investment The Management bond

The SBI invests the Bond Market Account through the bond segment of the Combined Investment Funds. The Bond Market Account thus shares fixed income managers with the Basic Retirement Funds. A discussion of the SBI's fixed income managers is presented in the Basic Funds section.

Investment Performance

The Bond Market Account is expected to exceed the performance of the bond market, as represented by the Salomon Broad Investment Grade Bond Index. For the fiscal year 1987, the Bond Market Account exceeded this target, with an 8.1% return compared to the Salomon index return of 5.6%.

A more detailed discussion of the performance of the SBI's bond managers is provided in the Basic Funds section.

MONEY MARKET ACCOUNT

The Money Market Account (formerly the Fixed Return Account) invests solely in short-term, liquid fixed income investments. The Money Market Account's investment objectives are to preserve capital and offer competitive money market returns. At the end of fiscal year 1987, the Money Market Account had a market value of \$77 million.

The SBI invests the Money Market Account through the short-term investment segment of the Combined Investment Funds. Thus, the Money Market Account is invested entirely by the SBI's short-term investment fund manager, State Street Bank and Trust Company.

The Money Market Account is expected to produce returns competitive with available short-term fixed income investments. The Money Market Account exceeded that target in fiscal year 1987 with a 6.4% return versus a return on 91-day Treasury Bills of 5.7%.

GUARANTEED RETURN ACCOUNT

The Guaranteed Return Account opened for subscription in November, 1986. At the end of fiscal year 1987, the account totaled \$4.5 million.

The Guaranteed Return Account is designed to offer participants a fixed rate of return for a specified period of time with negligible risk. The SBI invests the Guaranteed Return Account in three-year guaranteed investment contracts (GIC's) offered by major U.S. insurance companies.

Annually, the SBI accepts bids from insurance companies that meet financial quality criteria defined by State statute. Generally, the insurance company bidding the highest three-year GIC interest rate will be awarded the contract

for the three-year period. Participants in the Guaranteed Return Account then receive that interest rate on contributions made over the next twelve months.

Final bidding on the 1986 GIC contract occurred during October, 1986. Principal Mutual Life Insurance Company submitted the winning bid of 7.72%. Thus, all contributions made to the Guaranteed Return Account over the subsequent twelve months are managed by Principal Mutual for the three-year life of the GIC.

Within the constraints of permitting only top-rated U.S. insurance companies to bid on the GIC contracts, the SBI desires to maximize the three-year interest rate offered to Guaranteed Return Account participants. The Board believes the competitive bidding presents the most effective method of achieving this goal. The Board was very satisfied with the 1986 winning GIC bid of 7.72%, which was 122 basis points over prevailing interest rates on three-year Treasury Notes.

BOND ACCOUNT

The Bond Account was established by the 1981 Legislature to provide a separate fixed return investment vehicle for police and firefighter retirement organizations. The Bond Account is a low risk investment option which earns a high level of current income from quality debt securities. At the end of fiscal year 1987, the Bond Account had a market value of \$12 million.

Participation in the Bond Account is offered to qualified retirement organizations only. Individuals do not participate in this investment option. The Bond Account is designed to offer participating organizations a fixed rate of return for a specified period of time. The length of time this established return is in effect depends on the average maturity of the Bond Account's investments, usually in the range of six to eight years.

Contributions to the Bond Account made by the participating retirement organizations are grouped by year, referred to as a "class year." Depending on the fixed income investment opportunities available at the initiation of a class year, a rate of return is established for the contributions made by the participants in the class year. This rate is in effect for the life of the class. If a retirement organization chooses to withdraw from the Bond Account prior to the expiration of a class year, its shares are redeemed at market value.

The Bond Account is managed solely by SBI investment staff. Since all portfolio assets are held to maturity, staff provides very cost-effective management for the account. All assets are invested in investment grade debt securities (i.e. those rated BAA or above) with maturities of six to eight years.

The rates of return established for the last five class years are shown below:

Class Year	Fixed Period	Established Annual Yield
1983	6 yrs. (1983-88)	11.2%
1984	7 yrs. (1984-90)	13.0
1985	7 yrs. (1985-91)	11.8
1986	7 yrs. (1986-92)	10.5
1987	7 yrs. (1987-93)	9.0



VARIABLE ANNUITY FUND

INVESTMENT OBJECTIVES

ASSET ALLOCATION

INVESTMENT MANAGEMENT

INVESTMENT PERFORMANCE



The Minnesota Variable Annuity Fund is an investment option formerly offered to members of the Teachers' Retirement Association. The Variable Annuity Fund was designed as an alternative to the regular teachers' retirement plan. The opportunity to enroll is no longer offered to new Association members. However, members enrolled prior to the cutoff date may retain their participation in the Variable Annuity Fund and continue to make contributions. The June 30, 1987 market value of the Variable Annuity Fund was \$171 million.

INVESTMENT OBJECTIVES AND ASSET ALLOCATION

The investment objective of the Variable Annuity Fund is the same as that of the Growth Share Account in the Supplemental Investment Fund. The purpose of the Variable Annuity Fund is to provide participants with above average long-run capital appreciation on their investments.

This investment objective necessitates a sizable long-term commitment to common stocks. The Variable Annuity Fund is authorized to hold up to 100% of its market value in common stocks. The long term policy asset allocation of the fund is:

- 95% common stocks
- 5% cash equivalents

VARIABLE ANNUITY FUND

TOTAL FUND PERFORMANCE

Fiscal Years 1983 - 1987



* TUCS Median Managed Equity Portfolio

** 95/5 Wilshire 5000/91 Day T-Bills Composite

VARIABLE ANNUITY FUND

INVESTMENT MANAGEMENT

The State Board of Investment (SBI) has assigned approximately two-thirds of the Variable Annuity Fund's assets to the SBI's active external common stock managers. The Variable Annuity Fund shares these managers with the Basic and Supplemental Funds through the Combined Investment Funds. The remaining assets are managed by investment staff.

INVESTMENT PERFORMANCE

The Variable Annuity Fund's total fund performance is expected to surpass the returns of a market indices composite weighted in the same proportion as its policy asset allocation. In addition, the Variable Annuity Fund's performance is expected to exceed the performance of the median portfolio from a universe of managed equity portfolios.

Performance objectives for the Variable Annuity Fund's external stock managers are described in the Basic Retirement Funds discussion. Performance objectives for the Fund's internal manager are described in the Post Retirement Investment Fund discussion.

During the 1987 fiscal year, the Minnesota Variable Annuity Fund's performance failed to exceed the results of its total fund and individual manager performance objectives. Total fund results are presented on page 60.



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PERMANENT SCHOOL FUND

INVESTMENT OBJECTIVES

ASSET ALLOCATION

INVESTMENT MANAGEMENT

INVESTMENT PERFORMANCE

PERMANENT SCHOOL FUND

The Permanent School Fund is a trust fund created by the Minnesota State Constitution and designated as a long-term source of revenue for public schools. Proceeds from land sales, mining royalties, timber sales, and lakeshore and other leases are invested in the Permanent School Fund.

Income generated by the Permanent School Fund's assets currently is used to offset state school aid payments. During the 1987 fiscal year, investment income reported to the Minnesota Department of Finance totaled \$31.2 million.

INVESTMENT OBJECTIVES

The State Board of Investment (SBI) invests the Permanent School Fund to produce a high, consistent level of income that will assist in offsetting state expenditures on school aids.

The Permanent School Fund's investment objectives are influenced by the restrictive accounting provisions under which its investments must be managed. These provisions require that the Permanent School Fund's principal remain inviolate. Further, any net realized equity and fixed income capital gains must be added to principal. Moreover, if the Permanent School Fund realizes net capital losses, these losses must be offset against interest and dividend income before such income can be distributed. Finally, all interest and dividend income must be distributed in the year in which it is earned.

These accounting provisions limit the investment time horizon over which the Permanent School Fund is managed.

Investment Constraints
HISTORICAL ASSET MIX Percent of Market Value Fiscal Year-End Allocations



Long-run growth in its assets is difficult to achieve without seriously reducing current spendable income and exposing the spendable income stream to unacceptable volatility. The SBI, therefore, invests the Permanent School Fund's assets to produce the maximum amount of current income, within the constraint of maintaining adequate portfolio quality.

ASSET ALLOCATION

The SBI maximizes current income by investing all of the Permanent School Fund's assets in fixed income securities.

The SBI has a strong incentive not to invest in equity assets for several reasons:

- Common stock yields are considerably lower than bond yields. Thus, common stocks generate less current income than bonds.
- Stock prices are highly volatile and at times may produce realized capital losses that will reduce spendable income.
- Net capital gains become part of the Permanent School Fund's principal. Therefore, the effect of the volatility of common stock prices on the Permanent School Fund's spendable income cannot be smoothed out by spending past realized capital gains.

Considering these constraints, the Board completely eliminated the Permanent School Fund's small common stock component in fiscal year 1986, investing the proceeds in fixed income securities. The Permanent School Fund's 1987 year-end asset mix, as well as its historical asset allocation data, are shown on page 66.

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INVESTMENT MANAGEMENT

SBI staff manages all of the Permanent School Fund's assets. Given the existing accounting restrictions of the Permanent School Fund, external managers would find it extremely difficult to invest the Permanent School Fund's portfolio. Typically, money managers seek to earn superior total rates of return (which include income and capital appreciation) through active management.

The Permanent School Fund's emphasis on producing high levels of current spendable income through passive investments is not compatible with the investment style of most money managers. In addition, with the move to an all-fixed income portfolio, SBI staff management of the Permanent School Fund is the most cost-effective approach. The staff manages the Permanent School Fund's bond portfolio primarily through a buy-and-hold laddered maturity approach.

INVESTMENT PERFORMANCE

The Permanent School Fund's investment objective is to maximize spendable income, within the constraint of maintaining adequate portfolio quality.

From a total portfolio risk perspective, the Permanent School Fund is very conservatively structured, as its target asset mix calls for a full commitment to fixed income securities. Within the bond portfolio, SBI staff controls risk by establishing a laddered portfolio structure, thereby avoiding significant interest rate bets. Further, the staff purchases only investment-grade bonds and seeks to maintain an overall portfolio quality rating of at least AA.

From a rate of return perspective, the Board is not concerned with the Permanent School Fund's total rate of

return. Market value changes have no effect on the Permanent School Fund's ability to produce spendable income. Spendable income is affected only to the extent that any securities are sold at losses. Thus, the Permanent School Fund's return objective is to maintain a high current yield on new investments.

The Permanent School Fund achieved its risk-return performance objectives during the year. On June 30, 1987, the Permanent School Fund's bond portfolio had a duration of 6.6 years with an average quality rating of AAA. Further, for the fiscal year the Permanent School Fund generated income in excess of the Minnesota Department of Finance's spendable income target.

CASH MANAGEMENT

STATE CASH ACCOUNTS

SECURITIES LENDING PROGRAM

CD PROGRAM

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CASH MANAGEMENT

STATE CASH ACCOUNTS

The State Board of Investment (SBI) manages the \$1.9 billion short-term assets of State agency accounts and trust funds with the objectives of preserving capital and providing competitive money market returns. To this end, the SBI invests cash accounts in short-term, liquid, high-quality debt securities. These investments include U. S. Treasury and Agency issues, repurchase agreements, bankers acceptances, and commercial paper.

Most State cash accounts are managed by SBI staff through two pooled investment vehicles, which operate much like money market mutual funds. (These short-term pooled funds were created late in the 1987 fiscal year and are described in more detail in the Major Developments section of this report.)

- Trust Fund Pool. This pool contains cash balances of retirement-related accounts managed internally as well as the cash in the Permanent School Fund. The Trust Fund Pool has a daily balance of approximately \$350 million.
- Treasurer's Cash Pool. This pool contains cash balances from special or dedicated accounts necessary for the operation of State agencies as well as the balance of Invested Treasurer's Cash. The Treasurer's Cash Pool has a daily balance of approximately \$1.1 billion.

Because of special legal restrictions, a small number of cash accounts cannot be commingled. These accounts are therefore invested separately.

CASH MANAGEMENT

SECURITIES LENDING PROGRAM

As part of its cash management program, the SBI administers a securities lending program in which U. S. Treasury and Government Agency securities held by the SBI are loaned to banks and government security dealers for a daily fee. These loans are fully collateralized. The Securities Lending Program has generated approximately \$1.5 million per year in additional income for the funds managed by the Board.

CERTIFICATE OF DEPOSIT PROGRAM

The SBI also manages a certificate of deposit (CD) program in which it purchases CD's from Minnesota banks and savings and loan institutions. The SBI receives a market rate of return on these investments, using the average secondary CD market rate quoted by the New York Federal Reserve Bank. Only the cash reserves of pension funds (i.e., Basic Retirement Funds or Post Retirement Fund) are used in the program. As a result, all investments are fully insured by the Federal Deposit Insurance Corporation (FDIC) or Federal Savings and Loan Insurance Corporation (FSLIC).

The Minnesota Certificate of Deposit program provides a reliable source of capital to all Minnesota financial institutions, regardless of size, many of which do not have access to the national CD market. The Board designed the CD process so that no single institution is favored in the allocation of assets. Since it began in 1980, the SBI has purchased over \$1 billion of CD's from 365 financial institutions throughout the state.

LEGISLATIVE INITIATIVES

BASIC FUNDS POLICY REVIEW

BENCHMARK PORTFOLIOS

PERFORMANCE-BASED FEES

POOLED CASH ACCOUNTS

RESOLUTION ON SOUTH AFRICA

PROXY VOTING



LEGISLATIVE INITIATIVES

The statutory investment authority of the State Board of Investment (SBI) was expanded by the 1987 Legislature. The Board's legislative initiatives included several individual proposals.

New Equity Limits The Legislature approved higher limits on the use of common stocks and alternative assets in a fund. Alternative assets include real estate, venture capital and oil and gas funds:

- Alternative assets may now comprise up to 35% of a fund. (The previous limit was 20%.)
- Alternative assets and common stocks combined may now occupy up to 85% of a fund. (The previous limit was 75%.)

These higher limits will offer the Board greater investment flexibility in future policy decisions on asset allocation.

Within the new limits described above, the Board also requested two types of securities be added as allowable alternative assets:

- High-yield and unrated debt securities
- International investments

The Legislature adopted the Board's request regarding debt securities but did not approve the addition of international investments.

The new debt authority will allow the Board to increase its use of unrated private placement debt and to take

Additional Authorized Assets

advantage of growing investment opportunities in the taxable municipal market.

The Board's request for international authority gained substantial support despite its failure to gain final approval. As a result, the Board intends to renew this request during the 1988 session.

Administrative Changes

The Board proposed several changes to simplify other investment activities:

- Short-term Securities Provisions. Obsolete and extraneous language was removed from the statutes regarding bankers acceptances, certificates of deposit and commercial paper. In addition, new criteria governing the quality of those investments were added to the statutes. These changes should enhance the Board's ability to obtain competitive returns on its short-term investments. The amendments also remove cumbersome administrative procedures associated with the operation of the Minnesota Certificate of Deposit Program. (See page 74 for a description of this program.)
- Cash Account Maturity Limits. Formerly, State cash accounts were limited to investments in debt obligations with maturities of three years or less. Recent changes in federal tax law made this provision disadvantageous in certain instances. The limit was removed to avoid incurring penalties on arbitrage earnings. Due to the liquidity needs, nearly all cash accounts will continue to be invested in short-term securities with maturities considerably less than three years.

BASIC FUNDS POLICY REVIEW

The investment program for the Basic Retirement Funds has been in place for over three years. In that time, both the capital markets and the Basic Funds have undergone significant changes. In response to those changes, the Board staff, in collaboration with the Investment Advisory Council, formally updated the Basic Funds investment policies during fiscal year 1987. The Board adopted the recommendations over the course of the year.

The review process drew on information developed by a number of sources including the Board's staff; the Board's consultant, Richards & Tierney; members of the Investment Advisory Council; and the investment community at-large.

nentAn important product of this review process was the
creation of a formal investment policy statement for the
Basic Retirement Funds. The statement is a set of
guidelines for the management of the Basic Funds which
address several issues:

- Investment objectives
- Risk tolerance
- Long-term policy asset mix
- Asset class targets
- Investment management structure
- Performance evaluation

In a series of position papers, staff thoroughly discussed each of these topics and provided specific recommendations to be implemented. The investment policy statement itself is a summary of the recommendations adopted by the Board for the Basic Funds.

Investment Policy Statement

The guidelines set forth in the policy statement have been incorporated in the description of the Basic Retirement Funds found on pages 7 to 28.

Summary of Recommendations The recommendations that emerged from the study will not greatly change the investment objectives and the asset allocation previously established for the Basic Funds. The most significant modifications will occur in the investment management structure utilized by the Basic Funds.

> During fiscal year 1988, the Board staff, working in conjunction with the Investment Advisory Council, will implement several new management features. The most notable changes are:

- Creation of a passively managed component in the bond segment of the Basic Funds. Currently, all bond holdings are actively managed.
- Use of flexible allocations to active and passive management in the Basic Funds' stock and bond segments. Active management will range from a minimum of 10% to a maximum of 50%. Passive management will occupy the residual, from a minimum of 50% to a maximum of 90%.
- Construction of a completeness fund to offset any style biases in the actively managed segment of the Basic Funds. Selection of active managers will be based solely on their potential to provide superior performance.

The Board recognizes that there are no clear-cut answers to many of the issues raised during the analysis. However, by giving all issues thorough consideration, the Board can be confident that it is pursuing a well-designed and consistently applied investment policy appropriate for the Basic Funds.

BENCHMARK PORTFOLIOS AND PERFORMANCE-BASED FEES

During fiscal year 1986, the State Board of Investment (SBI) developed benchmark portfolios for each of its external common stock managers. These benchmarks became an integral component of a performance-based fee system which was also introduced during that year for most of the Board's stock managers. During fiscal year 1987, the benchmark building process was refined and performance-based fees were implemented with most of the Board's external active stock managers. In addition, the Board revised the formula used to calculate the fee.

Benchmark Portfolios

A benchmark portfolio is a customized index that represents the investment style of an individual money manager. A benchmark reflects the prominent risk characteristics that a manager's portfolio would exhibit if the manager were making no active investment judgments.

Benchmark portfolios are appropriate targets against which to measure the performance of individual managers. At times, managers may perform well simply because their styles are "in favor." As representations of managers' styles, benchmark portfolios compensate for this factor. This allows plan sponsors to evaluate more effectively the value individual managers add to the investment process.

SBI staff developed the initial benchmark portfolios for the Board's active common stock managers in fiscal year 1986. During fiscal year 1987, responsibility for maintaining appropriate benchmarks was shifted from staff to the individual managers. These benchmarks are monitored by Board staff and the Board's consultant, Richards & Tierney. The managers' performances relative to their benchmarks are calculated by Richards & Tierney on a quarterly basis.

Benchmark portfolios will continue to be a key component of the Board's on-going investment management program. They have proven to be useful tools

Performance

Based Fees

in manager evaluation and are integral to the application of performance-based fees.

After the Securities and Exchange Commission removed its prohibition on performance-based fees, the SBI was among the first institutional investors to implement this method of compensation for its external active common stock managers. By the end of fiscal year 1987, nine of the Board's eleven external stock managers were being paid using a fee schedule that compensated managers for their performance relative to their benchmark portfolios. During fiscal year 1988, all of the stock managers will be compensated through performance fees.

The Board uses a symmetrical fulcrum fee system. This fee system establishes a base compensation for a manager and a performance benchmark against which additional compensation (positive and negative) is paid. If a manager's performance matches that of the target, no additional fee is paid. If performance exceeds the target, an additional predetermined amount is paid. If performance fails to match the target, the base fee is reduced by the same predetermined formula. As a result, performance above the target produces additional payments to managers that are equivalent to those withheld from managers for performance below target.

The base fee was originally set at a single fixed rate. Given the growing account sizes of the SBI's active stock managers, staff believed that the single rate base fee component in the performance fee formula was too high and should be reduced. As a result, staff recommended that the Board adjust the fee schedule.

There are several important aspects of the revised fee structure adopted by the Board in late fiscal year 1987:

- As assets under management increase, the base fee rate paid to the manager will decrease in line with the manager's sliding fee scale.
- The excess performance calculation will reflect base fee payments. The manager's actual portfolio return will be calculated net of the base fee. The manager

is expected to outperform the benchmark portfolio, net of the base fee, by 150 basis points.

- Regardless of the base fee, the manager will still reach the minimum and maximum total fee rates at the same levels of deficit and excess performance measured net of the base fee (i.e., 600 basis points below and 900 basis points above the benchmark's return, respectively).
- The minimum fee rate will be zero and the maximum total fee rate will be twice the base fee.

The Board believes that this revised fee structure retains the simplicity and non-volatile nature of the symmetrical fulcrum fee structure. At the same time, it permits the SBI to benefit from the reduced fees charged by managers as account sizes increase. The revised performance fee schedule was implemented at the start of fiscal year 1988.

POOLED CASH ACCOUNTS

As described earlier in this report, the State Board of Investment manages approximately \$2 billion in cash accounts. These assets represent the balances in more than 200 separate accounts that flow through the Minnesota State Treasury and range in size from \$5,000 to over \$400 million.

During the year, Board staff examined the feasibility of Feasibility establishing a commingled investment pool for these accounts. Staff believed a large pool would be beneficial to participants since it would reduce both the all recordkeeping required and the number of individual transactions necessary to maintain the operation of all accounts. In addition, staff felt higher rates of return could be generated due to the increased investment flexibility of a large-scale pool.

> After examining the statutory requirements for each of the accounts, the Attorney General's office determined that legal restrictions prohibited a small number of accounts from participating in a pool. However, the remaining majority could be commingled, provided the interest income attributable to each account could be calculated and appropriately credited.

Staff determined that two separate pools should be

created to reflect the different nature and purpose of the various accounts:

- . Trust Fund Pool. This pool would contain the cash balances of retirement-related accounts managed internally by SBI staff, as well as the cash in the Permanent School Fund. The Trust Fund Pool would have a daily balance of approximately \$350 million.
- Treasurer's Cash Pool. This pool would contain cash balances from special or dedicated accounts necessary for the operation of state agencies, as well

Design

	as the balance of the state's Invested Treasurer's Cash. The Treasurer's Cash Pool would have a daily balance of approximately \$1.1 billion.
Objectives	Staff determined that both pools could be invested with the same objectives:
	• Liquidity. The pools should meet the cash needs of all participants without the forced sale of securities at a loss.
	• Safety of Principal. Pool participants should expect their deposits to be returned in full, with additional interest income.
	• Competitive Rate of Return. The pools should generate investment income at a level that is competitive with other money market type funds.
Implementation	Working from these objectives, staff developed internal investment guidelines that address a variety of issues including the quality and marketability of assets selected for investment and the maturity requirements of each pool.
	After review by the Investment Advisory Council, the Board adopted the staff recommendation to implement the cash pool vehicles. The two pools described earlier were constructed in late fiscal year 1987.

RESOLUTION ON SOUTH AFRICA

On October 2, 1985, the Board adopted a resolution concerning its holdings in companies doing business in the countries of South Africa and Namibia. The resolution calls for the Board to implement a four-phase divestment program which will be completed in 1989. The resolution also requires that divestment action will not take place before the Board obtains legal and financial advice concerning any impact on its fiduciary responsibilities.

When the resolution was adopted, the Board created a Task Force on South Africa to advise the Board on its implementation process. Membership of the Task Force includes one person designated by each of the five Board members, one representative from the private sector, one representative from the retirement fund systems, and one public employee representative.

The resolution establishes the following timetable for the

Board's divestment program:

- Phase 1: By January 2, 1986, the SBI will limit its holdings and future investments to companies that are signatories of the Sullivan Principles, as most recently amended, and/or making substantial efforts to eliminate Aparthied.
- Phase 2: By August 3, 1986, the SBI will limit its holdings and future investments to companies that meet the requirements of Phase 1 and that subject their behavior in South Africa or Namibia to monitoring by Arthur D. Little, Inc., or similar, suitable monitor.
- Phase 3: By August 3, 1987, the SBI will limit its holdings and future investments to companies that have complied with Phases 1 and 2 and that obtain the highest Sullivan Principles rating by Arthur D. Little, Inc., or the equivalent thereof.

Summary

• Phase 4: By August 3, 1989, the SBI will be divested of and make no new investments in companies doing business in South Africa.

In addition, the resolution requires the Board to consider divesting its holdings in companies which operate in a manner which directly supports Apartheid. Companies that support Apartheid are those which provide goods or services to governmental agencies responsible for the enforcement of Apartheid; provide technology or facilities which make South Africa or Namibia less dependent on international trade; or provide financial services to the government or governmental agencies of South Africa or Namibia.

Implementation of Phases 1 & 2 After the Board's resolution was adopted, the Sullivan Organization stipulated that companies must provide outside monitoring of their activities in order to maintain their status as a signatory of the Sullivan Principles. As a result, all signatories meet the requirements of both Phases 1 and 2 of the resolution.

> When it began implementation of the resolution, the Board and the Task Force focused their attention on companies in the actively managed common stock portfolios. Based on correspondence with companies known to do business in South Africa and information available through the Investor Responsibility Research Center (IRRC), it was initially determined that twenty companies in the actively managed common stock portfolios had not signed the Sullivan Principles.

> By January, 1986 (the end of Phase 1), fourteen of these companies became signatories or instituted a policy comparable to the Sullivan Principles and three other non-signatories sold their operations in South Africa. As a result, three companies in the actively managed common stock portfolios did not meet the requirements of the resolution by the end of Phase 1.

> After reviewing reports from its financial and legal advisors, the Board decided not to immediately liquidate the affected holdings. Rather, it chose to implement the

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requirements of the resolution by instituting a policy of "divestment through attrition." Under this policy, Board's active stock managers were directed to discontinue purchases of stock in the restricted companies unless the manager determined the failure to buy a particular stock would be a violation of its fiduciary responsibility. As existing holdings were sold during the normal course of business, the stock holdings in restricted companies would decline.

By August, 1986 (the end of Phase 2), the actively managed common stock portfolios did not contain the stock of any company which had not signed the Sullivan Principles. As a result, all holdings in those portfolios met the requirements of the resolution at the end of Phase 2. This change was due both to sales of stock by managers during the normal course of business as well as the decision of other companies to become signatories of the Sullivan Principles.

Implementation of Phase 3

Phase 3 of the resolution requires the SBI to restrict its holdings to signatories that have achieved the highest category ranking on their implementation of the Sullivan Principles (i.e., "Category I, Making Good Progress").

In May, 1987, the Task Force recommended that the divestment through attrition policy be expanded to include any company in the actively managed stock portfolios that did not meet the Phase 3 requirements. This action restricts the active common stock managers from purchasing stock in any of the following companies: non-signatories of the Sullivan Principles; companies whose most recent rating on their implementation of the Sullivan Principles was "Category II, Making Progress" or "Category III, Needs to Become More Active."

In May, the Board's active stock managers had positions in 26 restricted companies totaling 2.8 million shares. In August, 1987, the managers had positions in 16 restricted companies totaling 831,000 shares. This was a 70% reduction in the number of restricted shares and indicates substantial progress had been made in implementing the Board's policy of divestment through attrition in Phase 3.

This reduction was due both to sales of stock by managers during the normal course of business as well as the decisions of companies to terminate their operations in South Africa.

Future developments concerning Phases 3 and 4 of the resolution will be described in subsequent Annual Reports.

Shareholder Activity

As part of its implementation of the resolution, the Board sponsored or co-sponsored shareholder resolutions during the 1986 and 1987 proxy seasons. These resolutions called for companies to sign the Sullivan Principles.

Of the nine shareholder resolutions filed in 1986, six were withdrawn when the companies became signatories or terminated their operations in South Africa prior to their annual meetings. Three resolutions came to a vote. The current status of those companies with respect to South Africa is shown below:

- Diamond Shamrock terminated their operations in South Africa.
- Hughes Tool merged to form Baker Hughes, which is a signatory.
- U.S. Steel (USX) is now a signatory.

In 1987, three companies were identified as candidates for the Board's shareholder resolution. One resolution was withdrawn when the company terminated its operations in South Africa and another was dropped when the company became a signatory prior to their annual meeting. The Board's proposal came to a vote at Lubrizol, where the resolution drew 11.0% affirmative votes.

Shareholder activity during the 1988 proxy season will be reported in future Annual Reports.

PROXY VOTING

As a stockholder, the State Board of Investment (SBI) is entitled to participate in corporate annual meetings through direct attendance or casting its votes by proxy. Through proxy voting, the Board directs company representatives to vote its shares in a particular way on resolutions under consideration at annual meetings. Resolutions prepared at annual meetings range from routine issues, such as those involving the election of corporate directors and ratification of auditors, to non-routine items involving such matters as merger proposals and corporate social responsibility issues. In effect, as a shareholder the SBI can participate in shaping corporate policies and practices.

All non-routine proxy matters are reviewed by a committee of the Board and voted in accordance with the SBI's statement of investment responsibility, which states, in part:

"... The Investment Board recognizes that when performing their duty of investing the trust funds (pension and other funds) for which they are custodian, their primary responsibility is the prudent and responsible investment of the assets of the funds for the economic benefit of the beneficiaries of the funds...

...Consistent with prudent and responsible investment policy, the Investment Board shall not knowingly invest or maintain holdings in those corporations which are in flagrant violation of the law or in stubborn disregard of the social welfare of the society, or do not recognize environmental responsibilities in their corporate actions, and are not taking reasonable steps to overcome the situations..."

COMMON STOCK MANAGERS

BOND MANAGERS

ALTERNATIVE INVESTMENT MANAGERS



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COMMON STOCK MANAGERS

Fred Alger searches for companies expected to experience **Fred Alger** above-consensus earnings gains. These earnings gains may be either cyclical or secular. The firm focuses on two types of companies: first, Management companies whose products are expected to produce high consistent unit volume growth rates and second, companies undergoing a positive life cycle change not yet fully recognized by the market. The proportion of the total portfolio invested in these two types of companies varies over time. On average, however, the high unit growth companies tend to dominate the total portfolio. Fred Alger is not an active market timer, usually maintaining a fully invested position.

Alliance searches for companies likely to experience high rates of earnings growth, on either a cyclical or secular basis. Alliance has invested in a wide range of growth opportunities from small, emerging growth to large, cyclically sensitive companies. There is no clear Management distinction on the part of the firm as to an emphasis on one particular type of growth company over another. However, the firm's decision-making process appears to be much more oriented toward macroeconomic considerations than is the case with most other growth managers. Accordingly, cyclical earnings prospects, rather than secular, appear to play a larger role in terms of stock selection. Alliance is not an active market timer, rarely raising cash above minimal levels.

> BMI's investment approach focuses on companies expected to exhibit strong sustained earnings gains. BMI attempts to identify two types of "growth" companies: first, misperceived companies that are in the process of undergoing dynamic changes that will cause them to produce materially higher earnings over the near-term; and second, small-to-medium sized companies that exhibit the potential for rapid future earnings growth. The weighting of the two types of growth companies within the firm's portfolio will vary over time depending upon economic and financial conditions. Generally, however, the misperceived companies will make up the majority of the portfolio. On the other hand, the smaller high growth companies tend to dominate the portfolio's risk characteristics. The firm concentrates almost exclusively on stock selection, only rarely raising cash to significant levels.

Beutel Goodman searches for companies whose stock prices are low in comparison to estimated tangible book value or companies whose P/E's are low in relation to earnings quality and expected earnings growth. This "value" investment approach is contrarian and defensive by nature, exhibiting less volatility than investment styles focusing on growing earnings. Beutel Goodman is not an active market timer and is almost always fully invested.

Alliance Capital

BMI Capital

Beutel Goodman Capital Management

Forstmann Leff Associates	Forstmann Leff is a classic example of a "rotational" manager. The firm focuses almost exclusively on asset mix and sector weighting decisions. Based upon its macroeconomic outlook, the firm will move aggressively into and out of asset classes and equity sectors over the course of a market cycle. The firm tends to purchase liquid, large capitalization stocks. Forstmann Leff will make sizable market timing moves at any point during a market cycle.
Hellman Jordan Management	Hellman Jordan is a "rotational" manager. Its cyclical and secular economic forecasts drive its asset mix and industry sector selections. The firm's primary focus is asset allocation, although it will invest in a wide range of industries over a market cycle. The firm tends to purchase liquid, large capitalization stocks. Hellman Jordan will make sudden and significant asset mix shifts over a market cycle.
IDS Advisory	IDS employs a "rotational" style of management, shifting among industry sectors based upon its outlook for the economy and the financial markets. The firm emphasizes primarily sector weighting decisions. Moderate market timing is also used. Over a market cycle IDS will invest in a wide range of industries. It tends to buy liquid, large capitalization stocks. While IDS will make occasional significant asset mix shifts over a market cycle, the firm is a less aggressive market timer than most rotational managers.
Investment Advisers	Investment Advisers is a "rotational" manager. Its macroeconomic forecasts drive its investment decision-making. The firm emphasizes market timing and sector weighting decisions. Investment Advisers will invest in a wide range of industries over a market cycle. It tends to hold liquid, medium to large capitalization stocks. The firm is an active market timer, willing to make gradual but significant asset mix shifts over a market cycle.
Lieber & Co.	Lieber and Co. seeks to identify investment concepts that are either currently profitable or likely to become so in the near future, yet whose prospects are not reflected in the stock prices of the companies associated with the concepts. The investment concepts upon which the firm focuses are related to both macroeconomic trends and specific product developments within particular industries or companies. Stocks purchased by Lieber tend to be those of well-managed, high growth and high return on equity, small-to-medium sized companies. The stocks may be undervalued due to the failure of investors to recognize fully either the value of new products or a successful turnaround situation. Particularly attractive to Lieber are small-to-medium sized takeover candidates. The firm generally is fully invested, with any cash positions the result of a lack of attractive investment concepts.

Peregrine Capital Management	Peregrine is a contrarian investor searching for poorly performing stocks that have been "oversold" by the market. The firm expects that the prices of these stocks will rebound as the market's "emotional excesses" come to be recognized. The firm is very price sensitive. As a result it is an active trader, buying stocks as their performance relative to the market declines and selling stocks as relative performance rises. Peregrine tends to hold small positions in a large number of stocks, avoiding significant bets on individual issues. The firm is a moderate market timer, alternating its cash position incrementally around a moderately low cash position.
Waddell & Reed	Waddell & Reed focuses its attention primarily on small capitalization aggressive growth stocks. However, the firm has demonstrated a willingness to make significant bets against this investment approach for extended periods of time. The firm is an active market timer and will raise cash to extreme levels at various points in the market cycle.
Wilshire Associates	The index fund managed by Wilshire Associates is a well-diversified portfolio of common stocks designed to match the rate of return performance of a predetermined stock market index. The index fund utilized by the SBI tracks the Wilshire 5000, a broad-based equity market indicator composed of the common stocks of all U.S. domiciled corporations for which daily prices are available. In effect, the Wilshire 5000 represents virtually the entire domestic common stock market.

Portfolio statistics for each of these managers can be found in the Statistical Data Appendix.

BOND MANAGERS

Investment Advisers Investment Advisers is a traditional top down bond manager. The firm's approach is oriented toward correct identification of the economy's position in the credit cycle. This analysis leads the firm to its interest rate forecast and maturity decisions, from which the firm derives most of its value-added. Investment Advisers is an active asset allocator, willing to make rapid, significant moves between cash and long maturity investments over the course of an interest rate cycle. Quality, sector and issue selection are secondary decisions. Quality and sector choices are made through yield spread analyses consistent with the interest rate forecasts. Individual security selection receives very limited emphasis, focusing largely on specific bond characteristics such as call provisions.

Lehman Management Lehman's primary emphasis is on forecasting cyclical interest rate trends and positioning its portfolios in terms of maturity, quality and sectors, in response to its interest rate forecast. However, the firm avoids significant, rapidly changing interest rate bets. Instead, it prefers to shift portfolio

interest rate sensitivity gradually over a market cycle, avoiding extreme positions in either long or short maturities. Individual bond selection is based on a quantitative valuation approach and the firm's internally-conducted credit analysis. High quality (A or better) undervalued issues are selected consistent with the desired maturity, quality and sector composition of the portfolios.

- Miller, Anderson & Sherrerd Miller Anderson focuses its investments in misunderstood or under-researched classes of securities. Over the years this approach has led the firm to emphasize mortgage-backed securities in its portfolios. Based on its economic and interest rate outlook, the firm establishes a desired maturity level for its portfolios. This decision is instituted primarily through the selection of specific types of mortgage securities that have prepayment expectations consistent with the portfolio's desired maturity. The firm will also move in and out of cash, but generally only gradually over an interest rate cycle and never taking extremely high cash positions. Total portfolio maturity is always kept within an intermediate three-to-seven year duration band. Unlike other firms that also invest in mortgage securities, Miller Anderson intensively researches and, even in some cases manages, the mortgage pools in which it invests.
- Morgan
StanleyMorgan Stanley takes a very conservative approach to fixed income
investing, emphasizing the preservation of capital through the generation
of consistent real returns. This philosophy has led the firm to maintain a
vast majority of its portfolio in short to intermediate maturity, high
quality (A or better) securities. Large positions in maturities longer than
ten years are held only as temporary trading opportunities. These
positions are increased or reduced gradually as the firm's expectations of
the cyclical level of interest rates changes. Issue selection is of secondary
importance to maturity decisions. Rather, given its maturity decisions, the
firm prefers to make sizable investments in specific areas of the market
where it believes persistent misvaluations are present.
- **Peregrine Capital Management** Peregrine Capital stresses consistency of fixed income portfolio relative returns. To accomplish this goal, the firm maintains a portfolio of high quality, liquid securities and a balance of maturity levels avoiding extreme exposures on either the long or short end. Further, Peregrine will make only gradual moves between maturities over an interest rate cycle. The firm also concentrates on exploring misperceived fixed income securities, which has led the firm to make extensive use of mortgage-backed securities and floating rate notes.
- Western Asset Management Western recognizes the importance of interest rates changes on fixed income portfolio returns. However, the firm believes that successful interest rate forecasting, particularly short-run forecasting is extremely difficult to accomplish consistently. Thus, the firm attempts to keep portfolio maturity in a narrow band near that of the market, making only relatively small, gradual shifts over an interest rate cycle. It prefers to add value primarily through appropriate sector decisions. Based on its economic analysis, Western will significantly overweight particular sectors, shifting these weights as economic expectations warrant. Issue

selection, like its maturity decisions, are of secondary importance to the firm.

Portfolio statistics for each of these managers can be found in the Statistical Data Appendix.

ALTERNATIVE INVESTMENT MANAGERS

Real Estate

Fund: RESA

Real Estate Separate Account (RESA) is an open-end commingled real estate fund managed by the Aetna Life and Casualty Company of Hartford, Conn. The fund was formed in January, 1978. The fund has no termination date; investors have the option to withdraw all or a portion of their investment. RESA invests primarily in existing equity real estate. Investments are diversified by location and type of property. On-site management of properties is contracted to outside firms or conducted by a joint venture partner.

Fund: Prime Property Fund

Prime Property Fund was formed in August 1973 by the New York-based Equitable Real Estate Group, Inc. The account is an open-end commingled real estate fund. The fund has no termination date; investors retain the option to withdraw all or a portion of their investment. The fund makes equity investments in existing real estate. The fund's portfolio is diversified by location and property type. Management of the fund's properties is contracted to outside firms or is conducted by joint venture partners.

Fund: PRISA I

PRISA I is an open-end commingled real estate fund. One of the largest and oldest of the open-end funds, PRISA I was formed in July 1970 by the Prudential Investment Management Corporation of New Jersey. PRISA's real estate portfolio consists primarily of equity investments in existing properties. Investments are diversified by both the type and location of properties. Prudential contracts with outside firms for the on-site management of its properties or retains joint venture partners as property managers. The fund has no termination date. Investors have the option quarterly to withdraw a portion or all of their investment.

Aetna Life & Casualty

Equitable Real Estate Group

Prudential

Investment

Management

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Fund: RREEF USA III

Rosenberg Real Estate Equity Funds (RREEF) RREEF USA III is a closed-end commingled fund managed by the Rosenberg Real Estate Equity Funds. It has a twelve-year term. Typically, the trust purchases 100% of the equity of its properties with cash. The trust generally does not utilize leverage or participating mortgages. Properties are diversified by location and type. RREEF's in-house staff manages the trust's real estate properties. The firm's primary office is located in San Francisco.

Funds: HAC Group Trust I HAC Group Trust II HAC Group Trust III

Heitman Advisory Corp. (HAC) HAC Oloup Heitman Adv equity real es and location Heitman, man

HAC Group Trusts are closed-end commingled funds managed by the Heitman Advisory Group. The majority of the trust investments are equity real estate. The real estate portfolios are diversified by the type and location of the properties. Centre Properties, Ltd., an affiliate of Heitman, manages the trust's wholly-owned properties. Properties that are partially owned by the trusts may be managed by joint venture partners. Heitman Advisory is based in Chicago.

Funds: TCW Realty Fund III TCW Realty Fund IV

TCW Realty Funds are closed-end commingled funds. The funds are managed as joint ventures between Trust Company of the West and Westmark Real Estate Investment Services of Los Angeles. These managers utilize specialty investment vehicles such as convertible and participating mortgages to enhance real estate returns. Investments are diversified by location and type. Portfolio properties are typically managed by local property management firms.

Funds: AEW - State Street Real Estate Fund III AEW - State Street Real Estate Fund IV

State Street Real Estate Funds are closed-end commingled funds managed by the State Street Bank and Trust Company of Boston. State Street Bank has retained Aldrich, Eastman and Waltch (AEW) as the funds' advisor. The funds' special orientation is the use of creative investment vehicles such as convertible and participating mortgages to maximize real estate returns. The real estate portfolios are diversified by location and property type. On-site property management typically is contracted to outside firms or conducted by joint venture partners.

Venture Capital

Fund: Northwest Venture Partners I

Norwest Venture Capital Management Northwest Venture Partners I was formed in January 1984 and has a term of ten years. Norwest Venture Capital Management, a wholly owned subsidiary of Norwest Corp., is the general partner and manager of the partnership. Norwest Venture Capital also manages the Northwest

Trust Company of the West (TCW)

State Street

Bank & Trust

Growth Fund, an SBIC, and Northwest Equity Capital, a leveraged buyout fund. Northwest Venture Partners' investment focus is on high technology companies in the early stages of corporate development. However, the partnership's portfolio also includes investments in expansion stage firms and is diversified by the location and industry type of its portfolio companies.

Funds: KKR 1984 LBO Fund KKR 1986 LBO Fund

Fund: Summit Ventures

and industry type.

Kohlberg, Kravis, Roberts & Co. (KKR)

KKR's Leveraged Buyout Funds are structured as limited partnerships. The funds invest in large management leveraged buyouts. The partnerships' portfolio companies are mature, low technology companies with very diversified operations. Kohlberg, Kravis, Roberts and Co. operates offices in New York and San Francisco.

Summit Ventures is a limited partnership with a ten-year term. It was

formed in December 1984 by Stamps, Woodsum & Co., the managing

general partners of the fund and Shearson/American Express. Stamps and Woodsum focus on profitable, expansion stage firms that have not yet received any venture backing. The majority of the partnership's investments are in high tech firms. Investments are diversified by location

Stamps. Woodsum & Co.

Smith Barney

Venture Corp.

DSV Management Ltd.

Fund: First Century III First Century III was formed in December 1984. It is structured as a limited partnership with a term of ten years. The general partner and manager of the partnership is Smith Barney Venture Corp., a subsidiary of Smith Barney Harris Upham and Co. Smith Barney Venture has offices in New York and San Francisco. This is the third fund formed by the firm since 1972. The partnership invests primarily in early stage, high technology companies. Investments are diversified by location and industry group.

Fund: DSV Partners IV

DSV Partners IV limited partnership was formed in April, 1985. It has a twelve-year term. DSV Partners IV is the fourth venture fund to be managed by DSV Management Ltd. since the firm's inception in 1968. The firm has offices in Princeton, New Jersey, and California. DSV Partners' investment emphasis is on portfolio companies in the start-up and early stages of corporate development. The geographic focus of the partnership is on East and West Coast firms. Investments are diversified by industry type.

Fund: Inman & Bowman

Inman & Bowman Management The Inman & Bowman limited partnership was formed in June, 1985. Its investment focus is early-stage, high-technology firms. The fund will emphasize investments in California, where the general partner, Inman & Bowman Management, is based. However, the fund will consider investments in the Pacific Northwest as well. The partnership has a ten-year term.

Matrix Partners	Fund: Matrix Partners II Matrix Partners II limited partnership was formed in August, 1985 and has a term of ten years. The fund's investment emphasis is on high-technology firms in the early and expansion stages of corporate development. However, for diversification the Fund's portfolio will include a sizable component of non-technology firms. The portfolio may include several small leveraged buyout investments as well. The fund is managed by five experienced general partners. The partners have offices in Boston, San Jose, and San Francisco.
Allied Capital	Fund: Allied Venture Partnership Allied Venture Partnership was formed in September 1985 and has a ten-year term. Based in Washington D.C., the fund focuses on later-stage, low technology companies located in the Southeastern and Eastern U. S. Most investments will be made in syndication with Allied Capital, a large, publically owned venture capital corporation formed in 1958.
IAI Venture Capital Group	Fund: Superior Venture Partners Superior Ventures is a Minnesota-based venture capital limited partnership. It was formed in June 1986 and has an eleven-year term. Superior Ventures is managed by IAI Venture Capital Group, a subsidiary of Investment Advisers, Inc. Up to 15% of the fund will be invested in other Minnesota-based venture capital limited partnerships. The remainder of the fund will be invested in operating companies located within the state.
T. Rowe Price	T. Rowe Price, a Baltimore-based money management firm, was selected to manage stock distributions from the Board's venture capital limited partnerships. T. Rowe Price has extensive research capabilities in the small capitalization company area. In addition, the firm has a large trading staff with particular expertise in the trading of small capital, illiquid stocks.

Resource Funds

Funds: AMGO I AMGO II

AMGO funds are structured as limited partnerships. The general partner and manager of the funds is First Reserve Corp. The general partner's long-term investment strategy is to create diversified portfolios of oil and gas investments. The portfolios are diversified across four dimensions: location, geological structure, investment type, and operating company.

First Reserve Corp.

Apache

Corporation

Funds: Apache Equipment Financing Notes Apache Properties Acquisition Notes Apache Acquisition Net Profits Interest

Apache Equipment Financing Notes are a \$150 million private placement to finance Apache's portion of production facility expenditures. The expenditures were made under the terms of a series of offshore joint ventures in the Gulf of Mexico. The joint ventures were organized by Shell Oil Company. In addition to fixed interest payments of 10% per annum, noteholders will receive additional interest of 2% of Apache's share of gross revenues from the joint ventures. Principal and interest on the notes are estimated to be repaid by 1992. The 2% additional interest will be paid to noteholders throughout the life of producing properties. Apache Corp. is based in Denver.

Apache 1985 Properties Acquisition Notes are a \$118 million private placement to finance the acquisition and tangible development costs related to certain producing oil and gas properties, of which some are fully developed and some are partially developed. In addition to fixed interest payments of 10% per annum, noteholders will receive additional interest of 2% of Apache's share of gross revenues from the properties. Principal and interest on the notes are estimated to be repaid by 1996. The 2% additional interest will be paid to noteholders throughout the life of producing properties.

Apache Acquisition Net Profits Interest is a \$190 million private placement to acquire a non-operating interest in the net profit generated by oil and gas properties acquired in 1986 from Occidental Petroleum Company. Investors will receive a 85% net profits interest in the financed share of producing properties until the cumulative total of such payments equals the investment cost plus 8% per year return on investment (the "Payout"). However, if the cumulative net profit discounted at 10% should fail to exceed a defined cumulative cash flow comparably discounted, investors will receive a 90% net profits interest until Payout. After Payout, investors will receive a 75% net profits interest for the life of the producing properties. Payout is expected in 1991.

A summary of the Board's commitments to these real estate, venture capital, and resource funds can be found in the Statistical Data Appendix.


STATISTICAL DATA APPENDIX

MANAGER PORTFOLIO STATISTICS

HISTORICAL PERFORMANCE SUMMARIES

TIME-WEIGHTED RATE OF RETURN

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EQUITY MANAGER PORTFOLIO STATISTICS GLOSSARY

In the following pages, summary descriptions of the individual equity managers' investment philosophy, risk characteristics, and performance data are displayed. Some of the statistics presented are technical in nature. This glossary is designed to aid in understanding the terms that are introduced.

The first five portfolio characteristics listed in the glossary are presented in the Quarterly Investment Review and Appendix on an absolute basis. The remaining portfolio statistics are reported relative to the stock market. The purpose of presenting these statistics in a relative fashion is to "normalize" them, or remove the impact of market-wide changes on the characteristics of a manager's portfolio. In calculating the relative values, the stock market is represented by the 1000 largest capitalization companies The managers' portfolio characteristics are in the Wilshire 5000. reported in standard deviation units relative to the average or Thus, a positive (negative) value mean of these 1000 companies. for a portfolio characteristic indicates a value higher (lower) than the market average.

- # of Stocks number of different issues held in the manager's stock portfolio.
- Qtr. Port. Turnover the manager's total equity asset sales during the quarter divided by the average value of the manager's equity assets over the quarter.
- Equity Allocation percent of the manager's total portfolio invested in common and preferred stocks and convertible securities.

Diversification (R2)

- extent to which a manager's equity holdings statistically resemble the stock market. Low (high) diversification portfolios will experience returns which are not well (are well) correlated with those of the market. the market has definition, а By diversification measure of 1.0. The less a portfolio is diversified, the lower will be its diversification measure (referred to as SBI's managers are R-squared). The required, over the long-term, to hold portfolios with diversification levels less than .85.

Market Volatility (Equity Beta) - degree to which the returns on the manager's stock portfolio are sensitive to movements in the stock market's return. By definition the market has a market volatility measure (referred to as beta) of 1.0. Portfolios with values greater (less) than 1.0 have above (below) average sensitivity to market moves. The SBI's managers are required, over the long-term to hold portfolios with market volatility levels above 1.10. This measure does not include the impact of cash holdings on total portfolio volatility.

Price Variability (MVAR) - risk related to the historical variability of the prices of stocks in the manager's portfolio. The more variable are the portfolio's securities' prices, the more risky is the portfolio. Items such as current stock price, twelve month price range, trading volume, and beta make up this measure.

Earnings Variability (EVAR) - risk related to the variability of the earnings of those companies owned in the manager's portfolio. The more variable are the companies' earnings, the more risky is the portfolio. Items such as variance of accounting earnings, variance of cash flow, occurrence of extraordinary accounting items, and the correlation of companies' earnings with U.S. corporate earnings make up this measure.

Return (REL RET) - the return on the stocks currently in the manager's portfolio over the last twelve months less the return on the S&P 500.

12-Month Relative

Price-to-Book Ratio

(P/B) - the market value of the manager's portfolio divided by the latest available annual book value.

5 Year Earnings Growth (5 YR. EARN.) - the annualized growth of the average earnings per share of the manager's portfolio over the latest five fiscal years.

- Size and Immaturity (SIZE) - Risk related to the size and maturity of the companies held in the portfolio. The smaller and younger the companies, the more risky is the portfolio. Items such as total assets, market capitalization, gross plant/book value ratio, and company age make up this measure.
- Growth (GROW) risk related to the growth orientation of companies owned by the manager. The more growth-oriented are the companies, the riskier is the portfolio. Items such as dividend yield, E/P ratio, and growth in total assets make up this measure.
- Ratio (E/P) the weighted average trailing four quarter earnings per share of the manager's common stock portfolio divided by the weighted average price per share of the manager's common stock portfolio.

Earnings-to-Price

Dividend Yield (YIELD)

Financial Leverage

Industry Sector

- indicated annual dividend of the manager's stock portfolio divided by the portfolio market value.
- (FINL) risk related to the extent to which companies held in the portfolio have used debt to finance their operations. The more leveraged are the companies, the riskier is the portfolio. Items such as debt/asset ratio, current asset/current liability ratio, and uncovered fixed charges make up this ratio.
- Industry Sector Overweightings - those sectors of the economy in which the manager has invested a significantly larger percentage of the portfolio than is represented by the stock market.
- Underweightings those sectors of the economy in which the manager has invested a significantly smaller percentage of the portfolio than is represented by the stock market.

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EXTERNAL EQUITY MANAGERS PORTFOLIO STATISTICS RELATIVE TO BENCHMARK PORTFOLIOS

QUARTER-END PORTFOLIO STATISTICS *

MANAGER		# OF STOCKS	EQUITY ALLOC.	MKT. VOLTY	DIVER.	YIELD	E/P	REL. RET.	P/B	5 YR Earn	MVAR	EVAR	SIZE	GROW	FINL
GROWTH MANAGERS	1			£.2											
Fred Alger	(A) (B)	56 1,045	95 95	1.17	0.94 N.A.	-0.48 -0.28	-0.25 -0.18	0.30 -0.33	0.92 0.13	0.39	0.64	0.11	0.02	0.64	0.04
Alliance	(A) (B)	40 334	99 95	1.20	0.96 N.A.	-0.28 -0.50 -0.45	-0.09 -0.15	0.13	0.70	0.25	0.54 0.49	0.03	-0.18 0.44	0.67 0.72	-0.08 -0.04
SMALL GROWTH MA	NAGER	5													
BMI Capital	(A)	- 31	99	1.28	0.91	-0.64	0.09	-0.19	-0.02	-0.34	0.62	0.61	1.56	0.60	0.14
Lieber & Co.	(B) (A)	1,042 113	95 97	1.43	N.A. 0.86	-0.61 -0.23	-0.33 0.19	-0.03 -0.51	0.13	0.00	0.92	0.13	0.77	0.98 0.74	-0.08 -0.27
	(B)	1,129	95	1.29	N.A.	-0.44	-0.04	-0.56	0.01	0.09	0.40	0.05	1.94	0.85	-0.23
Waddell & Reed	(A) (B)	66 1,203	86 80	1.25 1.27	0.92 N.A.	-0.35 -0.45	-0.30 -0.37	0.03 -0.16	0.28	-0.17 -0.11	0.54 0.59	0.16 0.22	0.70 1.13	0.65 0.62	-0.09 0.13
ROTATIONAL MANA	GERS														
Forstmann Leff	(A)	35	68	1.11	0.94	-0.29	-0.30	0.50	0.53	-0.01	0.47	0.10	-0.20	0.23	0.05
Hellman Jordan	(B) (A)	1,383	70 78	1.17	N.A. 0.93	-0.13 -0.45	-0.08 0.08	-0.22 -0.02	0.12	0.07	0.31	0.04	0.63	0.45	0.06
TOTTINGT OVERALL	(B)	454	83	1.05	N.A.	0.01	-0.05	-0.15	0.16	0.03	0.07	-0.01	-0.12	0.04	0.05
IDS	(A)	53	98	1.13	0.96	-0.30	-0.23	0.26	0.45	0.07	0.41	0.09	-0.09	0.38	-0.07
IAI	(B) (A)	786 43	90 80	1.05	N.A.	0.15	0.04	-0.21	0.05	0.05	$0.01 \\ 0.19$	-0.06 0.05	0.10	0.07	0.07
101	(B)	331	85	1.02	0.95 N.A.	-0.27 0.11	-0.13 0.01	0.29 -0.09	0.85 0.15	0.01 0.05	0.07	-0.05	-0.14 -0.24	0.21 0.02	0.03 0.07
VALUE MANAGERS															
Beutel Goodman	(A)	29	86	1.14	0.89	-0.08	-0.42	-0.30	-0.59	-0.30	0.13	0.05	0.22	0.18	0.24
Peregrine Cap.	(B) (A)	422 175	95 79	1.19 1.10	N.A. 0.84	-0.02 0.69	0.01 0.15	-0.41 -0.91	-0.46 -0.61	-0.16 -0.25	0.34	0.24	0.88	0.20	0.15
	(B)	1,056	90	1.11	N.A.	0.09	-0.04	-0.38	-0.24	-0.19	0.05	-0.03	0.49	0.12	0.12
Composite Activ	e Ext.														
Managers		538	88	1.15	0.98	-0.18	-0.08	-0.10	0.18	0.00	0.32	0.07	0.16	0.39	0.04
Index Fund Mana Composite All B		1,482	100	1.06	0.98	0.08	-0.01	-0.19	0.05	-0.04	0.06	-0.05	0.09	0.07	-0.01
Eq. Manage		1,628	95	1.10	0.98	0.00	-0.04	-0.14	0.09	-0.02	0.20	0.04	0.02	0.17	0.01

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(A) - Actual Portfolio

(B) - Benchmark Portfolio

EXTERNAL EQUITY MANAGERS

SECTOR WEIGHTINGS RELATIVE TO BENCHMARK PORTFOLIOS

SECTOR WEIGHTINGS

MANAGER		CAPITAL GOODS	CONSUMER DURABLES	CONSUMER NONDURABLES	ENERGY	FINANCIAL	MAT. & SERVICES	TECHNOLOGY	TRANS- PORTATION	UTILITIES
GROWTH MANAGERS										
Fred Alger	(A)	1.0%	1.7%	45.5%	3.68	2.48	10.2%	28.7%	5.38	1.6%
Alliance	(B) (A) (B)	4.3 5.9 3.1	3.9 5.1 1.9	34.0 35.4 35.6	6.4 2.4 1.5	12.5 16.5 16.6	16.5 11.6 16.3	15.8 17.5 21.2	4.3 5.7 3.8	2.5
SMALL GROWTH MANAGERS	3									
BMI Capital	(A) (B)	12.4	5.8 3.4	42.3 28.5	7.5 2.0	13.5 26.5	8.5	10.1	4.5	0.6
Lieber & Company	(A)	3.3	6.1	31.6	1.7	37.4	7.3	8.9	3.1	0.7
Waddell & Reed	(B) (A) (B)	6.9 4.1 7.1	6.1 10.2 4.6	27.8 19.1 31.1	2.8 9.0 6.8	17.2 2.9 0.7	16.2 20.8 25.9	18.3 30.7 17.7	2.9 2.3 6.0	1.6 0.8 0.1
ROTATIONAL MANAGERS										
Forstmann Leff	(A) (B)	3.8	3.2	25.2 28.5	0.9 4.7	2.3	42.1 16.2	25.0 14.1	4.4 4.9	9.3
Hellman Jordan	(A) (B)	4.3	11.2	18.0 32.8	5.8	22.1	9.8 17.3	34.0	4.9	6.9
IDS	(A)	2.3	5.0	28.1	11.5		23.0	19.6	7.9	2.7
Investment Advisers	(B) (A) (B)	3.5 6.4 3.6	2.6 3.1 2.9	27.4 31.9 29.3	5.6 3.6 10.2	14.1 1.1 9.7	14.4 30.7 15.5	13.2 14.4 11.7	4.4 3.4 4.6	14.7 5.4 12.5
VALUE MANAGERS										
Beutel Goodman	(A) (B)	6.5 5.8	3.0 4.1	18.6	16.5	27.8	13.0	22.2	ar ar ar	2.5
Peregrine Capital	(B) (B)	3.9 6.2	4.1 7.8 3.8	17.5 24.7 22.0	8.5 3.7 5.6	23.2 15.0 15.6	19.5 7.4 14.2	12.9 16.1 14.0	8.4 3.1 6.2	18.2
Composite External Managers		3.9	4.9	27.2	6 3	10 5	14.0	20.4		5 E
Index Fund Manager		4.8	3.9	27.9	6.3 9.6	12.5 12.5	14.8 13.3	20.4 13.3	4.4 3.2	5.6 11.5
Composite All Basic Managers Wilshire 5000		4.5 4.8	4.2 4.0	27.7 27.3	8.5 9.8	12.5 12.3	13.8 13.4	15.6 13.6	3.6 3.1	9.6 11.7

(A) - Actual Portfolio

(B) - Benchmark Portfolio

EXTERNAL EQUITY MANAGERS

PERFORMANCE RELATIVE TO BENCHMARK PORTFOLIOS

Managers		ond er 1987	Year B 6/30		Two Ye Ending 6 (Annua]	/30/87 ized)	Three Years Ending 6/30/87 (Annualized)		
	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	
Fred Alger Alliance Capital Beutel Goodman BMI Capital Forstmann Leff Hellman Jordan IDS Investment Advisers Lieber & Company Peregrine Capital Waddell & Reed Internal Manager Wilshire Associates (Index Fund)	0.08 4.6 5.3 1.2 1.6 1.3 3.7 4.0 - 1.3 1.4 2.4 3.4 3.6	2.8% 3.2 3.5 0.3 2.1 3.4 3.4 3.4 0.1 2.5 3.4 4.9 3.4	7.1% 23.6 17.1 20.7 12.3 23.1 19.3 18.1 7.3 18.3 19.3 26.3 20.3	20.0% 17.1 24.5 13.9 15.1 20.2 20.2 20.2 9.7 19.9 20.2 24.8 20.2	25.6% 33.4 16.7 28.4 27.2 26.3 30.1 23.6 23.5 19.2 23.8 22.3 27.2	27.5% 24.8 28.1 24.3 20.4 27.5 27.5 27.5 23.0 23.5 27.5 N.A. 27.5	25.9% 33.6 22.9 23.6 28.0 28.7 26.4 31.9 25.9 N.A. 21.1 N.A. 28.6	27.6% 24.7 29.3 24.5 21.5 28.7 28.7 28.7 28.7 23.8 23.9 28.7 N.A. 28.7	
Total Basic Retireme Funds' Common Stock Segment Capital Markets Data	3.2	3.1	19.4	19.4	26.4	N . A .	27.8	N . A .	
Wilshire 5000 90-Day Treasury Bill Inflation	3.3 s 1.4 1.3		20.1 5.7 3.7		27.4 6.5 2.7		28.6 7.4 3.1		

EXTERNAL EQUITY MANAGERS

PORTFOLIO STATISTICS HISTORICAL SUMMARY

MANAGER NAME	DATE	QTR. PORT. T/O	EQUITY ALLOC.	R2	EQUITY BETA	MVAR	EVAR	REL RET	P/B	5 YR Earn	SIZE	GROW	E/P	Y I ELD	FINL
AVG. EXT. MANAGERS	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 3/31/84 12/31/83	29 35 28 25 29 27 24 33 24 33 27 25 36	88 89 87 91 92 90 82 90 86 84 81 83 84	0.92 0.91 0.90 0.88 0.89 0.83 0.83 0.83 0.82 0.81 0.82 0.81 0.82 0.80	1.17 1.20 1.25 1.28 1.25 1.23 1.23 1.23 1.23 1.25 1.26 1.29 1.25 1.23	0.38 0.44 0.43 0.55 0.70 0.66 0.55 0.55 0.55 0.55 0.55 0.56 0.36 0.38 0.44	0.12 0.13 0.15 0.21 0.26 0.30 0.29 0.27 0.14 0.02 0.08 0.09 0.04 0.03 0.07	$\begin{array}{c} -0.04\\ -0.07\\ 0.06\\ 0.04\\ 0.09\\ -0.04\\ 0.03\\ -0.29\\ -0.23\\ -0.26\\ -0.13\\ -0.10\\ -0.25\\ -0.10\\ -0.03\\ \end{array}$	0.28 0.23 0.20 0.10 0.12 0.07 0.04 0.04 0.07 0.06 0.17 0.17 0.13 0.13 0.13	0.02 -0.09 -0.05 0.04 0.01 0.02 -0.02 0.07 0.20 0.21 0.03 0.05 0.01 0.01 -0.19	0.33 0.27 0.31 0.47 0.45 0.41 0.43 0.41 0.46 0.54 0.73 0.72 0.79 0.60 0.80	0.46 0.41 0.50 0.49 0.41 0.33 0.31 0.27 0.13 0.23 0.22 0.19 0.20 0.26	$\begin{array}{c} -0.11 \\ -0.06 \\ -0.05 \\ -0.06 \\ -0.53 \\ -0.34 \\ -0.15 \\ -0.07 \\ -0.01 \\ -0.03 \\ -0.08 \\ -0.02 \\ -0.15 \\ -0.31 \end{array}$	$\begin{array}{c} -0.26\\ -0.28\\ -0.29\\ -0.33\\ -0.36\\ -0.27\\ -0.23\\ -0.25\\ -0.18\\ -0.17\\ -0.32\\ -0.28\\ -0.28\\ -0.29\\ -0.26\\ -0.27\end{array}$	$\begin{array}{c} -0.02\\ 0.01\\ -0.05\\ -0.07\\ 0.08\\ 0.14\\ 0.07\\ -0.02\\ 0.03\\ 0.05\\ 0.04\\ 0.14\\ 0.08\\ 0.06\end{array}$
PRED ALGER	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	50 82 49 38 21 40 28 28 41 36 16 20 16 19 23	95 79 93 88 94 98 95 95 95 95 94 93 95	0.94 0.95 0.91 0.92 0.91 0.83 0.79 0.85 0.86 0.86 0.86 0.86 0.88	1.17 1.16 1.17 1.28 1.31 1.29 1.25 1.23 1.23 1.23 1.27 1.19 1.22 1.22 1.19 1.18	0.64 0.48 0.84 0.88 0.94 0.69 0.64 0.77 0.84 0.48 0.48 0.44 0.11 0.14 0.38	0.11 0.21 0.32 0.35 0.48 0.45 0.33 0.39 0.24 0.05 0.14 -0.01 0.04 0.08	$\begin{array}{c} 0.30\\ 0.01\\ 0.26\\ 0.44\\ 0.74\\ 0.31\\ 0.11\\ -0.07\\ -0.07\\ 0.03\\ 0.03\\ 0.03\\ 0.10\\ 0.06\\ -0.13\\ 0.26\end{array}$	$\begin{array}{c} 0.92 \\ 0.37 \\ 0.73 \\ 0.56 \\ 0.40 \\ 0.23 \\ 0.13 \\ 0.16 \\ 0.32 \\ 0.39 \\ 0.35 \\ 0.34 \\ 0.06 \\ 0.08 \\ -0.04 \end{array}$	$\begin{array}{c} 0.39\\ 0.13\\ 0.01\\ 0.03\\ 0.09\\ 0.12\\ 0.25\\ 0.31\\ 0.48\\ 0.69\\ 0.10\\ 0.00\\ -0.21\\ -0.34\\ -0.37\end{array}$	0.02 0.16 0.19 0.40 0.02 -0.17 0.14 0.32 0.26 0.05 0.26 0.42 0.45 0.45 0.31	0.64 0.32 0.49 0.49 0.39 0.45 0.19 0.33 0.53 0.38 0.10 -0.01 -0.12 -0.05	$\begin{array}{c} -0.25\\ -0.02\\ -0.02\\ -0.19\\ -0.04\\ -0.40\\ 0.02\\ -0.17\\ -0.05\\ -0.23\\ 0.03\\ -0.04\\ -0.21\\ -0.40\\ -0.50\end{array}$	$\begin{array}{c} -0.48\\ -0.35\\ -0.34\\ -0.58\\ -0.56\\ -0.54\\ -0.45\\ -0.42\\ -0.55\\ -0.64\\ -0.47\\ -0.44\\ -0.31\\ -0.32\\ -0.32\end{array}$	$\begin{array}{c} 0.04 \\ -0.04 \\ -0.04 \\ -0.10 \\ 0.01 \\ 0.25 \\ 0.08 \\ 0.05 \\ 0.08 \\ -0.09 \\ -0.08 \\ 0.07 \\ -0.00 \\ 0.05 \end{array}$

MANAGER NAME	QTR. PORT. DATE T/O	EQUITY ALLOC. F	EQUITY 2 BETA	MVAR	EVAR	R EL RET	P/B	5 YR EARN	SIZE	GROW	E/P	YIELD	FINL
ALLIANCE CAPITAL	6/30/87 18 3/31/87 29 12/31/86 19 9/30/86 13 6/30/86 11 3/31/86 17 12/31/85 7 9/30/85 15 6/30/85 7 3/31/85 10 12/31/84 8 9/30/84 13 6/30/84 8 3/31/84 12 12/31/83 14	92 0 96 0 99 0 97 0 94 0 96 0 95 0 96 0 95 0 96 0 92 0 92 0 92 0	96 1.20 95 1.20 92 1.23 91 1.21 89 1.21 85 1.24 83 1.23 73 1.24 76 1.21 76 1.21 76 1.39 73 1.39 72 1.38 72 1.37	0.54 0.55 0.43 0.44 0.88 0.53 0.52 0.52 0.53 0.52 0.48 0.53 0.53 0.53 0.53 0.68 0.68 0.65	0.03 0.06 -0.04 -0.14 0.35 0.11 0.13 0.15 0.03 -0.12 0.09 0.15 0.13 0.13 0.31	0.13 0.09 0.28 0.20 0.30 0.48 0.23 0.09 0.04 0.00 0.03 -0.02 -0.02 0.13 0.18	0.70 0.93 0.66 0.64 0.75 0.88 1.06 0.99 0.96 0.74 0.82 0.72 0.72 0.78 0.71 0.78	0.25 0.20 0.34 0.35 0.48 0.36 0.54 0.66 0.73 0.52 0.45 0.46 0.14	$\begin{array}{c} -0.18\\ -0.28\\ -0.15\\ -0.12\\ -0.19\\ -0.10\\ -0.14\\ -0.02\\ 0.08\\ 0.15\\ 0.26\\ 0.33\\ 0.48\\ 0.50\\ 0.45\end{array}$	0.67 0.65 0.82 0.64 0.68 0.57 0.56 0.64 0.68 0.63 0.83 0.83 0.83 0.83 0.78 0.65 0.72	$\begin{array}{c} -0.09\\ -0.08\\ -0.06\\ 0.00\\ -0.02\\ -0.46\\ -0.44\\ -0.50\\ -0.30\\ -0.27\\ -0.29\\ -0.28\\ -0.40\\ -0.47\\ -0.50\end{array}$	$\begin{array}{c} -0.50\\ -0.51\\ -0.58\\ -0.50\\ -0.50\\ -0.49\\ -0.61\\ -0.56\\ -0.55\\ -0.73\\ -0.65\\ -0.73\\ -0.72\\ -0.72\\ -0.72\end{array}$	$\begin{array}{c} -0.08\\ -0.10\\ -0.08\\ -0.26\\ -0.26\\ 0.09\\ 0.00\\ -0.08\\ -0.06\\ -0.20\\ -0.15\\ -0.09\\ -0.04\\ -0.04\\ 0.06\end{array}$
BEUTEL GOODMAN	6/30/87 12 3/31/87 25 12/31/86 18 9/30/86 13 6/30/86 10 3/31/86 22 12/31/85 18 9/30/85 5 6/30/85 6 3/31/85 14 12/31/84 8 9/30/84 10 6/30/84 11 3/31/84 12 12/31/83 15	84 0 96 0 95 0 87 0 87 0 89 0 99 0 94 0 93 0 92 0 98 0	89 1.14 88 1.18 86 1.21 87 1.20 89 1.20 85 1.15 83 1.22 81 1.26 83 1.24 83 1.18 81 1.19 81 1.21 79 1.18 79 1.16 74 1.08	0.13 0.25 0.41 0.33 0.22 0.37 0.37 0.47 0.55 0.38 0.27 0.31 0.05 0.16 0.21	0.05 0.31 0.22 0.48 0.54 0.64 0.22 -0.25 -0.15 -0.17 -0.29 -0.19 -0.08	$\begin{array}{c} -0.30\\ -0.57\\ -0.79\\ -0.68\\ -0.79\\ -0.66\\ -0.58\\ -0.40\\ -0.27\\ -0.38\\ -0.41\\ -0.10\\ 0.19\\ 0.27\\ 0.22\end{array}$	$\begin{array}{c} -0.59\\ -0.66\\ -0.69\\ -0.68\\ -0.67\\ -0.64\\ -0.61\\ -0.32\\ -0.26\\ -0.25\\ -0.42\\ -0.41\\ -0.44\\ -0.41\\ -0.42\end{array}$	$\begin{array}{c} -0.30\\ -0.23\\ -0.24\\ -0.35\\ -0.28\\ -0.33\\ -0.74\\ -0.52\\ -0.64\\ -0.71\\ -0.87\\ -0.81\\ -0.89\\ -0.85\\ -0.61\end{array}$	0.22 0.25 0.22 0.38 0.23 0.19 0.63 0.90 0.96 1.19 1.14 1.28 1.32 1.34 1.18	0.18 0.34 0.40 0.09 0.07 0.23 0.12 0.27 0.14 0.04 0.04 0.07 0.01 0.03	$\begin{array}{c} -0.42 \\ -0.17 \\ -0.35 \\ -0.31 \\ -0.94 \\ -0.88 \\ -0.73 \\ -0.55 \\ -0.43 \\ 0.21 \\ 0.23 \\ 0.02 \\ -0.42 \\ -0.72 \end{array}$	$\begin{array}{c} -0.08\\ -0.02\\ -0.04\\ 0.09\\ 0.10\\ 0.25\\ 0.09\\ -0.02\\ 0.06\\ 0.08\\ -0.05\\ -0.04\\ 0.05\end{array}$	0.24 0.27 0.39 0.28 0.12 0.35 0.26 0.37 0.24 0.63 0.59 0.58 0.37 0.24
BMI CAPITAL	6/30/87 14 3/31/87 20 12/3186 21 9/30/86 7 6/30/86 20 3/31/86 17 12/31/85 5 9/30/85 28 6/30/85 10 3/31/85 2 12/31/84 13 9/30/84 29 6/30/84 6 3/31/84 18 12/31/83 14	96 0 96 0 97 0 96 0 97 0 95 0 28 0 98 0 99 0 87 0 99 0 99 0 99 0 99 0 99 0 99 0 99 0 99 0 95 0	91 1.28 89 1.29 91 1.21 89 1.31 90 1.33 85 1.27 72 1.40 75 1.22 55 1.26 74 1.33 79 1.33 80 1.32 81 1.29	0.62 0.65 0.78 1.10 0.98 0.74 0.89 0.80 0.80 0.84 0.78 0.78 0.78 0.63 0.77 1.02	0.61 0.48 0.47 0.49 0.31 0.43 0.35 0.32 0.17 0.10 0.34 0.17 0.17 0.20 0.26	$\begin{array}{c} -0.19\\ -0.02\\ 0.13\\ 0.14\\ 0.23\\ -0.13\\ -0.30\\ -0.78\\ -0.52\\ -0.66\\ -0.20\\ -0.44\\ -0.37\\ -0.53\\ 0.26\end{array}$	-0.02 0.00 -0.01 -0.03 0.23 0.22 0.22 0.22 0.48 0.80 1.13 1.05 0.83 0.67 0.72 0.58	-0.34 -0.62 -0.43 -0.28 -0.14 0.03 0.13 0.67 1.06 1.04 0.56 0.63 0.32 0.31 0.08	1.56 1.27 1.15 1.60 1.48 1.14 1.47 1.42 1.42 1.49 1.41 1.17 1.51 1.86 1.60	0.60 0.89 0.76 1.07 0.95 0.59 0.74 0.63 0.23 0.11 -0.05 0.22 0.36 0.48	$\begin{array}{c} 0.09\\ 0.10\\ -0.09\\ -0.35\\ -0.08\\ -1.06\\ -0.80\\ -0.42\\ -0.14\\ -0.20\\ -0.24\\ 0.01\\ -0.24\\ -0.40\\ -0.52\end{array}$	$\begin{array}{c} -0.64 \\ -0.63 \\ -0.74 \\ -0.85 \\ -0.84 \\ -0.59 \\ -0.40 \\ -0.71 \\ -0.56 \\ -0.61 \\ -0.57 \\ -0.44 \\ -0.48 \\ -0.47 \\ -0.49 \end{array}$	$\begin{array}{c} 0.14\\ 0.25\\ -0.04\\ -0.11\\ -0.17\\ 0.08\\ -0.01\\ -0.25\\ -0.38\\ -0.33\\ -0.18\\ -0.23\\ -0.16\\ -0.14\\ 0.01\\ \end{array}$

MANAGER NAME	QT POR DATE T/0	EQUITY	R2	EQUITY BETA	MVAR	EVAR	REL RET	P/B	5 YR EARN	SIZE	GROW	E/P	YIELD	FINL
FORSTMANN-LEFF	6/30/87 63 3/31/87 77 12/31/86 54 9/30/86 60 6/30/86 71 3/31/86 83	68 77 71 51 87 89	0.94 0.95 0.88 0.85 0.88 0.88	1.11 1.21 1.29 1.53 1.49 1.37	0.47 0.51 0.64 1.33 1.26 0.91	0.10 -0.09 0.29 0.59 0.51 0.35	0.50 0.29 0.90 0.44 0.29 0.16	0.53 0.55 1.01 0.43 0.37 0.10	-0.01 -0.09 0.24 0.44 0.35 -0.35	-0.20 -0.16 0.19 1.08 0.87 0.64	0.23 0.30 0.44 1.07 0.93 0.59	-0.30 -0.15 -0.09 -0.02 -0.04 -0.77	-0.29 -0.45 -0.58 -0.82 -0.72 -0.39	0.05 0.00 -0.16 -0.12 -0.25 0.27
	12/31/85 78 9/30/85 108 6/30/85 27 3/31/85 55 12/31/84 12 9/30/84 40 6/30/84 31	88 70 77 69 87 83 54	0.91 0.88 0.89 0.89 0.89	1.35 1.27 1.22 1.19 1.22 1.26 1.26	0.94 0.64 0.83 0.67 0.39 0.49 0.14	0.36 0.24 0.17 0.07 -0.06 0.03 0.01	0.48 0.13 0.16 -0.15 -0.14 -0.20 -0.27	0.06 0.10 0.15 -0.04 -0.07 -0.25 -0.21	-0.38 -0.42 0.08 0.13 -0.44 -0.43	0.03 0.00 -0.20 -0.03 0.39 0.25	0.45 0.25 0.35 0.16 -0.06 -0.17 0.07	-0.44 -0.48 -0.07 0.14 -0.01 -0.23 -0.08	-0.46 -0.43 -0.33 -0.18 -0.10 -0.09 -0.16	0.35 0.25 0.09 0.02 0.08 0.14
	3/31/84 34 12/31/83 41	71 81	0.82	1.17	0.13 0.02	-0.04 -0.11	-0.11 -0.25	-0.14 -0.03	-0.22 -0.21 -0.25	0.16 0.17 -0.12	0.07 0.05 -0.03	-0.18 -0.15	-0.10 -0.07	0.15 0.15 0.05
HELLMAN JORDAN	6/30/87 44 3/31/87 18 12/31/86 16 9/30/86 20 6/30/86 15 3/31/86 35 12/31/85 36 9/30/85 38 3/31/85 52 12/31/84 36 9/30/84 10 6/30/84 34 3/31/84 30 12/31/83 43	78 96 98 97 95 96 89 81 82 80 61 58 51	0.93 0.91 0.90 0.89 0.88 0.93 0.89 0.89 0.88 0.88 0.88 0.84 0.87 0.87	1.22 1.33 1.29 1.34 1.34 1.26 1.14 1.07 1.10 1.13 1.21 1.22 1.25 1.16 1.23	0.59 0.83 0.72 0.87 0.80 0.79 0.32 0.26 0.29 0.28 0.59 0.64 0.28 0.25 0.16	$\begin{array}{c} 0.13\\ 0.10\\ 0.11\\ 0.07\\ 0.15\\ 0.34\\ 0.23\\ 0.09\\ -0.04\\ -0.12\\ 0.25\\ 0.38\\ 0.21\\ 0.15\\ 0.09 \end{array}$	$\begin{array}{c} -0.02\\ 0.08\\ 0.05\\ 0.22\\ 0.26\\ -0.13\\ -0.49\\ -0.27\\ -0.20\\ -0.36\\ -0.17\\ -0.34\\ 0.03\\ -0.19\end{array}$	$\begin{array}{c} 0.56\\ 0.64\\ 0.36\\ 0.30\\ 0.16\\ 0.06\\ -0.17\\ -0.29\\ -0.21\\ -0.28\\ -0.35\\ -0.26\\ -0.29\\ -0.41\\ -0.23 \end{array}$	$\begin{array}{c} 0.27 \\ -0.16 \\ -0.22 \\ -0.21 \\ -0.29 \\ 0.04 \\ -0.06 \\ -0.12 \\ -0.07 \\ -0.36 \\ -0.45 \\ -0.33 \\ -0.22 \\ -0.26 \end{array}$	$\begin{array}{c} -0.39 \\ -0.17 \\ -0.24 \\ -0.18 \\ -0.07 \\ -0.16 \\ -0.13 \\ -0.54 \\ -0.47 \\ -0.24 \\ 0.15 \\ 0.22 \\ 0.10 \\ 0.01 \\ 0.25 \end{array}$	0.78 0.84 0.65 0.89 0.95 0.83 0.03 -0.07 0.00 0.12 0.16 0.10 0.19 0.18	$\begin{array}{c} 0.08 \\ -0.17 \\ 0.02 \\ -0.02 \\ -0.71 \\ -0.22 \\ 0.02 \\ 0.18 \\ -0.07 \\ 0.14 \\ -0.08 \\ -0.10 \\ -0.05 \\ 0.07 \end{array}$	$\begin{array}{c} -0.45 \\ -0.65 \\ -0.64 \\ -0.70 \\ -0.57 \\ -0.48 \\ -0.22 \\ 0.00 \\ 0.15 \\ 0.06 \\ -0.09 \\ 0.05 \\ 0.16 \\ 0.25 \\ 0.45 \end{array}$	$\begin{array}{c} -0.28\\ -0.05\\ -0.05\\ -0.06\\ 0.00\\ 0.09\\ 0.25\\ 0.27\\ 0.07\\ 0.30\\ 0.30\\ 0.33\\ 0.52\\ 0.30\\ 0.30\\ 0.26\end{array}$
IDS ADVISORY	6/30/87 22 3/31/87 38 12/31/86 14 9/30/86 28 6/30/86 28 3/31/86 16 12/31/85 19 9/30/85 21 6/30/85 13 3/31/85 39 12/31/84 40 6/30/84 42 3/31/84 41 12/31/83 45	98 97 99 95 90 92 93 98 98 87 89 92 87 89	0.96 0.94 0.92 0.93 0.91 0.88 0.86 0.87 0.85 0.83 0.89 0.85 0.85 0.80	1.13 1.14 1.16 1.19 1.20 1.18 1.15 1.11 1.08 1.05 1.08 1.04 1.09 1.17	0.41 0.44 0.35 0.45 0.53 0.55 0.37 0.24 0.04 0.17 -0.08 0.11 0.24	$\begin{array}{c} 0.09\\ 0.05\\ 0.08\\ 0.22\\ 0.17\\ 0.21\\ 0.30\\ 0.28\\ 0.21\\ -0.06\\ -0.10\\ -0.12\\ -0.15\\ -0.01\\ 0.23\\ \end{array}$	0.26 0.42 0.48 0.58 0.54 0.44 0.19 -0.02 0.17 0.10 0.16 0.17 0.28 0.23 0.27	0.45 0.65 0.51 0.35 0.46 0.50 0.55 0.30 0.16 0.07 0.12 0.28 0.54 0.15	0.07 0.25 0.32 0.25 0.34 0.35 0.34 0.41 0.43 0.23 0.31 0.31 0.19 -0.15	$\begin{array}{c} -0.09 \\ -0.20 \\ 0.01 \\ 0.18 \\ 0.09 \\ 0.11 \\ 0.24 \\ 0.07 \\ -0.02 \\ -0.09 \\ -0.07 \\ 0.08 \\ 0.28 \\ 0.17 \\ 0.43 \end{array}$	0.38 0.27 0.23 0.22 0.29 0.28 0.22 0.16 -0.06 -0.07 -0.04 -0.11 -0.13 0.22	-0.23 -0.15 0.09 0.10 0.06 -0.11 -0.12 -0.17 0.00 0.18 0.11 0.19 0.18 0.28 -0.34	-0.30 -0.22 -0.21 -0.18 -0.23 -0.22 -0.21 -0.15 0.04 0.18 0.25 0.23 0.21 0.14 -0.13	$\begin{array}{c} -0.07 \\ -0.15 \\ -0.07 \\ -0.03 \\ -0.08 \\ 0.11 \\ 0.16 \\ 0.06 \\ 0.03 \\ 0.10 \\ 0.07 \\ 0.03 \\ 0.17 \\ 0.04 \\ 0.14 \end{array}$

MANAGER NAME	I Date	QTR. PORT. T/O	EQUITY ALLOC.	R2	EQUITY BETA	MVAR	EVAR	REL RET	P/R	5 YR EARN	SIZE	GROW	E/P	YIELD	FINL
INVESTMENT ADVISERS	6/30/87 3/31/87 12/31/86 9/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	9 8 15 12 22 13 32 4 10 28 9 21 8 21 16	82 82 77 77 84 84 83 95 90 89 97 88 98 98 98 98 98	0.95 0.95 0.94 0.94 0.95 0.93 0.92 0.90 0.91 0.88 0.86 0.89 0.89 0.86	1.06 1.08 1.07 1.12 1.17 1.12 1.14 1.15 1.17 1.19 1.21 1.21 1.17 1.13	0.19 0.27 0.24 0.31 0.55 0.48 0.39 0.45 0.60 0.51 0.39 0.40 0.11 0.05 0.06	0.05 0.06 0.12 0.06 -0.04 0.10 0.18 0.10 0.05 -0.12 -0.13 -0.23 -0.22 -0.15	$\begin{array}{c} 0.29\\ 0.18\\ 0.29\\ 0.27\\ 0.40\\ 0.07\\ -0.22\\ -0.40\\ -0.33\\ -0.33\\ -0.20\\ -0.21\\ -0.28\\ -0.36\\ -0.30\\ \end{array}$	$\begin{array}{c} 0.85\\ 0.72\\ 0.45\\ 0.34\\ 0.28\\ 0.02\\ 0.04\\ -0.12\\ -0.26\\ -0.26\\ -0.34\\ -0.23\\ -0.23\\ -0.22\\ -0.17\\ -0.16\end{array}$	$\begin{array}{c} 0.01 \\ 0.08 \\ 0.02 \\ 0.07 \\ 0.06 \\ -0.03 \\ -0.01 \\ 0.07 \\ 0.14 \\ 0.16 \\ -0.15 \\ -0.00 \\ 0.09 \\ 0.14 \\ -0.05 \end{array}$	$\begin{array}{c} -0.14\\ -0.16\\ -0.12\\ 0.00\\ -0.03\\ -0.11\\ -0.12\\ -0.02\\ -0.17\\ 0.08\\ 0.09\\ 0.12\\ 0.08\\ 0.14\\ 0.01 \end{array}$	0.21 0.16 0.35 0.28 0.40 0.29 0.28 0.12 -0.02 -0.02 0.02 0.02 0.02 0.02 0.02 0.07 0.15	$\begin{array}{c} -0.13 \\ -0.06 \\ 0.00 \\ -0.17 \\ -0.16 \\ -0.57 \\ -0.27 \\ 0.02 \\ 0.18 \\ 0.43 \\ 0.43 \\ 0.43 \\ 0.45 \\ 0.45 \\ 0.25 \\ -0.09 \end{array}$	$\begin{array}{c} -0.27 \\ -0.27 \\ -0.23 \\ -0.39 \\ -0.44 \\ -0.29 \\ -0.25 \\ -0.19 \\ -0.11 \\ -0.01 \\ -0.02 \\ 0.00 \\ -0.14 \\ -0.17 \end{array}$	$\begin{array}{c} 0.03\\ 0.04\\ -0.02\\ -0.09\\ -0.10\\ 0.02\\ 0.02\\ 0.03\\ -0.08\\ -0.06\\ 0.04\\ 0.06\\ 0.21\\ 0.22\\ 0.17 \end{array}$
LIEBER & COMPANY	3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85	11 15 14 11 7 14 12 6 14 19 14 17 10 0 9	97 94 99 99 99 97 98 99 95 85 87 95 93 00	0.86 0.85 0.89 0.90 0.86 0.85 0.80 0.80 0.81 0.79 0.80 0.81 0.85 0.83	1.25 1.27 1.28 1.31 1.32 1.31 1.30 1.30 1.27 1.24 1.34 1.33 1.37 1.24	0.17 0.27 0.35 0.44 0.59 0.63 0.54 0.55 0.65 0.78 0.74 0.76 0.65 0.63	-0.01 0.06 0.11 0.10 0.02 0.07 0.12 0.04 0.03 0.12 0.07 0.05 0.00 -0.01	$\begin{array}{c} -0.51\\ -0.25\\ 0.01\\ 0.06\\ 0.12\\ -0.06\\ -0.01\\ -0.04\\ -0.17\\ 0.04\\ -0.25\\ -0.28\\ -0.37\\ -0.16\\ 0.30\\ \end{array}$	-0.04 -0.01 -0.02 0.05 0.03 0.04 0.03 0.03 0.09 0.03 0.09 0.03 0.05 0.13 0.18 -0.06	0.27 0.22 0.13 0.24 0.15 0.16 0.27 0.35 0.40 0.35 0.40 0.35 0.39 0.49 0.52 0.57 0.28	1.50 1.58 1.47 1.44 1.50 1.49 1.56 1.64 1.83 1.79 1.94 1.99 1.99 1.99 1.93	0.74 0.59 0.49 0.52 0.48 0.48 0.50 0.36 0.17 0.48 0.51 0.42 0.45 0.29	$\begin{array}{c} 0.19\\ 0.15\\ 0.19\\ 0.15\\ 0.14\\ 0.00\\ -0.02\\ -0.10\\ -0.05\\ -0.02\\ -0.05\\ 0.01\\ -0.02\\ 0.03\\ 0.12 \end{array}$	$\begin{array}{c} -0.23\\ -0.34\\ -0.32\\ -0.32\\ -0.36\\ -0.38\\ -0.39\\ -0.40\\ -0.35\\ -0.35\\ -0.47\\ -0.48\\ -0.48\\ -0.48\\ -0.46\\ -0.38\end{array}$	$\begin{array}{c} -0.27\\ -0.25\\ -0.17\\ -0.27\\ -0.33\\ -0.27\\ -0.21\\ -0.31\\ -0.43\\ -0.21\\ -0.17\\ -0.18\\ -0.10\\ -0.12\\ -0.07\end{array}$
PEREGRINE CAPITAL	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	26 41 50 37 47 53 9 58 49 37 61 26 66 92	79 79 81 83 84 82 80 75 89 87 97 89 87 83	0.84 0.86 0.86 0.79 0.76 0.81 0.82 0.78 0.79 0.81 0.81 0.81 0.83 0.82 0.83	1.10 1.12 1.18 1.12 1.18 1.19 1.21 1.22 1.48 1.41 1.37 1.36 1.39 1.28 1.23	-0.15 -0.11 0.12 -0.07 0.09 0.26 0.25 0.25 0.32 1.11 1.10 0.77 0.76 0.66	$\begin{array}{c} -0.04 \\ 0.00 \\ 0.04 \\ 0.06 \\ 0.27 \\ 0.16 \\ 0.18 \\ 0.37 \\ 0.00 \\ 0.07 \\ 0.39 \\ 0.43 \\ 0.37 \\ 0.26 \\ 0.16 \end{array}$	$\begin{array}{c} -0.91 \\ -0.90 \\ -1.05 \\ -1.06 \\ -1.28 \\ -1.53 \\ -1.31 \\ -1.26 \\ -1.46 \\ -1.28 \\ -0.05 \\ 0.10 \\ -0.59 \\ -0.30 \\ 0.12 \end{array}$	-0.61 -0.59 -0.57 -0.66 -0.73 -0.73 -0.63 -0.60 -0.53 0.72 0.89 0.49 0.82 0.41	$\begin{array}{c} -0.25\\ -0.19\\ -0.20\\ -0.52\\ -0.41\\ -0.55\\ -0.36\\ -0.45\\ -0.48\\ 0.27\\ 0.22\\ 0.23\\ 0.31\\ 0.12\end{array}$	0.67 0.54 0.51 0.50 0.62 0.73 0.88 0.36 1.06 1.01 1.88 1.70 1.45 1.29 1.32	-0.05 -0.04 0.16 0.12 0.17 0.20 0.10 0.15 0.07 -0.07 0.76 0.83 0.71 0.77 0.74	0.15 0.06 -0.15 0.00 -0.31 -0.54 -0.33 -0.33 -0.34 -0.9 -0.79 -0.82 -0.55 -0.59	$\begin{array}{c} 0.69\\ 0.57\\ 0.42\\ 0.47\\ 0.56\\ 0.51\\ 0.33\\ 0.22\\ 0.27\\ -0.96\\ -0.95\\ -0.77\\ -0.67\\ -0.69\end{array}$	$\begin{array}{c} 0.12\\ 0.10\\ 0.12\\ 0.17\\ 0.22\\ 0.19\\ 0.27\\ 0.24\\ -0.13\\ 0.02\\ -0.11\\ -0.17\\ -0.09\\ -0.07\\ -0.09\\ -0.09\\ \end{array}$

		QTR.													
MANAGER		PORT.	EQUITY		EQUITY			REL		5 YR					
NAME	DATE	T/O	ALLOC.	R2	BETA	MVAR	EVAR	RET	P/B	EARN	SIZE	GROW	E/P	YIELD	FINL
WADDELL & REED	6/30/87	45	86	0.92	1.25	0.54	0.16	0.03	0.28	-0.17	0.70	0.65	-0.30	-0.35	-0.09
	3/31/87	29	90	0.93	1.22	0.65	0.18	-0.07	-0.05	-0.41	0.67	0.16	-0.17	-0.18	0.03
	12/31/86	42	73	0.95	1.13	0.38	0.16	0.06	-0.14	-0.47	0.23	-0.02	-0.11	0.09	-0.01
	9/30/86	38	78	0.94	1.14	0.38	0.07	0.03	-0.13	-0.17	0.00	0.02	0.13	0.10	-0.06
	6/30/86	35	79	0.93	1.28	0.74	0.08	0.28	0.02	-0.04	0.30	0.23	-0.02	-0.35	-0.02
	3/31/86	20	88	0.93	1.29	0.87	0.42	0.22	-0.07	-0.19	0.36	0.11	-0.51	-0.16	0.11
	12/31/85	36	75	0.91	1,27	0.76	0.36	0.10	-0.12	0.02	0.48	0.22	-0.02	-0.20	0.15
	9/30/85	41	50	0.85	1.24	0.53	0.37	-0.02	-0.24	-0.13	0.36	0.15	0.17	-0.09	0.24
	6/30/85	34	74	0.79	1.19	0.55	0.21	0.14	-0.31	0.17	0.26	-0.17	0.41	0.11	0.27
	3/31/85		78	0.82	1.26	0.62	0.23	-0.12	-0.39	0.09	0.49	-0.09	0.43	0.01	0.34
	12/31/84	39	52	0.75	1.29	0.78	0.10	0.00	-0.05	0.05	0.54	0.27	0.13	-0.30	0.12
	9/30/84	76	35	0.76	1.27	0.53	0.07	-0.01	-0.04	0.08	0.35	0.22	0.21	-0.20	0.02
	6/30/84	81	21	0.52	1.56	0.71	0.22	-0.74	-0.05	-0.16	0.89	-0.03	0.72	-0.60	0.24
	3/31/84	35	31	0.74	1.31	0.43	0.03	-0.13	-0.12	-0.22	0.61	-0.08	0.28	-0.35	0.23
	12/31/83		31	0.72	1.36	0.86	0.03	-0.49	-0.23	-1.07	1.42	0.09	-0.24	-0.46	-0.14

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EXTERNAL EQUITY MANAGERS

SECTOR WEIGHTING HISTORICAL PROFILE

EQUITY SECTOR WEIGHTS

MANAGER NAME	DATE	TOTAL PORTFOLIO MARKET VALUE	CAP GDS	CONS DUR	CONS	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
AVG. EXT. MANAGERS	6/30/87	486. ctm) #200	4.2	5.4	29.1	4.6	12.8	16.8	20.6	3.6	2.9
NVOS DALS IMMODIO	3/31/87		3.5	5.7	28.5	4.8	17.3	15.6	18.1	3.9	2.6
	12/31/86	0329 dine poor	3.1	5.2	29.4	3.7	19.0	15.1	16.0	5.0	3.5
	9/30/86	1 mm 4355 4400 /	3.6	5.6	29.4	3.6	19.2	14.5	15.6	5.5	3.0
	6/30/86	1855 Gyg 484	3.7	5.5	30.7	2.4	21.0	13.3	14.6	5.3	3.3
	3/31/86	Gain dras data	2.8	5.5	25.6	5.1	20.7	13.4	14.6	6.4	5.8
	12/31/85		3.0	6.2	24.1	7.4	19.1	13.0	14.5	7.4	5.3
	9/30/85		2.8	6.6	27.5	4.2	18.4	12.7	16.8	7.6	3.4
	6/30/85	etch Care con-	2.2	6.6	29.3	3.1	20.0	10.9	17.3	7.6	3.0
	3/31/85	814 000 day	2.4	6.8	26.4	3.6	17.5	11.4	22.2	6.8	3.0
	12/31/84		2.4	8.0	26.4	2.3	15.5	11.2	23.9	6.6	4.0
•	9/30/84	100 ATR 400	2.9	7.9	27.9	3.8	14.1	9.6	26.3	4.8	2.7
	6/30/84	Sup Tar Sun	4.0	7.6	28.6	4.2	12.5	10.9	23.4	5.4	3.4
	3/31/84	600 470 680	5.2	7.6	24.0	5.7	13.2	13.3	22.7	5.1	3.1
,	12/31/83	613 AND CO.	6.0	6.4	23.5	3.0	12.2	15.1	24.0	6.3	3.5
FRED ALGER	6/30/87	120,786,460	1.0	1.7	45.5	3.6	2.4	10.2	28.7	5.3	1.6
	3/31/87	120,744,512	1.3	2.5	43.1	2.1	12.1	11.6	25.1	2.2	65m 600 600
	12/31/86	101,957,413	2.0	3.0	44.1	6.5	10.8	12.2	20.4	0.9	6m (im 6a)
	9/30/86	96,875,274	1.9	3.7	49.6		12.8	4.6	18.8	8.7	
	6/30/86	112,733,180	1.9	7.5	52.9	6000 6000 6000	11.6	6.2	15.8	4.0	
	3/31/86	103,958,164	1.7	8.2	46.5	Que 4935 4335	17.4	5.9	18.7	1.6	625 GAO GAD
	12/31/85	86,744,768	1.7	11.7	38.7	ana ana ana	18.2	3.1	17.0	6.6	2.9
	9/30/85	73,092,544	Que 1000 4335	10.3	44.4	2.4.	14.1	3.1	14.5	8.4	2.8
	6/30/85	63,144,042	400 HT 400	17.6	36.0	1.4	9.3	3.5	15.7	16.6	
	3/31/85	57,886,615	5.2	14.3	28.8	3.7	7.8	1.8	24.8	13.6	
	12/31/84	54,018,782	5.2	16.1	36.1	and the sea	4.1	7.9	25.2	5.4	410 446 446
	9/30/84	53,908,974	9.3	15.4	33.7	-	0.8	11.4	23.5	6.0	Lines Gard Cittle
	6/30/84	49,936,760	14.0	8.0	30.7	even that any	3.8	11.5	29.5	2.6	
	3/31/84	51,737,228	13.3	4.3	28.8	data dillo dillo	3.4	18.3	31.9	100mg 400g 400g	anna daya diba
	12/31/83	55,644,200	13.2	6.6	21.7	400. 680. 690.	6.4	18.1	33.9	an 499 an	600 EP# 444

						DQ011	DICTOR	MELOHIO			
MANAGER NAME	DATE	TOTAL PORTFOLIO MARKET VALUE	CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	ТЕСН	TRAN	UTIL
ALLIANCE CAPITAL	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	136,207,599 130,165,259 102,208,699 97,177,251 110,202,737 104,093,860 87,252,311 74,094,296 65,072,829 58,738,405 52,332,767 51,653,441 48,457,996 47,427,119 52,725,699	5.9 5.8 3.3 2.3 2.4 0.8	5.1 5.5 4.6 3.9 3.6 4.5 4.6 7.5 8.7 9.9 8.7 8.8 8.1 8.3 7.5	35.4 33.9 32.5 42.5 49.1 46.6 45.6 52.0 49.9 47.9 48.8 49.7 51.6 48.0 45.3	2.4 3.5 2.2 2.4 2.7	16.5 20.8 23.2 24.2 28.1 30.2 29.2 21.8 14.3 12.6 10.2 9.6 6.9 5.6 6.8	11.6 9.5 10.4 4.7 2.5 2.5 2.4	17.5 16.5 15.0 13.0 9.8 8.2 14.3 11.1 12.7 15.8 20.6 19.3 23.5 25.1 24.2	5.7 4.5 11.0 8.7 7.1 5.6 6.3 7.6 8.9 8.0 8.1 9.2 9.9 10.4 13.1	 3.3 3.4 3.7 3.5
BEUTEL GOODMAN	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	132,802,200 126,160,277 107,294,817 86,368,324 90,128,302 90,652,277 79,304,850 70,821,795 75,450,430 70,177,266 63,402,269 60,461,938 55,295,358 56,896,258 57,233,781	6.5 2.4 2.1 2.7 3.4 4.2 3.9 2.7 2.8 2.1 8.8 6.5 9.3 8.9 9.8	3.0 3.1 3.4 4.4 5.3 4.2 3.8 3.7 	18.6 15.4 9.7 11.1 9.3 9.2 9.0 15.7 12.8 19.2 13.8 14.0 21.1 18.6 20.2	6.5 3.4 4.8 4.2 4.0 3.8 2.8 	27.8 25.5 23.0 24.6 20.3 18.6 28.2 26.0 30.4 28.4 32.2 37.1 30.4 27.2 11.2	13.0 17.8 20.6 23.4 23.3 22.9 22.1 24.0 23.1 33.1 33.8 35.6 32.4 39.3 46.2	22.2 25.9 29.3 19.4 19.0 20.9 18.2 16.6 19.1 13.6 11.4 6.8 6.7 6.0 5.4	3.5 4.3 5.9 11.0 11.5 12.0 11.3 11.7 3.6 7.2	2.5 3.1 2.7 4.1 4.4 4.6
BMI CAPITAL	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	82,736,116 81,802,425 65,559,574 62,163,502 68,576,473 64,120,062 54,452,525 49,026,413 9,759,880 9,851,108 9,015,974 8,820,740 8,533,642 8,366,038 9,784,767	12.4 11.7 8.7 10.2 8.5 6.8 9.9 10.4 5.4 7.1 6.5 4.6 3.2 4.3 7.4	5.8 8.1 10.5 8.1 6.4 7.7 4.0 3.4 9.7 9.0 5.8 13.4 16.4 12.7 12.1	42.3 37.0 35.9 38.7 43.4 38.4 32.2 37.8 34.9 37.6 40.0 42.6 37.4 39.3 28.4	7.5 5.3 4.6 14.6 	13.5 14.3 20.1 13.1 19.8 20.9 19.3 6.0 5.7 6.6	8.5 13.3 8.9 12.4 2.9 3.6 4.3 4.0 4.0 6.8 7.4 4.1 11.5 17.8 19.0	10.1 10.3 15.9 17.5 19.1 18.0 12.3 28.9 30.3 35.9 35.9 31.3 31.5 25.9 26.4	3.4 9.6 9.9 3.7 4.4 3.9	

MANAGER NAME	DATE	TOTAL PORTFOLIO MARKET VALUE	CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
FORSTMANN-LEFF	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	107,438,093 105,717,837 88,281,072 85,396,871 95,703,997 87,886,861 73,996,082 63,626,068 66,383,632 61,436,421 55,396,358 53,550,733 51,218,131 52,083,507 55,421,154	 2.6 1.3 1.4 1.1 2.5 1.4 4.5 3.7 7.6 5.7	1.4 10.4 6.6 4.0 7.9 9.7 7.4 9.8 10.5 4.6 3.6 3.0 13.6	25.2 31.0 44.6 28.8 25.2 18.1 25.7 41.6 40.1 25.7 30.9 32.5 40.2 37.0 35.5	0.9	2.3 22.5 16.7 19.0 22.4 34.7 25.2 20.9 25.1 25.5 23.3 21.5 7.0 6.0 3.9	42.1 30.8 20.5 17.2 13.2 17.4 22.1 6.4 10.3 14.7 15.1 14.5 10.3 14.5 8.4	25.0 10.6 9.6 18.9 23.7 10.1 8.9 12.1 11.0 17.4 13.3 18.9 24.3 23.1 18.7	4.4 5.9 5.7 5.2 8.1 6.7 2.8 5.1 4.4 5.5 3.6 7.2 6.0 5.3	1.3 1.1 6.3 3.7 2.8 3.1
HELLMAN JORDAN	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	102,296,573 101,035,689 78,099,466 74,466,800 83,097,338 82,829,526 71,819,754 60,551,842 64,181,384 59,732,797 54,923,168 52,497,049 47,929,367 49,895,127 50,182,761	 3.9 1.3 1.3 1.5 1.8 	11.2 6.0 3.8 6.4 9.3 12.1 8.8 5.6 3.5 6.1 10.7 12.4 12.4 14.8	18.0 24.9 29.8 25.6 24.8 22.3 20.1 17.1 23.0 21.9 19.5 11.3 13.8 19.5 30.0	 2.2 9.4 6.9 7.0 5.9 1.1 0.8 1.2 6.4 6.0	22.1 25.6 31.7 33.5 32.7 29.8 23.5 26.9 26.0 25.3 19.8 14.0 16.4 15.7 16.5	9.8 5.8 7.3 8.1 10.7 13.6 18.7 17.2 15.5 13.6 17.1 15.3 21.2 15.7 10.4	34.0 31.3 23.2 23.3 20.1 18.4 15.2 13.8 7.5 16.1 20.3 29.3 12.6 4.3 2.1	4.9 6.3 4.1 3.2 2.4 1.7 2.9 4.7 3.5 6.7 9.2 12.0 11.1 8.8 3.0	 1.4 7.7 10.0 9.2 5.7 5.0 9.6 17.2 17.2
INVESTMENT ADVISE	RS 6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	101,936,871 98,002,073 81,868,013 78,677,066 86,330,923 82,520,514 73,389,199 61,953,366 66,785,302 62,742,678 58,967,426 55,807,710 50,388,386 51,864,720 54,533,402	6.4 5.2 5.2 8.2 5.6 4.0 3.2 3.4 3.4 3.3 5.5 5.8 5.8 6.3	3.1 3.2 2.2 3.3 6.6 6.5 8.8 6.0 6.4 7.2 5.9 5.4 6.3	31.9 28.5 31.0 33.0 20.6 15.7 8.3 6.5 6.1 13.6 21.5 26.3 30.2 25.0	3.6 3.0 2.9 2.9 1.0 2.3 3.0 2.9 3.2 2.8 5.9 6.2 8.9 5.8	1.1 6.9 7.6 9.6 12.6 15.9 18.8 16.3 20.5 21.0 18.8 21.5 21.9	30.7 29.1 25.8 28.6 26.5 23.8 18.5 20.2 17.1 19.9 19.2 13.1 9.1 7.7 9.7	14.4 11.9 10.1 14.7 13.2 18.8 24.4 28.3 29.0 32.9 19.9 20.2 20.6 15.6 15.7	3.4 7.4 9.7 8.0 8.6 13.4 12.2 12.8 13.2 12.6 10.8 5.6 3.7 3.9 6.1	5.4 5.3 6.7 2.6 2.9 1.8 0.6 0.8 3.9 1.0 3.2

MANAGER NAME	DATE	TOTAL PORTFOLIO MARKET VALUE	CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
IDS ADVISORY	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	115,535,096 111,432,245 91,035,628 87,085,769 96,881,914 90,164,763 76,939,408 64,292,295 68,295,847 62,021,800 57,153,006 55,468,185 50,278,968 50,085,955 54,006,960	2.3 2.6 2.7 2.3 3.0 3.0 3.0 1.8 3.4 4.8 4.9	5.0 3.1 1.1 1.2 $$ 1.7 1.9 2.2 4.8 5.2 4.6 6.6 5.3 10.1 7.6	28.1 25.7 25.2 29.7 42.4 32.6 31.7 27.1 27.7 27.5 29.5 25.4 27.6 12.4 18.0	11.5 12.5 7.4 8.2 3.1 1.1 2.6 5.1 8.4 9.8 3.7 7.6 8.1 9.6 	5.5 10.9 10.4 16.4 17.7 14.9 13.6 13.4 11.0 7.6 7.9 6.8 8.7 8.8	23.0 23.8 24.6 23.4 15.8 15.6 10.4 12.7 7.2 7.3 3.7 5.6 7.6 14.3 19.0	19.6 18.5 7.8 5.8 6.5 8.9 13.9 13.9 13.9 13.9 13.9 13.9 13.9 13	7.9 4.7 7.3 5.0 5.0 12.1 13.2 12.7 8.5 7.7 7.2 4.6 4.8 9.5 6.0	2.7 3.6 13.0 14.0 10.8 10.2 11.4 9.7 15.1 17.6 25.0 19.4 20.6 15.4 9.6
LIEBER & COMPANY	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	47,687,801 48,385,863 40,294,436 40,257,595 44,505,476 40,102,680 35,197,559 30,715,520 31,313,770 29,544,589 26,473,866 25,807,665 23,927,529 24,261,218 11,159,936	3.3 3.4 3.0 2.3 1.7. 2.1 1.6 2.1 2.9 3.2 2.9 2.6 3.6 7.7	6.1 8.8 8.0 7.4 7.3 7.4 8.7 7.0 7.8 8.0 5.3 3.8 3.3 6.4 4.5	31.6 29.7 26.5 25.5 22.4 21.4 20.1 21.9 21.4 25.3 27.0 33.0 34.8 32.3 33.7	1.7 1.8 2.4 3.1 3.5 3.5 4.5 4.6 6.1 3.2 4.1 3.5 4.9 3.5	37.4 39.7 41.1 42.7 41.8 38.4 34.3 32.6 30.3 28.9 24.2 22.4 21.1 17.3 16.7	7.3 5.8 8.6 9.2 10.3 12.3 11.9 14.3 16.0 15.1 18.4 16.8 16.7 16.8 22.3	8.9 8.3 7.7 6.4 7.5 9.0 12.2 11.8 11.0 8.9 15.3 14.8 15.3 16.3 6.1	3.1 1.8 1.7 2.8 3.7 4.0 5.4 5.1 5.5 3.5 3.5 3.4 2.2 1.8 1.8 5.6	0.7 0.7 1.2 2.1 2.0 2.0 1.2 1.2 1.3 0.8 0.7
PEREGRINE CAPITAL	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84 6/30/84 3/31/84 12/31/83	105,285,388 103,857,724 88,571,840 84,825,995 89,051,403 87,406,272 82,085,372 72,758,648 29,610,673 27,145,424 25,188,312 25,685,954 24,546,941 10,385,041 11,215,761	3.9 5.2 6.7 8.6 8.0 7.4 9.1 8.3 0.2 2.8 3.6 2.5	7.8 8.2 8.1 8.0 6.7 5.5 6.3 8.5 2.3 2.3 3.7 5.5 4.4 1.6	24.7 24.7 22.0 16.8 9.6 15.6 15.1 18.3 51.4 44.2 37.5 38.0 31.2 23.1 25.5	3.7 4.9 4.5 9.6 15.2 16.2 17.8 12.6 4.2 6.3 2.7 0.6 5.8 8.5 1.2	15.0 13.0 11.8 10.7 8.1 5.3 5.3 4.5 12.4 9.2 3.9 2.3 1.0 1.1 3.2	7.4 8.3 11.1 13.7 15.7 15.7 19.1 15.7 2.9 6.2 9.8 11.9 9.3 7.2 6.0	16.1 16.7 17.3 14.8 13.6 14.8 11.2 18.0 24.0 28.0 37.7 39.7 38.9 45.5 51.8	3.1 4.0 4.7 5.5 5.0 3.8 3.3 3.0 2.7 1.9 4.1 1.3 4.3 5.4 1.7	18.2 15.0 13.8 12.2 18.1 15.8 12.7 11.2 2.3 1.9 1.9 2.4 1.3 1.1 6.6

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WADDELL & REED 6/30/87 116,141,569 4.1 10.2 19.1 9.0 2.9 20.8 30.7 2.3 0.6 3/31/87 113,451,543 1.1 13.6 19.7 16.1 5.2 15.3 24.0 3.8 1.1 9/30/86 91,162,262 2.9 8.5 21.7 12.3 16.1 19.2 5.6 3/31/87 976,898 4.4 7.8 26.0 0.4 20.7 21.7 12.4 6.6 1.5 3/31/86 95,498,169 4.3 7.3 13.0 2.9 23.3 24.9 16.9 7.3 9/30/85 74,328,144 2.0 7.7 17.8 8 5.1 19.7 22.5 15.0 9.1 9/30/85 27,604,382 12.8 14.5 2.2 21.5 15.8 16.3 7.9 11.2 12/31/46 25,835,61251 1.4 13.9 28.0 3.3	MANAGER NAME	DATE	TOTAL PORTFOLIO MARKET VALUE	CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	WADDELL & REED											
9/30/86 91,162,262 2.9 8.5 21.7 12.4 12.9 14.6 18.9 6.6 1.5 6/30/86 97,376,988 4.4 7.8 26.0 0.4 20.7 21.7 12.4 6.6 3/31/86 95,498,169 4.3 7.3 13.0 0.4 20.7 21.7 12.4 6.6 12/31/85 62,027,227 4.6 7.7 17.0 5.4 15.2 25.9 15.0 9.1 9/30/85 29,531,769 11.8 14.5 2.5 21.1 18.4 13.3 6.1 12.4 3/31/85 27,604,382 12.8 11.9 2.7 21.5 18.6 13.3 6.1 12.4 12/31/84 26,254,116 14.0 18.7 18.8 2.7 25.5 1.0 19.3 9/30/84 25,455,564 29.0 25.7 15.7 17.8 11.8 3/31/87 4.6												
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MILSHIRE 5000 6/30/87 4.8 4.0 27.3 9.8 12.3 13.4 13.6 3.1 11.7 MILSHIRE 5000 6/30/87 4.8 4.0 27.3 9.8 12.3 13.4 13.6 3.1 11.7 MILSHIRE 5000 6/30/87 4.8 4.0 27.3 9.8 12.3 13.4 13.6 3.1 11.7 3/31/85 27,604,382 12.8 11.9 2.7 21.5 15.8 16.3 7.9 11.2 12/31/84 26,234,116 14.0 18.7 18.8 2.7 25.5 1.0 19.3 9/30/84 25,856,251 1.4 13.9 28.0 3.3 14.3 0.5 30.9 1.6 6.1 12/31/83 11,409,742 12.8 32.4 25.0 11.7 4.5 12/31/86 4.6 3.9 27.5 9.4 13.0 13.6 12.9 3.0 12.1 12/31/86 <th></th>												
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9/30/8425,856,2511.413.928.03.314.30.530.91.66.16/30/8425,495,56429.025.715.717.811.812/31/8311,409,74212.832.121.425.011.74.512/31/8311,409,74212.832.433.920.912/31/864.63.927.59.413.013.612.93.012.112/31/864.63.827.29.013.512.612.23.014.19/30/864.43.826.99.014.012.112.43.114.36/30/864.84.727.08.014.111.813.43.312.93/31/864.84.727.08.014.111.813.43.312.912/31/854.84.225.710.512.911.414.03.413.09/30/854.74.126.210.614.111.813.63.613.59/30/854.74.126.210.612.311.414.03.413.312/31/854.74.126.311.212.210.813.63.613.53/31/854.74.1												
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WILSHIRE 5000 $6/30/87$ 4.8 4.0 27.3 9.8 12.3 13.4 13.6 3.1 11.7 WILSHIRE 5000 $6/30/87$ 4.6 3.9 27.5 9.4 13.0 13.6 12.9 3.0 12.1 $12/31/86$ 4.6 3.9 27.5 9.4 13.0 13.6 12.9 3.0 12.1 $12/31/86$ 4.6 3.9 27.5 9.4 13.0 13.6 12.9 3.0 12.1 $12/31/86$ 4.6 3.8 26.9 9.0 14.0 12.1 12.4 3.1 14.3 $6/30/86$ 4.8 4.7 27.0 8.0 14.1 11.8 13.4 13.6 3.0 12.9 $12/31/85$ 4.8 4.2 25.7 10.5 12.9 11.4 14.0 3.4 13.3 12.9 $9/30/85$ 4.8 4.0 26.3												danay chron tilang
WILSHIRE 5000 6/30/87 4.8 4.0 27.3 9.8 12.3 13.4 13.6 3.1 11.7 3/31/87 4.6 3.9 27.5 9.4 13.0 13.6 12.9 3.0 12.1 12/31/86 4.6 3.8 27.2 9.0 13.5 12.6 12.2 3.0 14.1 9/30/86 4.4 3.8 26.9 9.0 14.0 12.1 12.4 3.1 14.3 6/30/86 4.5 4.0 28.8 7.8 14.0 12.1 12.4 3.1 14.3 6/30/86 4.8 4.7 27.0 8.0 14.1 11.8 13.4 3.3 12.9 3/31/85 4.8 4.2 25.7 10.5 12.9 11.4 14.2 3.3 13.0 9/30/85 4.8 4.0 26.3 11.2 12.2 10.8 13.6 3.6 13.5 3/31/85 4.9 3.9 25.3 <th></th> <th>an, esp des</th>												an, esp des
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		12/31/83	11,409,742	12.8	32.4	ung ago 60%	400 Gan qaa	33.9		20.9	ang ting allo	600 day 600
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WILSHIRE 5000	6/30/87		4.8	4.0	27.3	9.8	12.3	13.4	13.6	3.1	11.7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		3/31/87								12.9	3.0	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		12/31/86	1000 AM						12.6			14.1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		9/30/86			3.8		9.0					14.3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		6/30/86	-	4.5	4.0	28.8	7.8		12.4	12.6	3.0	12.9
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	•	3/31/86	500 tas (20)	4.8	4.7	27.0	8.0	14.1	11.8	13.4	3.3	12.9
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		12/31/85	time size, itiza	4.8	4.2	25.7	10.5	12.9	11.4	14.2	3.3	13.0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$)	9/30/85	070 Gap 4000	4.7	4.1	26.2	10.6	12.3	11.4	14.0	3.4	13.3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		6/30/85		4.8	4.0	26.3	11.2	12.2	10.8	13.6	3.6	13.5
9/30/84 5.2 4.3 24.9 13.2 10.3 11.5 15.5 2.9 12.2 6/30/84 5.3 4.0 25.7 13.5 9.6 11.7 15.6 2.9 11.7 3/31/84 5.4 3.9 23.6 16.1 9.8 12.1 15.3 2.9 11.1		3/31/85	Kites maps distri	4.9	3.9	25.3	13.0	11.4	10.9	14.4	3.3	12.9
6/30/84 5.3 4.0 25.7 13.5 9.6 11.7 15.6 2.9 11.7 3/31/84 5.4 3.9 23.6 16.1 9.8 12.1 15.3 2.9 11.1			diais dans diam				13.5	9.9				
3/31/84 5.4 3.9 23.6 16.1 9.8 12.1 15.3 2.9 11.1					4.3	24.9						
			60 in 60			25.7	13.5	9.6		15.6	2.9	
12/31/83 5.5 4.2 24.0 14.5 9.5 12.2 16.3 2.8 11.1			tion time time			23.6	16.1					
		12/31/83	Cine 600 (50)	5.5	4.2	24.0	14.5	9.5	12.2	16.3	2.8	11.1

EXTERNAL EQUITY MANAGERS

HISTORICAL PERFORMANCE SUMMARY

	1Q 87	2Q 87	3Q 87	4Q 87	1Q 88	2Q 88	3Q 88	4Q 88	1Q 89	2Q 89	3Q 89	4Q 89
FRED ALGER												
Equity	22.3%	-0.6										
Total Fund	18.4	0.0										
ALLIANCE CAPITAL												
Equity	28.8	4.9										
Total Fund	27.4	4.6										
BEUTEL GOODMAN												
Equity	18.6	6.4										
Total Fund	17.6	5.3	,									
BMI CAPITAL												
Equity	25.8	1.2										
Total Fund	24.8	1.2										
FORSTMANN-LEFF	~ ~ ~											
Equity	25.7	2.1										
Total Fund	19.8	1.6										
HELLMAN JORDAN	20.0	1 0										
Equity	30.2	1.8										
Total Fund IDS ADVISORY	29.4	1.3							•			
Equity	23.1	3.9										
Total Fund	22.4	3.7										
INVESTMENT ADVISERS	~~ ~ ~	2.1										
Equity	24.9	4.9										
Total Fund	19.7	4.0										
LIEBER & COMPANY	12.1	- <u>x</u> . U										
Equity	21.2	-1.4										
Total Fund	20.1	-1.3										
PEREGRINE CAPITAL												
Equity	21.8	1.5										
Total Fund	17.3	1.4										
WADDELL & REED												
Equity	23.0	2.6										
Total Fund	18.4	2.4										
SBI AGGREGATE												
Equity	23.6	2.9										
Total Fund	21.0	2.6										
MARKET INDICES												
Wilshire 5000	21.2	3.3										
S&P 500	21.2	5.1										
91 Day T-Bills	21.3	5.1 1.4										
JI Day 1-DIIIS	1.4	1.4										

(Previous historical performance data can be found on the following page).

EXTERNAL EQUITY MANAGERS

HISTORICAL PERFORMANCE SUMMARY

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	2Q 83	3Q 83	4Q 83	1Q 84	2Q 84	3Q 84	4Q 84	1Q 85	2Q 85	3Q 85	4Q 85	1Q 86	2Q 86	3Q 86	4Q 86
FRED ALGER	12 04	2 5 9	1 00	0 10	4 30			~ ^ ^	10.10	4 7 4	~~ ~~				
Equity Total Fund	13.9% 13.1	-3.5% -3.4	-1.0 -0.9	-8.1% -7.0	-4.1% -3.5	8.3% 8.0	0.2%	7.3%	10.1%			21.2%	9.08	-14.78	5.78
ALLIANCE CAPITAL	12.1	-2.4	-0.9	-/.0	-3.5	8.0	0.2	7.2	9.1	-4.6	18.7	19.8	8.5	-14.1	5.3
Equity	14.3	-8.7	-0.6	-11.2	2.2	7.1	1 1	12.1		2 6	10.0		<i>.</i> .		P A
Total Fund	14.3	-8.0	-0.4	-10.1	2.2	/ • 1 6 • 6	1.3 1.3	$13.1 \\ 12.2$	11.5 10.8	-3.6	19.2 17.8	20.0	6.1	-11.9	5.3
BEUTEL GOODMAN	12.0/	-0.0	-0.4	-10.1	6.6	0.0	1.3	12.2	10.8	-3.3	1/.8	19.3	5.9	-11.8	5.2
Equity	13.9	3.4	3.5	-0.7	-2.8	10.1	5.1	12.1	8.1	-9.0	12.5	15.7	0 0	4 0	1 0
Total Fund	8.7	1.1	3.3	-0.6	-2.8	9.3	4.9	12.1	7.5	-8.6	12.0	13.7	-0.9 -0.6	-4.8 -4.2	-1.2 -1.3
BMI CAPITAL	0.,/	* • *	1.1	-0.0	-2.0	205	*•7	10.7	1.5	-0.0	12.0	14.3	-0.0		-1.0
Equity	14.4	-7.8	-6.0	-14.4	2.1	3.6	2.3	10.5	-0.7	-9.9	19.4	18.6	7.2	-9.7	5.8
Total Fund	11.9	-7.7	-6.1	-14.5	2.0	3.4	2.2	9.3	-0.9	-2.4	11.1	17.8	7.0	-9.4	5.5
FORSTMANN-LEFF	****		0.1	4705	2.00	7.4	204	2.3	-0.9	- 2 . 3	17.07	11.0	/.0	- 2 . 4	3.5
Equity	11.2	-1.7	-1.0	-8.3	-2.8	7.5	3.7	12.6	9.4	-5.4	21.5	20.8	10.1	-16.0	5.7
Total Fund	9.9	-1.2	-0.6	-6.0	-1.7	4.6	3.4	10.9	8.1	-4.2	16.3	18.8	8.9	-10.8	3.4
HELLMAN JORDAN					2	100	5.1	10.5	0.12		T 0 0 0	20:0	0.5		J. T
Equity	10.0	-9.5	-0.9	-3.1	-4.8	8.6	4.3	10.0	9.5	-5.9	19.4	16.1	0.4	-10.7	5.2
Total Fund	5.8	-3.2	-1.0	-0.6	-3.9	9.5	4.6	8.7	7.5	-5.6	18.6	15.3	0.3	-10.4	4.9
IDS ADVISORY					-										201
Equity	14.3	-6.6	-0.9	-8.4	0.0	11.4	3.2	9.2	10.7	-5.9	20.5	18.2	8.1	-10.6	4.8
Total Fund	13.6	-5.6	-0.6	-7.3	0.4	10.3	3.0	8.5	10.1	-5.9	19.7	17.2	7.5	-10.1	4.5
INVESTMENT ADVISERS															
Equity	11.6	-2.9	1.5	-5.8	-3.0	11.3	5.8	6.6	7.1	-7.8	20.5	14.7	5.3	-11.1	4.9
Total Fund	8.0	-1.8	1.3	-4.9	-2.8	10.7	5.7	6.4	6.4	-7.2	18.5	12.4	4.6	-8.9	4.1
LIEBER & COMPANY															
Equity	16.6	-2.4	1.7	-10.2	-1.3	8.9	2.9	13.8	6.3	-1.7	15.2	13.8	11.8	-9.5	0.3
Total Fund	11.6	-1.9	1.3	-7.3	-1.4	7.9	2.6	11.6	6.0	-1.9	14.6	13.9	11.0	-9.5	0.1
PEREGRINE CAPITAL				_											
Equity Tot al Fund	19.6	-3.6	-6.0	-8.8	-3.2	5.3	-2.1	9.5	10.7	0.4	15.5	7.7	2.1	-5.7	5.2
WADDELL & REED	16.4	-2.6	-5.1	-7.4	-2.7	4.7	-1.9	7.8	9.1	-1.9	12.8	6.5	1.9	-4.7	4.4
Equity	30.2	A 7	~ ^	14.0											
Total Fund	24.0	-4.7 -3.0	-9.3 -5.3	-14.0	-10.3	-1.6	0.7	8.1	8.7	-5.4	18.4	19.7	2.4	-8.3	6.2
SBI AGGREGATE	29°0	-3.0	-2.3	-2.2	-1.3	1.4	1.5	5.2	7.0	-2.0	10.4	16.4	2.0	-6.4	5.1
Equity	12.1	-5.6	-1.5	-7.5	-2.7	8.0	2.4	0 5			4 -0 -0				
Total Fund	10.5	-4.5	-1.2	-5.9	-2.2	7.2	2.4	9.5	8.8	-5.7	17.7	16.6	5.0	-1.4	4.4
	10.0		-1.2	-2.9	-2.2	1.2	2.4	8.4	8.0	-4.5	15.2	15.2	4.5	-8.6	3.9
MARKET INDICES															
Wilshire 5000	13.0	-0.9	-1.0	-4.2	-2.8	9.2	1.3	10 2	7 F	4 2	16.0	3.4.4	e 0	~ ~	
S&P 500	11.1	-0.1	0.4	-2.4	-2.0	9.2	1.3	10.3 9.2	7.5 7.4	-4.3 -4.1	16.8 17.3	14.4 14.1	5.8 6.0	-7.7	4.0
91 Day T-Bills	2.2	2.4	2.3	2.4	2.6	2.7	2.3	9.2 2.1	1.9	-4.1	1.8	14.1	6.0 1.6	-7.0	5.4
4		~ ; 7	£ . J	4 o 7	2.0	2.01	4 o J	4.1	1.9	т.у	1.0	1.8	1.0	1.4	1.3

BOND MANAGER PORTFOLIO STATISTICS GLOSSARY

Like the preceding equity manager portfolio statistics glossary, this bond manager portfolio statistics glossary is designed to define terminology used in evaluating a bond manager's investment philosophy, risk characteristics and performance data.

- Qtr. Port. Turnover the manager's total bond sales during the quarter divided by the average value of the manager's bond portfolio over the quarter.
- # of Issues the number of different bond issues held in the manager's portfolio.
- Bond Allocation the percent of the manager's total portfolio invested in bonds.
- Coupon the annual interest payment received on the manager's total portfolio stated as a percent of the portfolio's face value.
- Current Yield the annual interest payment produced by the manager's total portfolio stated as a percent of the portfolio's market value.
- Yield to Maturity the compounded annualized return that the manager's total portfolio would produce if it were held to maturity and all cash flows were reinvested at an interest rate equal to the yield to maturity.
- Duration a measure of the average life of the total portfolio. Duration is a weighted average maturity whereby the time in the future that each cash flow is received is weighted by the proportion that the present value of the cash flow contributes to the total present value (or price) of the total portfolio.
- Term to Maturity also a measure of the average life of the total portfolio. Term to maturity is the number of years remaining until the average bond in the portfolio makes its final cash payment.

- Quality Weightings refers to the average rating given the total portfolio's securities by Moody's Corp. A security's rating indicates the financial strength of its issuer and other factors related to the likelihood of full and timely payment of interest and principal.
- Sector Weightings refers to the sectors of the bond market in which the manager has positioned his/her bond portfolio.
- TUCS Median the median manager within a subsample of the TUCS universe that is restricted to fixed income managers investing in portfolios with quality and duration characteristics similar to those that are required of the SBI's bond managers.

EXTERNAL FIXED INCOME MANAGERS

PORTFOLIO STATISTICS HISTORICAL SUMMARY

MANAGER NAME	DATE	QUARTER PORTFOLIO T/O	# OF BONDS	BOND ALLOCATION	COUPON	CURRENT YIELD	YIELD TO MAT.	AVERAGE QUALITY	DURATION	TERM TO MAT.
AVG. EXT. MGRS	6/30/87	44	44	93	8.4	8.4	8.9	AAA	4.4	7.5
	3/31/87	30	39	91	8.6	8.3	8.0	AAA	4.9	8.3
	12/31/86 9/30/86	30 19	40 41	94 99	9.2 9.5	8.6	8.2	AAA	5.4	9.5
	6/30/86	47	40	99	9.5	9.2 9.3	9.3 9.0	AAA	5.0	10.6
	3/31/86	41	39	96	10.3	9.6	8.8	ала Ала	4.6 4.5	10.0 12.3
	12/31/85	41	33	95	10.5	10.0	9.6	AAA	4.4	8.7
	9/30/85	22	34	96	10.7	10.6	10.6	AAA	4.3	8.7
	6/30/85	48	29 ⁻	95	10.4	10.2	10.4	AAA	4.5	8.5
	3/31/85	37	25	91	10.3	10.8	11.5	AAA	4.2	8.2
	12/31/84	38	22	93	10.3	10.8	11.4	AAA	4.5	8.8
	9/30/84	54	29	88	10.1	11.1	12.3	AAA	4.3	8.8
INVESTMENT ADV.		15	19	92	7.7	7.6	8.3	AAA	3.5	4.5
	3/31/87	7	24	97	8.6	8.1	8.0	AAA	3.4	4.3
	12/31/86	11	25	93	8.9	8.4	8.1	AAA	3.5	4.4
	9/30/86 6/30/86	5 9	22 21	98 96	9.4	8.6	8.5	AAA	3.5	4.4
	3/31/86	17	22	95	9.6 9.9	8.8 8.9	8.3 8.2	AAA AAA	3.3 3.3	4.1 4.2
	12/31/85	10	16	95	9.4	8.8	8.7	AAA	3.4	4.3
	9/30/85	30	18	99	9.7	9.3	9.9	AAA	3.8	5.1
	6/30/85	50	17	99	8.4	8.1	10.1	AAA	4.7	6.2
	3/31/85	19	13	99	8.7	9.3	11.7	AAA	4.9	8.9
	12/31/84	25	10	99	8.4	9.3	11.5	AAA	5.6	12.1
	9/30/94	10	7	100	9.0	10.8	12.6	AAA	6.4	15.2
LEHMAN MGMT.	6/30/87	36	46	92	7.9	8.1	8.2	AAA	3.7	5.0
	3/31/87	51	46	91	8.5	8.1	7.3	AAA	3.9	5.6
	12/31/86	40	45	94	9.6	8.9	7.5	AAA	4.3	6.7
	9/30/86	31	44	98	10.2	9.4	8.2	AAA	4.4	8.6
	6/30/86 3/31/86	16	48	97	10.8	9.8	8.3	AAA	4.0	8.1
	12/31/85	28 40	54 32	97	11.0 11.1	9.7	8.3	AAA	4.0	8.5
	9/30/85	24	3∡ 35	89 95	11.1	10.2 10.9	9.2 10.2	A AA AAA	3.7 3.9	6.5 6.6
	6/30/85	49	27	92	11.4	10.9	9.9	AAA	3.8	6.3
	3/31/85	43	24	85	11.6	11.4	11.0	AAA	3.6	5.6
	12/31/84	44	19	85	11.6	11.4	10.8	AAA	3.3	5.3
	9/30/84	62	15	82	11.2	11.5	12.2	AAA	3.7	6.5

	QUARTER									
MANAGER NAME	DATE	PORTFOLIO T/O	# OF BONDS	BOND ALLOCATION	COUPON	CURRENT YIFLD	YIELD TO MAT.	AVERAGE QUALITY	DURATION	TERM TO MAT.
MILLER ANDERSON	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85	52 70 30 15 57 73 71 23 75	76 43 57 68 60 37 42 52 48	95 82 96 99 97 92 99 98 95	9.0 8.4 9.5 9.3 9.4 10.5 10.4 9.6 9.3	8.8 7.9 8.8 9.3 9.3 9.7 9.9 10.2 10.0	8.9 7.8 8.2 9.8 9.5 8.8 9.6 10.6 10.4	АА АА АА АА АА АА АА АА	5.4 4.8 6.6 5.2 4.4 5.3 5.0 4.6	8.6 7.6 12.1 12.5 11.6 11.4 9.6 9.7 9.3
р. ,	3/31/85 12/31/84 9/30/84	35 50 83	41 43 59	92 99 71	9.0 9.1 9.8	10.0 10.1 11.1	11.1 11.3 11.9	АА АА ААА	3.7 3.9 3.3	7.4 7.3 6.7
MORGAN STANLEY	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	107 17 42 9 89 62 58 18 38 62 30 105	9 18 19 14 13 20 17 20 17 16 12 20	93 98 100 100 100 100 100 100 85 100 99	7.8 8.3 7.7 8.4 8.6 9.4 10.4 11.2 11.4 11.1 11.5 8.6	8.0 8.3 8.5 8.7 9.0 10.1 11.1 10.8 11.3 11.5 8.9	8.2 8.3 8.3 9.1 8.7 9.9 11.0 10.5 11.5 11.5 12.5	ААА Ала Ала Ала Ала Ала Ала Ала Ала Ала	3.4 6.2 6.5 5.3 5.4 5.4 5.0 4.4 5.0 3.8 5.3 3.7	5.1 11.1 11.0 10.7 10.8 19.9 10.6 9.8 9.7 7.3 9.4 5.3
PEREGRINE	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	8 6 24 14 12 10 18 20 15 13 39 17	64 62 52 56 51 54 51 43 35 28 25 21	93 92 84 97 97 98 98 96 98 96 98 100 98	9.2 9.4 10.5 10.3 10.8 11.2 11.5 11.6 11.2 11.1 10.5 10.6	9.1 9.0 8.1 9.8 10.2 10.3 10.8 11.2 10.8 11.3 10.9 11.7	10.8 8.1 8.5 11.3 9.8 9.4 10.4 11.0 10.5 11.5 11.3 12.5	АА АА АА АА АА АА АА АА АА АА	4.4 5.2 4.7 4.5 4.3 4.1 3.7 3.3 3.4 3.7 3.5 3.6	8.7 9.5 8.9 11.0 9.7 11.0 9.3 7.8 7.6 7.6 7.6 7.5 7.6
WESTERN ASSET	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	46 31 33 38 97 58 47 19 58 52 39 49	52 40 40 48 48 48 40 34 29 28 24 19	94 87 95 100 90 95 87 89 84 87 80 80	8.8 8.6 9.6 9.3 9.8 10.3 10.7 10.5 10.4 10.6 11.3	9.0 8.3 8.7 9.1 9.0 9.8 10.1 11.0 10.7 11.5 11.4 12.3	9.2 8.3 8.6 9.0 9.0 9.3 10.0 11.1 10.8 12.1 11.8 12.8	АА АА АА АА АА АА АА АА АА АА	6.2 5.7 6.7 6.4 5.6 5.5 5.2 5.6 5.4 5.3 5.2 4.8	13.2 11.6 13.9 16.4 15.7 18.9 11.9 13.0 12.1 12.2 11.3 11.3

EXTERNAL FIXED INCOME MANAGERS SECTOR WEIGHTING HISTORICAL PROFILE

MANAGER		TOTAL PORTFOLIO MARKET	Q	UALITY	WEI	GHTIN	IGS				SECI	OR WEI	GHTIN	GS			
NAME	DATE	VALUE	AAA	AA	A	BAA	OTHER	GOVT	AGCY	ZERO	I ND	UTIL	FIN	TRAN	MTGS	MISC	CASH
AVG. EXT. MGRS.	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84		76 77 78 79 80 81 78 77 79	5 5 6 6 5 6 10 12 12	11 11 13 12 10 9 8 8 6 6 7 7	5 4 3 3 3 3 2 1 3 2 2 2 2	3 3 5 3 3 5 5 4 4 2 0	36 32 29 28 35 35 35 33 34 27 33 30	3 2 3 6 2 3 1 5 8 10	2 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 7	8 10 12 11 9 6 7 5 5 2 3	2 2 2 2 2 2 2 2 4 6 8 8	14 7 9 9 10 9 9 9 9 12 12 9	1 1 1 0 0 0 0 0	24 32 39 37 34 35 39 36 31 24 19	3 3 3 3 3 1 1 1 1	7 9 6 1 4 5 4 5 9 7 12
INVESTMENT ADV.	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	42,121,121 42,655,770 42,094,854 40,731,041 39,301,944 38,938,391 36,766,845 34,573,707 33,794,148 30,942,776 30,397,636 27,932,974	96 80 78 81 84 96 96 85 74 72	0 4 7 8 8 8 4 4 4 15 26 28	4 10 13 14 11 8 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	56 51 40 45 34 52 68 70 62 53 52 59	9 5 5 18 0 0 0 0 0 0	13 12 11 12 12 12 13 23 18 18 18	0 11 13 23 23 25 8 9 10 11 0 0	0 0 0 0 0 0 13 25 31	6 9 15 13 10 6 7 7 4 4 4 0		8 9 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	8 7 2 4 5 1 1 1 0
LEHMAN MGMT.	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	235,159,610 238,911,690 236,321,758 229,994,337 223,483,722 220,998,995 207,462,430 194,774,253 190,808,742 177,383,853 173,831,628 162,737,117	88 85 80 89 89 89 87 91 95 98 96	6 9 6 4 4 5 6 5 3 0 1	5 4 11 12 6 6 7 4 2 2 2	0 0 0 1 1 0 0 0 0 0 0	1 2 2 0 0 0 0 0 0 0 0 0 0	63 58 53 60 65 51 64 65 64 60	0 0 0 2 10 12 8 13 13 13	0 0 0 0 0 0 0 0 0 5	9 12 14 14 11 9 7 9 5 2 3 4	1 2 3 8 2 0 2 2 2 0 0 0 0	7 5 7 7 7 6 7 7 4 2 0 0		12 9 16 18 15 12 11 9 3 5 0	0 0 0 0 0 0 0 0 0 0 0	8 9 6 2 3 11 5 8 15 15 15

1		TOTAL PORTFOLIO	Q	UALITY	WEI	GHTIN	IGS				SECT	OR WE	GHTIN	IGS			
MANAGER NAME	DATE	MARKET VALUE	AAA	AA	A	BAA	OTHER	GOVT	AGCY	ZERO	I ND	UTIL	FIN	TRAN	MTGS	MISC	CASH
MILLER ANDERSON	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	248,119,545 252,209,582 245,302,600 222,348,832 217,656,629 217,291,031 208,552,908 191,849,284 183,857,869 173,961,916 169,696,156 159,574,376	67 75 68 72 71 74 71 68 69 54 55 81	5 2 3 5 0 1 3 13 17 12	7 3 6 5 4 5 6 9 8 11 14 5	6 5 5 5 4 4 2 5 2	15 15 21 14 15 16 19 18 16 20 9 0	37 42 38 25 45 45 24 19 2 0 0	0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 2 4 4 7 0	9 5 7 6 2 2 2 5 5 7 5 2	0 0 0 0 0 0 0 0 0 0 0 0	17 3 6 8 8 9 12 27 36 17	1 0 0 0 0 0 0 0 0 0 0 0	30 30 44 61 60 37 44 60 57 52 51 52	0 1 2 2 0 0 0 0 0 0 0 0 0	5 18 4 1 3 8 1 2 5 8 1 29
MORGAN STANLEY A I N OO	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	198,820,186 246,865,703 239,857,185 229,631,966 222,763,940 225,686,690 208,381,895 193,513,567 188,907,479 173,106,782 170,547,941 159,109,110	100 100 100 100 100 100 100 100 100 100	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	54 25 35 33 41 42 41 49 38 74 5	0 0 9 0 0 0 0 0 0 9 18 27	0 0 0 0 0 0 0 0 0 0 0 27	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	10 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	29 75 73 58 59 59 59 59 51 38 8 0		7 2 0 0 0 0 0 0 0 1 5 0 1
PEREGRINE	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	112,206,244 114,089,715 111,810,642 108,237,995 104,606,143 104,370,666 100,139,659 95,186,493 92,417,709 86,259,088 84,387,890 79,887,650	41 47 49 48 55 61 56 55 58	18 12 14 19 18 13 12 15 23 13 14	34 32 29 31 32 29 25 20 19 18 24	5 7 4 2 0 0 0 0 7 3 4 4	2 6 3 2 2 3 2 2 0 0 0 0	0 0 0 0 0 0 0 0 0 0 3 6 12	0 0 0 0 0 0 0 0 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0	14 15 22 12 9 9 5 4 4 0 0 10	0 1 0 0 0 0 2 5 5 5 0	31 24 20 26 30 31 29 31 33 38 30 31	1 0 0 0 0 0 0 0 0 0 0	29 31 47 41 40 48 52 49 47 48 33	18 17 11 13 17 17 16 7 7 7 0 0	7 8 16 2 3 2 4 2 4 2 0 4 7
WESTERN ASSET	6/30/87 3/31/87 12/31/86 9/30/86 6/30/86 3/31/86 12/31/85 9/30/85 6/30/85 3/31/85 12/31/84 9/30/84	253,510,478 262,481,416 255,942,435 244,004,935 238,657,259 235,514,306 220,363,561 201,666,058 197,929,627 181,426,695 177,328,832 165,957,816	64 69 75 80 76 73 76 69 68	3 2 2 2 4 5 6 9 9 15 15	15 16 17 11 8 5 8 5 4 4 7 9	18 11 10 11 9 14 7 4 8 7 5 5	0 2 1 1 1 7 11 6 4 4 3	5 8 16 13 7 5 11 10 4 3 4	7 6 11 13 9 9 8 3 0 11 11 16	0 1 0 2 3 3 1 0 0 0 0 0	19 16 20 9 7 12 15 14 8 8 6 3	10 5 7 9 9 10 15 16 19 18	11 4 2 2 2 0 0 0 2 4	3 3 4 1 1 1 2 5	39 36 42 43 45 52 48 49 51 47 33 26	0 3 1 2 0 0 0 0 0 0 4 4	6 13 5 0 10 5 11 12 15 13 20 20

EXTERNAL FIXED INCOME MANAGERS

HISTORICAL PERFORMANCE SUMMARY

	2Q 87	1Q 87	4Q 86	3Q 86	2Q 86	1Q 86	4Q 85	3Q 85	2Q 85	1Q 85	4Q 84	3Q 84
INVESTMENT ADVISERS Fixed Income	-0.9	1.0%	2.8%	2.5%	0.9%	6.2%	6.5%	2.5%	9.48	1.9%	8.8%	11.8%
Total Fund	-0.9	1.0	2.7	2.4	0.9	5.9	6.3	2.3	9.2	1.8	8.8	11.8
LEHMAN MANAGEMENT												
Fixed Income	-1.7	1,0	2.8	3.0	1.2	6.7	6.9	2.1	8.7	2.0	7.7	9.6
Total Fund	-1.6	1.1	2.8	2.9	1.1	6.5	6.5	2.1	7.6	2.1	6.8	8.7
MILLER ANDERSON												
Fixed Income	-2.0	3.2	10.6	2.2	0.2	4.4	8.8	4.4	6.0	2.5	7.5	7.7
Total Fund	-1.6	2.8	10.3	2.2	0.2	4.2	8.7	4.4	5.7	2.5 2.5	7.5 6.3	7.7 6.7
MORGAN STANLEY												
Fixed Income	-5.6	3.1	4.3	3.1	-2.1	8.2	7.7	2.5	9.3	1.5	7.3	6.1
Total Fund	-3.1	2.9	4.5	3.1	-1.3	8.3	7.7	2.4	9.1	1.5	7.2	6.3
PEREGRINE CAPITAL												
Fixed Income	-1.9	2.2	3.4	3.6	0.2	4.3	5.4	3.1	7.3	2.3	6.0	7.7
Total Fund	-1.7	2.0	3.3	3.5	0.2	4.2	5.2	3.0	7.1	2.2	5.6	6.9
WESTERN ASSET												
Fixed Income	-3.9	2.6	5.0	2.3	0.9	7.4	10.7	1.9	10.7	2.4	8.0	11.8
Total Fund	-3.4	2.6	4.9	2.2	1.3	6.9	9.3	1.9	9.1	2.3	6.8	10.8
SBI FIXED INCOME AGGREGATE												
Fixed Income	-2.8	2.4	5.3	2.8	1.7	б.4	8.1	2.8	8.5	2.1	7.5	8.8
Total Fund	-2.3	2.3	5.2	2.7	0.4	6.2	7.7	2.7	7.8	2.1	6.8	8.1
MARKET INDEX							-					
Salomon Broad Bond Index	-1.6	1.3	3.3	2.5	1.1	7.9	7.8	2.0	8.9	2.2	7.5	8.6

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ALTERNATIVE EQUITY INVESTMENTS JUNE 30, 1987

REAL ESTATE:	INCEPTION DATE	FUND SIZE (MILLIONS)	SB I COMM I THENT	SBI-FUNDED	SBI- TO BE Funded	FUND DESCRIPTION
EQUITABLE AETNA PRUDENTIAL REEEF- USA III HEITMAN I HEITMAN II HEITMAN III TCW I TCW I STATE STREET I STATE STREET II	10/81 4/82 9/81 4/84 6/84 10/85 11/86 7/85 9/86 7/85 7/85 7/86	\$2,849.7 \$1,592.0 \$4,584.0 \$773.0 \$113.0 \$238.0 \$200.0 \$216.0 \$250.0 \$103.0 \$86.0	\$40,000,000.00 \$40,000,000.00 \$40,000,000.00 \$75,000,000.00 \$20,000,000.00 \$20,000,000.00 \$20,000,000.00 \$20,000,000.00 \$40,000,000.00 \$30,000,000.00 \$20,000,000.00 \$15,000,000.00	\$40,000,000.00 \$40,000,000.00 \$40,000,000.00 \$67,000,000.00 \$20,000,000.00 \$30,000,000.00 \$10,000,000.00 \$10,000,000.00 \$15,000,000.00 \$15,000,000.00	\$0.00 \$0.00 \$0.00 \$8,000,000.00 \$0.00 \$10,000,000.00 \$0.00 \$15,000,000.00 \$0.00 \$0.00	OPEN - DIV. OPEN - DIV. OPEN - DIV. CLOSED - DIV. CLOSED - DIV. CLOSED - DIV. CLOSED - DIV. CLOSED - DIV. CLOSED - SPEC. CLOSED - SPEC. CLOSED - SPEC.
TOTAL R.E. PORTFOLIC)	0 A	\$370,000,000.00	\$337,000,000.00	\$33,000,000.00	
VENTURE CAPITAL:						
NORWEST KKR I KKR II SUMHIT FIRST CENTURY DSV MATRIX INMAN/BOWMAN ALLIED SUPERIOR VENTURE	1/84 3/84 12/85 12/84 12/84 4/85 7/85 6/85 7/85 6/86	\$60.0 \$1,000.0 \$2,000.0 \$93.0 \$100.0 \$60.0 \$70.0 \$44.0 \$40.0 \$35.0	\$10,000,000.00 \$25,000,000.00 \$50,000,000.00 \$10,000,000.00 \$10,000,000.00 \$10,000,000.00 \$10,000,000.00 \$10,000,000.00 \$7,500,000.00 \$5,000,000.00	\$10,000,000.00 \$25,000,000.00 \$14,591,340.00 \$7,500,000.00 \$2,500,000.00 \$10,000,000.00 \$7,500,000.00 \$3,750,000.00 \$3,333,334.00 \$1,661,250.00	\$0.00 \$0.00 \$35,408,660.00 \$2,500,000.00 \$7,500,000.00 \$0.00 \$2,500,000.00 \$3,750,000.00 \$1,666,666.00 \$4,938,750.00	EARLY STAGE LBO LATER STAGE EARLY STAGE EARLY STAGE EARLY STAGE EARLY STAGE LATER STAGE EARLY STAGE - MN.
TOTAL V.C. PORTFOLIC)		\$144,100,000.00	\$85,835,924.00	\$58,264,076.00	
RESOURCES :						
AMGO I AMGO II APACHE I APACHE II APACHE III	7/81 2/83 5/84 10/85 12/86	\$144.0 \$36.0 \$150.0 \$180.0 \$190.0	\$15,000,000.00 \$7,000,000.00 \$22,500,000.00 \$23,000,000.00 \$30,000,000.00	\$15,000,000.00 \$7,000,000.00 \$766,916.75 \$22,400,000.00 \$30,000,000.00	\$0.00 \$0.00 \$21,733,083.25 \$600,000.00 \$0.00	DEBT WITH EQUITY DEBT WITH EQUITY DEBT WITH EQUITY DEBT WITH EQUITY NET PROFITS INT.
TOTAL RES. PORTFOLIO)	**	\$97,500,000.00	\$75,166,916.75	\$22,333,083.25	
TOTAL ALT. INV. PORT		÷ =	\$611,600,000.00	\$498,002,840.75	\$113,597,159.25	

۹.,

TIME-WEIGHTED RATE OF RETURN

In measuring the performance of a manager or fund whose investment objective is to maximize the total value of an investment portfolio, the proper measuring tool is the timeweighted total rate of return. This performance measure includes the effect of income earned as well as realized and unrealized portfolio market value changes. In addition, the time-weighted total rate of return nets out the influence of contributions made to and distributions taken from the manager or fund. These are variables over which the manager or fund generally has no control.

The calculation of a portfolio's true time-weighted return requires that the portfolio be valued every time that there is a capital flow in or out. Because most portfolios are not valued that frequently, it is usually necessary to estimate the timeweighted total rates of return by approximating the required valuations.

In 1968, the Bank Administration Institute (BAI) commissioned a study, conducted by the University of Chicago, which considered desirable methods of estimating time-weighted returns. The BAI report is considered to be the definitive work in the field of performance measurement because of the academic reputations and thorough scientific efforts of its authors.

When monthly data are available, the BAI study recommends employing a technique called the linked internal rate of return (LIRR). State Street Bank, the SBI's performance measurement consultant, calculates the LIRR by solving the following equation for R:

$$VB*(1+R) + \sum_{i=1}^{n} C*(1+R) **ti = VE$$

Where:

VB = Value of the fund at the beginning of the month

- VE = Value of the fund at the end of the month
- Ci = Net cash flow on the ith day of the month
- n = Number of cash flows in the month

R = Internal rate of return

ti = Time from cash flow i to the end of the period, expressed as a percentage of the total number of days in the month

The internal rate of return, R, is a proxy for the true timeweighted return over the month. It approximates the interim valuations by assuming a uniform growth of the invested assets throughout the period.

The IRR's calculated for each month can be linked together to estimate the time-weighted return for a longer period. For example, given three consecutive monthly IRR's - R1, R2, and R3, the quarterly time-weighted return (TWRQ) is:

TWRQ = (1+R1)*(1+R2)*(1+R3) - 1

MINNESOTA STATE BOARD OF INVESTMENT COMMISSIONS & TRADING VOLUME BY BROKER FISCAL YEAR 1987

	EQUITY	EQUITY	DOWD	DOMD.	
BROKER	DOLLAR VOLUME	COMMISSIONS	BOND DOLLAR VOLUME	BOND COMMISSIONS	SHORT TERM DOLLAR VOLUME
	الله الله الله عنه الله الله الله الله الله الله الله ال				
Abel/Noser Corp. Abrams & Co.	2,485,806.95 537,579.25	5,610.00 1,380.50	0.00 0.00	0.00	0.00
Adams Harkness & Hill	2,146,018.68	2,356.00	0.00	0.00 0.00	0.00
Allen & Company Allison-Williams	1,270,500.00	0.00	0.00	0.00	0.00
American Express Credit	0.00 112,077.00 112,077.00 0.00	0.00 252.00	2,607,865.00 0.00	0.00 0.00	0.00 52,027,000.00
American Securities	112,077.00	252.00	0.00	0.00	0.00
Assoc. Corp. of N. Amer. Autranet	0.00 114,294,843.14	0.00 262,997.97	0.00 23,716,016.67	0.00 0.00	96,722,000.00 0.00
Bank of America	0.00	0.00	6,000,000.00	0.00	104,922,075.54
Bankers Discount Corp. Bankers Trust	0.00	0.00	3,399,375.00 269,162,977.51	0.00 0.00	0.00 79,780,504.50
Barclays American Corp.	0 00	0.00	0.00	0.00	702,000.00
Barrington Trading Co. Bear Stearns & Co.	0.00 88,758,886.77	0.00 177,817.50	33,720,468.75 141,095,535.49	0.00 12,500.00	0.00 6,908,446,000.00
Beneficial Corp.	0.00	0.00	0.00	0.00	28,000,000.00
Boston Inst. Services Brandt (Robert) & Co.	59,028,702.63 56,475,352.28	103,454.50 56,298.00	3,147,187.50 0.00	0.00 0.00	0.00 0.00
Brean Murray	81,858,233.55	165,376.15	0.00	0.00	0.00
Brick Securities Bridge Trading Co.	2,571,375.56 81,436,157.79	7,744.50 171,040.98	0.00 0.00	0.00 0.00	0.00
Briggs & Schaedle	0.00	0.00	0.00	0.00	5,904,146.67
Brown Alex & Sons	804,211,906.15 5,079,053.20	222,026.81 1,533.00	311,927,899.49 0.00	0.00 0.00	18,580,000.00 0.00
Brown Bros. Harriman	473,340.00 395,452.00 774,000.00 45,951,545.00	1,740.00	0.00	0.00	0.00
	395,452.00	602.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
Cantor Fitzgerald	45,951,545.00	69,905.95	0.00	0.00	0.00
Cable/Howse & Ragen Cantor Fitzgerald Capital Inst. Services Carroll McEntee & Mcg. Chase Manhattan Bank Chemical Bank N V	5,712,740.67 0.00	21,536.50 0.00	2,177,789.06 17,285,171.88	0.00	0.00
Chase Manhattan Bank	0.00	0.00	0.00	0.00	330,578,466.84
Chemical Bank N. Y. Chevron Oil Fin. Co.	0.00	0.00	28,516,453.13 0.00	0.00 0.00	25,000,350.48 70,891,000.00
Chicago Corp.	589,580.29	1,650.00	0.00	0.00	0.00
CIT Financial Corp. Citibank	0.00	0.00	0.00 36,406,500.00	0.00	242,959,138.11 236,935,045.63
Continental Bank (CHI)	34,296.00	0.00	0.00	0.00	0.00
Cowen & Co. Cyrus J. Lawrence	34,152,269.39 20,246,261.59	64,958.00	0.00	0.00 0.00	0.00
Dain Kalman & Quail	3,898,635.99	41,876.00 10,619.50	0.00	0.00	0.00
Daiwa Sec. America	3,410,726.40	3,871.00	6,433,515.63	0.00	0.00
Dean Witter Reynolds Delafield Har. Tabell	82,601,234.57 7,674,443.33	204,300.00 14,770.00	58,297,858.14 0.00	0.00 0.00	0.00
Dillon Read	7,604,631.72	17,033.00	0.00	0.00	0.00
Discount Corp. (NY) Dominion Sec. H & P	0.00 870,210.60	0.00 784.00	41,299,218.75 0.00	0.00 0.00	0.00 0.00
Donaldson Lufkin	62,594,594.56	90,116.00	40,911,261.28	0.00	0.00
Drexel Burnham Lambert E. F. Hutton & Co.	156,038,969.05	305,299.00 60,517.50	83,183,912.75 128,850,333.90	30,000.00 0.00	0.00
Eberstadt (F) & Co.	28,371,055.03 12,531,679.38	23,189.00	0.00	0.00	0.00
Edwards - Bond Service Edwards A. G. & Sons	0.00	0.00	8,322,972.50 9,426,370.00	0.00 12,500.00	0.00 0.00
Ernst & Co.	6,545,403.55	5,607.00	0.00	0.00	0.00
First Boston Corp. First Interstate Bk Cal	149,835,632.54 0.00	246,593.59 0.00	593,596,640.17 5,000,000.00	93,000.00 0.00	6,468,641,348.08 0.00
First Manhattan Co.	17,264,552.44	35,576.00	0.00	0.00	0.00
First National Bank Boston First National Bank Chi.	0.00	0.00	522,062.50 5,000,000.00	0.00 0.00	0.00 97,542,745.27
First National Bank Mpls	0.00	0.00	25,113,221.89	0.00	807,799,099.30
First National Bank SP First Southwest Co.	0.00 1,157,746.86	0.00 3,965.00	0.00 0.00	0.00 0.00	224,623,484.44 0.00
Ford Motor Credit Co.	0.00	0.00	0.00	0.00	328,883,000.00 0.00
Fred Alger & Company Furman Selz Mager	424,226,847.76 3,256,077.58	1,268,086.52 2,760.00	0.00 0.00	0.00 0.00	0.00
Gartner Securities Corp.	300,780.00	180.00	0.00	0.00	0.00 229,499,000.00
General Elec. Fin. Serv. General Electric Credit	0.00	0.00	0.00 0.00	0.00 0.00	372,005,000.00
General Motors Acceptance	0.00	0.00	0.00	0.00	677,053,000.00
Goldman Sachs & Co. Gordon Haskett & Co.	250,870,940.18 99,549.00	357,978.34	687,681,347.44 0.00	27,500.00 0.00	9,090,732,452.67 0.00
Greenwich Capital Markets	0.00	0.00	20,803,152.81	0.00	0.00
Gruntal & Company Harris Trust & Savings	1,010,781.00 0.00	2,286.00 0.00	0.00 7,000,000.00	0.00 0.00	0.00 6,257,002.36
Heller Financial Inc.	0.00	0.00	0.00	0.00	685,881,000.00
Herzog Heine Gedvid Household Finance	5,646,886.75 0.00	0.00	0.00 0.00	0.00 0.00	0.00 34,274,000.00
Howard Weil Labouisse Friedrichs	141,470.00	1,645.00	0.00	0.00	0.00
Instinet Interstate Securities	92,897,510.82 8,661,845.49	83,423.30 10,649.10	0.00	0.00 0.00	0.00 0.00
Janney Montgomery Scott	245,622.00	1,072.00	0.00	0.00	0.00
Jefferies & Co. Johnson	278,313,896.45 10,013,409.83	420,585.25 19,669.00	0.00	0.00 0.00	0.00 0.00
Johnson Lane Space & Smith	15,188,554.00	30,904.00	0.00	0.00	0.00 0.00
Jones Associates Keefe Bruyette & Wood	87,730,606.59 15,441,132.89	141,613.82 32,557.00	0.00 0.00	0.00 0.00	0.00
Kidder Peabody	57,672,693.92	68,530.00	271,871,477.22	294,455.00	13,738,981,305.98
		A-33			

MINNESOTA STATE BOARD OF INVESTMENT COMMISSIONS & TRADING VOLUME BY BROKER FISCAL YEAR 1987

BROKER	EQUITY DOLLAR VOLUME	EQUITY COMMISSIONS	BOND DOLLAR VOLUME	BOND COMMISSIONS	SHORT TERM DOLLAR VOLUME
	0.00	0.00	41 027 054 60	0.00	0 000 470 40
Kleinwort Benson Govt. Sec. L. F. Rothschild	0.00 14,369,223.22	0.00 21,248.00	41,837,054.69 36,070,796.20	0.00 69,822.50	2,283,478.41
Lanston Co.	0.00	0.00	44,899,550.78	0.00	0.00
Lazard Freres & Co.	288,995.00 5,060,827.20	420.00 8,728.00	0.00	0.00	0.00
Legg Mason Lehman Govt. Securities	0.00	0.00	107,753,917.51	20,000.00	12,192,324,971.67
Lewco Securities Inc.	32,326,160.59	55,102.50	0.00	0.00	0.00
Lieber & Company Lynch Jones & Ryan	34,310,497.06 10,549,030.97	80,117,75 22,376.50	0.00	0.00	0.00
Mabon Nugent & Co.	3,696,967.58	5,644.00	0.00	0.00	0.00
Manufacturers Hanover Trust	0.00	0.00	846,000.00	0.00	151,153,412.47 70,747,657.77
Marquette National Bank McDonald & Company	0.00 11,417,729.30	0.00 35,388.00	20,945,000.00 0.00	0.00	0.00
McKinney Square Allsopp	1,367,650.00	3,400.00	.0.00	0.00	0.00
McLeod Young Weir	1,806,633.55	835.00 0.00	13,772,290.00 0.00	0.00	0.00 40,126,843.34
Mellon Bank Merrill Lynch - IDC	0.00 234,840,409.55	310,102.72	487,899,082.43	0.00	0.00
Merrill Lynch PF&S	0.00	0.00	0.00	0.00	45,968,000.00
Merrill Lynch PF&S (R) Mesirow & Co.	116,911,227.62 5,222,071.65	218,459.65 14,901.20	158,495,319.10 0.00	63,750.00 0.00	5,654,701,953.60
Montgomery Securities	33,190,964.85	56,170.65	2,168,512.50	0.00	0.00
Moore Schley & Cameron	8,680,381.06	10,790.00	0.00	0.00	0.00
Morgan Guaranty	66,955,494.17 49,017,893.17	86,348.50 140,653.50	490,781,560.15 69,836,287.08	0.00 92,458.80	0.00
Morgan Stanley & Co. Moseley Hallgarter Estabrook	1,084,125.81	1,400.00	0.00	0.00	0.00
Nesbitt Thomson Sec.	1,736,773.76	3,689.00	0.00	0.00	0.00
Neuberger & Berman New York & Foreign Sec.	7,696,490.77 5,319,774.43	12,938.00 15,062.50	0.00 0.00	0.00	0.00
Newhard Cooke & Co.	474,097.50	1,710.00	0.00	0.00	0.00
Nomura Securities Int'l.	14,643,958.67	12,347.00	0.00	0.00	0.00
Norwest Bank Mpls Oppenheimer & Co.	0.00 46,886,621.01	0.00 87,259.55	6,941,929.71 0.00	0.00	253,873,455.14 0.00
Paine Webber J & C	158,959,141.14	210,764.50	43,282,249.69	15,000.00	0.00
Penney (J.C.) Finance	0.00	0.00		0.00	30,878,000.00
Piper Jaffray & Hopwood Pittsburg Natl. Bank	6,493,564.40 0.00	5,926.00	0.00	0.00	6,811,336.39
Prescott Ball & Turben	3,879,395.67	7,281.00	0.00	0.00	0.00
Printon & Kane Prudential	0.00 15,000,254.73	0.00	2,723,625.00 4,474,760.00	0.00	0.00
Prudential Bache Sec.	6,009,077.41	16,122.00	187,493,953.13	0.00	15,308,106,883.33
R. C. Stamm	1,148,616.00	2,016.00	0.00	0.00	0.00
Re-Investment Plan Robert Fleming	0.00 117,500.00	0.00	587.12 0.00	0.00	0.00
Robertson Colman & Stephens	1,339,125.87	700.00	0.00	0.00	0.00
Robinson-Humphrey Co.	7,476,359.67	4,766.00	0.00	0.00	0.00
Roulston & Company	269,916.98 99,040,381.60	474.00 182,072.59	0.00 583,598,213.35	0.00 244,000.00	0.00 10,238,569,843.33
Salomon Bros. Sanford C. Bernstein	13,831,918.89	45,091.50	0.00	0.00	0.00
Schwab (Charles) & Co.	372,450.00	1,200.00	2,873,075.00	0.00	0.00
Sears Roebuck Acceptance Securities Settlement Corp.	0.00 493,522.97	0.00 1,120.00	0.00 0.00	0.00	204,740,000.00 0.00
SEI Funds Evaluation	16,635,034.92	39,169.00	0.00	0.00	0.00
Shearson Argus Research	71,180,863.44	90,485.00	64,103,165.60	0.00	0.00
Shearson Lehman (Bondst) Shearson Lehman Amer Exp	0.00	0.00	24,874,120.00 29,736,159.06	45,000.00 0.00	0.00
Shearson/American Express	29,044,770.61	58,238.50	0.00	0.00	0.00
Smith Barney & Co.	56,186,446.21	122,020.50	17,902,095.50	0.00	0.00
State Board of Investment State Street Bank & Trust	1,273,407.77 948,531,006.82	0.00	414,312,360.66 123,365,115.23	0.00	1,606,592,378.05 39,995.00
Stifel Nicolaus & Company	205,046.00	1,546.00	0.00	0.00	0.00
Sutro & Company, Inc.	4,767,814.90	8,257.00	657,800.00 0.00	0.00	0.00
Thomson & McKinnon Tucker Anthony & R. L. Day	8,704,286.72 8,276,588.41	19,982.00 12,966.00	0.00	0.00	0.00
Union Bank of L.A.	0.00	0.00	1,000,000.00	0.00	6,898,761.11
W. E. Pollock & Co. Wagner Stott & Co.	0.00 72,877,878.43	0.00 112,917.50	97,909,229.08 0.00	0.00	8,449,306.99
Wall Street Clearing	1,145,373.51	1,689.00	0.00	0.00	0.00
Walsh Greenwood	1,365,850.49	2,956.25	0.00	0.00	0.00
Warburg-Paribus Inc.	121,430.00	180.00 137,013.00	0.00 0.00	0.00	0.00
Weeden & Company Weiss	90,146,992.17 3,214,980.00	7,100.00	0.00	0.00	0.00
Wellington & Co.	104,113,748.20	283,913.75	0.00	0.00	0.00
Wertheim Schroder & Co.	6,860,545.40	20,255.00	0.00	0.00	0.00 197,113,000.00
Westinghouse Credit William Blair & Co.	0.00 2,592,888.22	0.00 3,968.00	3,167,875.00	0.00	0.00
Wilshire Associates	130,088,954.75	282,480.80	0.00	0.00	0.00
Wood Gundy & Company'	1,350,594.55	1,463.00	0.00	0.00	0.00
All Brokers Combined	5,781,795,900.51	7,757,773.19	5,956,198,268.03	1,019,986.30	86,982,999,442.47

1987 ANNUAL REPORT

PART II

MINNESOTA STATE BOARD OF INVESTMENT

GOVERNOR RUDY PERPICH

STATE AUDITOR ARNE H. CARLSON

STATE TREASURER MICHAEL A. MCGRATH

SECRETARY OF STATE JOAN ANDERSON GROWE

ATTORNEY GENERAL HUBERT H. HUMPHREY III
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STATE OF MINNESOTA OFFICE OF THE LEGISLATIVE AUDITOR VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612/296-4708 JAMES R. NOBLES, LEGISLATIVE AUDITOR

The State Board of Investment and Howard J. Bicker, Executive Director

We have examined the financial statements for the Supplemental Retirement Fund, the Post Retirement Investment Fund, and the Variable Annuity Fund, which constitute the Investment Trust Funds of the State of Minnesota as of and for the year ended June 30, 1987, as shown on pages 2 to 10. Our examination was made in accordance with generally accepted auditing standards and included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The financial statements present only the Investment Trust Funds of the State of Minnesota and are not intended to present fairly the financial position and results of operations of the State Board of Investment or the State of Minnesota in conformity with generally accepted accounting principles.

In our opinion, the financial statements referred to above present fairly the net assets and participation of the Investment Trust Funds of the State of Minnesota at June 30, 1987, and the results of their operations and changes in their net assets for the year then ended, in conformity with generally accepted accounting principles.

Our examination was made for the purpose of forming an opinion on the financial statements of the Investment Trust Funds of the State of Minnesota. The supporting schedules shown on pages 11 to 111 are presented for purposes of additional analysis and are not a required part of the aforementioned financial statements. Such information has been subjected to the auditing procedures applied in the examination of the aforementioned financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

James

Legislative Auditor November 17, 1987

Asmussen, CPA

John Asmussen, CPA Deputy Legislative Auditor

STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF ASSETS AND LIABILITIES JUNE 30, 1987

		SUPPLEMENTAL (5) RETIREMENT FUND TOTAL	I	COST RETIREMENT((INVESTMENT FUND	5)	VARIABLE (7) ANNUITY FUND
ASSETS:						
INVESTMENTS (at market value)(3)						
Common Stock	\$	221,566,425	Ş	670,664,380	\$	170,455,353
Alternative Equities				-0-		-0-
Fixed Income Securities		74,355,691		2,898,641,761		-0-
Short Term Securities		107,421,931		356,600,888		145,912
TOTAL INVESTMENTS (4)	\$	403,344,047	\$	3,925,907,029	\$	170,601,265
Cash		1		48,686		-0-
Security Sales Receivable		-0		2,368,627		-0-
Accounts Receivable-Fee Refunds		689		-0-		-0-
Accounts Receivable-Mortality		-0-		9,851,407		-0-
Accounts Receivable-Participants		-0-		11,648,682		245,831
Accrued Interest		1,467,649		66,620,207		-0-
Accrued Dividends		-0-		1,996,542		-0-
Accrued Short Term Gain		595,071		1,357,890		2,107
TOTAL ASSETS	\$	405,407,457	\$	4,019,799,070	\$	170,849,203
LIABILITIES:						
Management Fees Payable		34,285		236,194		39,822
Security Purchases Payable		4,581,250		895,210		-0-
Accounts Payable-Participants		-0-		-0-		-0-
Options Premiums Received		-0-		-0-		-0-
TOTAL LIABILITIES	\$	4,615,535	\$	1,131,404	\$	39,822
NET ASSETS AT JUNE 30, 1986	<u>\$</u>	400,791,922	<u>Ş</u>	4,018,667,666	<u>\$</u>	170,809,381

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STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1987

		SUPPLEMENTAL RETIREMENT FUND TOTAL	PC	OST RETIREMENT INVESIMENT FUND		VARIABLE ANNUITY FUND
FROM INVESTMENT ACTIVITY:			-			
Net Investment Income	\$	40,614,650	\$	296,084,886	\$	24,849,384
Realized Gains (Losses)	•	9,563,415	•	106,362,157	•	2,196,714
Unrealized Gains (Losses)		(4,822,470)		(210,864,547)		(1,750,264)
TOTAL INCOME	\$	45,355,595	\$	191,582,496	\$	25,295,834
Less Distribution to						
Participant Accounts		(45,835,257)		(152,917,754)		(36,330,581)
Undistributed Dedicated Income		-0-		(246,892,590)		(2,196,714)
NET CHANGE IN UNDISTRIBUTED INCOME	\$	(479,662)	\$	(208,227,848)	\$	(13,231,461)
FROM PARTICIPANT TRANSACTION: Additions to Participant Accounts						
Participant Contributions		27,606,009		439,888,106		-0-
Income Distribution		45,835,257		152,917,754		36,330,581
Income to be Distributed		-0-		246,892,590		2,196,714
TOTAL ADDITIONS	\$	73,441,266	\$	839,698,450	\$	38,527,295
Deductions from						
Participant Accounts						
Withdrawals		18,232,759		245,653,557		1,633,149
TOTAL DEDUCTIONS	\$	18,232,759	<u>\$</u>	245,653,557	<u>\$</u>	1,633,149
NET CHANGE IN PARTICIPATION	<u>\$</u>	55,208,507	\$	594,044,893	\$	36,894,146
TOTAL CHANGE IN ASSETS		54,728,845		385,817,045		23,662,685
NET ASSETS:						
Beginning of Period		346,063,077		<u>3,632,850,621</u>		147,146,696
End of Period	<u>\$</u>	400,791,922	<u>\$</u>	4,018,667,666	<u>\$</u>	170,809,381

STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1987

	_	SUPPLEMENTAL RETIREMENT FUND TOTAL	P	OST RETIREMENT INVESTMENT FUND		VARIABLE ANNUITY FUND
INVESTMENT INCOME:						
Interest	\$	8,124,706	\$	258,447,563	\$	-0-
Dividends		26,696,726		19,191,631		24,857,494
Short Term Gains		5,886,369		19,140,567		64,529
INCOME BEFORE EXPENSES	\$	40,707,801	\$	296,779,761	Ş	24,922,023
Management Fees		93,151		694,875	-	72,639
NET INCOME	\$	40,614,650	<u>\$</u>	296,084,886	\$	24,849,384
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS Realized:						
Proceeds from Sales	\$	131,706,580	\$	1,103,112,221	\$	30,192,996
Cost of Securities Sold	-	122,143,165		996,750,064	-	27,996,282
NET REALIZED GAIN (LOSS) Unrealized	\$	9,563,415	\$	106,362,157	\$	2,196,714
Beginning of Period		24,157,440		482,673,623		14,256,810
End of Period		19,334,970		271,809,076		12,506,546
INCREASE (DECREASE) IN					<u></u>	
UNREALIZED APPRECIATION NET REALIZED AND UNREALIZED	<u>\$</u>	(4,822,470)	\$	(210,864,547)	<u>\$</u>	(1,750,264)
GAIN (LOSS) ON INVESTMENT	\$	4,740,945	<u>Ş</u>	(104,502,390)	<u>\$</u>	446,450

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NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 1987

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Financial Reporting Entity and Basis of Presentation: This report includes financial statements for the Investment Trust Funds of the State of Minnesota, which are administered by the State Board of Investment under authority of Minnesota Statutes Chapter 11A. The Investment Trust Funds include the Supplemental Retirement Fund, the Post Retirement Investment Fund, and the Variable Annuity Fund.

The financial statements presented for these funds are based on the preferred accounting practices described in the American Institute of Certified Public Accountants audit guide, "Audits of Investment Companies". These practices, and the significant accounting policies which follow, conform with generally accepted accounting principles.

<u>Authorized Investments</u>: Minnesota Statutes, Section 11A.24 broadly restricts investments to obligations and stocks of the U.S. and Canadian governments, their agencies and their registered corporations; short term obligations of specified high quality; restricted participation as a limited partner in venture capital, real estate or resource equity investments; and restricted participation in registered mutual funds.

<u>Risk Categories</u>: At June 30, 1987, all investments of the Investment Trust Funds and pooled investment accounts are insured or registered, or are held by the state or its agent in the state's name, except for approximately \$200,000,000 in repurchase agreements for the Post Retirement Investment Fund, where the securities are held by the broker or dealer rather than the state. The state's investment risk for these repurchase agreements is reduced by a State Board of Investment policy which limits transactions to those with primary government securities dealers whose net excess capital is greater than \$200,000,000.

<u>Security Valuation</u>: All securities are valued at market except for U. S. Government short-term securities and commercial paper, which are valued at market less accrued interest. Accrued short-term interest is recognized as income as part of "Short-Term Gain". For long-term fixed income securities the State Board uses the Merrill Lynch valuation system. This pricing service is capable of providing prices for both actively traded and privately placed bonds. For equity securities the State Board uses a valuation service provided by Financial Control Systems, Inc.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

<u>Recognition of Security Transactions</u>: Security transactions are accounted for on the date the securities are purchased or sold.

<u>Income Recognition</u>: Dividend income is recorded on the ex-dividend date. Interest and dividend income are accrued monthly. Short-term interest is accrued monthly and is presented as "Accrued Short-Term Gain".

<u>Loaning Securities</u>: Certain U.S. Government and Government Agency securities are loaned out by the State Board to banks and brokers for additional income. Collateral in the amount of 100% of the market value of the security loaned is required.

2. PORTFOLIO LISTING:

A listing of all securities held by these funds can be found starting on page 20 of this report. Fixed income and equity securities are presented at market value. Securities held as cash equivalents are not listed.

3. COST OF INVESTMENTS

At June 30, 1987, the cost of investments for the Investment Trust Funds was:

Supplemental Retirement Fund	\$ 384,009,077
Post Retirement Investment Fund	\$3,654,097,953
Variable Annuity Fund	\$ 158,094,719

4. LOANED SECURITIES

The market value of loaned securities outstanding at June 30, 1987 was:

Supplemental	Retirement Fund	\$ 3,415,195
Post Retireme	ent Investment Fund	\$ 485,965,882

5. SUPPLEMENTAL RETIREMENT FUND

The Supplemental Retirement Fund serves as an investment vehicle for the various state and locally administered pension plans. During Fiscal Year 1987 the fund included seven separate accounts with different investment objectives. The Index Account, Bond Market Account and Guaranteed Investment Contract(G.I.C.) Accounts were new investment vehicles during Fiscal Year 1987. Financial information on the individual accounts is shown on pages 12 to 15 of this report. Participation in the Supplemental Retirement Fund accounts is determined in accordance with various statutory requirements.

6. POST RETIREMENT INVESTMENT FUND

The Post Retirement Fund serves as an investment vehicle for the Defined Benefit Pension Funds of the State of Minnesota. The fund invests amounts certified by the various pension funds as reserves required for the payment of retirement benefits.

Participation in the Post Retirement Investment Fund is equal to the actuarially determined required reserves for retirement benefits as of June 30, 1987. It includes a 5% assumed income distribution, in accordance with Minnesota Statutes Section 11A.18, and any mortality gains or losses as determined by an independent actuary hired by the State Legislature.

Pursuant to Minnesota Statutes Section 11A.18, Subdivision 9, a portion of Fiscal Year 1987 investment income of the Post Retirement Investment Fund is available for distribution as a benefit increase to pension fund participants in January 1988. This amount is increased by 2.5% from Fiscal Year 1988 income. The benefit increase is stated as a percentage of total required reserves. In accordance with statutory provisions, the amount available for the benefit increase is certified to each participating pension fund for distribution to eligible individuals. Annuitants and other individuals receiving benefits at June 30, 1986 are eligible to receive the January 1, 1988 benefit increase, which will be 8.054%. Past increases paid to retirees on January 1st have been:

	6%
1982 7.43	
1983 6.85	38
1984 7.44	98
1985 6.90	15%
1986 7.88	48
1987 9.79	128
1988 8.05	j4 %

7. VARIABLE ANNUITY FUND:

Participation in the Variable Annuity Fund is restricted to members of the Teachers Retirement Fund.

The Admitted Value Increment for the Variable Annuity Fund totalled \$20,804,887 at June 30, 1987. This valuation is required by Minnesota Statutes Section 11A.19, Subdivision 5, and is the amount by which the recognized value of investments is above or below their book value. The admitted value is based on an average ratio of book value to market value of the securities calculated over a two year period. This calculation is used to determine the rate of return and the increase or decrease which will be credited to the individual member's account balances at the end of each fiscal year.

Laws of Minnesota 1978, Chapter 781, stated in part "Effective July 1, 1978 no future employee and employer contribution shall be credited to any account in the variable annuity division unless the member elects continued participation..." Very few members of the Teachers' Retirement Fund elected to continue in the variable annuity division. Previous contributions for all former and current participants in the variable annuity fund will remain in that fund until the participant retires or withdraws in accordance with the Teachers' Retirement Act. (Minnesota Statutes Chapter 354)

VARIABLE ANNUITY FUND PARTICIPATION AT JUNE 30,1987

Net Assets	\$ 170,809,381
Admitted Value Increment	20,804,887
Tecovity and Maniach	\$ 191,614,268
Less:Unrealized Market	
Appreciation (Depreciation)	12,506,546
Undistributed Earnings	7,478,009
Total Participation	\$ 171,629,713

8. POOLED INVESTMENT ACCOUNTS

The State Board of Investment manages seven pooled investment accounts for the Investment Trust Funds and the Defined Benefit Pension Funds of the State of Minnesota. The assets of the pooled accounts are held by our master custodian, State Street Bank of Boston. Financial information on these pooled accounts is shown on pages 16 to 19 of this report.

9. SOUTH AFRICA POLICY

At its October 2, 1985 meeting the Minnesota State Board of Investment adopted a resolution relating to companies doing business in South Africa. The resolution calls for the divestment of companies not meeting predetermined guidelines in a four phased approach. The first three phases relate to individual companies signing and complying with the Sullivan Principles. The fourth phase, to be completed by August, 1989, calls for the divestment of any company with operations in South Africa.

The resolution also calls for the SBI to receive financial and legal advise at the completion of each phase to insure it is not violating its fiduciary responsibility. To date, no securities have been liquidated as a result of the resolution.

It can't be determined at this time what effect, if any, this resolution will have on the SBI's future investment flexibility.

STATE BOARD OF INVESTMENT MINNESOTA INVESTMENT TRUST FUNDS SCHEDULE OF PARTICIPATION JUNE 30, 1987

	SUPPLEMENTAL	POST		VARIABLE
	RETIREMENT	RETIREMENT		ANNUITY
	 FUND TOTAL	 FUND		FUND
Teacher's Retirement Fund	\$ -0-	\$ 1,502,816,000	Ş	171,629,713
Public Employees Retirement Fund	-0-	1,211,028,000		-0-
State Employees Retirement Fund	-0-	586,695,000		-0-
Public Employees Police & Fire	-0-	116,011,000		-0-
Highway Patrolmen's Retirement	-0-	60,771,000		-0-
Legislators & Survivors Retire.	-0-	8,318,000		-0-
Judges Retirement Fund	-0-	14,327,000		-0-
Variable Annuity Fund	-0-	-0-		-0-
Income Share Account	214,180,959	-0-		-0-
Growth Share Account	90,459,043	-0-		-0-
Money Market Account	76,976,870	-0-		-0-
Bond Account	11,498,731	-0-		-0-
Index Account	1,906,389	-0-		-0-
Bond Market Account	798,177	-0-		-0-
G.I.C. Account	 4,472,562	-0-		
TOTAL PARTICIPATION Adjustments	\$ 400,292,731	\$ 3,499,966,000	\$	171,629,713
Admitted Value Increment Unrealized Appreciation	-0-	-0-		(20,804,887)
(Depreciation) of Investments	455,041	271,809,076		12,506,546
Undistributed Earnings	 44,150	 246,892,590		7,478,009
NET ASSETS	\$ 400,791,922	\$ 4,018,667,666	\$	170,809,381

SUPPLEMENTAL FINANCIAL STATEMENTS

STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND COMBINING STATEMENT OF ASSETS AND LIABILITIES JUNE 30, 1987

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT	BOND ACCOUNT	INDEX ACCOUNT	BOND MARKET ACCOUNT	G.I.C. ACCOUNT	SUPPLEMENTAL RETIREMENT FUND TOTAL
ASSETS: INVESTMENTS (at market value)(1) Common Stock Fixed Income Securities Short Term Securities TOTAL INVESTMENTS(2)	<pre>\$ 129,204,233 57,956,149 30,320,141 \$ 217,480,523</pre>	\$ 90,455,683 -0- <u>24,727</u> \$ 90,480,410	\$-0- -0- <u>76,503,700</u> \$76,503,700	\$-0- 11,155,470 <u>573,356</u> \$11,728,826	\$ 1,906,509 -0- -0- \$ 1,906,509	\$-0- 798,566 -0- \$798,566	\$-0- 4,445,506 <u>7</u> \$4,445,513	<pre>\$ 221,566,425 74,355,691 <u>107,421,931</u> \$ 403,344,047</pre>
Cash Security Sales Receivable Accounts Receivable-Fee Refunds Accounts Receivable-Participants Accrued Interest Accrued Dividends Accrued Short Term Gain TOTAL ASSETS	-0- -0- -0- 1,122,132 -0- <u>167,857</u> \$ 218,770,512	-0- -0- -0- -0- -0- -0- -0- -0- -0- -0-	-0- -0- -0- -0- -0- -0- -0- -0- -0- -0-	1 -0- 689 -0- 318,461 -0- <u>3,083</u> \$ 12,051,060	-0- -0- -0- -0- -0- -0- -0- -0- -0- -0-	-0- -0- -0- -0- -0- -0- -0- -0- -0- -0-	-0- -0- -0- 27,056 -0- -0- \$ 4,472,569	1 -0- 689 -0- 1,467,649 -0- <u>595,071</u> \$ 405,407,457
LIABILITIES: Management Fees Payable Security Purchases Payable Accounts Payable to Teachers Options Premiums Received TOTAL LIABILITIES	8,303 4,581,250 -0- -0- \$ 4,589,553	21,944 -0- -0- <u>-0-</u> \$ 21,944	3,370 -0- -0- \$3,370	-0- -0- -0- -0- \$ -0-	120 -0- -0- -0- \$ 120	389 -0- -0- <u>-0-</u> \$ 389	159 -0- -0- <u>-0-</u> \$ 159	34,285 4,581,250 -0- -0- \$ 4,615,535
NET ASSETS AT JUNE 30, 1987	<u>\$ 214,180,959</u>	<u>\$ 90,459,043</u>	<u>\$ 76,923,884</u>	<u>\$ 12,051,060</u>	<u>\$ 1,906,389</u>	<u>\$ 798,177</u>	<u>\$ 4,472,410</u>	<u>\$ 400,791,922</u>
(1)The cost of investments at June 30, Common Stock Fixed Income Securities Short Term Securities Total Investments at Cost	was: \$ 118,525,054 55,965,279 <u>30,320,141</u> <u>\$ 204,810,474</u>	\$ 84,404,946 -0- <u>24,727</u> <u>\$ 84,429,673</u>	\$-0- -0- <u>76,503,700</u> \$76,503,700	\$ -0- 10,700,429 <u>573,356</u> <u>\$ 11,273,785</u>	\$ 1,707,667 -0- -0- <u>\$ 1,707,667</u>	\$ -0- 838,265 -0- \$ 838,265	\$ -0- 4,445,506 <u>7</u> <u>\$ 4,445,513</u>	\$ 204,637,667 71,949,479 <u>107,421,931</u> \$ 384,009,077
(2)The market value of loaned securiti outstanding at June 30, was:	es \$3,307,500	\$ -0-	\$ -0-	\$ 107,695	\$ -0-	\$ -0-	\$-0-	\$ 3,415,195

STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND COMBINING STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1987

		INCOME SHARE ACCOUNT		GROWTH SHARE ACCOUNT		MONEY MARKET ACCOUNT		BOND ACCOUNT		INDEX ACCOUNT	_	BOND MARKET ACCOUNT		G.I.C. ACCOUNT		UPPLEMENTAL RETIREMENT FUND TOTAL
FROM INVESTMENT ACTIVITY:																
Net Investment Income	\$	20,907,596	\$	13,611,912	\$	4,576,438	\$	1,138,318	\$	105,499	\$	70,237	\$	204,650	\$	40,614,650
Realized Gains (Losses)		7,815,228		1,596,078		-0-		145,821		-0-		6,288		-0-		9,563,415
Unrealized Gains (Losses)	-	(2,844,663)	-	(1,650,712)		-0-	-	(486,238)		198,842	-	<u>(39,699</u>)		-0-		(4,822,470)
TOTAL INCOME	\$	25,878,161	\$	13,557,278	\$	4,576,438	\$	797,901	\$	304,341	\$	36,826	\$	204,650	\$	45,355,595
Less Distribution to																
Participant Accounts		(25,878,161)		(13,557,278)		(4,629,644)		(1,224,357)		(304,341)		(36,826)		(204,650)		(45,835,257)
Undistributed Dedicated Income	_	-0-	_	-0-		-0-		-0-	_	-0-		-0-		-0-	_	-0-
NET CHANGE IN UNDISTRIBUTED INCOME	\$	-0-	\$	-0-	\$	(53,206)	\$	(426,456)	\$	-0-	\$	-0-	\$	-0-	\$	(479,662)
FROM PARTICIPANT TRANSACTION: Additions to Participant Accounts																
Participant Contributions		10,629,086		1,907,206		5,095,891		3,119,139		1,602,048		952,518		4,300,121		27,606,009
Income Distribution		25,878,161		13,557,278		4,629,644		1,224,357		304,341		36,826		204,650		45,835,257
Income to be Distributed	_	-0-		-0-		-0-	_	-0-		-0-	_	-0-	_	-0-	_	-0-
TOTAL ADDITIONS	\$	36,507,247	\$	15,464,484	\$	9,725,535	\$	4,343,496	\$.	1,906,389	\$	989,344	\$	4,504,771	\$	73,441,266
Deductions from																
Participant Accounts		•														
Withdrawals		1,593,798	-	3,671,584		9,639,889	-	3,103,960		-0-	-	191,167	_	32,361		18,232,759
TOTAL DEDUCTIONS	<u>\$</u>	1,593,798	<u>\$</u>	3,671,584	<u>\$</u>	9,639,889	<u>\$</u>	3,103,960	<u>\$</u>	-0-	<u>\$</u> _	191,167	<u>\$</u>	32,361	<u>\$</u>	18,232,759
NET CHANGE IN PARTICIPATION	<u>\$</u>	34,913,449	<u></u>	11,792,900	<u>\$</u>	85,646	<u>\$</u>	1,239,536	<u>\$</u>	1,906,389	<u>\$</u>	798,177	<u>\$</u>	4,472,410		55,208,507
TOTAL CHANGE IN ASSETS	\$	34,913,449	\$	11,792,900	\$	32,440	\$	813,080	\$	1,906,389	\$	798,177	\$	4,472,410	\$	54,728,845
NET ASSETS:																
Beginning of Period		179,267,510		78,666,143		76,891,444		<u>11,237,980</u>		-0-	_	-0-	_	-0-		<u>346,063,077</u>
End of Period	\$	214,180,959	\$	90,459,043	\$	76,923,884	\$	12,051,060	\$	1,906,389	\$	798,177	\$	4,472,410	\$ /	00,791,922

STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND COMBINING STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1987

	INCOME	GROWTH	MONEY			BOND		SUPPLEMENTAL
	SHARE	SHARE	MARKET	BOND	INDEX	MARKET	G.I.C.	RETIREMENT
	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	FUND TOTAL
INVESTMENT INCOME:								
Interest	\$ 6,752,619	\$ -0-	\$ (14,444) \$	\$ 1,113,931	\$-0-	\$ 70,695	\$ 201,905	\$ 8,124,706
Dividends	12,972,914	13,618,128	-0-	-0-	105,684	-0-	-0-	26,696,726
Short Term Gains	1 219,651	35,027	4,603,891	24,649	-0-	-0-	3,151	5,886,369
INCOME BEFORE EXPENSES	\$ 20,945,184	\$ 13,653,155	\$ 4,589,447	₺ 1,138,580	\$ 105,684	\$ 70,695	\$ 205,056	\$ 40,707,801
Management Fees	37,588	41,243	13,009	262	185	458	406	93,151
NET INCOME	<u>\$ 20,907,596</u>	<u>\$ 13,611,912</u>	\$ 4,576,438	⊾ 1,138,318	<u>\$ 105,499</u>	\$ <u>70,237</u>	<u>\$ 204,650</u>	\$ 40,614,650
REALIZED AND UNREALIZED GAIN								
(LOSS) ON INVESTMENTS								
Realized:								
Proceeds from Sales	\$ 109,517,592	\$ 20,513,960	\$ -0- \$	\$ 1,451,500	\$-0-	\$ 191,167	\$ 32,361	\$ 131,706,580
Cost of Securities Sold	101,702,364	18,917,882	-0-	1,305,679	-0-	<u> </u>	32,361	122,143,165
NET REALIZED GAIN (LOSS)	\$ 7,815,228	\$ 1,596,078	\$ -0- \$	§ 145,821	\$ -0-	\$ 6,288	\$ -0-	\$ 9,563,415
Unrealized								
Beginning of Period	15,514,712	7,701,449	-0-	941,279	-0-	-0-	-0-	24,157,440
End of period	12,670,049	6,050,737	-0-	455,041	<u> </u>	<u>(39,699</u>)	-0-	<u> 19,334,970</u>
INCREASE (DECREASE) IN								
UNREALIZED APPRECIATION	<u>\$ (2,844,663</u>)	\$ (1,650,712)) <u>\$ -0-</u> §	<u>(486,238</u>)	<u>\$ 198,842</u>	<u>\$ (39,699</u>)	<u>\$ -0-</u>	<u>\$ (4,822,470</u>)
NET REALIZED AND UNREALIZED								
GAIN (LOSS) ON INVESTMENT	<u>\$ 4,970,565</u>	<u>\$ (54,634</u>)) <u>\$ -0-</u> §	<u>(340,417</u>)	<u>\$198,842</u>	<u>\$ (33,411</u>)	<u>\$ -0-</u>	<u>\$4,740,945</u>

(8)

STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL RETIREMENT FUND SCHEDULE OF PARTICIPATION JUNE 30, 1987

	INCOME	GROWTH	MONEY			BOND		SUPPLEMENTAL
	SHARE	SHARE	MARKET	BOND	INDEX	MARKET	G.I.C.	RETIREMENT
	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	FUND TOTAL
Albert Lea Firemen's Relief	\$ 3,267,152	\$ -0-	\$ -0-	\$ 120,024	-0-	-0-	-0-	\$3,387,176
Austin Fire Relief	430,636	-0-	-0-	-0-	-0-	-0-	-0-	430,636
Austin Police Relief	471,404	-0-	-0-	-0-	-0-	-0-	-0-	471,404
Bloomington Fire Dept. Relief	12,033,685	677,070	-0-	-0-	-0-	-0-	-0-	12,710,755
Bloomington Police Relief	1,031,308	593,282	-0-	-0-	-0-	-0-	-0-	1,624,590
Buhl Police Relief	-0-	-0-	-0-	74,967	-0-	-0-	-0-	74,967
Clear Lake Fire Relief	-0-	72,965	-0-	-0-	-0-	-0-	-0-	72,965
Clearbrook Fire Relief	38,221	63,096	-0-	-0-	-0-	-0-	-0-	101,317
Hennepin County Supplemental Ret.	12,848,209	10,522,973	2,981,813	-0-	-0-	-0-	-0-	26,352,995
Hinckley Fire Relief	5,165	-0-	-0-	-0-	-0-	-0-	-0-	5,165
Osseo Fire Relief	25,200	-0-	-0-	-0-	-0-	-0-	-0-	25,200
St. Paul Fire -General	348,559	54,093	-0-	129,243	-0-	-0-	-0-	531,895
St. Paul Fire-Special	28,558,329	6,563,049	-0-	11,059,954	-0-	-0-	-0-	46,181,332
St. Paul Police Relief	44,894,031	5,493,526	-0-	-0-	-0-	-0-	-0-	50,387,557
MSRS Deferred Compensation	28,055,794	19,203,462	64,870,693	-0-	1,379,093	-0-	4,472,562	117,981,604
MSRS Unclassified Empl. Escrow	25,770,300	9,608,219	9,124,364	-0-	527,296	798,177	-0-	45,828,356
South St. Paul Policemen's Relief	130,513	-0-	-0-	114,543	-0-	-0-	-0-	245,056
Teacher's Supplemental Retirement	55,929,092	37,607,308	-0-	-0-	-0-	-0-	-0-	93,536,400
Winona Fire Dept. Relief	343,361	-0-	-0-	-0-	-0-	-0-	-0-	343,361
TOTAL PARTICIPATION	\$ 214,180,959	\$ 90,459,043	\$ 76,976,870	\$ 11,498,731	\$ 1,906,389	\$ 798,177	\$ 4,472,562	\$ 400,292,731
Adjustments								
Unrealized Appreciation	-0-	-0-	-0-	455,041	-0-	-0-	-0-	455,041
(Depreciation) of Investments	-0-	-0-	(52,986)	97,288	-0-	-0-	(152)	44,150
Undistributed Earnings		\$ 90,459,043	\$ 76,923,884	\$ 12,051,060	\$ 1,906,389		\$ 4,472,410	\$ 400,791,922
NET ASSETS	<u>> 214,100,939</u>	<u>a 70,437,043</u>	<u>\$ 10,723,004</u>	<u>⊅ 12,001,000</u>	<u>₽ 1,700,309</u>	p <u> </u>	<u>\$ 4,412,410</u>	<u>⊅ 400,191,922</u>

STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF ASSETS AND LIABILITIES JUNE 30, 1987

	ACTIVE EQUITY ACCOUNT	PASSIVE EQUITY ACCOUNT		INTERNAL EQUITY ACCOUNT		REAL ESTATE ACCOUNT		RESOURCE		VENTURE CAPITAL ACCOUNT	_	BOND MANAGERS ACCOUNT
ASSETS:												
INVESTMENTS (at market value)(1)		AD 450 005 700	•	00 /// 0/0	•	•	•	•	•	•	•	•
Common Stock	\$1,144,761,593 -0-	\$2,158,085,702	\$	90,666,962	\$	-0-	\$	-0-	\$	-0-	\$	-0- -0-
Alternative Equities Fixed Income Securities	37,137,870	-0- 1,628		-0- -0-		396,342,647 -0-		62,767,384 -0-		86,182,508		•
Short Term Securities	126,232,088	7,686,534		1,987,770		8,192,105		4,809,180		-0- 7,185,605		1,000,905,947 80,398,333
TOTAL INVESTMENTS(2)	\$1,308,131,551	\$2,165,773,864	\$	92,654,732	\$		\$	67,576,564	\$	93,368,113	ē	1,081,304,280
TOTAL INVESTMENTS(2)	\$1,000,101,001	\$2,103,113,004	\$	72,034,132	Þ	404,334,132	Ð	07,070,004	-Þ	<i>73,300,113</i>	-p	1,001,304,200
Cash With State Treasurer	6,006	-0-		1		1		1		-0-		2
Security Sales Receivable	20,604,247	14,164,363		918,474		-0-		-0-		-0-		4,235,564
Accounts Receivable-Mortality	-0-	-0-		-0-		-0-		-0-		-0-		-0-
Accounts Receivable-Participants	-0-	-0-		-0-		-0-		-0-		-0-		-0-
Accounts Receivable-Managers		-		-		-				-		
Performance Fee Refunds	1,092,459	-0-		-0-		-0-		-0-		-0-		-0-
Accrued Interest	249,473	34		-0-		-0-		-0-		-0-		15,678,692
Accrued Dividends	2,393,008	5,815,892		277,452		918,029		-0-		-0-		-0-
Accrued Short Term Gain	866,965	36,123		11,704		45,598		26,768		30,183		955,707
TOTAL ASSETS	\$1,333,343,709	\$2,185,790,276	\$	93,862,363	\$	405,498,380	\$	67,603,333	\$	93,398,296	\$	1,102,174,245
LIABILITIES:												
Management Fees Payable	1,414,583	66,568		-0-		55,000		-0-		-0-		513,258
Security Purchases Payable	19,358,885	11,806,404		117,796		-0-		-0-		-0-		12,237,060
Accounts Payable to Teachers	-0-	-0-		-0-		-0-		-0-		-0-		-0-
Options Premiums Received	-0-	-0-		-0-		-0-		-0-		-0-		-0-
TOTAL LIABILITIES	\$ 20,773,468	\$ 11,872,972	\$	117,796	\$	55,000	\$	-0-	\$	-0-	\$	12,750,318
		• •		•		•						• •
NET ASSETS AT JUNE 30, 1987	\$1,312,570,241	\$2,173,917,304	\$	93,744,567	\$	405,443,380	\$	67,603,333	\$	93,398,296	_	1,089,423,927
-					-							
(1)The cost of investments												
at June 30, was:												
Common Stock	\$ 939,791,084	\$1,364,332,866		78,501,342		-0-	\$	-0-	\$	-0-	\$	-0-
Alternative Equities	-0-	-0-	•	-0-		338,136,544		74,250,700		85,822,703		-0-
Fixed Income Securities	36,329,520	699		-0-		-0-		-0-		-0-		1,006,161,808
Short Term Securities	126,232,088	7,686,534		1,987,770		8,192,105		4,809,180	_	7,185,605		80,398,333
Total Investments at Cost	\$1,102,352,692	\$1,372,020,099	\$	80,489,112	\$	346,328,649	\$	79,059,880	\$	93,008,308	\$	1,086,560,141
(2)The market of loaned securities												
outstanding at June 30, was:	\$56,198,445	\$ 66,826,320	\$	5,923,850	\$	-0-	\$	-0-	\$	-0-	\$	65,244,310

STATE BOARD OF INVESTMENT MINNESOTA POOLED ACCOUNTS SCHEDULE OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1987

		ACTIVE EQUITY ACCOUNT	PASSIVE EQUITY ACCOUNT	INTERNAL EQUITY ACCOUNT	REAL ESTATE ACCOUNT	RESOURCE	VENTURE CAPITAL ACCOUNT	BOND MANAGERS ACCOUNT
	FROM INVESTMENT ACTIVITY:							
	Net Investment Income	\$ 26,272,756	\$61,796,130	\$ 3,716,327	\$ 8,407,081	\$ 5,311,722	\$ 790,922	\$ 93,067,918
	Realized Gains (Losses)	166,441,073	117,480,223	14,054,482	-0-	-0-	707,306	24,677,248
	Unrealized Gains (Losses)	9,135,207	206,179,728	(9,374,670)	15,115,411	305,486	437,801	(34,993,278)
	TOTAL INCOME	\$ 201,849,036	\$ 385,456,081	\$ 8,396,139	\$ 23,522,492	\$ 5,617,208	\$ 1,936,029	\$ 82,751,888
	Less Distribution to						2	
	Participant Accounts	(194,051,555)	(169,280,002)	(17,770,809)	(8,506,099)	(5,332,148)	(1,498,228)	(117,768,362)
	Undistributed Dedicated Income	1,337,726	<u>(9,996,351</u>)	-0-	<u> </u>	20,426	-0-	23,196
J	NET CHANGE IN UNDISTRIBUTED INCOM	E\$ 9,135,207	\$ 206,179,728	\$ (9,374,670)	\$ 15,115,411	\$ 305,486	\$ 437,801	\$ (34,993,278)
	FROM PARTICIPANT TRANSACTION:							
	Additions to Participant Accounts							
	Participant Contributions	63,478,324	69,236,294	-0-	50,000,000	25,000,000	26,000,000	1,028,180
	Income Distribution	194,051,555	169,280,002	17,770,809	8,506,099	5,332,148	1.498,228	117,768,362
	Income to be Distributed	(1,337,726)	9,996,351	-0-	(99,018)	(20,426)	-0-	(23, 196)
	TOTAL ADDITIONS	\$ 256,192,153	\$ 248,512,647	\$ 17,770,809	\$ 58,407,081	\$ 30,311,722	\$ 27,498,228	\$ 118,773,346
	Deductions from		•					
	Participant Accounts	45 450 740	07/ 070 500		•	•		70 005 070
	Withdrawals	15,659,762	274,838,508	116,629,021	-0-	-0-	-0-	72,805,979
	TOTAL DEDUCTIONS	<u>\$ 15,659,762</u>	<u>\$ 274,838,508</u>	<u>\$ 116,629,021</u>	<u>\$ -0-</u>	\$ -0-	<u>\$ -0-</u>	<u>\$ 72,805,979</u>
	NET CHANGE IN PARTICIPATION	<u>\$ 240,532,391</u>	<u>\$ (26,325,861</u>)	\$ (98,858,212) \$ (408,272,882)	<u>\$ 58,407,081</u>	\$ 30,311,722	<u>\$ 27,498,228</u>	<u>\$ 45,967,367</u>
	TOTAL CHANGE IN ASSETS	\$ 249,667,598	\$ 179,853,867	\$(108,232,882)	\$ 73,522,492	\$ 30,617,208	\$ 27,936,029	\$ 10,974,089
	NET ASSETS:				774 000 4	7/ 00/ 45-		
	Beginning of Period	1,062,902,643	1,994,063,437	201,977,449	331,920,888	36,986,125	65,462,267	1,078,449,838
	End of Period	<u>\$1,312,570,241</u>	\$2,173,917,30 4	\$ 93,744,567	<u>\$ 405,443,380</u>	<u>\$ 67,603,333</u>	<u>\$93,398,296</u>	<u>\$1,089,423,927</u>

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STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF OPERATIONS YEAR ENDED JUNE 30, 1987

	ACTIVE EQUITY ACCOUNT	PASSIVE EQUITY ACCOUNT	INTERNAL EQUITY ACCOUNT	REAL ESTATE ACCOUNT	RESOURCE ACCOUNT	VENTURE CAPITAL ACCOUNT	BOND MANAGERS ACCOUNT
INVESTMENT INCOME:	• 770.00/	A 477 (70	• •	• •			
Interest	\$ 730,904	\$ 177,438	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 89,932,262
Dividends	21,786,405	61,326,922	3,339,558	7,614,442	4,536,023	382,332	-0-
Short Term Gains	7,736,869	545,770	376,769	847,639	780,200	408,590	5,215,053
INCOME BEFORE EXPENSES	\$ 30,254,178	\$ 62,050,130	\$ 3,716,327	\$ 8,462,081	\$ 5,316,223	\$ 790,922	\$ 95,147,315
Management Fees	3,981,422	254,000	-0-	55,000	4,501	-0-	2,079,397
NET INCOME	<u>\$ 26,272,756</u>	<u>\$61,796,130</u>	\$ 3,716,327	<u>\$8,407,081</u>	<u>\$5,311,722</u>	\$ 790,922	<u>\$93,067,918</u>
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS							
A Realized:							
00 Proceeds from Sales	\$ 1,168,956,599	\$ 401,460,700	\$ 195,348,434	\$ -0-	\$ -0-	\$ 16,429,357	\$ 1,540,891,771
Cost of Securities Sold	1,002,515,526	283,980,477	181,293,952	-0-	-0-	15,722,051	1,516,214,523
NET REALIZED GAIN (LOSS) Unrealized	\$ 166,441,073	\$ 117,480,223	\$ 14,054,482	\$ -0-	\$ -0-	\$ 707,306	\$ 24,677,248
Beginning of Period	196,643,652	587,574,037	21,540,290	43,090,692	(11,788,802)	(77,996)	29,737,417
End of Period	205,778,859	793,753,765	12,165,620	58,206,103	(11,483,316)	359,805	(5,255,861)
INCREASE (DECREASE) IN					· · · · · · · · · · · · · · · · · · ·		
UNREALIZED APPRECIATION	<u>\$ 9,135,207</u>	\$_206,179,728	<u>\$ (9,374,670</u>)	\$ <u>15,115,411</u>	\$305,486	\$ 437,801	<u>\$ (34,993,278</u>)
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT	<u>\$ 175,576,280</u>	<u>\$ 323,659,951</u>	<u>\$ 4,679,812</u>	<u>\$ 15,115,411</u>	\$ 305,486	<u>\$1,145,107</u>	<u>\$ (10,316,030</u>)

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STATE BOARD OF INVESTMENT MINNESOTA POOLED ACCOUNTS SCHEDULE OF PARTICIPATION JUNE 30, 1987

	ACTIVE EQUITY ACCOUNT	PASSIVE EQUITY ACCOUNT	INTERNAL EQUITY ACCOUNT	REAL ESTATE ACCOUNT	RESOURCE ACCOUNT	VENTURE CAPITAL ACCOUNT	BOND MANAGERS <u>ACCOUNT</u>	POOLED ACCOUNT TOTAL
Teachers Retirement Fund	\$ 456,495,186	\$ 849,614,519 \$	-0-	\$ 166,060,533	\$ 27,688,767	\$ 38,253,860	\$ 445,876,810 \$	\$ 1,983,989,675
Public Employees Retirement Fund	305,078,701	567,240,326	-0-	110,979,591	18,504,728	25,565,330	297,982,710	1,325,351,386
State Employees Retirement Fund	240,949,058	448,368,829	-0-	87,650,661	14,614,785	20,191,295	235,344,359	1,047,118,987
Public Employees Police & Fire	93,359,791	173,721,585	-0-	33,961,688	5,662,741	7,823,453	91,188,097	405,717,355
Highway Patrolmen's Retirement	17,705,262	32,952,607	-0-	6,440,691	1,073,915	1,483,682	17,293,425	76,949,582
Judges Retirement Fund	962,740	1,812,942	-0-	350,216	58,397	80,676	940,336	4,205,307
Supplemental Income Share Account	-0-	98,300,047	30,901,223	-0-	-0-	-0-	-0-	129,201,270
Supplemental Growth Share Account	68,996,730	-0-	21,442,190	-0-	-0-	-0-	-0-	90,438,920
Supplemental Index Account	-0-	1,906,449	-0-	-0-	-0-	-0-	-0-	1,906,449
Supplemental Bond Market Account	-0-	-0-	-0-	-0-	-0-	-0-	798,190	798,190
Variable Annuity Fund	129,022,773	-0-	41,401,154	-0-	-0-	-0-	-0-	170,423,927
TOTAL PARTICIPATION	\$1,312,570,241	\$2,173,917,304 \$	93,744,567	\$ 405,443,380	\$ 67,603,333	\$ 93,398,296	\$1,089,423,927 \$	5,236,101,048

NO. OF SHARES 113,000 ALEXANDER & ALEXANDER \$ 2,923,875 239,600 AMERICAN FAMILY CORP 3,114,800 82,500 AMERICAN GENERAL CORP 3,269,063 251,900 AMERICAN MEDICAL INTL. 4,817,588 76,000 AMERICAN STORES NEW 5,567,000 126,200 AMES DEPARTMENT STORES 2,997,250 117,200 AON CORP 3,017,900 69,550 ATLANTIC RICHFIELD 6,624,638 156,300 BALLY MFG CO 3,516,750 136,700 BANC ONE CORP 3,776,338 149,800 BANK BOSTON CORP 5,243,000 182,500 BANKERS TRUST NY CORP. 9,307,500 154,200 BOEING COMPANY 7,228,125 93,200 BROWN GROUP 3,984,300 71,900 BURLINGTON NORTHERN INC. 5,949,725 73,500 CENTEL CORP. 4,860,188 136,600 CENTRAL & SO WEST CORP. 4,285,825 149,200 CHARMING SHOPPES INC 4,531,950 217,200 CHASE MANHATTAN CORP. 8,959,500 184,200 CHEMICAL NEW YORK CORP 7,736,400 144,450 CHRYSLER CORP. 4,929,356 257,400 CHURCHS FRIED CHICKEN 2,574,000 56,600 3,587,025 CIGNA CORPORATION 89,100 CIRCUIT CITY STORES INC 3,408,075 160,100 CITICORP 9,445,900 CITIZENS & SOUTHERN CORP. 3,607,825 130,600 2,993,925 57,300 CNA FINL CORP 164,850 COASTAL CORP 5,728,538 5,328,975 173,300 COMDISCO INC. 131,400 COMMONWEALTH EDISON CO. 4,549,725 144,200 COMMUNICATIONS SATELLITE 4,091,675 4,700,588 148,050 CONTEL CORP 4,472,200 75,800 COOPER INDS. INC. 4,176,788 41,100 CRAY RESEARCH INC 9,322,088 267,300 CSX CORPORATION 5,578,875 110,200 DAYTON-HUDSON CORP. 2,857,850 DSC COMMUNICATIONS CORP 374,800 4,533,900 101,600 DUKE POWER CO. NC 4,228,875 94,500 EMHART CORP VA 2,898,000 165,600 FAMILY DLR STORES INC 5,097,550 75,800 FEDERAL EXPRESS CORP. 4,812,750 142,600 FIRST BANK SYSTEM 8,514,375 142,500 FIRST INTERST. BANCORP 3,367,263 132,700 FIRST UNION CORP 5,420,938 FMC CORP NEW 157,700

MARKET VALUE

6,300,000

7,082,175

FPL GROUP INC.

GENERAL DYNAMICS

200,000

106,100

NO. OF

SHARES

MARKET VALUE 4,398,750

115,000	GENERAL MOTORS CORP CL E	\$	4,398,750
61,000	GENERAL MOTORS CORP.	Ŷ	5,040,125
55,900	GENERAL RE CORP.		3,032,575
206,300	GIBSON GREETINGS		3,042,925
94,200	GOLDEN WEST FIN'L		3,367,650
130,600	GREAT ATLANTIC & PAC TEA		
118,325	GTE CORP.		5,060,750
150,000	HASBRO INC.		4,555,513
115,000	HM FED S & L ASSN. S.D.		3,731,250
173,300	HOME DEPOT INC.		3,536,250
69,800	HONEYWELL INC.		5,848,875
137,100			5,758,500
86,600	HOSPITAL CORP. OF AMER.		6,358,013
	HOUSEHOLD INTL.		4,589,800
129,250	HOUSTON INDUSTRIES INC.		4,297,563
376,800	HUMANA INC.		9,702,600
164,600	INTERGRAPH CORP.		3,703,500
123,800	KEMPER CORP.		3,806,850
154,500	KERR MCGEE CORP.		5,677,875
206,300	KEYSTONE INTL INC		4,280,725
178,400	KLM ROYAL DUTCH AIR		4,415,400
96,000	LEASEWAY TRANSN CORP		4,884,000
96 , 300	LIMITED INC.		4,177,013
57 , 900	LITTON INDS INC.		5,290,613
142,000	LIZ CLAIBORNE INC.		4,934,500
153,030	LOCKHEED AIRCRAFT CORP		7,900,174
57 , 000	LOEWS CORP		3,733,500
417,200	LONG ISLAND LTG CO		3,859,100
179,600	MARTIN MARIETTA		8,306,500
191,200	MAXICARE HEALTH PLANS		2,724,600
825,500	MCI COMMUNICATION		6,191,250
88,200	MELLON BANK CORP		3,142,125
51,400	MELVILLE CORPORATION		3,771,475
185,400	MFRS. HANOVER CORP.		8,273,475
329,600	MIDDLE SOUTH UTILS INC		3,502,000
110,550	MOBIL CORPORATION		5,624,231
63,400	MONSANTO CO.		5,301,825
74,000	MORGAN J P & COMPANY INC.		3,542,750
180,500	NATL. MEDICAL ENTER. INC.		4,941,188
335,700	NCNB CORP.		8,686,238
277,100	NIAGARA MOHAWK PWR CORP		4,606,788
142,600	NO. STS. POWER CO. MINN.		4,491,900
285,300	OCEAN DRILLING & EXPL CO		7,631,775
180,400	PACIFIC GAS & ELEC. CO.		3,630,550
131,100	PACIFIC GAS & ELEC. CO. PACIFICORP		
202,500	PHILADELPHIA ELEC. CO.		4,703,213
246,000	PIC N SAVE CORP.		4,277,813
96,300	PIONEER HI-BRED INTL.		5,996,250
90,000	FIONEER HI-DRED INTL.		3,514,950

NO. OF SHARES

MARKET VALUE

75,800	PNC FINANCIAL	\$	3,676,300
91,200	PRICE CO	+	4,092,600
88,100	PRIME MTR INNS INC		3,667,163
103,200	PROGRESSIVE CORP OHIO		3,096,000
62,200	RAYTHEON COMPANY		4,696,100
117,900	REEBOK INTERNATIONAL LTD		
184,400	ROCKWELL INTL CORP		4,966,538
			4,978,800
166,650	ROLLINS ENVIR. SVS.		3,707,963
45,100	ROYAL DUTCH PET. GLDRS.		5,953,200
121,650	RYDER SYSTEMS INC.		4,409,813
151,800	SAFECARD SVCS INC		3,092,925
196,500	SALOMON INC		6,459,938
162,500	SEAGATE TECHNOLOGY		5,525,000
226,300	SECURITY PACIFIC CORP.		9,504,600
268,900	SHARED MED. SYSTEMS CORP.		7,529,200
155,600	SONAT INC.		5,407,100
174,800	SOUTHERN CO		4,238,900
92,600	SOUTHLAND CORP.		6,204,200
125,700	SOUTHWESTERN BELL CORP.		4,886,588
92,500	SOVRAN FINANCIAL CORP.		3,283,750
76,700	ST. PAUL COS. INC.		3,509,025
146,100	SUBARU OF AMERICA INC.		1,753,200
81,300	SUN COMPANY INC		5,335,313
120,400	TELERATE INC		5,237,400
46,800	TELEX CORP.		3,311,100
141,100	TEXACO INC.		5,714,550
137,100	TEXAS UTILITIES CO.		4,421,475
112,100	TORCHMARK CORP		3,180,838
101,900	TOYS R US		3,693,875
183,900	TRACOR INC.		3,723,975
69,600	TRW INC.		3,662,700
77,800	TYCO LABS		3,403,750
232,100	U.S. HEALTHCARE INC.		3,336,438
86,800	U.S. WEST CORP		4,567,850
158,850	UNITED TECHNOLOGIES CORP.		8,299,913
166,050	UNITED TELECOM. INC.		4,545,619
150,900	UNOCAL CORP.		5,979,413
	US AIR GROUP		6,632,500
140,000			3,098,175
81,800	US FIDELITY & GUAR. CO.		4,154,525
121,300	USG CORP HOLDING CO.		
88,400	VALLEY NATIONAL CORP.		3,536,000
39,000	WENDYS INTL INC		380,250
191,200	WORTHINGTON INDS INC		4,158,600
146,400	YELLOW FREIGHT SYSTEM		5,050,800
123,200	ZAYRE CORP.		3,434,200

TOTAL EQUITY PORTFOLIO

670,664,380

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
696,000 2,888,000 2,565,000 13,675,000 1,000,000 745,000 13,477,000 1,105,000 6,000,000 2,102,000 3,769,104	AMER AIRLINES EQMT TR CER AMERICAN CAN AMERICAN TELEPHONE & TELE AMOCO CORP ARCHER DANIELS MIDLAND CO ARISTAR INC. ASSOCIATES CORP. NORTH AM ATLANTIC RICHFIELD ATLANTIC RICHFIELD CO.	01/15/2002 01/15/2004 10/15/1992 08/01/2000 07/15/2004 05/01/1992 05/15/1990 11/15/1992 07/15/2005 07/15/1996	9.900% \$ 9.750% 9.850% 11.125% 6.000% 9.200% 0.000% 8.500% 11.450% 10.875% 9.250%	2,932,735 2,628,202 14,561,550 756,370 735,688 8,824,740 1,100,679 6,643,740 2,329,058 3,826,319
2,602,840 7,896,000 10,000,000 9,750,000 6,000,000 15,000,000 6,000,000 1,439,581 125,427	ATLANTIC RICHFIELD CO. AVCO FINANCIAL CORP BANKAMERICA CORP. BELL TEL OF CANADA BENEFICIAL CORP BENEFICIAL CORP. BOSTON EDISON BRITISH COLUMBIA HYDRO BURLINGTON NORTHERN BURLINGTON NORTHERN	12/01/2001 02/01/1990 12/01/2003 01/15/2008 12/01/2007 07/15/2002 04/15/2007 06/15/2007 09/01/1993 07/03/1993	8.750% 11.125% 7.875% 9.000% 8.400% 7.500% 9.250% 8.375% 8.750% 8.500%	2,480,194 8,417,373 7,556,600 9,146,768 5,112,420 11,991,300 5,698,920 5,376,060 1,419,254 123,133
1,656,000 6,000,000 7,790,000 2,500,000 6,000,000 5,000,000 750,000 6,000,000 18,140,000	C.I.T. FINANCIAL C.I.T. FINANCIAL C.I.T. FINANCIAL C.I.T. FINANCIAL CORP. CANADIAN PACIFIC, LTD. CAROLINA POWER & LIGHT CENTRAL POWER & LIGHT CERTIFICATES ACCRUAL TREA CHEMICAL N.Y. CORP CHEVRON CORP.	08/01/1988 03/15/2008 08/15/2004 04/01/2001 01/15/1992 08/01/2000 06/01/2004 11/15/1998 08/01/2002 07/01/2005	13.625% 8.750% 9.850% 8.375% 8.625% 8.750% 9.375% 0.000% 8.250% 8.750%	1,750,409 5,443,260 5,973,120 7,173,577 2,509,650 5,470,440 4,680,750 271,605 5,356,560 17,200,529
7,904,000 6,000,000 15,000,000 470,000 6,400,000 7,020,000 5,700,000 1,000,000 4,200,000 5,800,000 6,000,000 6,000,000	CHRYSLER CORP CHRYSLER CORP CHRYSLER CORPORATION CHRYSLER FINANCIAL CHRYSLER FINANCIAL CITICORP CITIES SVC CO CITIZENS UTILITIES COMMONWEALTH EDISON CONOCO INC CONSOLIDATED EDISON CONTINENTAL OIL COUPON TREASURY RCPT	03/01/1992 11/01/1998 08/01/1992 09/01/1989 11/15/1988 03/15/2007 04/15/2011 12/31/1991 06/01/2007 04/01/2009 03/01/2004 11/01/1999 02/15/1999	12.750% 8.000%	8,929,465 5,459,820 15,909,600 458,250 6,499,584 6,226,038 4,059,483 898,870 3,566,388 5,732,256 5,640,840 5,944,140 2,113,020
1,734,375 1,040,040 250,000	COUPON TREASURY RCPT COUPON TREASURY RCPT COUPON TREASURY RCPTS	02/15/1999 11/15/1993 02/15/1989 08/15/1991	0.000 0.000 0.000 0.000	2,113,020 1,022,050 922,838 179,075

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
$\begin{array}{r} 4,821,000\\ 1,320,000\\ 945,000\\ 1,656,250\\ 668,990\\ 166,875\\ 4,875,000\\ 1,650,000\\ 6,000,000\\ 6,000,000\\ \end{array}$	COUPON TREASURY RCPTS COUPON TREASURY RCPTS COUPON TREASURY RCPTS COUPON TREASURY RCPTS COUPON TREASURY RCPTS COUPON TREASURY RCPTS DANA CORP DEERE (JOHN) CREDIT DETROIT EDISON	11/15/2000 08/15/1991 11/15/1998 11/15/1998 11/15/1998 08/15/1991 11/15/2008 10/31/1990 06/15/2001	0.000 0.000 0.000 0.000 0.000 0.000 8.875 5.000 8.125 375	945,516 342,222 599,794 242,268 119,533 4,473,300 1,490,412 5,077,200
6,000,000 2,350,000 6,000,000 1,255,000 7,000,000 4,000,000 1,177,000 820,000	DETROIT EDISON DETROIT EDISON DOW CHEMICAL DOW CHEMICAL DOW CHEMICAL COMPANY DU PONT (E.I.) DENEMOURS EXPORT DEVELOPMENT CORP EXPORT DEVELOPMENT CORP	11/15/2001 02/15/2017 02/01/2005 02/15/2008 07/15/2007 12/01/2001 07/15/1987 03/01/1988	7.375% 9.000% 8.500% 8.625% 7.875% 6.000% 14.375% 14.125%	5,077,440 2,026,875 5,491,320 1,140,582 5,960,990 2,938,280 1,178,342 854,957
40,000,000 10,000,000 12,000,000 5,000,000 2,260,000 15,000,000 665,000	FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK	10/20/1997 10/21/1991 10/20/1993 03/01/1994 09/01/1988 04/22/1991 12/02/1991	11.900% 10.600% 11.800% 12.350% 12.875% 14.100% 13.650%	47,300,000 10,737,500 13,717,440 5,870,300 2,392,775 17,695,350 785,944
2,100,000 6,400,000 3,800,000 980,000 2,000,000 100,000 3,300,000	FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK	10/20/1988 07/20/1988 01/23/1989 04/20/1989 07/20/1987 07/20/1989 04/20/1988	11.500% 11.700% 13.050% 12.500% 10.625% 13.700% 10.250%	2,199,099 6,672,000 4,081,428 1,053,500 2,004,060 110,625 3,373,227
4,285,000 27,000,000 2,865,000 5,000,000 2,515,000 5,000,000 6,295,000	FEDERAL HOME LOAN BANK FEDERAL HOME LOAN BANK	09/25/1990 07/26/1993 09/25/1991 04/27/1992 12/27/1993 09/25/1989 11/26/1990	12.150% 12.500% 13.700%	4,811,241 30,754,620 3,201,638 5,618,750 2,939,406 5,481,250 7,315,986
6,470,000 5,775,000 1,050,000 775,000 40,000,000 1,075,000 900,000 5,650,000 3,400,000	FEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANKFEDERALHOMELOANBANK	02/25/1992 06/26/1995 03/25/1993 07/26/1993 09/25/1996 09/27/1993 04/26/1993 07/25/1990 10/26/1987	11.450% 10.000% 10.800% 7.750% 8.250% 7.950% 7.550% 9.750% 12.050%	7,189,788 6,112,491 1,149,089 743,512 38,024,800 1,040,063 856,683 5,906,002 3,453,108

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PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
3,250,000 18,600,000 375,000 250,000 925,000 200,000 10,300,000 17,400,000 22,000,000 2,050,000 1,320,000 500,000	FEDERAL HOME LOAN BANK FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE	12/28/1987 06/25/1996 01/25/1993 05/25/1993 04/25/1993 12/27/1993 01/25/1994 12/10/2015 07/05/2014 01/10/1996 01/10/1995 10/10/1990	8.050% \$ 8.250% 9.500% 8.125% 7.750% 7.875% 7.375% 7.300% 10.350% 0.000% 9.200% 11.950% 10.150%	3,269,305 17,704,782 390,233 243,905 853,313 915,563 187,688 9,636,886 19,292,250 1,821,729 2,083,313 1,539,450 581,250
350,000 2,025,000 3,000,000 5,000,000 5,650,000 6,000,000 5,000,000 5,000,000 5,000,000 8,500,000	FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FIRESTONE TIRE &RUBBER FMC CORP GARDNER-DENVER GENERAL FOODS INC GENERAL MOTORS ACCEPT COR GENERAL MOTORS ACCEPT COR GENERAL MOTORS ACCEPT COR	12/10/1997 02/10/1995 03/10/2016 12/01/2004 01/15/2000 06/01/2005 06/15/2001 11/15/2006 06/15/2001 06/01/1999	7.100% 11.500% 8.200% 9.250% 9.500% 9.250% 6.000% 8.250% 8.750% 8.875%	307,342 2,315,466 2,677,500 4,791,500 5,480,500 5,820,900 3,663,700 4,410,000 4,712,950 8,124,130
5,290,000 1,200,000 4,200,000 3,200,000 3,500,000 1,000,000 8,150,000 200,000 6,000,000 325,000 7,320,000	GENERAL MOTORS ACCEPT COR GENERAL MOTORS ACCEPT COR GENERAL MOTORS ACCEPT COR GENERAL MOTORS ACCEPT COR GENERAL MOTORS CORPORATIO GENERAL TEL CO (FLA) GREYHOUND LEASING HARBOR TUG & BARGE HOUSEHHOLD FINANCE CORP HOUSEHOLD FINANCE CORP HOUSEHOLD FINANCE CORP.	02/01/2000 02/15/1989	8.150% 8.200% 9.625%	5,392,626 1,183,548 3,970,932 3,222,304 3,012,275 820,540 8,821,968 185,990 5,254,980 324,197
525,000 330,000 3,500,000 6,000,000 6,000,000 12,000,000 12,000,000 3,300,000 4,950,000 5,000,000 3,600,000 5,700,000 1,000,000	HOUSTON LTG & POWER HYDRO QUEBEC HYDRO-QUEBEC HYDRO-QUEBECK INDIANA & MICH ELECTRIC INTER-AMERICAN DEV. BANK INTERNORTH INC. INTL BK FOR RECON. & DEVL JEWEL CO'S INC. KANSAS POWER & LIGHT KMART LOEWS CORP LONG ISLAND LIGHTING	10/01/2003 10/01/2007 07/15/1991 04/15/2026 09/15/2006 03/01/2008 01/15/2004 03/15/2006 09/01/1992 12/01/1992 02/01/2008 03/01/2005 01/15/2007 04/01/1993	8.250% 8.600% 9.500% 9.625% 9.625% 13.625% 11.500% 8.750%	6,587,488 436,769 413,685 3,102,575 5,440,080 5,573,340 6,086,640 11,868,720 3,966,534 5,214,677 4,595,500 4,452,480 4,987,500 836,960

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
2,018,045 34,042 50,000	LOUISVILLE & NASHVILLE LOUISVILLE & NASHVILLE MACMILLAN BLOEDEL LTD.	10/20/1991 04/20/1988 07/15/1992	9.000% 8.125% 6.500%	34,143
6,000,000	MANITOBA HYDRO	12/01/2006	8.625%	44,760 5,464,080
5,440,000	MANITOBA HYDRO ELEC BD	10/15/1997	7.650%	4,626,557
4,330,000	MANITOBA PROVINCE OF	07/01/1991	14.750%	5,203,491
800,000	MARATHON OIL COMPANY	02/01/2000	8.500%	689,144
9,000,000	MARTIN-MARIETTA CORP.	03/15/2011	7.000%	6,823,530
296,000	MERRILL LYNCH & CO	10/15/1987	11.625%	299,223
1,062,875	MISSOURI PACIFIC RR	06/01/1995	12.750%	1,221,350
1,613,047	MISSOURI PACIFIC RR	06/01/1994	9.750%	1,686,538
6,000,000	MOBIL CORP	06/15/2001	8.500%	5,655,000
2,150,000	MOBIL CORP	06/15/1988	8.750%	2,169,630
3,535,000	MONSANTO CO.	05/15/2008	8.750%	3,250,362
6,000,000	N. BRUNSWICK ELECTRIC	05/01/2001	9.375%	5,785,740
6,000,000	NATIONAL RURAL UTIL.	09/01/2009	9.750%	5,879,400
6,000,000 6,000,000	NORTHERN IND. PUB. SERV.	10/15/2006	8.375%	5,178,120
3,125,000	NORTHERN IND. PUB. SERV. NORTHERN STATES POWER CO.	11/01/2007	8.500%	5,228,580
3,500,000	NOVA SCOTIA POWER COMM	01/01/2004 03/15/1997	8.375%	2,796,688
6,400,000	NOVA SCOTIA POWER COMM	06/01/2008	7.750% 9.625%	2,977,345 6,217,216
3,690,000	ONTARIO HYDRO	03/15/1996	9.500%	3,689,041
6,000,000	ONTARIO PROVINCE	03/01/2009	9.750%	6,014,700
6,000,000	ONTARIO PROVINCE	09/20/2009	9.875%	6,082,380
120,000	ONTARIO PROVINCE	03/10/1988	10.375%	122,270
1,120,000	ONTARIO PROVINCE	04/25/1989	10.500%	1,168,507
1,000,000	ONTARIO PROVINCE OF CANAD	06/15/2005	9.125%	955,570
7,000,000	ONTARIO, PROVINCE OF	06/01/2008	9.375%	6,827,100
6,920,000	ONTARIO, PROVINCE OF	11/30/2008	9.375%	6,747,761
6,000,000	PACIFIC GAS & ELECTRIC	02/01/2009	8.500%	5,164,020
3,765,000	PACIFIC GAS & ELECTRIC	09/01/2008	8.250%	3,184,286
5,000,000	PACIFIC TEL & TEL	04/01/2005	8.650%	4,521,000
5,000,000	PACIFIC TEL & TEL	07/01/2003	6.500%	3,894,400
5,000,000	PACIFIC TEL & TEL CO	10/01/2006	8.750%	4,616,750
30,000	PACIFIC TELE & TELE	11/01/1990	4.625%	27,090
8,159,000	PENNEY J.C.	05/01/1989	0.000%	7,046,439
7,930,000	PENNEY J.C. CO.	05/01/2006	6.000%	5,464,246
755,000	PHILADELPHIA ELECTRIC	08/01/2002	9.625%	716,306
2,777,000 6,000,000	PHILADELPHIA ELECTRIC PHILADELPHIA ELECTRIC	03/15/2008 03/01/2006	9.125% 9.125%	2,552,396
6,000,000	PHILADELPHIA ELECTRIC	01/15/1999	7.500%	5,505,660 5,119,380
3,060,000	PHILADELPHIA ELECTRIC	03/15/2007	8.625%	2,667,953
4,075,000	PHILADELPHIA ELECTRIC	01/15/2004	8.500%	3,590,320
5,000,000	PHILLIPS PETE CO	03/15/1997	13.875%	5,650,000
1,960,000	PRIVATE EXPORT FUNDING	05/31/1988	10.250%	2,005,413
3,500,000	PROCTOR & GAMBLE	01/15/2017	8.125%	3,075,625
1,682,959	PUBLIC SERVICE ELEC & GAS	07/01/2009	9.750%	1,609,683

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PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
6,000,000	PUBLIC SERVICE ELEC & GAS	09/01/2007	8.125%	\$ 5,008,200
6,000,000	QUEBEC PROVINCE	04/15/2004	9.200%	5,705,160
4,400,000	QUEBEC-HYDRO ELECTRIC	01/01/2004	8.250%	3,913,052
1,110,000	ROCHESTER TELEPHONE	09/01/1993	4.750%	941,979
8,775,000	SASKATCH., PROVINCE OF	04/15/2008	9.250%	8,347,219
6,000,000	SASKATCHEWAN CDA	05/15/2007	8.625%	5,445,240
6,000,000	SASKATCHEWAN CDA	11/15/2006	8.700%	5,513,160
17,203,000	SASKATCHEWAN PROVINCE OF	10/01/1991	16.375%	21,818,565
3,317,938	SEABOARD COAST LINE RR	10/01/1992	8.250%	3,252,607
3,216,569	SEABOARD COAST LINE RR	09/01/1993	9.625%	3,309,206
3,000,000	SEARS	11/15/2001	7.000%	2,428,350
1,525,000	SEARS ROEBUCK & CO	01/15/1988	10.250%	1,547,143
13,000,000	SEARS ROEBUCK & CO.	05/01/2000	6.000%	9,821,760
420,000	SHEARSON LEHMAN BROS.	08/15/1993	7.875%	394,691
6,000,000	SONAT	06/01/1996	9.875%	5,947,680
5,000,000	SOUTH CENTRAL BELL TEL	12/01/2004	8.250%	4,491,650
3,000,000	SOUTH CENTRAL BELL TEL	11/01/2007	7.375%	2,497,140
5,000,000	SOUTHWESTERN BELL TEL	08/01/2007	8.750%	4,657,950
3,100,000	SOUTHWESTERN BELL TEL	06/01/2003	5.875%	2,306,865
450,000	SPRAGUE ELECTRIC CO	09/01/1988	4.375%	425,336
952,540	STANDARD OIL OF CALIF.	03/30/1997	7.700%	858,944
884,502	STANDARD OIL OF CALIF.	03/02/1997	7.700%	790,29 3
884,502	STANDARD OIL OF CALIF.	02/10/1997	7.700%	798,449
3,466,211	STANDARD OIL OF CALIF.	07/02/1999	8.500%	3,256,401
165,000	STATES STEAMSHIP CO	03/31/1993	5.100%	142,306
10,000,000	STRPD U.S. TREAS. BONDS	05/15/2006	0.000%	1,899,000
5,000,000	STUDEBAKER-WORTHINGTON	11/15/2003	9.350%	4,916,800
11,385,000	TENNECO INC	09/01/1992	13.700%	13,440,220
5,700,000	TENNECO INC	01/15/2017	9.375%	5,142,540
3,000,000	TEXAS POWER & LIGHT	01/01/2006	8.600%	2,581,050
2,500,000	TEXAS POWER & LIGHT	02/01/2009	9.375%	2,270,125
170,000	TRANSAMERICA FINANCIAL NO	03/15/1991	7.875%	165,575
250,000 1,619,000	TREASURY INVT GROWTH RCPT TREASURY INVT GROWTH RCPT	02/15/1999	0.000%	88,043
44,810,000		11/15/2000	0.000%	586,305
38,704,000	U.S.A. TREASURY BOND U.S.A. TREASURY BOND	11/15/2002	11.625%	55,788,450
29,475,000	U.S.A. TREASURY BOND	11/15/2004 02/15/2007	11.625%	48,476,760 26,674,875
48,000,000	U.S.A. TREASURY BOND	02/15/2010	7.625% 11.750%	60,360,000
40,000,000	U.S.A. TREASURY BOND	02/15/1994	9.000%	41,462,400
44,950,000	U.S.A. TREASURY BOND	02/15/2003	10.750%	52,591,500
53,100,000	U.S.A. TREASURY BOND	05/15/1999	8.500%	52,900,875
40,000,000	U.S.A. TREASURY BOND	08/15/2001	8.000%	38,450,000
12,200,000	U.S.A. TREASURY BOND	08/15/2008	8.375%	11,849,250
9,450,000	U.S.A. TREASURY BOND	05/15/2005	8.250%	9,077,859
72,500,000	U.S.A. TREASURY BOND	05/15/1995	10.375%	80,724,400
40,000,000	U.S.A. TREASURY BOND	11/15/2010	12.750%	54,000,000
60,000,000	U.S.A. TREASURY BOND	11/15/1995	11.500%	71,137,200
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PAR					MARKET
VALUE	SECU	RITY	MATURITY	COUPON	VALUE
					11202
2,625,000	U.S.A. TREASU	JRY BOND	05/15/2011	13.875%	\$ 3,824,284
40,350,000	U.S.A. TREASU		02/15/2000	7.875%	38,168,679
39,650,000	U.S.A. TREASU		02/15/2001	11.750%	49,612,063
28,020,000	U.S.A. TREASU		08/15/2000	8.375%	27,573,361
22,300,000	U.S.A. TREASU		02/15/1995	10.500%	24,969,087
40,000,000	U.S.A. TREASU		05/15/1995	12.625%	49,724,800
28,326,000	U.S.A. TREASU		08/15/2013	12.000%	36,894,615
77,200,000	U.S.A. TREASU		05/15/2005	12.000%	99,298,500
146,100,000	U.S.A. TREASU		08/15/2005	10.750%	171,850,125
3,125,000	U.S.A. TREAS		05/15/2001	13.125%	4,244,125
10,000,000	U.S.A. TREAS		02/15/2006	9.375%	10,631,200
7,000,000	U.S.A. TREASU		08/15/2001	13.375%	9,660,000
26,600,000	U.S.A. TREASU		05/15/2009	9.125%	27,431,250
19,400,000	U.S.A. TREASU		11/15/2009	10.375%	22,067,500
275,000	U.S.A. TREASU		11/15/2003	11.875%	348,563
6,200,000	U.S.A. TREASU		08/15/2003	11.125%	7,463,250
3,075,000	U.S.A. TREASU		05/15/2003	10.750%	3,599,657
15,745,000	U.S.A. TREASU		05/15/2004	12.375%	20,724,356
12,200,000	U.S.A. TREASU		02/15/2002	14.250%	17,789,064
5,100,000	U.S.A. TREASU		08/15/2004	13.750%	7,359,912
28,204,000	U.S.A. TREASU		08/15/1998	0.000%	10,683,393
1,308,000	U.S.A. TREASU		02/15/1991	0.000%	982,269
16,000,000	U.S.A. TREAS		11/15/2008	0.000%	2,438,240
10,600,000	U.S.A. TREASU		05/15/2009	0.000%	1,545,798
26,500,000	U.S.A. TREAS		08/15/2004	0.000%	5,850,140
22,500,000	U.S.A. TREASU		05/15/2004	0.000%	4,859,550
3,830,000	U.S.A. TREASU		02/15/2004	0.000%	883,619
11,360,000	U.S.A. TREAS		11/15/2003	0.000%	2,684,027
8,500,000	U.S.A. TREASU		02/15/2009	0.000%	1,266,840
80,000,000	U.S.A. TREASU		08/15/2009	0.000%	11,410,400
10,525,000	U.S.A. TREASU		08/15/2003	0.000%	2,541,682
11,850,000	U.S.A. TREASU		11/15/1999	0.000%	4,011,344
14,000,000	U.S.A. TREAS		02/15/1999	0.000%	5,076,680
7,125,000	U.S.A. TREASU		08/15/1999	0.000%	2,464,823
6,160,000		JRY COUPON	05/15/1998	0.000%	2,377,822
16,350,000	U.S.A. TREASU		11/15/1998	0.000%	6,060,782
15,600,000	U.S.A. TREASU		11/15/2000	0.000%	4,788,732
1,000,000	U.S.A. TREASU		02/15/2002	0.000%	274,460
16,900,000	U.S.A. TREASU		05/15/2002	0.000%	4,537,819
11,500,000	U.S.A. TREASU		08/15/2002	0.000%	3,019,785
67,000,000	U.S.A. TREAS		08/15/2012	0.000%	7,571,670
25,000,000	U.S.A. TREASU		08/15/2013	0.000%	2,623,000
34,000,000	U.S.A. TREASU		05/15/2013	0.000%	3,645,820
92,000,000	U.S.A. TREASU		02/15/2013	0.000%	10,078,600
2,400,000	U.S.A. TREASU		05/15/2010	0.000%	501,960
99,250,000	U.S.A. TREASU		08/15/2010	0.000%	13,106,955
75,000,000	U.S.A. TREAS		08/15/2011	0.000%	9,201,000
/ 5 / 000 / 000		TIT COOLON	00/ ±3/ 2011	010000	J / 20 2 / 000

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
VALUE 25,000,000 25,000,000 95,300,000 42,000,000 49,250,000 3,560,000 6,290,000 8,400,000 5,650,000 10,000,000 11,800,000 53,750,000 5,000,000 53,750,000 4,800,000 53,500,000 15,000,000 15,000,000 1,300,000 1,250,000 1,250,000 2,600,000 1,800,000 1,800,000 1,800,000	U.S.A. TREASURY COUPON U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	05/15/2011 02/15/2014 02/15/2012 02/15/2012 02/15/2011 02/15/2010 08/15/1994 04/15/1989 10/15/1989 10/15/1989 10/15/1988 12/31/1988 05/15/1991 01/15/1988 01/15/1988 01/15/1988 01/15/1988 01/15/1988 01/15/1988 01/15/1985 08/15/1995 08/15/1995 09/30/1987 01/15/1993 01/31/1987 10/31/1987 11/15/1990 07/15/1991 11/15/1995 04/15/1990	0.000% 0.000% 0.000% 0.000% 0.000% 12.625% 14.375% 14.500% 11.875% 11.625% 14.500% 14.500% 14.500% 14.500% 13.250% 14.625% 14.625% 14.625% 14.625% 14.625% 14.625% 14.625% 14.625% 14.625% 13.250% 15.375% 14.625% 13.250% 13.750% 8.875% 8.875% 13.000% 13.750% 9.500% 10.500%	VALUE 3,135,000 2,610,250 2,501,750 11,247,306 5,381,880 6,795,023 4,372,107 7,019,263 9,499,896 6,149,686 11,796,900 12,159,546 345,573 6,071,850 57,193,225 5,134,512 561,081 5,817,825 3,760,196 133,651,850 72,921,550 3,521,315 231,327 1,486,756 1,303,042 5,840,774 12,916,350 3,111,056 21,293,800 1,922,058
3,425,000 5,600,000 52,000,000 1,610,000 10,000,000 50,000,000 50,000,000 3,527,000 1,300,000 60,000 4,000,000 10,450,000 4,555,000	U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY PHY. COUP U.S.A. TREASURY SEC PRIN. U.S.A. TREASURY SEC PRIN. U.S.A. TREASURY SEC PRIN. U.S.A. TREASURY SEC PRIN. UNION TANK CAR USX CORP VIRGINIA ELEC. & POWER WESTINGHOUSE CREDIT CORP. WILLAMETTE INDUSTRIES INC WISCONSIN ELECTRIC POWER	01/15/1991 10/15/1990 08/15/1989 02/15/2010 11/15/1994 02/15/2015 08/15/2015 12/15/1995 01/15/1992 12/01/1987 01/15/1989 04/15/1993 05/15/2008	11.750% 11.500% 6.625% 0.000% 0.000% 0.000% 9.500% 9.500% 9.000% 4.500% 10.750% 11.375% 8.875%	3,824,218 6,181,000 51,090,000 222,132 5,412,500 5,051,000 3,638,876 1,244,750 59,500 4,144,400 11,047,427 4,252,047

TOTAL BOND PORTFOLIO

\$ 2,898,641,761

MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL RET. INCOME SHARES ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
1,250,000 $1,500,000$ $2,000,000$ $2,000,000$ $1,000,000$ $2,000,000$ $2,000,000$ $2,000,000$ $500,000$ $2,255,513$ $1,927,978$ $1,907,660$ $1,000,000$ $1,000,000$ $1,000,000$ $1,000,000$ $1,000,000$ $2,000,000$ $2,000,000$ $1,000$	ASSOCIATES CORP. NORTH AM FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK FEDERAL HOME LOAN MORTGAG FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FNMA 15 YR # TBA FNMA POOL # 002499 FNMA POOL # 006226 FNMA POOL # 2494 GENERAL MOTORS ACCEPT. CO GERBER PRODUCTS CO GNMA II POOL # 000587 HOUSTON NATURAL GAS CO. MISSISSIPPI POWER & LIGHT NEW YORK STATE ELEC. & GA SEAFIRST CORP. SECURITY PACIFIC CORP U.S.A. TREASURY BOND	11/15/1992 03/01/1994 01/22/1990 08/30/1991 10/13/1987 11/10/1987 01/10/1990 02/13/1990 07/05/2014 06/10/1988 07/01/2002 03/01/2016 12/01/2016 12/01/2016 12/01/2016 10/15/1989 11/01/1994 07/20/2016 11/15/1992 06/01/1988 04/01/1993 06/01/1999 11/15/1995	11.450% \$ 12.350% 11.150% 11.850% 12.550% 11.550% 11.450% 11.050% 0.000% 10.500% 8.000% 10.000% 11.000% 8.000% 11.750% 8.000% 11.750% 11.750% 11.750% 11.500%	1,384,113 1,761,090 2,137,500 2,230,000 1,015,620 1,015,940 2,162,500 2,146,240 1,407,700 515,235 4,700,000 2,276,647 2,034,017 1,732,384 1,011,220 1,095,670 1,790,813 1,014,430 2,002,660 710,185 500,730 2,019,800 1,659,868
3,000,000 3,000,000 7,500,000 3,600,000 12,000,000	U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY PHY. COUP	10/15/1989 11/15/1992 09/30/1989 01/31/1988 02/15/2010	11.875% 10.500% 9.375% 8.125% 0.000%	3,265,320 3,305,610 7,776,525 3,628,692 1,655,640

TOTAL BOND PORTFOLIO

\$ 57,956,149

MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL RET. INCOME SHARES ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES	SECURITY	MARKET VALUE
30,232 61,661	MINN INTERNAL POOLED FUND MINN. INDEXED FUND POOL	\$ 30,901,223 98,303,009
TOTAL EQUIT	Y PORTFOLIO	\$ 1 29,204,2 33

MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL RET. GROWTH SHARES ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES	SECURITY	MARKET VALUE
20,329 52,263	MINN INTERNAL POOLED FUND MN. EXT. ACTIVE MAN. POOL	\$ 21,442,190 69,013,493
TOTAL EQUID	Y PORTFOLIO	\$ 90,455,683

MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL COMMON STOCK INDEX ACOUNT ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES	SECURITY		MARKET VALUE
1,189	MINN. INDEXED FUND	POOL	\$ 1,906,509
TOTAL EQUIT	Y PORTFOLIO		\$ 1,906,509

33

MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL BOND MARKET ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE SECURITY	MATURITY	COUPON	MARKET VALUE
799 MN. FIXED INCOME POOL		\$	798,566
TOTAL BOND PORTFOLIO		\$	798 , 566
MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL GUARANTEED RETURN ACCOUNT ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
4,445,506	PRINCIPAL MUTUAL LIF	E GIC 10/31/1989	7.720% \$	4,445,506
TOTAL BON	D PORTFOLIO		\$	4,445,506

35

MINNESOTA STATE BOARD OF INVESMENT SUPPLEMENTAL RET. BOND FUND ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
700,000 610,000 350,000 400,000 300,000 200,000 1,000,000 1,290,000 300,000 300,000 300,000 300,000 300,000 400,000 480,000 250,000 300,000 500,000	AMERICAN CAN AMERICAN MEDICAL INTL. ASSOCIATES CORP. NORTH AM FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FLUOR CORP FORD MOTOR CREDIT CORP GENERAL MOTORS ACCEPT. CO HOSPITAL CORP OF AMERICA NEW YORK STATE ELEC. & GA OCCIDENTAL PETE CORP PENNEY J.C. SHEARSON LEHMAN BROS. U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	10/15/1992 08/15/1992 11/15/1992 03/01/1994 01/20/1992 10/13/1987 04/10/1992 06/10/1992 06/10/1993 08/15/1987 10/15/1989 08/15/1993 04/01/1993 04/01/1993 04/01/1993 04/15/1989 11/15/1991 01/15/1989 01/15/1993 03/01/1994	14.375% 11.450% 12.350% 11.500% 12.125% 12.000% 10.125% 9.500% 13.000% 11.750% 7.875% 11.750% 9.650% 12.125% 7.875% 14.375% 14.375% 14.250% 14.625% 8.750%	\$ 745,381 686,903 387,552 469,624 331,500 202,874 1,135,620 1,372,238 286,500 1,206,372 202,244 274,869 304,365 576,000 323,325 375,896 535,651 307,265 276,485 308,436 497,505
330,000	WILLAMETTE INDUSTRIES INC	04/15/1993	11.375%	348,866

TOTAL BOND PORTFOLIO

\$

11,155,470

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36

MINNESOTA STATE BOARD OF INVESMENT MINNESOTA VARIABLE ANNUITY FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES	SECURITY	MARKET VALUE
38,114 97,996	MINN INTERNAL POOLED FUND MN. EXT. ACTIVE MAN. POOL	\$ 41,401,154 129,054,199
TOTAL EQUIT	Y PORTFOLIO	\$ 170,455,353

MINNESOTA STATE BOARD OF INVESMENT PERMANENT SCHOOL FUND ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
1,700,000 5,000,000 2,261,462 1,735,226 4,000,000 2,500,000 750,000 5,000,000 3,678,000 500,000	ASSOCIATES CORP NO. AMERI ATLANTIC RICHFIELD ATLANTIC RICHFIELD ATLANTIC RICHFIELD CO. ATLANTIC RICHFIELD CO. BARNETT BANKS INC BELL TELE. CO CANADA CANADIAN PACIFIC, LTD. CITICORP PERSON TO PERSON CONSOLIDATED NATURAL GAS CONSTRUCTION AGGREGATE	08/01/1990 03/01/2011 03/01/2016 07/15/1996 12/01/2001 03/01/1999 09/01/1995 01/15/1992 03/01/1998 06/01/1991	11.000% 9.125% 9.875% 9.250% 8.750% 8.500% 4.850% 8.625% 8.625% 8.750% 8.125% 7.500%	<pre>\$ 1,809,191 4,822,400 5,155,950 2,295,791 1,653,463 3,747,520 2,074,400 752,895 4,670,650 3,515,543 481,250</pre>
5,000,000 5,000,000 365,000 120,000 116,000 114,000 286,000 5,000,000	CSX TRANSPORTATION DOW CHEMICAL EAGLE TERMINAL TANKERS FARRELL LINES, INC FARRELL LINES, INC FARRELL LINES, INC FARRELL LINES, INC FEDERAL FARM CREDIT BANK	08/15/2006 04/01/2006 06/01/1989 09/20/1998 11/27/1997 02/28/1998 04/01/1988 10/21/1991	9.000% 8.625% 6.000% 9.000% 9.000% 9.000% 8.050% 10.600%	4,759,650 4,598,800 351,729 116,287 113,317 110,580 284,948 5,368,750
100,000 600,000 5,000,000 3,000,000 7,000,000 3,000,000 3,000,000 5,000,000 3,000,000	FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK FEDERAL HOME LOAN BANK	03/01/1994 07/20/1992 09/01/1988 10/23/1989 03/25/1988 07/26/1993 04/27/1992 09/25/1989 08/30/1991	13.750% 12.875% 12.450% 10.200% 11.700% 11.700%	117,406 724,872 5,293,750 3,271,860 7,164,080 3,417,180 3,371,250 5,481,250 3,345,000
4,000,000 3,000,000 3,000,000 500,000 3,000,000 5,000,000 1,827,410 1,653,606 1,929,651	FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FEDERAL NATIONAL MORTGAGE FMC CORP FORD MOTOR COMPANY GNMA POOL # 00505 GNMA POOL # 00506 GNMA POOL # 02290	05/10/1990 10/13/1987 10/12/1992 10/10/1988 01/15/2000 04/01/2006 11/15/2001 12/15/2001 03/15/2003	10.300% 12.550%	4,233,760 3,046,860 3,273,750 513,435 2,910,000 4,748,000 1,613,260 1,459,824 1,703,520
2,207,627 1,928,587 280,006 911,427 589,494 368,517 317,756 812,560 278,725 442,991	GNMAPOOL#02291GNMAPOOL#02424GNMAPOOL#03627GNMAPOOL#03972GNMAPOOL#03974GNMAPOOL#04004GNMAPOOL#04092GNMAPOOL#04145GNMAPOOL#04472	04/15/2003 04/15/2003 07/15/2004 07/15/2004 11/15/2004 08/15/2004 08/15/2004 08/15/2004 08/15/2004 09/15/2004	6.500% 6.500% 8.250% 8.250% 9.000% 8.250% 8.250% 8.250% 8.250% 9.000%	1,948,921 1,702,581 262,330 853,889 571,809 345,253 297,696 761,263 261,129 429,701

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MINNESOTA STATE BOARD OF INVESMENT PERMANENT SCHOOL FUND ALPHABETICAL BOND HOLDINGS JUNE 30,1987

365,945 GNMA POOL # 09680 06/15/2006 8.250% \$ 342,843 551,648 GNMA POOL # 10887 07/15/2006 8.250% \$ 507,668 3,569,282 GNMA POOL # 11383 02/15/2007 8.000% 247,628 442,440 GNMA POOL # 18058 07/15/2007 8.000% 247,628 442,440 GNMA POOL # 18058 07/15/2007 8.000% 661,143 281,556 GNMA POOL # 18768 08/15/2007 8.000% 661,143 282,425 GNMA POOL # 18768 01/15/2007 8.000% 508,762 645,269 GNMA POOL # 19165 01/15/2007 8.000% 601,011 517,435 GNMA POOL # 19740 10/15/2007 8.000% 481,215 637,35797 GNMA POOL # 20074 03/15/2007 8.000% 592,542 3735,797 GNMA POOL # 20074 03/15/2007 8.000% 602,425 611,478 GNMA POOL # 2033 11/15/2007 8.000% 602,425 708,752 GNMA POOL # 21063 06/15/217 8.000% 652,135	PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
551,648 GNMA POOL # 10887 07/15/2006 8.2508 507,688 3,569,282 GNMA POOL # 17904 08/15/2007 8.0008 247,628 442,440 GNMA POOL # 18017 07/15/2007 8.0008 247,628 442,440 GNMA POOL # 18058 07/15/2007 8.0008 661,143 281,556 GNMA POOL # 18768 08/15/2007 8.0008 266,267 592,425 GNMA POOL # 18768 08/15/2007 8.0008 560,955 547,056 GNMA POOL # 18768 08/15/2007 8.0008 600,101 517,435 GNMA POOL # 19740 10/15/2007 8.0008 600,101 517,435 GNMA POOL # 19784 09/15/2007 8.0008 592,542 637,142 GNMA POOL # 19977 10/15/2007 8.0008 592,542 647,263 GNMA POOL # 19971 10/15/2007 8.0008 592,542 613,776 GNMA POOL # 20074 03/15/2007 8.0008 559,375 614,78 GNMA POOL # 20263 11/15/2007 8.0008 559,375 614,776 GNMA POOL # 2045 11/15/2007 8.0008 652,467					
3,569,282 GNMA POOL # 12383 02/15/2005 8.750% 3,372,686 266,267 GNMA POOL # 18017 07/15/2007 8.000% 241,469 710,906 GNMA POOL # 18058 07/15/2007 8.000% 411,469 710,906 GNMA POOL # 18582 01/15/2007 8.000% 261,847 592,425 GNMA POOL # 18782 10/15/2007 8.000% 550,955 547,056 GNMA POOL # 18782 10/15/2007 8.000% 508,762 645,269 GNMA POOL # 19105 07/15/2007 8.000% 600,101 517,435 GNMA POOL # 19105 07/15/2007 8.000% 481,215 637,142 GNMA POOL # 19784 09/15/2007 8.000% 3,474,291 529,046 GNMA POOL # 19784 09/15/2007 8.000% 3,474,291 529,046 GNMA POOL # 19970 10/15/2007 8.000% 3,559,375 647,814 GNMA POOL # 20263 11/15/2007 8.000% 559,375 647,814 GNMA POOL # 20293 11/15/2007 8.000% 559,375 647,814 GNMA POOL # 20495 11/15/2007 8.000% 606,2467 708,752 GNMA POOL # 210687 06/15/2017 8.000% 659,139 5,000,000 GNMA POOL # 210643 06/15/2017 8.000% 659,139 5,000,000 GNMA POOL # 210643 06/15/2017 8.000% 653,2781 708,752 GNMA POOL # 210687 06/15/2017 8.000% 653,2781 641,949 GNMA POOL # 216687 06/15/2017 8.000% 653,2781 652,185 GNMA POOL # 216687 06/15/2017 8.000% 653,2781 652,185 GNMA POOL # 216687 06/15/2017 8.000% 653,2781 749,924 GNMA POOL # 21668 06/15/2017 8.000% 653,2781 749,924 GNMA POOL # 21480 01/15/2008 8.000% 653,2781 749,924 GNMA POOL # 21480 01/15/2008 8.000% 653,2781 749,924 GNMA POOL # 21460 01/15/2008 8.000% 653,2781 749,924 GNMA POOL # 21460 01/15/2008 8.000% 653,2781 749,924 GNMA POOL # 21460 01/15/2008 8.000% 653,2781 749,924 GNMA POOL # 224920 12/15/2007 8.000% 603,468 740,095 GNMA POOL # 224920 12/15/2007 8.000% 613,468 700,695 GNMA POOL # 227638 10/15/2008 8.000% 653,2781 749,924 GNMA POOL # 227638 10/15/2008 8.000% 653,468 740,095 GNMA POOL # 227638 10/15/2008 8.000% 653,468 740,090 GNMA POOL # 227638 10/15/2008 8.000% 653,468 740,090 GNMA POOL # 27638 10/15/2008 8.000% 653,468 740,695 GNMA POOL # 27638 10/1				,	•
442,440 GNMA POOL # 18017 07/15/2007 8.000% 611,43 281,556 GNMA POOL # 18592 11/15/2007 8.000% 661,143 281,556 GNMA POOL # 18782 11/15/2007 8.000% 550,955 547,056 GNMA POOL # 18782 10/15/2007 8.000% 508,752 645,269 GNMA POOL # 19105 07/15/2007 8.000% 600,101 517,455 GNMA POOL # 19740 10/15/2007 8.000% 481,215 637,142 GNMA POOL # 19740 10/15/2007 8.000% 492,542 3,735,797 GNMA POOL # 19947 10/15/2007 8.000% 492,013 42,578 GNMA POOL # 20263 11/15/2007 8.000% 602,467 611,877 GNMA POOL # 20495 11/15/2007 8.000% 602,467 618,877 GNMA POOL # 210643 06/15/2017 8.000% 652,139 5,014,862 GNMA POOL # 210687 06/15/2017 8.000% 652,78 614,949 GNMA POOL # 211615 01/15/2008 8.000% 663,278 164,949 GNMA POOL # 224960 02/15/2007 8.000% 663,278<					
710,906 GNMA POOL # 18058 07/15/2007 8.000% 61,13 281,556 GNMA POOL # 18768 08/15/2007 8.000% 261,847 592,425 GNMA POOL # 18782 10/15/2007 8.000% 508,762 645,269 GNMA POOL # 19105 07/15/2007 8.000% 508,762 645,269 GNMA POOL # 19667 01/15/2008 8.000% 481,215 637,142 GNMA POOL # 19740 10/15/2007 8.000% 492,013 3,735,797 GNMA POOL # 19971 10/15/2007 8.000% 492,013 42,578 GNMA POOL # 20263 11/15/2007 8.000% 602,467 61,478 GNMA POOL # 20393 11/15/2007 8.000% 602,467 61,471 GNMA POOL # 210643 06/15/2017 8.000% 659,139 5,000,000 GNMA POOL # 210687 06/15/2017 8.000% 659,139 5,000,000 GNMA POOL # 210687 06/15/2017 8.000% 662,2467 614,949 GNMA POOL # 210687 06/15/2017 8.000% 632,781 614,949 GNMA POOL # 21480 01/15/2008 8.000% 632,878					
281,556 GNMA POOL # 18592 11/15/2007 8.0008 261,847 592,425 GNMA POOL # 18768 08/15/2007 8.0008 500,955 547,056 GNMA POOL # 19105 07/15/2007 8.0008 600,101 517,435 GNMA POOL # 19105 07/15/2007 8.0008 600,101 517,435 GNMA POOL # 19740 10/15/2007 8.0008 692,542 3,735,797 GNA POOL # 19744 09/15/2007 8.0008 3,474,291 529,046 GNMA POOL # 20074 03/15/2007 8.0008 39,598 601,478 GNMA POOL # 20263 11/15/2007 8.0008 602,467 618,777 GNMA POOL # 20393 11/15/2007 8.0008 606,2465 708,752 GNMA POOL # 210643 06/15/2017 8.0008 606,245 708,752 GNMA POOL # 210643 06/15/2017 8.0008 632,478 5,000,000 GNMA POOL # 210687 06/15/2017 8.0008 632,781 614,949 GNMA POOL # 21615 01/15/2008 8.0008 632,781 614,949 GNMA POOL # 21480 03/15/2008 8.0008 633,3					
592,425 GNMA POOL # 18768 08/15/2007 8.000% 550,955 547,056 GNMA POOL # 18782 10/15/2007 8.000% 508,762 645,269 GNMA POOL # 19105 07/15/2007 8.000% 600,101 517,435 GNMA POOL # 19740 10/15/2007 8.000% 481,215 637,142 GNMA POOL # 19740 10/15/2007 8.000% 492,013 42,578 GNMA POOL # 20074 03/15/2007 8.000% 492,013 42,578 GNMA POOL # 20074 03/15/2007 8.000% 602,467 61,478 GNMA POOL # 2033 11/15/2007 8.000% 602,467 651,877 GNMA POOL # 20495 11/15/2007 8.000% 659,139 5,014,862 GNMA POOL # 210643 06/15/2017 8.000% 659,139 5,014,062 GNMA POOL # 210687 06/15/2017 8.000% 632,781 652,185 GNMA POOL # 21480 01/15/2008 8.000% 632,781 657,185 GNMA POOL # 224960 06/15/2017 8.000% 633,305 749,924 GNMA POOL # 224960 06/15/2017 8.000% 633,468 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
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2,500,000MICHIGAN BELL TELEPHONE C 06/01/2015 8.125%2,139,9254,575,482MN MTG. MARKETING CORP06/01/2014 12.566%5,000,1441,963,633MN MTG. MARKETING CORP09/01/2014 12.823%2,147,417963,384MN MTG. MARKETING CORP02/01/2015 13.004%1,064,5392,512,000MOORE-MCCORMACK LEASING07/15/2001 8.875%2,477,3603,000,000MOUNTAIN STATES TEL & TEL 06/01/2013 7.750%2,506,3202,500,000NORTHERN STATES POWER CO. 01/01/2004 8.375%2,237,3501,619,200NORTON SIMON, INC.06/01/2004 9.875%1,653,7051,500,000NORWEST CORP03/15/2003 7.750%1,271,6551,500,000NORWEST CORP10/15/1990 5.125%1,359,225496,500PENN TANKER CO.11/10/1989 6.000%474,078				8.125%	
4,575,482MN MTG. MARKETING CORP06/01/201412.566%5,000,1441,963,633MN MTG. MARKETING CORP09/01/201412.823%2,147,417963,384MN MTG. MARKETING CORP02/01/201513.004%1,064,5392,512,000MOORE-MCCORMACK LEASING07/15/20018.875%2,477,3603,000,000MOUNTAIN STATES TEL & TEL06/01/20137.750%2,506,3202,500,000NORTHERN STATES POWER CO.01/01/20048.375%2,237,3501,619,200NORTON SIMON, INC.06/01/20049.875%1,653,7051,500,000NORWEST CORP03/15/20037.750%1,271,6551,500,000NORWEST CORP10/15/19905.125%1,359,225496,500PENN TANKER CO.11/10/19896.000%474,078				7.500%	
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2,500,000NORTHERN STATES POWER CO. 01/01/20048.375%2,237,3501,619,200NORTON SIMON, INC.06/01/20049.875%1,653,7051,500,000NORWEST CORP03/15/20037.750%1,271,6551,500,000NORWEST CORP10/15/19905.125%1,359,225496,500PENN TANKER CO.11/10/19896.000%474,078			· · · ·		
1,619,200NORTON SIMON, INC.06/01/20049.875%1,653,7051,500,000NORWEST CORP03/15/20037.750%1,271,6551,500,000NORWEST CORP10/15/19905.125%1,359,225496,500PENN TANKER CO.11/10/19896.000%474,078					
1,500,000NORWEST CORP03/15/20037.750%1,271,6551,500,000NORWEST CORP10/15/19905.125%1,359,225496,500PENN TANKER CO.11/10/19896.000%474,078					
1,500,000NORWEST CORP10/15/19905.125%1,359,225496,500PENN TANKER CO.11/10/19896.000%474,078					
496,500 PENN TANKER CO. 11/10/1989 6.000% 474,078			, ,		
1,352,000 PUGET SOUND TUG & BARG 02/15/2001 9.125% 1,313,495	496,500				
	1,352,000	PUGET SOUND TUG & BARG	02/15/2001	9.125%	1,313,495

MINNESOTA STATE BOARD OF INVESMENT PERMANENT SCHOOL FUND ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
3,896,499 4,000,000 4,000,000 1,000,000 702,732 702,732 702,732 188,000 3,000,000 3,500,000 3,500,000 2,000,000 2,000,000 5,000,000 3,000,000 5,000,000	SBA POOL - MEEDA BONDS SE SECURITY PACIFIC CORP SOUTHERN BELL TEL & TEL SPRAGUE ELECTRIC CO STANDARD OIL OF CALIF. STANDARD OIL OF CALIF. STANDARD OIL OF CALIF. STANDARD OIL OF CALIF. STATES STEAMSHIP CO TEXAS POWER & LIGHT U.S.A. TREASURY BOND U.S.A. TREASURY BOND	12/01/2004 05/15/1999 03/15/2013 09/01/1988 09/07/1997 09/08/1997 11/06/1997 03/31/1993 02/01/2009 11/15/2002 11/15/2002 11/15/2003 02/15/2001 08/15/2005 11/15/1993 11/15/1993 11/15/2009 05/15/2003 05/15/2017 10/15/1989	11.700% \$ 9.750% 7.625% 4.375% 7.700% 7.700% 5.100% 9.375% 11.625% 11.625% 11.625% 11.625% 11.625% 11.500% 3.500% 11.750% 10.750% 8.625% 10.375% 10.750% 8.750% 11.875%	4,529,680 4,039,600 3,301,600 945,190 666,211 631,798 665,333 162,142 2,724,150 9,337,500 4,383,750 905,000 4,856,250 2,700,000 2,371,240 45,188 3,753,750 9,410,000 2,043,120 5,687,500 6,438,410 10,271,900 16,326,600
40,000 10,000,000 2,000,000	U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	11/15/1987 03/31/1988 11/15/1989	7.625% 7.125% 10.750%	40,144 10,010,900 2,133,740

TOTAL BOND PORTFOLIO

\$

291,140,406

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
938 200 8,760 700 129	BCI HOLDINGS C B S INC GENERAL MOTORS CONT MARY KAY CORP SAFEWAY STORES INC.	05/01/2002 08/01/1995 10/28/1991 11/30/2000 11/24/2006	10.875% 0.000% 0.000%	\$ 972 215 0 308 133
TOTAL BON	D PORTFOLIO			\$ 1,628

41

MARKET

SHARES		VALUE
15,000 39,000 10,400 10,000 165,000 5,000 51,300 15,000 3,528 5,400 10,500 16,000 9,200 46,800 122,807 79,500	A & W BRANDS INC A G EDWARDS, INC AAR CORP AARON RENTS INC ABBOTT LABS ABM GOLD CORP ACCO WORLD CORP ACME CLEVELAND CORP ACME STL CO DEL ADOBE RESOURCES ADT , INC. ADV SEMI CONDUCTOR ADVANCED MICRO DEV. ADVO SYS INC. AETNA LIFE & CASUALTY CO.	\$ 180,000 1,062,750 334,100 110,000 10,291,875 36,875 1,462,050 191,250 27,783 75,600 95,813 510,000 77,050 889,200 1,089,912 4,730,250
24,000 10,000 69,750 72,300 46,100 21,000 19,100 45,000 26,000 12,000 135,900 38,200	AFFILATED PUBNS AFFILIATED BANKSHARES COL AFG INDS INC AHMANSON H.F. CO. AIR PRODUCTS & CHEM. INC. AIR WIS AVIATION INC AIRBORNE FGHT CORP ALASKA AIR GROUP ALBERTSONS INC ALC COMMUNICATIONS CORP ALCAN ALUMINUM LTD. ALCO STANDARD CORP.	1,464,000 126,250 1,883,250 1,554,450 2,166,700 215,250 630,300 916,875 1,449,500 39,000 4,127,963 993,200
157 27,800 19,900 8,500 30,000 8,489 101,000 23,500 11,000 32,700 33,313	ALEX BROWN INC ALEXANDER & ALEXANDER ALEXANDER & BALDWIN INC ALEXANDERS INC ALFIN FRAGRANCES INC ALLEGHANY CORP NEW ALLEGHENY BEVERAGE CORP ALLEGHENY & WESTN ENERGY ALLEGHENY INTL. ALLEGHENY POWER SYS INC ALLEGIS CORP	3,219 719,325 1,099,475 409,063 120,000 950,768 1,237,250 666,813 170,500 1,312,088 2,977,349
25,250 28,140 27,100 55,500 123,950 24,000 27,000 61,900	ALLEGIS CORP ALLEN GROUP INC ALLEN ORGAN CLASS B ALLIED BANKSHARES INC. ALLIED SUPERMARKETS INC. ALLIED-SIGNAL INC. ALLTEL CORP ALLWASTE INC ALUMINUM CO. OF AMERICA	2,377,343 397,688 886,410 243,900 568,875 5,407,319 660,000 232,875 3,303,913

NO. OF SHARES			MARKET VALUE
58,000	AMAX INC	\$	1,196,250
58,000	AMDAHL CORP	Ŧ	2,037,250
76,100	AMERADA HESS CORP.		2,920,338
30,000	AMERICAN FRUCTOSE CL A		356,250
50,000	AMERICAN INTEGRITY CORP		331,250
39,050	AMERICAN STANDARD INC.		1,654,744
31,700	AMERICAN BANK INSURANCE G		423,988
8,000	AMERICAN BLDG MAINTENANC		200,000
1,000	AMERICAN CAP MGMT & RESH		18,500
10,000	AMERICAN CAPACITY GROUP I		100,000
71,600	AMERICAN CYANAMID		3,508,400
8,457	AMERICAN ECOLOGY		190,283
137,600	AMERICAN ELEC POWER INC		3,784,000
309,478	AMERICAN EXPRESS COMPANY		10,599,622
77,066	AMERICAN FAMILY CORP		1,001,858
93,100	AMERICAN GENERAL CORP		3,689,088
24,900	AMERICAN GREETINGS		647,400
77,500	AMERICAN HOIST & DERRICK		804,063
7,600	AMERICAN INCOME LIFE INS		90,250
103,840	AMERICAN INFORMATION		9,034,080
115,500 24,400	AMERICAN INTERNATIONAL GR AMERICAN MAIZE PRODS CO		8,186,063
65,000	AMERICAN MAIZE PRODS CO AMERICAN MEDICAL INTL.		542,900
19,200	AMERICAN MEDICAL INTL. AMERICAN NATL INS CO		1,243,125
13,200	AMERICAN NAIL INS CO AMERICAN PETROFINA INC.		672,000 768,900
10,000	AMERICAN PEIROFINA INC. AMERICAN PRESIDENT COS L		432,500
20,000	AMERICAN SHIP BLDG CO		132,500
33,300	AMERICAN SOFTWARE INC		499,500
22,352	AMERICAN STORES NEW		1,637,284
10,000	AMERICAN SVGS BK FSB		168,750
767,407	AMERICAN TEL & TEL NEW		21,199,618
76,600	AMERICAN TELEVISION &		1,915,000
9,000	AMERICAN WATER WORKS		160,875
29,600	AMERITRUST CORP		717,800
32,800	AMES DEPARTMENT STORES		779,000
24,900	AMETEK INC		806,138
30,200	AMFAC INC		992,825
183,000	AMOCO CORP		16,012,500
10,000	AMOSKEAG BK SHS INC		2 13,750
77,000	AMP INC.		4,514,125
15,000	AMPCO PITTSBURGH CORP.		230,625
48,200	AMR CORP.		2,855,850
15,000	AMSOUTH BANCORP.		485,625
55,000	AMWEST INS GROUP INC		632,500
30,700	ANADARKO PETE CORP.		909,488
34,333	ANALOG DEVICES INC		669,494
19,100	ANALOGIC CORP		202,938

NO. OF SHARES MARKET VALUE

£

23,000	ANCHOR HOCKING CORP.	\$	690,000
12,000	ANDOVER TOGS INC		73,500
12,000	ANDREW CORP.		183,000
10,000	ANTHEM ELECTRS INC		161,250
35,000	AOI COAL CO		126,875
51,800	AON CORP		1,333,850
58,000	APACHE CORP		623,500
2,800	APL CORP		20,650
84,000	APPLE COMPUTER		3,402,000
31,600	APPLIED CIRCUIT TECH.		31,600
60,000	APPLIED MATLS INC		1,185,000
142,803	ARCHER DANIELS MIDLAND C		3,498,674
100,000	ARCHIVE CORP		987 , 500
9,100	ARGONAUT GROUP INC		302 , 575
10,300	ARGOSYSTEMS INC		378,525
3,200	ARITECH CORP DEL		47,200
12,800	ARKANSAS BEST CORP		219,200
39,000	ARKLA INCORPORATED		940,875
39,000	ARMCO INC		390,000
49,600	ARMSTRONG IND. INC.		1,897,200
15,000	ARMTEK CORP		301,875
30,000	ARNOX CORP		191,250
9,666	ARVIN INDS INC		343,143
12,175	ARX INC		126,316
15,000	ASA LTD	•	864,375
53 , 600	ASAMERA INC		515,900
28,700	ASARCO INC.		710,325
19,000	ASHLAND OIL INC		1,204,125
20,000	ASHTON TATE		490,000
30,000	ASK COMPUTER		371,250
10,000	ATALANTA SOSNOFF CAP CORP		120,000
17,000	ATLANTA GAS LT CO		395,250
28,000	ATLANTIC CITY ELEC CO		969,500
135,400	ATLANTIC RICHFIELD		12,896,850
11,200	ATWOOD OCEANICS INC		198,800
			359,525
14,600	AUGAT INC		
51,700	AUTOMATIC DATA PROCESSIN		2,468,675
9,400	AVALON ENERGY CORP		54,050
25,400	AVANTEK INC		403,225
23,400	AVERY INTL. CORP.		585,000
27,800	AVNET INC		913,925
59,900	AVON PRODS INC		2,021,625
24,000	AVX CORP.		429,000
14,200	AYDIN CORP.		488,125
30,750	BAIRNCO CORP		1,199,250
83,120	BAKER HUGHES INC		1,890,980
11,000	BALL CORP		525,250
,000			

NO. OF SHARES			MARKET VALUE
32,800	BALLY MFG CO	Ş	738,000
52,900	BALTIMORE GAS & ELEC CO		1,659,738
67,688	BANC ONE CORP		1,869,881
12,000	BANDAG INC		768,000
53,100	BANK BOSTON CORP		1,858,500
52,622	BANK NEW ENGLAND CORP		1,868,081
27,750	BANK OF NY CO. INC.		1,207,125
14,258	BANK SOUTH CORP		260,209
110,200	BANKAMERICA CORP.		1,267,300
3,900 3,000 57,400 20,700 9,000 43,350 20,000 26,000	BANKAMERICAN RLTY INVS BANKERS FIRST CORP BANKERS TRUST NY CORP. BARD C.R. INC. BARNES GROUP INC BARNETT BKS FLA BARRIS INDS INC BARRY WRIGHT CORP		118,950 36,000 2,927,400 931,500 320,625 1,603,950 305,000
14,000 46,400 23,900 172,705 36,000 35,700 81,915	BARRI WRIGHT CORP BASSETT FURNITURE INDS BATTLE MTN GOLD CL A BAUSCH & LOMB INC BAXTER TRAVENOL LABS BAYBANKS INC BAYLY CORP. BEAR STEARNS COS INC		487,500 567,000 1,386,200 1,015,750 4,209,684 1,548,000 401,625 1,392,555
19,500	BEAUTICONTROL COSMETICS I		146,250
28,000	BECOR WESTERN INC		420,000
34,100	BECTON DICKINSON CO		2,173,875
20,000	BEEBAS CREATIONS INC		300,000
22,100	BELL & HOWELL CO.		1,276,275
141,520	BELL ATLANTIC CORP.		9,641,050
192,200	BELL CANADA ENTERPRISES I		6,078,325
5,000	BELL INDUSTRIES		114,375
339,120	BELL SOUTH CORP		13,861,530
15,700	BELO A H CORP		1,024,425
20,900	BENEFICIAL CORP.		1,199,138
26,250	BERGEN BRUNSWIG CORP.		630,000
3,900	BERKEY PHOTO INC		20,475
775	BERKSHIRE HATHAWAY INC D		2,712,500
17,200	BEST PRODUCTS		182,750
6,600	BETZ LABS INC		323,400
74,100	BEVERLY ENTERPRISES INC		1,092,975
5,200	BEVERLY INVT PPTYS INC		120,900
21,400	BIG B INC		291,575
63,825	BIG BEAR INC		1,627,538
15,000	BIG V SUPERMARKETS INC		301,875
25,000	BILDNER J & SONS INC		225,000
25,000	BIOTECH CAP CORP		287,500

NO. OF SHARES		MARKET VALUE
43,500	BLACK & DECKER MFG CO	\$ 1,011,375
25 , 000	BLACK HILLS CORP	581,250
28,000	BLOCK H & R INC.	1,487,500
16,400	BLOUNT INC	262,400
5,950	BOATMEN'S BANCSHARES	229,075
50 , 875	BOB EVANS FARMS INC	1,246,438
110,325	BOEING COMPANY	5,171,484
21,300	BOISE CASCADE CORP	1,549,575
11,600	BOLAR PHARMACY	275,500
75,850	BORDEN INC.	4,551,000
64,100	BORG-WARNER	2,980,650
41,600	BOSTON EDISON CO	946,400
7,000	BRANCH CORP	252,000
42,600	BRASCAN LTD	1,107,600
8,600	BRIGGS & STRATTON CORP	337,550
203,164	BRISTOL-MYERS CO.	10,107,409
15,700	BROOKLYN UN GAS CO.	421,938
9,700	BROWN GROUP BROWN TRANS INC	414,675
16,000 118,400	BROWNING FERRIS INDS INC	180,000 3,359,600
34,000	BRUNOS INC	654,500
74,000	BRUNSWICK CORP.	1,776,000
22,000	BRUSH WELLMAN INC	858,000
12,500	BSN CORP COM PAR .03	185,938
19,400	BURLINGTON IND	1,484,100
55,000	BURLINGTON NORTHERN INC.	4,551,250
33,000	BURNDY CORP	561,000
5,000	BURNUP & SIMS INC	33,125
4,576	BURRITT MUT SVGS BK NEW	80,080
20,800	C3 INC	226,200
18,000	CABOT CORP	634,500
33,000	CALFED INC	1,150,875
60,000	CALGENE INC	675,000
14,081	CALLAHAN MNG CORP	387,228
20,000	CALMAT CO	600,000
34,300	CALNY FOOD SVCS INC	330,138
20,000	CAMBRIDGE BIOSCIENCE CORP	230,000
27,400	CAMERON IRON WORKS INC	595,950
50,000	CAMPBELL RED LAKES MINES	1,268,750
57 , 800	CAMPBELL SOUP CO	3,865,375
30,000	CANADIAN MARCONI CO	453,750
212,657	CANADIAN PACIFIC LTD	3,987,319
1,000	CANAL RANDOLPH LTD PARTNE	6,000
11,900	CAPITAL CITIES/ABC INC.	4,551,750
36,100	CAPITAL HOLDING CORP.	1,110,075
20,000	CAREERCOM CORP	177,500
81,000	CAREMARK	1,690,875

NO. OF SHARES			MARKET VALUE
SHARES 33,000 16,800 24,000 58,800 6,400 70,000 21,500 16,600 5,000 33,000 16,800 67,400 8,250 12,000 16,052 2,000 16,052 2,000 16,500 41,835 8,400 21,000 16,500 41,835 8,400 21,000 12,000 16,500 41,835 8,400 21,000 12,000 12,000 12,000 12,000 12,758 39,900 5,900 24,000 20,500 19,700 31,400 49,000 27,236	CARL KARCHER ENTERPRISES CARLISLE CORP CAROLINA FREIGHT CORP CAROLINA PWR & LT CO CARPENTER TECHNOLOGY CORP CARRIAGE INDS INC CARSON PIRIE & CO. CARTER HAWLEY HALE STORE CARTER WALLACE INC CARTERET SAVINGS BK F.A. CASCADE NAT GAS CORP CATERPILLAR INC. CB & T BANKSHARES INC CBI INDS INC CBS INCORPORATED CCB FINL CORP CEN. BANKSHRS. SO. CENERGY CORP CENT HUDSON GAS & ELEC CO CENTEL CORP. CENTERIOR ENERGY CORP CENTERIOR ENERGY CORP CENTERIC BANCORP CENTER BANCORP CENTRAL & SO WEST CORP. CENTRAL & SO WEST CORP. CENTRAL JERSEY BANCORP CENTRAL LA ELEC CO CENTRAL ME PWR CO CENTRAL LA ELEC CO CENTRAL ME PWR CO CENTRAL LA ELEC CO	Ş	
27,236 70,065 10,600	CF & I STL CORP CHAMPION INTL. CHAMPION SPARK PLUG CO		129,371 2,548,614 153,700
35,000 13,000 49,450 48,000 66,600 15,700 21,000 48,635 31,500 77,000 15,000 19,200	CHANTAL PHARMACEUTICAL CO CHARLOTTE CHARLES INC CHARMING SHOPPES INC CHARTER MED CORP CHASE MANHATTAN CORP. CHATHAM MFG CO CHEMED CORPORATION CHEMICAL NEW YORK CORP CHEMICAL NEW YORK CORP CHEMICAL NY CORP CL B CHEMICAL WASTE MGMT INC CHEROKEE GROUP CHESAPEAKE CORP VA	• •	218,750 100,750 1,502,044 1,470,000 2,747,250 573,050 847,875 2,042,670 208,688 2,310,000 285,000 828,000

NO. OF SHARES			MARKET VALUE
244,100 29,000 21,000 27,501 154,075 27,025	CHEVRON CORP CHI-CHIS INC CHIEFTAIN DEV LTD CHOCK FULL O NUTS CORP CHRYSLER CORP. CHUBB CORPORATION	Ş	15,134,200 213,875 225,750 220,008 5,257,809
56,400 55,900 32,000	CHUBE CORFORATION CHURCHS FRIED CHICKEN CIGNA CORPORATION CILCORP INC		1,662,038 564,000 3,542,663 1,076,000
26,000 8,000 10,500 27,600	CINCINNATI BELL INC CINCINNATI FINL CORP CINCINNATI MILACRON INC CIPHER DATA PRODS INC		637,000 530,000 332,063
64,200 103,600 55,660	CIRCLE K CORP CITICORP CITIZENS & SOUTHERN CORP.		310,500 1,075,350 6,112,400 1,537,608
12,000	CITIZENS FIRST BANCORP IN		291,000
53,606	CITIZENS UTILS DEL		1,634,995
39,100	CITY FED FIN'L CORP		327,463
6,800	CLABIR CORP		50,150
34,400	CLARK EQUIP CO		907,300
87,300	CLEVELAND-CLIFFS INC		1,353,150
28,000	CLOROX CO.		920,500
2,100	CMS ENERGY CORP		38,850
47,500	CNA FINL CORP		2,481,875
52,700	COACHMEN INDS INC		599,463
30,900	COASTAL CORP		1,073,775
36,300	COBE LABS INC		784,988
17,600	COCA COLA BOTTLING CO CO		611,600
313,300	COCA COLA COMPANY		13,941,850
107,200	COCA COLA ENTERPRISES INC		2,063,600
7,000	COLEMAN CO. INC.		257,250
49,745	COLGATE PALMOLIVE		2,338,015
10,050	COLLAGEN CORP.		103,013
72,000	COLLINS FOODS INTL.		1,494,000
21,300	COLT INDS. INC NEW		284,888
27,900	COLUMBIA GAS SYSTEM INC		1,398,488
18,600	COMAIR INC		167,400
25,100	COMBUSTION ENGINEERING		941,250
20,000	COMCAST CORP		470,000
10,000	COMCAST CORP CL A		226,250
36,000	COMDATA NETWORK INC.		576,000
34,600	COMDISCO INC.		1,063,950
23,000	COMERICA INC		1,362,750
48,513	COMINCO LTD		594,284
11,200	COMMERCE CLEARING HOUSE		733,600
7,000	COMMERCE UN CORP		212,625

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NO. OF SHARES		MARKET VALUE
34,666 141,236 9,600 22,900 15,000 37,333 27,000 60,000 4,792 10,900	COMMERCIAL METALS CO COMMONWEALTH EDISON CO. COMMUNICATIONS SATELLITE COMMUNITY PSYCHIATRIC CEN COMPAQ COMPUTER CORP COMPREHENSIVE CARE CORP COMPUGRAPHIC CORP COMPUTER ASSOC INTL INC COMPUTER CONSOLES COMPUTER SCIENCES CORP.	4,890,297 272,400 941,763 703,125 545,995 627,750 1,507,500 46,123 614,488
59,900 100,000 69,600 9,100	COMPUTER VISION CORP. COMSTOCK GROUP INC CONAGRA INC. CONCURRENT COMPUTER CORP	898,500 675,000 2,201,100
84,300 33,900 59,700	CONSOL. EDISON OF N.Y. CONSOL. FREIGHTWAYS INC. CONSOL. NAT. GAS	156,975 3,782,963 1,237,350 2,701,425
12,000	CONSOLIDATED PAPERS INC	777,000
49,900	CONSOLIDATED RAIL CORP	1,665,413
85,000	CONSUMER PLASTICS CORP	956,250
23,600	CONSUMERS WTR CO	474,950
54,400	CONTEL CORP	1,727,200
44,300	CONTINENTAL CORP	1,949,200
22,000	CONTINENTAL INFORMATION S	261,250
14,900	CONTROL DATA CORP.	426,513
14,000	CONTROL RESOURCE INDS INC	297,500
201,000	CONVERGENT INC	1,381,875
44,000	COOPER COS	654,500
48,781	COOPER DEVELOPMENT CO.	60,976
30,300	COOPER INDS. INC.	1,787,700
37,000	COOPER LASERSONICS INC	76,313
7,200	COOPER TIRE & RUBBER	251,100
32,586	CORESTATES FINL CORP	1,279,001
37,846	CORNING GLASS WORKS	2,422,157
34,000	CORROON & BLACK CORP	1,015,750
83,000	CPC INTL. INC.	4,523,500
14,000	CPI CORP	344,750
53,000	CPT CORP.	185,500
2,400	CRAIG CORP	39,000
39,390	CRANE CO.	1,162,005
22,400	CRAY RESEARCH INC	2,276,400
7,200	CRONUS INDS INC	116,100
24,000	CROSS & TRECKER	471,000
39,000	CROSS A T CO	1,296,750
7,100	CROWN CORK & SEAL	830,700
10,400	CRYSTAL BRANDS INC	223,600
116,600	CSX CORPORATION	4,066,425

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SHARES			VALUE
9,500 17,000	CUBIC CORP CULLEN FROST BANKERS INC	\$	192,375 195,500
25,000	CULLINET SOFTWARE INC.		290,625
6,100	CULLUM COS INC		191,388
11,500	CUMMINS ENGINE CO.	· .	1,037,875
3,500	CURTICE-BURNS FOODS INC.		125,563
35,000	CYCARE SYS INC		306,250
22,830	CYPRUS MINERALS CORP		536,505
20,000	D & N SVGS BK FSB HANCOCK		280,000
37,000	DANA CORPORATION		1,748,250
24,150	DANIEL INDS INC		262,631
2,800	DATA CARD CORP.		34,650
4,900	DATA DESIGN LABS INC		34,913
20,100	DATA GENERAL CORP.		620,588
30,700	DATA I O CORP		276,300
55,000	DATA SWITCH CORP		364,375
2,900	DATAPOINT CORP		18,850
62,200	DATAPRODUCTS CORP		699 , 750
10,000	DAYCO CORP		348,750
78,800	DAYTON-HUDSON CORP.		3,989,250
73,700	DE LUXE CHK PRINTERS INC		2 , 330,763
22,400	DEAN FOODS CO		800,800
10,400	DECISION INDUSTRIES CORP.		104,000
53,600	DEERE & COMPANY		1,520,900
26,000	DEKALB CORP		627,250
35,500	DELCHAMPS INC		772,125
47,400	DELMARVA PWR & LT CO		953,925
37,600	DELTA AIR LINES INC.		2,105,600
19,000	DENISON MINES LTD A		135,375
19,000	DENISON MINES LTD B		111,625
109,000	DETROIT EDISON CO		1,771,250
5,100	DEVON GROUP INC NEW		87,975
43,500	DEXTER CORP		1,082,063
35,300	DI GIORGIO CORP		1,059,000
12,000	DIAL REIT INC		234,000
13,500	DIAMOND BATHURST INC		337,500
23,400	DIAMOND SHAMROCK R&M INC		383,175
10,150	DIGITAL COMM. ASSOC.		329,875 15,142,050
92,400	DIGITAL EQUIPMENT CORP.		1,681,500
35,400	DILLARD DEPT. STORES		7,774,100
107,600	DISNEY WALT CORP		470,000
20,000	DIVERSIFIED ENERGIES INC		307,500
10,000	DIXIE YARNS INC DOLLAR GEN CORP		496,800
41,400 14,000	DOLLAR GEN CORP DOMINION BANKSHARES CORP		278,250
63,200	DOMINION BANKSHARES CORP DOMINION RESOURCES		2,733,400
14,900	DOMINION RESOURCES		536,400
T4,300	DOMUTINGON TINC		2201400

NO. OF SHARES		MARKET VALUE
55,600	DONNELLEY RR & SONS	\$ 2,175,350
28,600	DOVER CORP.	1,926,925
136,200	DOW CHEMICAL COMPANY	11,730,225
75,000	DOW JONES & CO	3,843,750
19,800	DOWNEY SAVINGS & LN ASSN	361,350
35,600	DPL INC.	925,600
10,000	DRESHER INC	111,250
58,500	DRESSER INDUSTRIES	1,828,125
41,000	DREYERS GRAND ICE CREAM I	830,250
42,800 170,680 70,800 108,200 5,000	DREYFUS CORP. DU PONT EI DENEMOURS DUKE POWER CO. NC DUN & BRADSTREET COS INC DUNKIN DOUGHNUT INC.	1,401,700 20,481,600 3,159,450 6,843,650
50,600 18,000 18,451 8,725	DUQUESNE LT CO DURAKON INDS INC DURO TEST CORP DURR FILLAUER MED INC	143,750 607,200 211,500 232,944 104,700
7,300	DYNATECH CORP	222,650
21,600	E-SYSTEMS	704,700
29,300	E.F. HUTTON GP. INC.	1,117,063
12,700	EAGLE PICHER INDS INC	536,575
15,000	EASCO HAND TOOLS INC	146,250
26,000 160,600 22,300 10,000 26,400 26,700	EASTERN GAS & FUEL ASSN EASTMAN KODAK CO. EATON CORP. EATON FINL CORP ECHLIN INC. ECHO BAY MINES LTD	708,500 13,831,675 2,062,750 107,500 462,000
7,400 14,000 12,800 57,000 13,000	ECHO BAY MINES LID EDISON BROS STORES INC EDO CORP EG & G INC EL PASO ELEC CO ELBIT COMPUTERS INC	944,513 271,950 215,250 441,600 969,000 117,000
23,000	ELECTRO BIOLOGY INC	106,375
13,100	ELECTRO NUCLEONICS INC	145,738
10,000	ELECTROSPACE SYSTEMS	267,500
40,000	EMC INS GROUP INC	410,000
51,666	EMERSON ELECTRIC	5,605,761
22,000	EMERY AIR FREIGHT CORP.	360,250
22,000	EMHART CORP VA	984,500
30,200	EMULEX CORP	230,275
37,800	ENGLEHARD CORP	973,350
14,400	ENNIS BUSINESS FORMS INC	360,000
26,300	ENRON CORP.	1,219,663
45,000	ENSERCH CORP.	1,096,875
29,500	ENTERRA CORP	287,625

NO. OF Shares			MARKET VALUE
36,000	ENTEX ENVIRONMENTAL SYS CO	\$	531,000 190,000
34,800	ENZO BIOCHEM INC		321,900
100,000	EPSILON DATA MGMT INC		1,000,000
96,700 8,400	EQUATORIAL COMMUNICATIONS EOUITABLE BANCORP		314,275 214,200
21,000	EQUITABLE RES INC		892,500
4,200	EQUITEC FINL GROUP INC		32,550
23,000	ESTERLINE CORP		388,125
89,800	ETHYL CORP.		2,402,150
39,400	EVANS & SUTHERLAND COMPU		1,280,500
15,000	EVANS INC		127,500
70,000	EXCHANGE INTL CORP		997,500
515,600	EXXON CORPORATION		48,079,700
20,000	FAIRFIELD COMMUNITY INC.		135,000
50,000	FALCONBRIDGE LTD		793,750
25,500	FAMILY DLR STORES INC		446,250
65,700	FARM FRESH INC		771 , 975
71,778	FARM HOUSE FOODS CORP		318,515
49,000	FARMERS GROUP INC.		2,205,000
11,700	FAYS DRUG INC		102,375
42,000	FEDERAL CO		1,879,500
42,100	FEDERAL EXPRESS CORP.		2,831,225
61,800	FEDERAL NATL MORTGAGE ASS		2,402,475
32,000	FEDERAL PAPER BRD INC		1,280,000
17,000	FEDERAL-MOGUL CORP FEDERATED DEPT. STORES		765,000 3,469,400
66,400 10,000	FEDERATED DEFT. STORES		535,000
26,000	FIDELCOR		955,500
6,000	FIFTH THIRD BANCORP		321,000
51,000	FIREMANS FD CORP		1,836,000
27,400	FIRESTONE TIRE & RUBR CO		1,140,525
72,000	FIRST ALA BANCSHARES INC		1,584,000
17,500	FIRST AM. CORP TENN.		490,000
18,700	FIRST AMERN BK & TR PALM		147,263
7,500	FIRST AMERN SVGS F A ABIN		126,563
49,400	FIRST BANK SYSTEM		1,667,250
19,600	FIRST BOSTON INC		874,650
47,400	FIRST CHICAGO CORP		1,398,300
35,000	FIRST CITY BANKCORP TEXAS		91, 875
6,600	FIRST EASTN CORP PA		168,300
57,500	FIRST EXECUTIVE CORP DEL		984,688
37,200	FIRST FED MICH DETROIT	•	837,000
21,400	FIRST FIDELITY BANCORP		920,200
17,100	FIRST FINL CORP WIC		316,350
30,000	FIRST FINL MGMT CORP		772,500
10,000	FIRST FLA BKS INC.		310,000

NO. OF SHARES			MARKET VALUE
36,100 7,000 40,275 10,900 30,000 1,050 5,250 21,050 29,000 39,300 84,780 38,100 10,000 8,000 6,500 5,627 32,000 28,300 16,400 34,500 13,400 55,000 31,300 57,000	FIRST INTERST. BANCORP FIRST JERSEY NAT'L. CO. FIRST KY NATL CORP FIRST NATL CINCINNATI COR FIRST PA CORP FIRST REPUBLICBANK ADJ. FIRST REPUBLICBANK CL A FIRST REPUBLICBANK CORP FIRST SEC CORP DEL FIRST SEC CORP DEL FIRST TENN NATL CORP FIRST WIS CORP FIRST WIS CORP FIRST WIS CORP FISCHBACH CORP FISHER FOODS INC FISHER SCIENTIFIC GROUP I FLEET FINANCIAL GRP INC FLEETWOOD ENTER. INC. FLEMING COS. FLIGHTSAFETY INTL INC FLOATING POINT SYS INC FLORIDA EXPRESS INC FLORIDA FED. S & L FLORIDA NATL BKS FLA INC	\$	2,156,975 388,500 976,669 430,550 288,750 101,194 122,719 489,413 775,750 1,188,825 2,151,293 1,538,288 261,250 175,000 77,188 92,851 876,000 725,188 670,350 1,129,875 125,625 254,375 461,675 1,225,500
33,800	FLORIDA PROGRESS CORP		1,212,575
9,200	FLORIDA ROCK & TANK LINES		108,100
10,000	FLORIDA ROCK INDS.		257,500
52,500	FLOWERS INDUSTRIES	•	1,424,063
15,765	FLUKE JOHN MFG.		457,185
47,700	FLUOR CORP		840,713
25,000	FMC CORP NEW		859,375
15,000	FMC GOLD CO		211,875
77,500	FOOD LION CORP		1,278,750
47,400	FOOD LION INC CL A		734,700
172,675	FORD MOTOR CO.		17,094,825
29,922	FOREST OIL CORP		418,911
56,200	FORT HOWARD PAPER CO.		3,013,725
23,000	FORTUNE FINL GROUP INC		615,250
22,600	FOSTER WHEELER CORP		457,650
19,000	FOXBORO CO		584,250
91,500	FPL GROUP INC.		2,882,250
1,333	FREEPORT MCMORAN ENERGY		20,167
3,149	FREEPORT MCMORAN GOLD CO		48,411
667	FREEPORT MCMORAN RESOURCE		11,917
80,000	FREEPORT-MCMORAN INC		1,960,000
34,000	FREMONT GEN CORP		531,250
6,240	FRISCHS RESTAURANTS INC		188,760

NO. OF SHARES		MARKET VALUE
5,500 3,500 14,200	FRUEHAUF CORP DEL CL B FUDDRUCKERS INC FUQUA INDS INC	\$ 35,750 7,000 504,100
25,100	GAF CORP	1,336,575
124,000 14,800	GANNETT INC. GAP INC	6,324,000 1,002,700
27,100	GATX	1,100,938
1,300	GEARHART INDS INC	4,063
12,300	GEICO CORP.	1,649,738
16,500	GELCO CORP RIGHTS	825
16,500	GELCO CORPORATION	369,188
11,700	GELMAN SCIENCES INC	169,650
15,924	GENCORP	1,640,172
57,800	GENENTECH INC	2,312,000
20,800	GENERAL CINEMA CORP	1,094,600
14,920	GENERAL COMMUNIC CL A	23,215
63,300	GENERAL DATACOMM INDS INC	617,175
30,000	GENERAL DEVELOPMENT CORP	513,750
33,500 660,000	GENERAL DYNAMICS GENERAL ELECTRIC CO.	2,236,125 35,887,500
70,137	GENERAL HOST CORP	981,918
23,800	GENERAL INSTRUMENT CORP	886,550
84,800	GENERAL MILLS INC.	4,717,000
44,820	GENERAL MOTORS (H)	2,207,385
45,860	GENERAL MOTORS CORP CL E	1,754,145
230,400	GENERAL MOTORS CORP.	19,036,800
57,000	GENERAL NUTRITION INC.	334,875
44,700	GENERAL PUBLIC UTILITIES	1,156,613
74,800	GENERAL RE CORP.	4,057,900
23,400	GENERAL SIGNAL CORP.	1,152,450
89,550	GENRAD INC.	1,130,569
57,750	GENUINE PARTS CO.	2,143,969
56,800	GEORGE A HORMEL & CO	1,306,400
83,700	GEORGIA PACIFIC CORP.	3,672,338
26,050	GERBER PRODS CO	1,276,450
8,000	GIANT FOODS INC	268,000
15,000 87,400	GIANT YELLOWKNIFE MINES L GILLETTE COMPANY	241,875 3,332,125
4,500	GLEASON CORP	78,188
15,800	GODFREY COMPANY	525,350
49,333	GOLDEN ENTERPRISES	616,663
31,500	GOLDEN WEST FIN'L	1,126,125
17,500	GOODMARK FOODS INC	275,625
8,900	GOODRICH (B.F.)	457,238
40,200	GOODYEAR TIRE & RUBBER	2,723,550
38,400	GOULD INC.	772 , 800
35,000	GOULDS PUMPS INC	700,000

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NO. OF

SHARES

SUAKES		VALUE
15,000	GR. AMER. FIRST SVGS BK S	\$ 286,875
85,250	GR. WESTERN FIN'L	1,736,969
29,100	GRACE W R & CO	1,869,675
20,600	GRAINGER W W INC	1,102,100
13,900	GRAND AUTO INC	231,088
12,900	GRANDVIEW RES INC	108,844
16,200	GREAT ATLANTIC & PAC TEA	627,750
5,500	GREAT CTRY BK ANSONIA CON	97,625
7,000	GREAT LAKES CHEMICAL CORP	406,875
36,400	GREAT NORTHN NEKOOSA CORP	1,528,800
19,500	GREAT WESTN. SVGS BK BELL	160,875
12,575	GREENMAN BROS INC	127,322
30,400	GREENTREE ACCEPT. INC.	805,600
33,200	GREYHOUND CORP.	1,352,900
58,434	GROW CHEM CORP	620,861
11,687	GROW VENTURES CORP	10,226
78,900	GRUBB & ELLIS CO	483,263
24,600	GRUMMAN CORP.	630,375
237,800	GTE CORP.	9,155,300
6,250	GUILFORD MILLS	203,125
49,300	GULF & WESTERN INDUS.	4,190,500
100,800	GULF BROADCASTING CO LIQ	12,600
106,800	GULF CDA CORP	2,349,600
13,800	GULF RES & CHEM CORP	219,075
63,200	GULF STS UTILS CO	497,700
25,000	GULL INC	368,750
29,500	HALL FRANK B & CO INC	383,500
91,700	HALLIBURTON INC.	3,484,600
44,000	HAMILTON OIL CORP	929,500
8,833	HANCOCK FABRICS INC	164,521
38,000	HANDY & HARMAN	940,500
3,750	HANDYMAN CORP	169,219
18,000	HANNAFORD BROS CO	945,000
25,300	HANOVER INS. CO	822,250
34,600	HARCOURT BRACE JOVAN.	2,058,700
48,200	HARLAND JOHN H CO	1,331,525
11,250	HARPER GROUP	149,063
30,900	HARRIS CORP.	1,108,538
20,900	HARSCO CORP	700,150
26,250	HARTFORD NATL CORP	774,375
31,500	HARTMARX CORP	917,438
18,200	HASBRO INC.	452,725
10,500	HAVERTY FURNITURE CO	173,250
10,500	HAVERTY FURNITURE COS INC	170,625
19,800	HAWAIIAN ELEC INDS INC	571,725
13,000	HB FULLER CO	529,750
30,000	HBO & CO	371,250

MARKET VALUE

NO. OF SHARES			MARKET VALUE
10,600 25,000 117,800 25,000	HEALTH CARE PPTY INVS INC HECLA INC. HEINZ H.J. & CO. HELMERICH & PAYNE INC	\$	294,150 468,750 5,713,300 784,375
78,837	HENLEY GROUP INC		2,020,198
40,800 85,300	HERCULES INC. HERSHEY FOODS CORP		2,580,600 2,388,400
182,100	HEWLETT PACKARD CO.		11,130,863
20,000	HICKAM DOW B INC		265,000
42,500 24,000	HILLENBRAND INDS INC HILTON HOTELS CORP		1,227,188
43,200	HIMONT INC		2,133,000 1,922,400
22,200	HM FED S & L ASSN. S.D.		682,650
30,000	HOGAN SYSTEMS		397 , 500
24,200	HOLIDAY CORP		589,875
37,267 1	HOLLY CORP HOLLY CORP (NEW)		559,005 8
4,700	HOLLY SUGAR CORP		477,050
6,695	HOLMES D.H. & CO.		140,595
16,000	HOME DEPOT INC.		540,000
55,500	HOME GROUP INC		1,096,125
66,000 52,250	HOME SHOPPING NETWORK INC HOMESTAKE MNG CO		1,221,000 1,867,938
38,400	HONEYWELL INC.		3,168,000
1,500	HORIZON BANCORP	•	91,875
72,900	HOSPITAL CORP. OF AMER.		3,380,738
8,000	HOUGHTON MIFFLIN CO.		315,000
7,000 42,400	HOUSE OF FABRICS INC. HOUSEHOLD INTL.		116,375 2,247,200
80,600	HOUSTON INDUSTRIES INC.		2,679,950
20,600	HOWARD SVGS BK LIVINGSTON		445,475
23,200	HRE PROPERTIES		533,600
17,500	HUBBELL INC.		665,000
45,400 72,340	HUDSON FOODS INC HUMANA INC.		817,200 1,862,755
11,000	HUNTINGTON BANCSHARES INC		288,750
23,400	ICH		315,900
85,872	I C INDUSTRIES		2,855,244
44,800	I M S INTL INC		1,366,400
35,300 5,672	IDAHO PWR CO IDC SVCS INC		864,850 69,482
30,800	IE INDS INC		735,350
51,300	ILLINOIS POWER CORP		1,378,688
45,400	ILLINOIS TOOL WORKS INC		1,781,950
6,060	IMO DELAVAL INC		170,438 6,925,225
126,200 88,900	IMPERIAL OIL CO. LTD. INCO INC.		1,522,413

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NO. OF SHARES			MARKET VALUE
8,250 20,000 15,000	INDIANA NATL CORP INFINITY BROADCASTING COR INGERSOLL RAND	\$	323,813 435,000 1,181,250
19,100 30,500	INGREDIENT TECHNOLOGY COR INLAND STEEL IND. INC.		403,488 800,625
22,575	INSILCO CORP.		530,513
15,000	INT'L TECHNOLOGY CORP.		223,125
30,000	INTEGRATED RESOURCES INC.		772,500
83,800 35,000	INTEL CORP. INTELLIGENT SYS CORP		3,687,200
20,900	INTELOGIC TRACE INC		249,375 122,788
42,100	INTERCO		1,910,288
43,300	INTERGRAPH CORP.		974,250
10,800	INTERLAKE INC		449,550
1,116	INTERNATIONAL CAP EQUIP.		2,232
19,000	INTERNATIONAL CTLS CORP		831,250
20,000 44,000	INTERNATIONAL GAME TECHN INTERPUBLIC GROUP		262,500 1,595,000
31,350	INTERSTATE BAKERIES CORP		905,231
11,000	INTERSTATE PWR CO		262,625
7,270	INTERTAN INC		127,225
19,200	INTL MINERALS & CHEM.		801,600
39,000	INTL MULTIFOODS CORP		1,150,500
435,963	INTL. BUSINESS MACHINES	7	0,843,988
26,300 74,000	INTL. FLAVORS & FRAG.	,	1,278,838
10,000	INTL. PAPER CO. IONICS INC		3,589,000
26,000	IONICS INC IOWA ILL GAS & ELEC CO		153,750 1,095,250
48,000	IOWA RESOURSES INC.		1,068,000
6,000	IOWA SOUTHN INC		181,500
44,000	IPALCO ENTERPRISES		1,034,000
28,000	IRVING BK CORP		1,295,000
72,100	ISC SYS CORP		639,888
117,600 9,800	ITT CORP IU INTL CORP		6,909,000
67,386	JAMES RIV CORP VA		181,300 2,257,431
14,000	JAMESWAY CORP.		185,500
30,000	JB'S RESTAURANTS		180,000
36,750	JEFFERSON PILOT CORP.		1,176,000
44,500	JEFFRIES GROUP		623,000
50,400	JERRICO INC		1,083,600
10,100 122,800	JIFFY LUBE INTL INC JOHNSON & JOHNSON	-	151,500
16,380	JOHNSON & JOHNSON JOHNSON CONTROLS		L1,282,250 593,775
82,000	JONES INTERCABLE INC CL A		1,158,250
8,000	JORGENSEN EARLE M CO DEL		214,000
72,000	JOSTENS INC		1,638,000

NO. OF SHARES

MARKET VALUE

29,750	JOY TECHNOLOGIES PFD.	\$ 573 , 750
10,000	JUSTIN INDS INC	138,750
24,750	JWT GROUP INC.	1,364,344
147,450	K MART CORPORATION	6,229,763
16,700	K N ENERGY INC.	313,125
17,200	KAISER TECH LTD	309,600
54,000	KANEB SERVICES	155,250
35,000	KANSAS CITY PWR & LT CO	914,375
6,100	KANSAS CITY SO. IND.	358,375
32,800	KANSAS PWR & LT CO	840,500
20,000	KASLER CORP.	175,000
13,500	KATY INDS INC	214,313
40,500	KAUFMAN & BROAD INC	916,313
54,000	KAYDON CORP	1,613,250
87,800	KELLOGG CO	5,739,925
39,235	KEMPER CORP.	1,206,476
19,000	KENNAMETAL INC	586,625
9,900	KENNER PARKER TOYS INC	316,800
8,700	KENTUCKY CENT LIFE INS C	131,588
58,000	KENTUCKY UTILS CO	1,131,000
8,800	KERR GLASS MFG CORP	123,200
37,000	KERR MCGEE CORP.	1,359,750
18,922	KEYSTONE INTL INC	392,632
19,500	KIDDE INC.	940,875
67,600	KIMBERLY CLARK CORP	3,709,550
30,000	KINCAID FURNITURE INC	300,000
14,666	KINDER CARE LEARNING CTR.	251,155
39,300	KLA INSTRS CORP	805,650
	KLM ROYAL DUTCH AIR	1,064,250
43,000		
49,700	KNIGHT RIDDER INC.	2,621,675
10,000	KNOGO CORP	248,750
9,400	KOPPERS INC	379 , 525
129,100	KRAFT INC.	7,762,138
68,000	KROGER COMPANY	2,499,000
4,000	KRUEGER WA CO.	47,500
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40,000	KV PHARMACEUTICAL INC	650,000
25,000	LA QUINTA MOTOR INNS INC.	343,750
7,000	LA Z BOY CHAIR CO	588,000
14,000	LAIDLAW INDUSTRIES	329,000
15,000	LANCASTER COLONY CORP	296,250
33, 333	LANCE INC.	1,458,319
30,000	LANCER CORP TEX	225,000
15,500	LAND OF LINCOLN SVGS & LN	228,625
13,500	LAWSON PRODS INC	391,500
48,000	LAWTER INTL INC	768,000
28,100	LEE DATA CORP.	182,650
5,000	LIBERTY CORP S C	196,875
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NO. OF MARKET SHARES VALUE LIEBERMAN ENTERPRISES 30,000 \$ 592,500 98,900 LILLY ELI & CO 9,284,238 134,200 LIMITED INC. 5,820,925 56,000 LIN BROADCAST. CORP. 2,331,000 25,000 LINCOLN FOOD SERVICE PROD 212,500 30,000 LINCOLN NATL CORP IND 1,537,500 30,000 LIPOSOME INC 187,500 18,400 LITTON INDS INC. 1,681,300 66,600 LIZ CLAIBORNE INC. 2,314,350 51,070 LOCKHEED AIRCRAFT CORP 2,636,489 19,000 LOCTITE CORP 1,173,250 57,950 LOEWS CORP 3,795,725 39,000 LOMAS & NETTLETON FINL 1,096,875 25,000 LONE STAR INDUSTRIES 909,375 30,300 LONE STAR TECH 568,125 26,000 LONG DRUG STORES INC 919,750 15,200 LORAL CORP 613,700 8,285 LORIMAR TELEPICTURES CORP 128,418 14,300 LOUISIANA LD & EXPL CO 546,975 20,861 LOUISIANA PAC. CORP. 649,299 28,000 LOUISVILLE GAS ELEC CO 997,500 35,200 LOWES COMPANY 959,200 75,000 LSI LOGIC CORP. 768,750 36,000 LTX CORP 585,000 28,400 LUBRIZOL CORP 1,111,150 26,500 LUCKY STORES 804,938 19,300 709,275 LUKENS STL CO 3,400 LUMEX INC 51,000 31,800 M/A COM 437,250 45,100 MACHINE TECHNOLOGY 186,038 32,400 MACK TRUCKS INC. 627,750 74,700 MACMILLAN BLOEDEL LTD 1,503,338 13,900 MACMILLAN INC. 906,975 24,600 MAGMA COPPER CO NEW CL B 162,975 23,000 MANITOWOC INC 471,500 38,500 MANOR CARE INC 712,250 11,480 MANPOWER INC 628,530 10,000 MANUFACTURERS NATL CORP 440,000 11,200 MAPCO INC 613,200 33,000 MARINE MIDLAND BANKS INC 1,955,250 118,000 MARION LABS INC 4,248,000 100,300 MARRIOTT CORP. 3,924,238 52,600 MARSH & MCCLENNAN 3,267,775 1,800 MARSHALL & ILSLEY CORP 54,450 33,800 MARSHALL INDUSTRIES 422,500 42,100 MARTIN MARIETTA 1,947,125 106,300 MASCO CORP 3,760,363

NO. OF SHARES

52,300

9,992

5,000

39,062

10,600

93,600

42,636

66,850

12,000

16,400 5,400

135,843

29,900

32,000

43,900

8,000

34,400

13,100 55,850

13,400

40,600

44,000

10,000

22,100

36,200

41,000

33,400

27,500

22,500

20,800

66,000

25,000

83,800 3,000

41,200

33,700

5,000 4,800

4,100

200

3,148 97,000

101,300

9,400

3,800

218,600

118,152

MASCO INDS

MAYTAG CO.

MCA INC.

MATERIAL SCIENCES CORP

MATH APPLICATION GP.

MATRIX SCIENCE CORP.

MAY DEPT. STORES CO.

MCCORMICK & CO INC MCDERMOTT INTL INC

MCDONALDS CORP.

MCGRAW HILL INC.

MCKESSON CORP MCO HOLDINGS INC

MEASUREX CORP

MEDIA GEN INC

MEDTRONIC INC.

MELRIDGE INC.

MEREDITH CORP

MERRILL CORP

METRO AIRLS INC

MERCANTILE

MELLON BANK CORP

MEAD CORP.

MEDIO INC

MCORP

MCI COMMUNICATION

MCINTYRE MINES LTD

MDU RESOURCES GROUP

MEI DIVERSIFIED INC.

MELVILLE CORPORATION

MERCK & COMPANY INC.

MERIDIAN BANCORP INC

MFRS. HANOVER CORP.

MGMT. SCIENCE AMER.

MICHIGAN NATL CORP

MICKELBERRY CORP

MICOM SYS INC

MENTOR GRAPHICS CORP.

STORES

MERCANTILE BANCORPORATION MERCANTILE BANKSHARES COR

MERRILL LYNCH & CO. INC.

MGT. ASSIST. INC LIQUID.

INC

MCDONALD & CO INVTS INC

MCDONNELL DOUGLAS CORP.

MCFARLAND ENERGY INC

MATRIX CORP N J

MAXUS ENERGY CORP

VALUE
\$ 941,400 222,322 9,375
405,268 193,450
1,275,300 5,612,220
2,275,697 3,242,225 564,000
489,950 50,625
7,199,679 2,078,050
424,000 3,012,638 1,639,500
256,000 1,161,000
198,138 516,613 289,775
1,355,025 256,150
1,710,500 26,125
935,000 797,738 787,313
352,950 3,008,375
993,650 1,326,875 573,750
129,068 16,538,500
761,800 1,410,750 368,750
2,922,525 25,125
1,838,550 408,613
375 208,750

MARKET

2	4	4	1	2	4	5	
	2	5	,	1	2	5	
8	3	8	,	5	5	0	
4	0	8	,	6	1	3	
				3	7	5	
2	0	8	,	7	5	0	
	2	4	,	0	0	0	
	5	2	,	2	7	5	

NO. OF SHARES

MARKET VALUE

24,300	MICRO D INC	\$	230,850
19,500	MICROSOFT CORP	•	1,989,000
30,000	MID SOUTH INS CO		525,000
29,296	MIDLANTIC CORP		1,373,250
24,600	MILLER HERMAN INC.		568,875
20,000	MILLIPORE CORP.		802,500
50,000	MILTOPE GROUP INC		
13,000	MILWAUKEE INS GROUP INC		537,500
38,800	MINISCRIBE		169,000
162,400	MINISCRIBE MINNESOTA MNG & MFG CO		640,200
32,000	MINNESOTA MNG & MFG CO MINNETONKA CORP		11,510,100
33,900			540,000
	MITCHELL ENERGY		487,313
47,000	MITEL CORP		217,375
31,400	MNC FINANCIAL INC		1,432,625
290,900	MOBIL CORPORATION		14,799,538
37,000	MOLECULAR GENETICS INC		268, 250
17,250	MOLEX INC		737 , 438
17,000	MONARCH CAPITAL CORP.		1,156,000
62,000	MONOLITHIC MEMORIES INC		992,000
60,700	MONSANTO CO.		5,076,038
25,000	MONTANA PWR CO		890,625
83,300	MOORE CORP LTD		2,124,150
7,250	MOORE FINL GROUP INC IDAH		207,531
10,000	MOORE MCCORMACK RES INC		247,500
135,400	MORGAN J P & COMPANY INC.	,	6,482,275
19,100	MORGAN STANLEY GROUP INC		1,382,363
10,000	MORRISON INC		305,000
20,200	MORRISON KNUDSEN CORP		992,325
39,400	MORTON THIOKOL		1,753,300
91,200	MOTOROLA INC.		4,936,200
15,000	MSI DATA CORP		270,000
10,000	MULTIBANK FINL CORP		206,250
10,440	MULTIMEDIA INC. NEW		613,350
14,300	MUNFORD INC.		
22,500	MURPHY OIL		357,500
47,250	MYLAN LABS INC		824,063
38,900	N.W. NATL. LIFE		702,844
			1,064,888
13,000	NAC RE CORP		325,000
13,000	NACCO INDS INC		321,750
26,000	NACCO INDS INC CL A		643,500
2,904	NAFCO FINANCIAL GP		46,464
30,000	NALCO CHEMICAL CO.		1,072,500
13,550	NATIONAL BANKSHARES CORP.		103,319
8,000	NATIONAL BUSINESS SYS INC		115,000
40,500	NATIONAL CITY CORP		1,402,313
22,450	NATIONAL CONVENIENCE STOR		221,694
27,100	NATIONAL DATA CORP		582 , 650

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NO. OF SHARES		MARKET VALUE
26,800 20,000 20,300 31,500 39,300 16,300 50,075 64,300 45,000 18,000 67,600 81,200 10,000	NATIONAL DISTILLERS & CHE NATIONAL EDUCATION CORP NATIONAL INTERGROUP INC NATIONAL LN BK HOUSTON TE NATIONAL STANDARD CO NATIONAL SVC INDS INC NATL PATENT DEVEL CORP NATL. MEDICAL ENTER. INC. NATL. SEMICONDUCTOR NBD BANCORP INC NBI INC NCNB CORP. NCR CORP. NELSON THOMAS INC	\$ 1,819,050 495,000 329,875 82,688 38,700 977,588 248,575 1,370,803 835,900 1,659,375 216,000 1,749,150 6,049,400 73,750
25,575	NETWORK SYSTEMS CORP.	252,553
13,000	NETWORK USA	203,125
52,000	NEVADA PWR CO	1,014,000
41,000	NEW ENGLAND BUS SVC INC	912,250
30,638	NEW ENGLAND ELEC SYS	827,226
14,000	NEW JERSEY RES CORP	294,000
10,300	NEW PROCESS CO	275,525
38,700	NEW YORK ST ELEC & GAS C	1,064,250
71,000	NEW YORK TIMES CO	3,337,000
42,000	NEWHALL LD & FARMING CO C	1,375,500
75,000	NEWMONT GOLD CO	2,081,250
49,200	NEWMONT MINING	2,318,550
15,000	NEWPORT CORP	176,250
93,500	NIAGARA MOHAWK PWR CORP	1,554,438
21,100	NICOR INC	569,700
46,000	NIKE INC.	776,250
17,500	NL INDUSTRIES	146,563
23,400	NO. AMERICAN PHILIPS CORP	1,000,350
43,088	NO. STS. POWER CO. MINN.	1,357,272
22,000	NOBEL INS LTD	297,000
33,500	NOBLE AFFILIATES INC	556,938
12,289	NOBLE DRILLING CORP	83,717
29,200 148,500 37,800 22,000 80,000 46,100 169,700 2,000 33,500	NORDSTROM INC NORFOLK SOUTHERN CORP NORSTAR BANCORP NORTH SIDE SVGS BK BRONX NORTHEAST UTILITIES NORTHERN IND PUB SVC CO NORTHERN TELECOM LTD. NORTHERN TRUST CORP NORTHROP CORP	2,044,000 4,900,500 1,237,950 407,000 1,830,000 541,675 3,606,125 90,250 1,381,875 281,250
12,500	NORTHWEST NAT GAS CO	281,250
15,000	NORTHWESTERN STL & WIRE	298,125

NO. OF SHARES		MARKET VALUE
	NORTON CO NORWEST CORP. NOVA PHARMACEUTICAL CORP NOVAR ELECTRONICS NOVELL INC NOXELL CORP NUCOR CORP NWA INC. NYNEX OAKWOOD HOMES CORP OCCIDENTAL PETE CORP OCCUPATIONAL URGENT CARE OCEAN DRILLING & EXPL CO OGDEN CORP. OHIO CAS CORP OHIO EDISON CO OHIO MATTRESS CO. OKLAHOMA GAS & ELEC CO OLD KENT FINL CORP OLD REP INTL CORP OLIN CORP OMNICARE INC OMNICOM GROUP INC. ONEOK INC OPTICAL COATING LAB OPTICAL RADIATION CORP ORANGE & ROCKLAND UTILS I ORIENT EXPRESS HOTELS INC OSHKOSH B GOSH INC CL B OUTBOARD MARINE CORP OVERSEAS SHIPHOLDING GROU OWENS & MINOR INC OWENS CORNING FIBERGLAS (OXFORD INDS INC PACIFIC GAS & ELEC. CO. PACIFIC CAS ORP	
	PACIFIC LTG CORP PACIFIC SCIENTIFIC CO	2,378,283 180,000
48,900 10,000 18,375 23,000 30,700 66,000	PACIFIC TELESIS GP. PACIFICORP PACO PHARMACEUTICAL SVCS PAINE WEBBER PALL CORP PANHANDLE EASTN CORP PANSOPHIC SYS INC	8,110,060 1,754,288 168,750 571,922 669,875 959,375 1,287,000
40,000 49,980	PAR TECHNOLOGY PARADYNE CORP	480,000 337,365

NO. OF SHARES			MARKET VALUE
35,000 90,000 27,250 20,000	PARK OHIO INDS INC OHIO PARKER DRILLING CO PARKER HANNIFIN CORP PARKWAY CO	\$	245,000 697,500 899,250 422,500
49,000	PAUL HARRIS STORES INC		1,237,250
12,100	PAY N PAK STORES		252,588
30,000	PAYLESS CASHWAYS		697,500
20,000	PEGASUS GOLD INC		372,500
29,500	PENN CENT CORP		1,707,313
118,700	PENNEY J.C. INC.		6,231,750
54,000	PENNSYLVANIA PWR & LT CO	1	1,944,000
13,400	PENNWALT CORP		840,850
33,800	PENNZOIL CO.		2,543,450
35,750	PENTAIR INC		1,018,875
44,000	PEOPLES ENERGY CORP		896,500
10,000	PEOPLES HERITAGE SVGS BK		200,000
20,000	PEOPLES WESTCHESTER SVGS	1	535,000
13,300	PEP BOYS MANNY MOE & JACK		645,050
184,952 32,300	PEPSICO INCORPORATED PERKIN ELMER		6,658,272 1,021,488
12,500	PERRY DRUG STORES INC.		139,063
46,900	PETRIE STORES CORP.		1,547,700
24,000	PETROLITE CORP		864,000
125,100	PFIZER INCORPORATED		9,007,200
45,800	PHELPS DODGE		1,631,625
29,000	PHH GROUP INC		1,174,500
130,100	PHILADELPHIA ELEC. CO.		2,748,363
183,900	PHILLIPS PETROLEUM CO.		3,057,338
56,250	PHILLIPS VAN HEUSEN CORP		1,132,031
26,250	PIC N SAVE CORP.		639,844
14,400	PIEDMONT AVIATION		997,200
24,600	PILGRIMS PRIDE CORP		249,075
74,000	PILLSBURY COMPANY		3,209,750
50 ₀ 100	PINNACLE WEST CAPITAL COR		1,590,675
16,954	PIONEER GROUP INC		372,988
30,000	PIONEER HI-BRED INTL.		1,095,000
15,000	PIONEER STD ELECTRS INC		135,000
52,200	PITNEY BOWES INC.		2,225,025
36,500	PITTSTON CO		552,063
22,000	PLAINS PETE CO		706,750
44,882	PNC FINANCIAL		2,176,777 221,250
30,000 44,000	POGO PRODUCING CO POLAROID CORP.		1,688,500
23,000	POLICY MGMT. SYS. CORP.		546,250
13,100	PONDEROSA SYSTEM INC.		379,900
67,400	POPE & TALBOT		1,474,375
35,500	PORTLAND GENERAL CORP		909,688
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NO. OF SHARES			MARKET VALUE
31,900	POTLATCH CORP	\$	1,040,738
61,000	POTOMAC ELEC. & PWR.		1,403,000
99,200	PPG INDUSTRIES INC.		4,662,400
17,900	PRATT & LAMBERT INC		798,788
15,000	PRECISION CASTPARTS CORP		543,750
32,275	PREMARK INTL INC		907,734
30,000	PREMIER INDL CORP		1,177,500
20,000	PRESIDENTIAL LIFE CORP		340,000
10,000 40,700	PRESTON CORP PRICE CO		167,500
29,000	PRIMARK CORP		1,826,413 775,750
37,400	PRIME COMPUTER INC.		986,425
24,433	PRIME MTR INNS INC		1,017,024
43,600	PRIMERICA CORP		1,814,850
119,700	PROCTOR & GAMBLE		11,730,600
40,000 26,100	PROFIT SYS INC PROTECTIVE LIFE CORP		410,000 362,138
26,000	PROVIDENT LIFE & ACC INS		526,500
24,100	PS GROUP INC.		831,450
63,100 95,515	PSE INC PUBLIC SERVICE ENTERPRISE		567,900
35,000	PUBLIC SVC CO COLO		3,629,570 787,500
29,200	PUBLIC SVC CO N MEX		956,300
16,000	PUGET SOUND BANCORP WASH		412,000
56,500	PUGET SOUND PWR & LT CO		1,130,000
40,000	PULTE HOME CORP		465,000
40,000	PURITAN BENNETT CORP		1,070,000
11,000	PUROLATOR COURIER CORP		404,250
4,800	QUAKER CHEMICAL		96,000
60,200	QUAKER OATS CO		3,130,400
18,400	QUAKER ST OIL REFNG CORP	•	407,100
19,500	QUANTUM CORP.		314,438
6,150	QUEBECOR INC		85,331
26,000	QUESTAR CORP		1,111,500
31,500	QUICK & REILLY GROUP INC		606,375
10,000	QUIKSILVER INC		116,250
16,800	QUIXOTE CORP		214,200
8,000	R T E CORP		256,000
25,000	R.P.M. INC OHIO		537,500
26,900	RAINIER BANCORP		1,432,425
15,000	RALIGH FED SVGS BK N C		140,625
73,100	RALSTON PURINA CO.		6,250,050
77,000	RANGER OIL LTD		442,750
34,000	RANSBURG CORP		522,750
11,000	RAYCHEM CORP		1,298,000
53,800	RAYTHEON COMPANY		4,061,900
8,250	REDKEN LABS INC.		183,563

NO. OF SHARES			MARKET VALUE
30,400	REDMAN INDS INC	Ş.	277,400
40,500	REEBOK INTERNATIONAL LTD		1,706,063
49,900	REEVES COMMUNICATIONS COR		461,575
32,000	REGIS CORP.		432,000
5,100	REICHHOLD CHEMS INC		309,825
2,508	REPUB. PICTURES CORP CL A		22,572
21,050	REPUBLIC N Y CORP		1,147,225
11,000	RESORT INTL.		635,250
40,000	REYNOLDS & REYNOLDS CO		1,310,000
22,800	REYNOLDS METALS CO		1,727,100
10,000	RHODES INC		172,500
27,600	RIBI IMMUNOCHEM RESH INC		279,450
25,000	RICHMOND HILL SVGS BK N Y		409,375
5,000	RIEDEL ENVIRONMENTAL		118,750
6,000	RIGGS NATL CORP WASH D C		174,000
41,700	RITE AID CORP		1,626,300
90,750	RLC CORP.		805,406
31,000	RLI CORP		430,125
38,200	ROADWAY SVCS INC		1,403,850
18,500	ROBERTSON H H CO		247,438
31,900	ROCHESTER GAS & ELEC CORP		566,225
7,700	ROCHESTER TEL CORP		340,725
10,000	ROCKAWAY CORP		113,750
217,100 58,600 22,600 35,000 10,000	ROCKWELL INTL CORP ROHM & HAAS CO ROHR INDS INC ROLLINS INC ROPER CORP		5,861,700 2,776,175 666,700 630,000 247,500
25,242	RORER GROUP INC.		1,110,652
14,000	ROSES STORES INC		259,000
39,800	ROTHSCHILD L F UNTERBERG		482,575
20,000	ROTO ROOTER INC		500,000
64,200	ROUSE CO		1,540,800
69,200	ROWAN COMPANIES INC		631,450
69,600	ROYAL INTL OPTICAL CORP		417,600
20,000	ROYAL PALM SVGS ASSN WEST		97,500
91,000	RPC ENERGY SVCS INC		511,875
52,100	RUBBERMAID INC		1,556,488
45,600	RYAN BECK & CO		438,900
12,300	RYAN HOMES INC.		579,638
36,975	RYANS FAMILY STEAK HOUSE		503,784
65,810	RYDER SYSTEMS INC.		2,385,613
37,000	RYKOFF S E & CO		1,049,875
10,000	RYMER CO		192,500
33,000	SABINE CORP		585,750
10,500	SAFECARD SVCS INC		213,938
48,000	SAFECO CORPORATION		1,524,000

		MARKET VALUE
SAFETY KLEEN CORP SALEM CARPET MLS INC SALOMON INC SAN DIEGO GAS & ELEC CO SAN JUAN RACING ASSN INC	\$	390,891 475,000 4,148,825 1,280,475 45,100
SANTA FE SO. PACIFIC CORP SARA LEE		5,832,250 4,240,600
SAVANNAH ELEC & PWR CO		187,600
SCAN TRON CORP		853,200 185,791
SCANA SCHERER R R CORR		972,213
SCHERING PLOUGH CORP		299,063 4,038,112
		9,617,565 378,000
SCI SYS INC		1,430,325
		377,300 117,500
SCITEX LTD		84,375
SCOA INDS INC SCOTT PAPER CO.		5 1,874,513
SEAGATE TECHNOLOGY		1,142,400
SEALED AIR CORP SEALED POWER CORP		522,625 525,600
		13,456,125 256,275
SECURITY PACIFIC CORP.		2,254,140
		837,200 1,109,200
SEQUA CORP CLASS A		1,399,009
		251,250 787,966
SERVICE MERCHANDISE		144,900
SERVICEMASTER LTD PARTN SEVEN OAKS INTL INC		790,500 582,000
SHAKLEE CORP		656,750
SHAW INDS INC		579,600 237,500
		695,625 1,123,500
SHL SYSTEMHOUSE INC		236,800
SIERRA PAC RES		1,325,839 324,800
SIGNET BANKING CORP.		1,000,825
SIPPICAN INC		890,900 282,094
SIZZLER RESTAURANTS INTL		288,070
	SALEM CARPET MLS INC SALOMON INC SAN DIEGO GAS & ELEC CO SAN JUAN RACING ASSN INC SANTA FE SO. PACIFIC CORP SARA LEE SAVANNAH FESO. PACIFIC CORP SARA LEE SAVANNAH FOODS & INDS INC SCAN TRON CORP SCANA SCHERER R.P. CORP. SCHERING PLOUGH CORP SCHLUMBERGER LTD SCHULMAN A INC SCI SYS INC SCIENTIFIC ATLANTA INC SCI SYS INC SCIENTIFIC MICRO SYS INC SCIENTIFIC MICRO SYS INC SCOTT PAPER CO. SEAGATE TECHNOLOGY SEALED AIR CORP SEALED POWER CORP SEALED POWER CORP SEALED POWER CORP SEALED POWER CORP SEALED POWER CORP. SELECTIVE INSURANCE GROUP SENSORMATIC ELECTRS CORP SEQUA CORP CLASS A SEQUA CORP CLASS A SEQUA CORP CLASS B SERVICE CORP. INT'L SERVICE MERCHANDISE SERVICE MERCHANDISE INC SHAWMUT CORP SHARED MED. SYSTEMS CORP. SHAWIN WILLIAMS CO. SHL SYSTEMHOUSE INC SHAWMUT CORP SHERWIN WILLIAMS CO. SHL SYSTEMHOUSE INC SIGNET BANKING CORP. SINGER CO.	SALEM CARPET MLS INC SALOMON INC SAN DIEGO GAS & ELEC CO SAN JUAN RACING ASSN INC SANTA FE SO. PACIFIC CORP SARA LEE SAVANNAH FEODS & INDS INC SCANA SCHERER R.P. CORP. SCANA SCHERER R.P. CORP. SCHLUMBERGER LTD SCHLUMBERGER LTD SCHLUMBERGER LTD SCHULMAN A INC SCI ENTIFIC ATLANTA INC SCIENTIFIC MICRO SYS INC SCIENTIFIC MICRO SYS INC SCOT PAPER CO. SEAGATE TECHNOLOGY SEALED POWER CORP SEALED POWER CORP SEALED POWER CORP SEALED POWER CORP SECURITY BANCORP INC DEL SECURITY PACIFIC CORP. SELCTIVE INSURANCE GROUP SENSORMATIC ELECTRS CORP SEQUA CORP CLASS A SEQUA CORP CLASS A SEQUA CORP CLASS A SEQUA CORP CLASS A SEQUA CORP CLASS B SERVICE MERCHANDISE SERVICE MERCHANDISE SIGNET BANKING CORP. SIGNET BANKING CORP. SIPPICAN INC

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SHARES			VALUE
19,700	SKYLINE CORP.	\$	297,963
25,000	SKYWEST INC		212,500
46,000	SMITHFIELD FOODS INC		977,500
90,400	SMITHKLINE-BECKMAN CORP.		5,401,400
22,000	SMUCKER J M CO		1,102,750
40,300	SNAP ON TOOLS CORP		1,707,713
12,600	SO JERSEY INDS INC		253 , 575
13,000	SO. CAROLINA NATL. CORP.		292,500
20,000	SOCIETY CORP		670,000
6,800	SOFTWARE AG SYS GP		89,250
20,000	SOMERSET SVGS BK SOMERVIL		262,500
34,200	SONAT INC.		1,188,450
34,000	SONOCO PRODS CO		969,000
12,153	SOUTHDOWN INC.		463,333
42,000	SOUTHEAST BKG CORP		1,149,750
154,300	SOUTHERN CALIF. EDISON		4,744,725
198,800	SOUTHERN CO		4,820,900
28,500	SOUTHERN NEW ENGLAND TELE		1,528,313
31,000	SOUTHERN UN CO.		403,000
40,174	SOUTHLAND CORP.		2,691,658
34,000	SOUTHLIFE HLDG CO		255,000
13,333	SOUTHTRUST CORP		306,659
21,250	SOUTHWEST AIRLINES		430,313
212,580	SOUTHWESTERN BELL CORP.		8,264,048
24,000	SOUTHWESTERN ENERGY CO		609,000
37,000	SOUTHWESTERN PUB SVC CO		1,045,250
27,125	SOVRAN FINANCIAL CORP.	•	962,938
4,500	SPARTON CORP		72,000
7,500	SPELLING AARON PRODTNS.		73,125
42,000	SPRINGS INDS INC		1,401,750
4,600	SPS TECHNOLOGIES INC		200,675
22,100	SQUARE D CO		1,176,825
84,000	SQUIBB CORP.		7,287,000
5,900	SSMC INC.		119,475 427,500
30,000	ST JOE GOLD CORP		•
50,400	ST JUDE MED INC		1,222,200 1,354,200
29,600	ST. PAUL COS. INC.		
31,000	STALEY CONTL INC		883,500
36,500	STANDARD BRANDS PAINT CO		862,313
20,400	STANDARD MICROSYSTEMS COR		285,600 327,250
17,000	STANDARD MTR PRODS INC		1,055,925
23,400	STANDARD PRODS CO STANDARD REGISTER		495,000
20,000 6,000			108,000
-	STANDEX INTL.		662,738
19,350	STANLEY WKS		190,000
20,000 24,700	STARS TO GO INC STATE STREET BOSTON CORP		747,175
241/00	STATE STREET DOSTON CORP		14/11/2

NO. OF SHARES		MARKET VALUE
45,800 27,000 12,000 6,600 16,000 30,800 15,000 4,500 5,512 75,000 27,600 4,100	STERLING DRUG INC STEVENS J.P. STEWART INFORMATION SVCS STEWART WARNER CORP STOKELY USA INC STONE CONTAINER CORP STOP & SHOP INC. STORAGE EQUITIES INC STRAWBRIDGE & CLOTHIER STRYKER CORP STUDENT LN MARKETING ASSN SUAVE SHOE CORP	\$ 2,627,775 1,157,625 231,000 195,525 128,000 1,443,750 1,029,375 64,688 248,040 1,893,750 2,190,750 38,438
43,200 10,600	SUBARU OF AMERICA INC. SUMMIT BANCORP.	518,400 312,700
32,100 84,345 14,800 1	SUMMIT HEALTH LTD SUN COMPANY INC SUNDSTRAND CORP SUNSHINE MNG CO	168,525 5,535,141 845,450
99,100	SUNTRUST BKS INC	3 2,514,663
47,500 70,000	SUPER FOOD SVCS INC SUPER RITE FOODS INC	1,252,813 1,111,250
54,900	SUPER VALU STORES INC.	1,544,063
15,700 2,700	SUPERMARKETS GEN CORP SWANK INC	620,150
50,000	SYMBOLICS INC	41,513 212,500
86,600	SYNTEX CORPORATION	3,723,800
40,600 3,600	SYSCO CORP SYSTEMS & COMPUTER TECHN	1,426,075 11,250
15,000	TAB PRODS CO	270,000
6,500	TAFT BROADCASTING	988,000
10,500 24,000	TALLEY INDS INC TAMBRANDS INC.	250,688 1,422,000
73,600	TANDEM COMPUTERS INC	2,327,600
50,000	TANDON CORP.	262,500
72,700 6,900	TANDY CORP TASTY BAKING CORP	3,135,188 206,138
10,000	TCA CABLE TV INC	255,000
50,850 22,800	TCBY ENTERPRISES INC.	826,313
7,000	TECO ENERGY INC TECUMSEH PRODS CO	1,023,150 864,500
34,500	TEJON RANCH CO	1,574,063
28,400	TEKTRONIX INC	1,100,500
85,400 6,600	TELE COMMUNICATIONS INC TELECOM CORP	3,010,350 17,325
10,000	TELECREDIT INC	390,000
9,100 13,400	TELEDYNE INC. TELEPHONE & DATA SYS INC	3,100,825 386,925

NO. OF

6,900

SHARES			VALUE
30,659	TELERATE INC	\$	1,333,667
3,400	TELEX CORP.		240,550
16,700	TELLABS INC		194,138
24,295	TEMPLE INLAND		1,481,995
10,000	TENNANT CO		325,000
122,300	TENNECO INC.		6,007,988
22,600	TERADYNE INC.		593 , 250
44,000	TESORO PETE CORP		583,000
75,000	TEXACO CDA INC		2,090,625
184,600	TEXACO INC.		7,476,300
151	TEXAS AIR CORP		5,625
750	TEXAS AIR CORP PFD 6.5		3,656
17,000	TEXAS AMERN BANCSHARES IN		233,750
37,900	TEXAS EASTERN CORP.		1,383,350
13,989	TEXAS INDUSTRIES		423,168
58,200	TEXAS INSTRUMENTS		3,542,925
104,500	TEXAS UTILITIES CO.		3,370,125
60,000	TEXTRON INC		1,822,500
36,000	THERMO ENVIRONMENTAL CORP		243,000
14,300	THOMAS & BETTS CORP		809,738
15,400	THOMPSON MED CO INC		288,750
27,900	TIDEWATER INC.		258,075
136,200	TIE COMMUNICATIONS		595,875
50,100	TIME INC.		4,897,275
15,000	TIMEPLEX INC.	·	459,375
50,200	TIMES MIRROR CO		4,630,950
10,200	TIMKEN CO		629,850
7,200	TIPTON CTRS INC		41,400
100,000	TITAN CORP		600,000
4,584	TMK UNITED INC		53,862
5,716	TODD AO CORP		114,320
13,000	TODD SHIPYARDS CORP		128,375
12,730	TOOTSIE ROLL INDS INC		393,039
55,400	TORCHMARK CORP		1,571,975
54,000	TOTAL ASSETS PROTN INC		290,250
102,000	TOYS R US		3,697,500 77,238
16,700	TPI ENTERPRISES INC		405,000
20,000 18,422	TRACOR INC.		545,752
93,567	TRANS WORLD AIRLINES		3,789,464
-	TRANSAMERICA CORP TRANSCO ENERGY CO.		658,388
18,100 69,100			3,109,500
	TRAVELERS CORP. TRENWICK GROUP INC		147,500
10,000			593,750
50,000	TRIAD SYS CORP TRIBUNE COMPANY		2,487,450
61,800	TRIBUNE COMPANY TRINITY INDS INC.		2,487,450
20,000	TRINITI INDS INC.		20/ ₁ 200 101 275

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TRINOVA CORP
MINNESOTA STATE BOARD OF INVESMENT PASSIVE EQUITY FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES

MARKET VALUE

20,000	TRUS JOIST CORP	\$	420,000
41,800	TRW INC.	Ŧ	2,199,725
18,200	TUCSON ELECTRIC PWR CO		
•			1,060,150
57,500	TVX BROADCAST GROUP INC		589 , 375
35,100	TW SERVICES INC		662,513
13,000	TYCO LABS		568,750
23,400	TYLER CORP		301,275
51,900	TYSON FOODS INC		
51,150			973,125
	U S BANCORP		1,432,200
80,200	U.S. HEALTHCARE INC.		1,152,875
42,000	U.S. LEASING INTL INC		2,168,250
141,620	U.S. WEST CORP		7,452,753
6,300	UCCELCORP		259,875
25,000	ULTIMATE CORP.		668,750
91,400	ULTRASYSTEMS INC		
			1,028,250
12,400	UNIMAR CO		120,900
52,350	UNION CAMP CORP.		2,172,525
92,091	UNION CARBIDE CORP		2,728,196
15,197	UNION CARBIDE CORP RTS		56,989
81,500	UNION ELEC CO		1,996,750
74,700	UNION PACIFIC CORP.		5,854,613
39,400	UNISYS CORP.		
			4,856,050
43,500	UNITED MERCHANTS & MFRS		505,688
8,000	UNITED NEW MEXICO FIN'L		86,000
10,000	UNITED STATIONERS INC		192,500
47,900	UNITED ARTIST COMM INC C		1,329,225
27,000	UNITED BANKERS INC		114,750
19,000	UNITED BKS COLO INC		351,500
20,000	UNITED BRANDS CO		
			790,000
28,000	UNITED ILLUM CO		763,000
12,100	UNITED INDL CORP		196,625
15,600	UNITED JERSEY BANKS HACKE		468,000
41,000	UNITED STATES SHOE CORP		1,245,375
39,600	UNITED STATES SURGICAL CO	•	1,257,300
76,450	UNITED STOCKYARDS CORP		716,719
92,700	UNITED TECHNOLOGIES CORP.		4,843,575
62,600	UNITED TELECOM. INC.		
			1,713,675
44,000	UNITED VA BANKSHARES INC		1,358,500
23,000	UNITRODE CORP		319,125
10,000	UNIVAR CORP		215,000
38,950	UNIVERSAL FOODS CORP		1,051,650
77,000	UNIVERSAL HEALTH SVCS INC		606,375
82,680	UNOCAL CORP.		3,276,195
145,500			
	UPJOHN COMPANY		6,583,875
70,000	US FACS CORP		350,000
47,200	US FIDELITY & GUAR. CO.		1,787,700
50,400	USG CORP HOLDING CO.		1,726,200

MINNESOTA STATE BOARD OF INVESMENT PASSIVE EQUITY FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES		MARKET VALUE
16,200 184,134 39,000 48,000 20,100 33,100 19,900 25,000 41,000 10,500 28,000 5,020 7,749	USLIFE CORP. USX CORP. UTAH POWER & LIGHT CO. I V F CORP VALLEY NATIONAL CORP. VALUE LINE INC VARIAN ASSOC. INC. VARIAN ASSOC. INC. VERCO INSTRS INC VERMONT FIN'L SVCS VESTRON INC VIACOM INC. PFD.	\$ 603,450 5,800,221 931,125 1,956,000 804,000 885,425 631,825 431,250 799,500 315,000 136,500 113,578 193,737
23,900	VICORP RESTAURANTS INC	239,000
105,000	VIE DE FRANCE CORP	682,500
25,000	VLSI TECHNOLOGY INC	378,125
11,000	VOLT INFORMATION SCIENCES	308,000
8,100	VORNADO INC	769,500
10,000	VULCAN MATLS CO	1,452,500
21,200	WACKENHUT CORP.	461,100
206,200	WAL-MART STORES INC.	13,944,275
25,000	WALBRO CORP	543,750
46,800	WALGREEN CO	1,930,500
22,000	WALLACE COMPUTER SER INC	888,250
22,925	WALTER JIM CORP	1,189,234
112,100	WANG LABS CL B	1,779,588
105,300	WARNER COMMUNICATIONS	3,672,338
60,700	WARNER LAMBERT	4,385,575
115,000	WARWICK INS MGRS INC	891,250
10,500	WASHINGTON GAS LT CO	275,625
19,050	WASHINGTON MUT SVGS BK SE	707,231
36,000	WASHINGTON NATL CORP	985,500
7,300	WASHINGTON POST B	1,606,000
34,000	WASHINGTON WTR PWR CO	926,500
154,600	WASTE MANAGEMENT	6,068,050
19,000	WATKINS JOHNSON CO.	703,000
27,000	WD 40 CO	924,750
31,500	WEIS MARKETS INC.	1,027,688
41,400	WELLS FARGO & CO.	2,251,125
9,000	WELLS FARGO MTG & EQUITY	166,500
85,100	WENDYS INTL INC	829,725
41,000	WEST INC	830,250
10,420	WEST POINT PEPPERELL INC.	681,208
10,000	WESTERN CAP. INVESTMENT	151,250
10,000	WESTERN FED SVGS & LN ASS	193,750
14,920	WESTERN TEL COMM	251,775
101,300	WESTINGHOUSE ELEC. CO.	6,445,213

MINNESOTA STATE BOARD OF INVESMENT PASSIVE EQUITY FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES

MARKET VALUE

8,400	WESTMARK INTL INC	\$ 193,200
27,000	WESTMORELAND COAL CO	614,250
33 , 650	WESTVACO CORP	1,489,013
33,000	WETTERAU INC	1,641,750
3,300	WETTERAU PPTYS INC	18,150
104,900	WEYERHEUSER CO.	5,271,225
53 , 200	WHIRLPOOL CORP.	1,895,250
35,400	WHITEHALL CORP.	712,425
30,200	WHITTAKER CORP	1,083,425
6,100	WILEY JOHN + SON	257,725
18,666	WILLAMETTE INDS INC.	919,301
13,100	WILLIAMS COMPANIES INC	450,313
12,000	WILMINGTON TRUST CO.	336,000
46,000	WILSON FOODS CORP	454,250
31,200	WINN DIXIE STORES INC	1,536,600
78,900	WINNEBAGO IND INC.	917,213
25,500	WISCONSIN ENERGY CORP	1,249,500
24,000	WISCONSIN PUB SVC CORP	1,101,000
9,400	WISCONSIN PWR & LT CO	451,200
20,800	WISER OIL CO DEL	410,800
30,150	WITCO CORP.	1,243,688
35,000	WOLVERINE TECHNOLOGIES IN	402,500
19,700	WOLVERINE WORLD WIDE	238,863
46,600	WOOLWORTH F W CO	2,481,450
46,600	WORTHINGTON INDS INC	1,013,550
26,000	WRIGLEY WM JR CO	1,391,000
12,000	WRIGLEY WM JR CO B	224,357
15,200	WYMAN-GORDON CO.	269,800
69,300	XEROX CORP	5,353,425
50,887	XIDEX CORP	578,840
19,800	XTRA CORP.	504,900
31,200	YELLOW FREIGHT SYSTEM	1,076,400
15,510	YORK INTL CORP	412,954
46,766	ZAYRE CORP.	1,303,602
18,900	ZENITH ELECTRONICS CORP	486,675
15,000	ZERO CORP.	253,125
23,000	ZURN INDS INC	1,213,250
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TOTAL EQUITY PORTFOLIO

\$ 2,158,085,702

MINNESOTA STATE BOARD OF INVESMENT INTERNAL POOLED FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES		MARKET VALUE
SHARES 17,400 36,800 12,700 31,900 8,900 19,400 18,000 8,800 21,500 18,800 18,950 23,700 21,125 14,300 9,100 9,100 9,300 17,300 20,500 28,900 23,800 18,375 39,600 8,700 12,700 20,900	ALEXANDER & ALEXANDER AMERICAN FAMILY CORP AMERICAN GENERAL CORP AMERICAN MEDICAL INTL. AMERICAN STORES NEW AMES DEPARTMENT STORES AON CORP ATLANTIC RICHFIELD BALLY MFG CO BANC ONE CORP BANK BOSTON CORP BANKERS TRUST NY CORP. BOEING COMPANY BROWN GROUP BURLINGTON NORTHERN INC. CENTEL CORP. CENTRAL & SO WEST CORP. CHARMING SHOPPES INC CHASE MANHATTAN CORP. CHEMICAL NEW YORK CORP CHRYSLER CORP. CHURCHS FRIED CHICKEN CIGNA CORPORATION CIRCUIT CITY STORES INC CITICORP	\$ VALUE 450,225 478,400 503,238 610,088 651,925 460,750 463,500 838,200 483,750 519,350 663,250 1,208,700 990,234 611,325 753,025 614,963 542,788 622,688 1,192,125 999,600 627,047 396,000 551,363 485,775 1,233,100
20,100 8,800 20,850 26,700 16,450 18,300 18,750 11,700	CITIZENS & SOUTHN GA CORP CNA FINL CORP COASTAL CORP COMDISCO INC. COMMONWEALTH EDISON CO. COMMUNICATIONS SATELLITE CONTEL CORP COOPER INDS. INC.	555,263 459,800 724,538 821,025 569,581 519,263 595,313 690,300
6,300 34,900 14,000 12,900 14,500 25,500 9,600 18,100 19,700 20,400 20,000 27,500 14,600 17,700	CRAY RESEARCH INC CSX CORPORATION DAYTON-HUDSON CORP. DUKE POWER CO. NC EMHART CORP VA FAMILY DLR STORES INC FEDERAL EXPRESS CORP. FIRST BANK SYSTEM FIRST INTERST. BANCORP FIRST UNION CORP FMC CORP NEW FPL GROUP INC. GENERAL DYNAMICS GENERAL MOTORS CORP CL E	640,238 1,217,138 708,750 575,663 648,875 446,250 645,600 610,875 1,177,075 517,650 687,500 866,250 974,550 677,025
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MINNESOTA STATE BOARD OF INVESMENT INTERNAL POOLED FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

SHARES 7,700 GENERAL MOTORS CORP. 8,600 GENERAL RE CORP. 31,700 **GIBSON GREETINGS** 14,500 GOLDEN WEST FIN'L 20,100 GREAT ATLANTIC & PAC TEA 15,050 GTE CORP. 23,600 HASBRO INC. 17,700 HM FED S & L ASSN. S.D. 26,700 HOME DEPOT INC. 8,800 HONEYWELL INC. 17,400 HOSPITAL CORP. OF AMER. 11,000 HOUSEHOLD INTL. 16,250 HOUSTON INDUSTRIES INC. 49,500 HUMANA INC. 25,300 INTERGRAPH CORP. 19,000 KEMPER CORP. 19,600 KERR MCGEE CORP. 32,500 KEYSTONE INTL INC 28,100 KLM ROYAL DUTCH AIR 14,800 LIMITED INC. 6,950 LITTON INDS INC. 21,800 LIZ CLAIBORNE INC. 21,050 LOCKHEED AIRCRAFT CORP 7,900 LOEWS CORP 52,900 LONG ISLAND LTG CO 24,800 MARTIN MARIETTA 29,400 MAXICARE HEALTH PLANS 104,700 MCI COMMUNICATION 11,200 MELLON BANK CORP 7,900 MELVILLE CORPORATION 23,900 MFRS. HANOVER CORP. 41,300 MIDDLE SOUTH UTILS INC 13,200 MOBIL CORPORATION 8,000 MONSANTO CO. 11,400 MORGAN J P & COMPANY INC. 22,850 NATL. MEDICAL ENTER. INC. 46,500 NCNB CORP. 35,100 NIAGARA MOHAWK PWR CORP 18,100 NO. STS. POWER CO. MINN.

OCEAN DRILLING & EXPL CO

PACIFIC GAS & ELEC. CO.

PHILADELPHIA ELEC. CO.

PIONEER HI-BRED INTL.

PACIFICORP

PRICE CO

PIC N SAVE CORP.

PNC FINANCIAL

NO. OF

36,200

22,900

16,600

27,800

24,500

14,800

11,700

12,500

636,213 466,550 467,575 518,375 778,875 579,425 587,050 544,275 901,125 726,000 806,925 583,000 540,313 1,274,625 569,250 584,250 720,300 674,375 695,475 641,950 635,056 757,550 1,086,706 517,450 489,325 1,147,000 418,950 785,250 399,000 579,663 1,066,538 438,813 671,550 669,000 545,775 625,519 1,203,188 583,538 570,150 968,350 460,863 595,525 587,275 597,188 540,200 567,450 560,938

MARKET

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VALUE

MINNESOTA STATE BOARD OF INVESMENT INTERNAL POOLED FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES MARKET VALUE

13,600 15,900 7,900 18,600 23,400 25,650 5,700 15,450 23,400 26,900 25,000 20,000 22,200 11,700 15,900 14,200 11,800 22,500 10,300 14,200 11,800 22,500 10,300 18,500 7,200 17,900 17,400 17,400 17,200 15,650 32,800 10,600 12,000 35,700 11,000 21,150 21,150 21,150	PRIME MTR INNS INC PROGRESSIVE CORP OHIO RAYTHEON COMPANY REEBOK INTERNATIONAL LTD ROCKWELL INTL CORP ROLLINS ENVIR. SVS. ROYAL DUTCH PET. GLDRS. RYDER SYSTEMS INC. SAFECARD SVCS INC SALOMON INC SEAGATE TECHNOLOGY SECURITY PACIFIC CORP. SHARED MED. SYSTEMS CORP. SONAT INC. SOUTHERN CO SOUTHLAND CORP. SOUTHWESTERN BELL CORP. SOUTHWESTERN BELL CORP. SOUTHWESTERN BELL CORP. SOVRAN FINANCIAL CORP. SVRAN FINANCIAL CORP. ST. PAUL COS. INC. SUBARU OF AMERICA INC. SUBARU OF AMERICA INC. SUN COMPANY INC TELERATE INC TELEX CORP. TEXAS UTILITIES CO. TORCHMARK CORP TOYS R US TRACOR INC. TRW INC. TYCO LABS U.S. HEALTHCARE INC. U.S. WEST CORP UNITED TECHNOLOGIES CORP. UNITED TECHNOLOGIES CORP. UNITED TELECOM. INC. UNOCAL CORP. US AIR GROUP	\$ 566,100 477,000 596,450 783,525 631,800 570,713 752,400 560,063 476,775 884,338 850,000 1,243,200 856,800 695,000 538,350 783,900 618,113 504,100 539,850 270,000 618,113 504,100 539,850 270,000 675,938 804,750 509,400 724,950 561,150 488,050 567,313 664,200 557,825 525,000 513,188 578,875 1,105,088 578,981 756,838 852,750
21,150 19,100	UNITED TELECOM. INC. UNOCAL CORP.	578,981 756,838
12,800 15,400 13,600 29,450 18,600 19,000	USG CORP HOLDING CO. VALLEY NATIONAL CORP. WORTHINGTON INDS INC YELLOW FREIGHT SYSTEM ZAYRE CORP.	477,225 527,450 544,000 640,538 641,700 529,625
		010,010

TOTAL EQUITY PORTFOLIO

\$

90,666,963

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EXTERNAL EQUITY FUND POOL

Key to Advisor references on attached listing:

Alger	Fred Alger Management
Alliance	Alliance Capital Management
BMI	BMI Capital
Beutel	Beutel Goodman Capital Management
F.L.A.	Forstmann Leff Associates
Hellman	Hellman Jordan Management
IDS	IDS Advisory
IAI	Investment Advisers
Lieber	Lieber & Co.
RMA	Waddell & Reed
NWNB	Peregrine Capital Management

NO. OF SHARES	SECURITY	ADVIS	OR	MARKET VALUE
14,000 55,200 43,000	A G EDWARDS, INC ABBOTT LABS ABBOTT LABS SUB-TOTAL	LIEBER ALGER ALLIANCE 98,200 SHA	\$ ARES	381,500 3,443,100 2,682,125 6,125,225
48,800 57,300 4,000 5,500	ACTION INDS INC ADVANCED MICRO DEV. AETNA LIFE & CASUALTY CO. AETNA LIFE & CASUALTY CO. SUB-TOTAL		ARES	329,400 1,088,700 238,000 327,250 565,250
16,800 104,600 55,000	AFG INDS INC AHMANSON H.F. CO. AHMANSON H.F. CO. SUB-TOTAL	LIEBER BEUTEL RMA 159,600 SHA		453,600 2,248,900 1,182,500 3,431,400
21,900 12,500	ALEXANDER & ALEXANDER ALEXANDER & ALEXANDER SUB-TOTAL	LIEBER NWNB 34,400 SHA	ARES	566,663 323,438 890,100
8,700 22,000 34,000 3,150 268,500 26,200 15,000 4,500	ALEXANDERS INC ALFA CORP ALLEN GROUP INC ALLEN ORGAN CLASS B ALLIED BANKSHARES INC. ALLIED-SIGNAL INC. ALUMINUM CO. OF AMERICA ALUMINUM CO. OF AMERICA SUB-TOTAL	LIEBER LIEBER NWNB LIEBER BEUTEL NWNB IAI NWNB 19,500 SHA	ARES	418,688 291,500 535,500 99,225 2,416,500 1,142,975 800,625 240,188 1,040,813
30,000 70,000 55,000	ALZA CORPORATION AMAX INC AMAX INC SUB-TOTAL	HELLMAN ALLIANCE RMA 125,000 SHA		1,121,250 1,443,750 1,134,375 2,578,125
44,000 13,200 100,000 90,000 110,000	AMCAST INDUSTRIAL CORP. AMERICAN STANDARD INC. AMERICAN BARRICK RES CORP AMERICAN EXPRESS COMPANY AMERICAN EXPRESS COMPANY SUB-TOTAL	ALLIANCE	ARES	495,000 559,350 3,450,000 3,082,500 3,767,500 6,850,000
40,000 130,000 22,100 14,000 63,000	AMERICAN FAMILY CORP AMERICAN GENERAL CORP AMERICAN GREETINGS AMERICAN HEALTH PPTYS INC AMERICAN INTERNATIONAL GR			520,000 5,151,250 574,600 246,750 4,465,125

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
86,000	AMERICAN INTERNATIONAL GR SUB-TOTAL	HELLMAN SHARES	\$ 6,095,250 10,560,375
32,000 93,500	AMERICAN MEDICAL INTL. AMERICAN MEDICAL INTL. SUB-TOTAL	NWNB INTERNAL MANAGED FUN 125,500 SHARES	612,000 1,788,188 2,400,188
11,000 26,600 70,000 65,000 10,000	AMERICAN PRESIDENT COS L AMERICAN STORES NEW AMERICAN TEL & TEL NEW AMERICAN TEL & TEL NEW AMERICAN TEL & TEL NEW SUB-TOTAL	RMA INTERNAL MANAGED FUN IDS IAI NWNB 145,000 SHARES	866,250 1,948,450 1,933,750 1,795,625 276,250 4,005,625
59,600 10,000 35,300 20,500 36,000	AMERICAN WATER WORKS AMES DEPARTMENT STORES AMGEN CORP. AMOCO CORP AMOCO CORP SUB-TOTAL	IDS LIEBER RMA ALGER IDS 56,500 SHARES	1,065,350 237,500 1,350,225 1,793,750 3,150,000 4,943,750
10,000 21,900 86,000 15,000	AMP INC. AMR CORP. AMR CORP. AMR CORP. SUB-TOTAL	IAI ALGER ALLIANCE IAI 122,900 SHARES	586,250 1,297,575 5,095,500 888,750 7,281,825
89,000 64,700 120,000 24,900 85,200 40,000 70,200 62,000 40,000 72,000	ANADARKO PETE CORP. ANALOGIC CORP ANCHOR GLASS CONTAINER CO ANGELICA CORP APPLE COMPUTER APPLE COMPUTER APPLE COMPUTER APPLE COMPUTER APPLE COMPUTER APPLE COMPUTER APPLE COMPUTER SUB-TOTAL	RMA NWNB BMI NWNB ALGER ALLIANCE F.L.A. HELLMAN IAI RMA 369,400 SHARES	2,636,625 687,438 3,300,000 678,525 3,450,600 1,620,000 2,843,100 2,511,000 1,620,000 2,916,000 14,960,700
37,625 17,200	ARCHER DANIELS MIDLAND C ARCHER DANIELS MIDLAND C SUB-TOTAL		921,813 421,400 1,343,213
13,500 18,700 86,600	ARISTECH CHEM CORP ARISTECH CHEM CORP ARISTECH CHEM CORP SUB-TOTAL	F.L.A. LIEBER RMA 118,800 SHARES	374,625 518,925 2,403,150 3,296,700

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
18,100 33,000 30,000 17,300 15,000 30,000 25,800	ARMTEK CORP ASARCO INC. ASHLAND OIL INC ATLANTA GAS LT CO ATLANTIC RESEARCH CORP ATLANTIC RICHFIELD ATLANTIC RICHFIELD SUB-TOTAL	NWNB RMA IDS NWNB LIEBER IAI INTERNAL MANAGED FUN 55,800 SHARES	<pre>\$ 364,263 816,750 1,901,250 402,225 405,000 2,857,500 2,457,450 5,314,950</pre>
44,500 48,000 20,000	AUDIO VIDEO AFFILIATES IN AUTOMATIC DATA PROCESSIN AUTOMATIC DATA PROCESSIN SUB-TOTAL	IDS	294,813 2,292,000 955,000 3,247,000
54,400 24,500 11,500 36,558 55,550 26,676 7,500 53,200 50,000 37,100	AVERY INTL. CORP. AVON PRODS INC BALDWIN & LYONS INC CL B BANC ONE CORP BANK BOSTON CORP BANK NEW ENGLAND CORP BANK OF NY CO. INC. BANKERS TRUST NY CORP. BANKERS TRUST NY CORP. BANKERS TRUST NY CORP. BANKERS TRUST NY CORP. BUB-TOTAL	ALGER NWNB NWNB LIEBER INTERNAL MANAGED FUN LIEBER ALGER BEUTEL INTERNAL MANAGED FUN 140,300 SHARES	1,360,000 826,875 196,938 1,009,915 1,944,250 946,998 326,250 2,713,200 2,550,000 1,892,100 7,155,300
14,100 19,476 19,500 11,000 45,000 31,500 15,000 100,000 10,000	BARCLAYS PLC BARNETT BKS FLA BARRY WRIGHT CORP BEARINGS INC BECTON DICKINSON CO BELL CANADA ENTERPRISES I BENCH CRAFT INC BENEFICIAL CORP. BENEFICIAL CORP. SUB-TOTAL	F.L.A. LIEBER NWNB BMI NWNB LIEBER BEUTEL LIEBER 110,000 SHARES	523,463 720,612 365,625 459,250 2,868,750 996,188 202,500 5,737,500 573,750 6,311,250
8,000 65,500 25,000 10,200 50,000 8,750 5,500	BERKLINE CORP. BEST PRODUCTS BINDLEY WESTN INDS INC BK. OF NEW HAMP. CORP. BLACK & DECKER MFG CO BOATMEN'S BANCSHARES BOATMEN'S BANCSHARES SUB-TOTAL	LIEBER NWNB LIEBER RMA LIEBER NWNB 14,250 SHARES	100,000 695,938 290,625 267,750 1,162,500 336,875 211,750 548,625
22,100	BOEING COMPANY	NWNB	1,035,938

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
19,400 33,700	BOEING COMPANY BOEING COMPANY SUB-TOTAL	RMA \$ INTERNAL MANAGED FUN 75,200 SHARES	909,375 1,579,688 3,525,000
40,000 14,600 30,000	BOISE CASCADE CORP BOISE CASCADE CORP BOISE CASCADE CORP SUB-TOTAL	ALLIANCE F.L.A. IAI 84,600 SHARES	2,910,000 1,062,150 2,182,500 6,154,650
5,000 16,500 30,000 22,700 90,000 89,200 15,000 13,900 16,000 26,600	BORDEN INC. BOWATER INC. BRISTOL-MYERS CO. BRITISH PETROLEUM BROWNING FERRIS INDS INC BRUNSWICK CORP. BUILDERS TRANSPORT INC. BURLINGTON NORTHERN INC. BURLINGTON NORTHERN INC. SUB-TOTAL	ALGER RMA IAI RMA IAI ALGER LIEBER F.L.A. IDS INTERNAL MANAGED FUN 56,500 SHARES	300,000 643,500 1,492,500 1,702,500 2,553,750 2,140,800 330,000 1,150,225 1,324,000 2,201,150 4,675,375
20,000 42,900 43,500 6,100 3,000	CADILLAC FAIRVIEW LTD CALGON CARBON CORP CANNON GROUP INC CAPITAL CITIES/ABC INC. CAPITAL CITIES/ABC INC. SUB-TOTAL	LIEBER RMA NWNB ALGER IAI 9,100 SHARES	490,354 1,335,263 212,063 2,333,250 1,147,500 3,480,750
55,000 160,000 25,000 27,300 50,500 12,500 50,700 29,500 35,500	CARTER HAWLEY HALE STORE CASTLE & COOKE INC CBS INCORPORATED CENTEL CORP. CENTERIOR ENERGY CORP CENTERRE BANCORP CENTRAL & SO WEST CORP. CETUS CORP CETUS CORP SUB-TOTAL	BMI BMI BMI INTERNAL MANAGED FUN NWNB LIEBER INTERNAL MANAGED FUN ALGER F.L.A. 65,000 SHARES	3,458,125 3,800,000 4,387,500 1,805,213 871,125 482,813 1,590,713 859,188 1,033,938 1,893,125
16,300 66,000	CHAMPION INTL. CHAMPION INTL. SUB-TOTAL	F.L.A. HELLMAN 82,300 SHARES	592,913 2,400,750 2,993,663
8,000 46,300	CHASE MANHATTAN CORP. CHASE MANHATTAN CORP. SUB-TOTAL	NWNB INTERNAL MANAGED FUN 54,300 SHARES	330,000 1,909,875 2,239,875

NO. OF SHARES	SECURITY	ADVISOR		MARKET VALUE
26,000 55,000 14,900 38,500	CHAUS BERNARD INC CHEMICAL NEW YORK CORP CHEMICAL NEW YORK CORP CHEMICAL NEW YORK CORP SUB-TOTAL	NWNB BEUTEL NWNB INTERNAL MANAGED F 108,400 SHARES	\$ FUN	318,500 2,310,000 625,800 1,617,000 4,552,800
44,500 54,500 29,250 55,000 10,900 53,550	CHEROKEE GROUP CHI-CHIS INC CHIEF AUTO SYSTEMS CHRYSLER CORP. CHRYSLER CORP. CHRYSLER CORP. SUB-TOTAL	ALGER NWNB LIEBER ALLIANCE RMA INTERNAL MANAGED F 119,450 SHARES	FUN	845,500 401,938 446,063 1,876,875 371,963 1,827,394 4,076,231
11,500 67,700 71,900	CHUBB CORPORATION CHURCHS FRIED CHICKEN CHURCHS FRIED CHICKEN SUB-TOTAL	LIEBER NWNB RMA 139,600 SHARES		707,250 677,000 719,000 1,396,000
13,100 9,200 34,100	CIGNA CORPORATION CITICORP CITICORP SUB-TOTAL	NWNB NWNB INTERNAL MANAGED F 43,300 SHARES	FUN	830,213 542,800 2,011,900 2,554,700
60,500 61,200 4,400 41,000 72,000	CMI CORP COASTAL CORP COCA COLA BOTTLING CO CO COCA COLA COMPANY COCA COLA COMPANY SUB-TOTAL	NWNB INTERNAL MANAGED F NWNB ALGER ALLIANCE 113,000 SHARES	FUN	219,313 2,126,700 152,900 1,824,500 3,204,000 5,028,500
11,500 15,000 15,000 10,000 175,000 9,300 48,050	COLEMAN CO. INC. COLONIAL LIFE & ACC INS C COMBUSTION ENGINEERING COMMERCE UN CORP COMMERCIAL CREDIT CO. COMMONWEALTH EDISON CO. SUB-TOTAL	NWNB LIEBER IAI LIEBER BMI NWNB INTERNAL MANAGED F 57,350 SHARES	FUN	422,625 375,000 562,500 303,750 4,550,000 322,013 1,663,731 1,985,744
100,000 53,500	COMMUNICATIONS SATELLITE COMMUNICATIONS SATELLITE SUB-TOTAL	BEUTEL INTERNAL MANAGED F 153,500 SHARES	FUN	2,837,500 1,518,063 4,355,563
35,000 32,900 10,000	COMMUNITY PSYCHIATRIC CEN COMPAQ COMPUTER CORP COMPUTER HORIZONS CORP	BMI ALGER LIEBER		1,439,375 1,542,188 123,750

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
82,500 17,200 24,600	COMPUTER PRODS INC COMPUTER SCIENCES CORP. COMPUTER SCIENCES CORP. SUB-TOTAL	NWNB \$ IAI RMA 41,800 SHARES	304,219 969,650 1,386,825 2,356,475
56,000 64,000 52,700 76,000	COMPUTER VISION CORP. CONAGRA INC. CONSOLIDATED RAIL CORP CONSOLIDATED RAIL CORP SUB-TOTAL	RMA IDS ALGER ALLIANCE 128,700 SHARES	840,000 2,024,000 1,758,863 2,536,500 4,295,363
31,100 55,000	CONTEL CORP CONTEL CORP SUB-TOTAL	NWNB INTERNAL MANAGED FUN 86,100 SHARES	987,425 1,746,250 2,733,675
115,000 105,400 27,000	CONTROL DATA CORP. CPC INTL. INC. CPC INTL. INC. SUB-TOTAL	BMI F.L.A. HELLMAN 132,400 SHARES	3,291,875 5,744,300 1,471,500 7,215,800
105,000 23,000 33,900 27,500 30,000	CPT CORP. CRAFTMATIC CONTOUR INDS. CRAY RESEARCH INC CRAY RESEARCH INC CRAY RESEARCH INC SUB-TOTAL	NWNB LIEBER ALGER ALLIANCE HELLMAN 91,400 SHARES	367,500 109,250 3,445,088 2,794,688 3,048,750 9,288,525
1,000 9,000 27,500 30,500 55,000	CROWN CRAFTS INC CRYSTAL BRANDS INC CSX CORPORATION CSX CORPORATION CSX CORPORATION SUB-TOTAL	LIEBER NWNB F.L.A. NWNB INTERNAL MANAGED FUN 113,000 SHARES	58,500 193,500 959,063 1,063,688 1,918,125 3,940,875
10,000 12,700 15,000 80,000 3,500 33,000 15,000 56,300 4,900 40,900	CTS CORP CUBIC CORP CULLUM COS INC DAMON CORP. DATA GENERAL CORP. DATA SCOPE CORP DATAPRODUCTS CORP DAYTON-HUDSON CORP. DAYTON-HUDSON CORP. SUB-TOTAL	NWNB NWNB LIEBER ALGER LIEBER RMA LIEBER NWNB NWNB INTERNAL MANAGED FUN 45,800 SHARES	253,750 257,175 470,625 1,630,000 588,000 1,018,875 551,250 633,375 248,063 2,070,563 2,318,625
95,000	DEERE & COMPANY	BEUTEL	2,695,625

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
11,300	DEERE & COMPANY SUB-TOTAL	NWNB 106,300 SHARES	\$ 320,638 3,016,263
12,400 33,900 10,000 60,000 25,800 36,000 6,500 51,000 24,000 30,000 6,800	DESOTO INC DETROIT EDISON CO DICEON ELECTRONICS INC DIEBOLD INC. DIGITAL EQUIPMENT CORP. DIGITAL EQUIPMENT CORP. SUB-TOTAL	NWNB NWNB LIEBER BMI ALGER ALLIANCE F.L.A. HELLMAN IDS IAI RMA 180,100 SHARES	491,350 550,875 375,000 3,285,000 4,227,975 5,899,500 1,065,188 8,357,625 3,933,000 4,916,250 1,114,350 29,513,888
79,000 35,000 10,000	DISNEY WALT CORP DISNEY WALT CORP DISNEY WALT CORP SUB-TOTAL	ALLIANCE IDS LIEBER 124,000 SHARES	5,707,750 2,528,750 722,500 8,959,000
42,100 33,000 40,800 35,000 60,000	DOW CHEMICAL COMPANY DOW CHEMICAL COMPANY DOW CHEMICAL COMPANY DOW CHEMICAL COMPANY DOW CHEMICAL COMPANY SUB-TOTAL	ALGER ALLIANCE F.L.A. IDS IAI 210,900 SHARES	3,625,863 2,842,125 3,513,900 3,014,375 5,167,500 18,163,763
60,000 39,000 41,100 37,700 48,000 20,000	DRESSER INDUSTRIES DSC COMMUNICATIONS CORP DU PONT EI DENEMOURS DUKE POWER CO. NC DUN & BRADSTREET COS INC DUN & BRADSTREET COS INC SUB-TOTAL	IDS INTERNAL MANAGED FUN F.L.A. INTERNAL MANAGED FUN IDS IAI 68,000 SHARES	1,875,000 297,375 4,932,000 1,682,363 3,036,000 1,265,000 4,301,000
45,000 15,000 30,000 13,000 34,200 22,000 15,500 18,000 15,700 42,600 39,000	DUQUESNE LT CO DYNATECH CORP E Z EM INC E.F. HUTTON GP. INC. EASTERN GAS & FUEL ASSN EASTMAN KODAK CO. EDISON BROS STORES INC EDUCATIONAL COMP. CORP. EL PASO ELEC CO ELECTRO BIOLOGY INC EMERSON ELECTRIC	NWNB LIEBER LIEBER NWNB IAI NWNB LIEBER NWNB ALLIANCE	540,000 457,500 435,000 495,625 931,950 1,894,750 569,625 236,250 266,900 197,025 4,231,500

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
8,300	EMERSON ELECTRIC SUB-TOTAL	IAI \$ 47,300 SHARES	900,550 5,132,050
4,500 35,000 10,300 6,800 25,000 14,500	EMHART CORP VA ENERGY FACTORS INC EXXON CORPORATION EXXON CORPORATION EXXON CORPORATION EXXON CORPORATION SUB-TOTAL	NWNB NWNB ALGER F.L.A. IDS RMA 56,600 SHARES	201,375 297,500 960,475 634,100 2,331,250 1,352,125 5,277,950
21,500 35,000 25,000	FARAH MANUFACTURING FARM FRESH INC FARM FRESH INC SUB-TOTAL	NWNB LIEBER NWNB 60,000 SHARES	338,625 411,250 293,750 705,000
39,000 28,100	FEDERAL EXPRESS CORP. FEDERAL EXPRESS CORP. SUB-TOTAL	HELLMAN INTERNAL MANAGED FUN 67,100 SHARES	2,622,750 1,889,725 4,512,475
55,000 40,000	FEDERAL NATL MORTGAGE ASS FEDERAL NATL MORTGAGE ASS SUB-TOTAL		2,138,125 1,555,000 3,693,125
34,100 13,200 10,000 75,100 15,000 15,000 10,000 93,000 25,000 52,900	FEDERAL PAPER BRD INC FEDERAL SIGNAL CORP. FEDERAL-MOGUL CORP FEDERATED GROUP INC FHP INTERNATIONAL CORP FIRST AM. CORP TENN. FIRST AMER BK CORP FIRST BANK SYSTEM FIRST BANK SYSTEM FIRST BANK SYSTEM SUB-TOTAL	RMA NWNB NWNB LIEBER LIEBER ALLIANCE IAI INTERNAL MANAGED FUN 170,900 SHARES	1,611,225 310,200 450,000 328,563 168,750 420,000 445,000 3,138,750 843,750 1,785,375 5,767,875
2,800 10,328 14,600 51,300	FIRST CHICAGO CORP FIRST EMPIRE ST CORP FIRST FIDELITY BANCORP FIRST INTERST BANCORP RTS FIRST INTERST. BANCORP FIRST INTERST. BANCORP SUB-TOTAL	NWNB LIEBER LIEBER BEUTEL INTERNAL MANAGED FUN 82,100 SHARES	622,450 260,400 444,104 21,900 3,065,175 1,840,300 4,905,475
8,000 12,900 12,000	FIRST JERSEY NAT'L. CO. FIRST REPUBLICBANK CORP FIRST SVGS. BANK FLORIDA	LIEBER NWNB LIEBER	444,000 299,925 471,000

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
20,000 5,400 10,800 10,000 65,000 58,500 5,800 19,200 50,000 50,500 40,000 25,000	FLORIDA FED. S & L FLORIDA ROCK & TANK LINES FLORIDA ROCK INDS. FLOWERS INDUSTRIES FLUOR CORP FMC CORP NEW FOOTE CONE & BELDING COMM FORD MOTOR CO. FORD MOTOR CO. FORD MOTOR CO. FORD MOTOR CO. FORD MOTOR CO. SUB-TOTAL	LIEBER NWNB IDS INTERNAL MANAGED FUN	<pre>\$ 295,000 63,450 278,100 271,250 1,145,625 2,010,938 320,450 1,900,800 4,950,000 4,999,500 3,960,000 2,475,000 18,285,300</pre>
37,000 4,700 19,300 97,000	FORMICA CORP FORT HOWARD PAPER CO. FPL GROUP INC. FPL GROUP INC. SUB-TOTAL	F.L.A. NWNB NWNB INTERNAL MANAGED FUN 116,300 SHARES	434,750 252,038 607,950 3,055,500 3,663,450
42,487 75,300 30,000	G & K SERVICES INC. GAF CORP GAF CORP SUB-TOTAL	LIEBER F.L.A. IAI 105,300 SHARES	786,010 4,009,725 1,597,500 5,607,225
79,000 20,000 11,250 10,000 41,300 38,500	GANNETT INC. GANTOS INC GATEWAY BK SOUTH NORWALK GENCORP GENENTECH INC GENENTECH INC SUB-TOTAL	ALLIANCE LIEBER BMI ALGER HELLMAN 79,800 SHARES	4,029,000 410,000 202,500 1,030,000 1,652,000 1,540,000 3,192,000
23,000 68,000 22,000 66,000 20,900	GENERAL DYNAMICS GENERAL ELECTRIC CO. GENERAL ELECTRIC CO. GENERAL ELECTRIC CO. GENERAL ELECTRIC CO. SUB-TOTAL	INTERNAL MANAGED FUN ALLIANCE IDS IAI RMA 176,900 SHARES	1,535,250 3,697,500 1,196,250 3,588,750 1,136,438 9,618,938
75,000 1,400 100,200	GENERAL INSTRUMENT CORP GENERAL INSTRUMENT CORP GENERAL INSTRUMENT CORP SUB-TOTAL	BMI F.L.A. RMA 176,600 SHARES	2,793,750 52,150 3,732,450 6,578,350
80,100 10,000	GENERAL MILLS INC. GENERAL MILLS INC.	F.L.A. IAI	4,455,563 556,250

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NO. OF SHARES	SECURITY	ADVISOR		MARKET VALUE
	SUB-TOTAL	90,100 SHARES		5,011,813
41,500 30,000 20,000 16,300 22,600	GENERAL MOTORS CORP. GENERAL MOTORS CORP. GENERAL MOTORS CORP. GENERAL MOTORS CORP. GENERAL MOTORS CORP. SUB-TOTAL	BEUTEL HELLMAN IDS NWNB INTERNAL MANAGED F 130,400 SHARES	\$ VUN	3,428,938 2,478,750 1,652,500 1,346,788 1,867,325 10,774,300
60,000 41,100	GENERAL RE CORP. GENERAL RE CORP. SUB-TOTAL	ALLIANCE HELLMAN 101,100 SHARES		3,255,000 2,229,675 5,484,675
17,200 212,000 59,600 50,400	GENERAL SIGNAL CORP. GENRAD INC. GEORGIA GULF CORP GEORGIA GULF CORP SUB-TOTAL	NWNB BEUTEL F.L.A. RMA 110,000 SHARES		847,100 2,676,500 2,279,700 1,927,800 4,207,500
23,300 22,000 7,100 21,800 33,000 28,000 37,700	GEORGIA PACIFIC CORP. GIANT FOODS INC GILLETTE COMPANY GLAXO HLDGS PLC GODFREY COMPANY GOODRICH (B.F.) GOODRICH (B.F.) SUB-TOTAL	F.L.A. LIEBER F.L.A. RMA LIEBER HELLMAN RMA 65,700 SHARES		1,022,288 737,000 270,688 580,425 1,097,250 1,438,500 1,936,838 3,375,338
26,700 59,400 62,000 6,000 17,800 18,500 43,875	GOODY PRODS INC GR. WESTERN FIN'L GREAT NORTHN NEKOOSA CORP GREYHOUND CORP. GRUMMAN CORP. GTE CORP. GTE CORP. SUB-TOTAL	LIEBER RMA ALLIANCE NWNB NWNB INTERNAL MANAGED F 62,375 SHARES	run	570,713 1,210,275 2,604,000 244,500 456,125 712,250 1,689,188 2,401,438
•	GULF & WESTERN INDUS. HANDLEMAN CO. HARPER GROUP HARTMARX CORP HARTMARX CORP SUB-TOTAL	ALLIANCE NWNB LIEBER LIEBER NWNB 24,400 SHARES		3,825,000 290,000 149,063 466,000 244,650 710,650
47,300 54,500 75,000	HASBRO INC. HECHINGER CO CL B CV HEEKIN CAN INC	RMA RMA BMI		1,176,588 1,226,250 1,987,500

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
32,500 12,500 48,700 40,000 11,300 125,000 10,712 45,200 28,000 200,000 160,000 146,000	HERCULES INC. HERITAGE ENTERTAINMENT IN HEWLETT PACKARD CO. HIMONT INC HITACHI LTD HOLIDAY CORP HOLMES D.H. & CO. HOME DEPOT INC. HOME FED SVGS & LN ASSN HOME GROUP INC HOME GROUP INC SUB-TOTAL	HELLMAN LIEBER F.L.A. IDS RMA BMI LIEBER RMA LIEBER BEUTEL BMI HELLMAN 506,000 SHARES	<pre>\$ 2,055,625 103,125 2,976,788 1,780,000 930,838 3,046,875 224,952 1,525,500 294,000 3,950,000 3,160,000 2,883,500 9,993,500</pre>
7,400 2,500 25,900	HONDA MOTORS NEW HONEYWELL INC. HONEYWELL INC. SUB-TOTAL	RMA NWNB INTERNAL MANAGED FUN 28,400 SHARES	834,350 206,250 2,136,750 2,343,000
25,000 134,100 4,100 50,900	HORN & HARDART CO HOSPITAL CORP. OF AMER. HOSPITAL CORP. OF AMER. HOSPITAL CORP. OF AMER. SUB-TOTAL	NWNB BEUTEL NWNB INTERNAL MANAGED FUN 189,100 SHARES	309,375 6,218,888 190,138 2,360,488 8,769,513
60,000 31,700	HOUSEHOLD INTL. HOUSEHOLD INTL. SUB-TOTAL	BMI INTERNAL MANAGED FUN 91,700 SHARES	3,180,000 1,680,100 4,860,100
21,500 47,700	HOUSTON INDUSTRIES INC. HOUSTON INDUSTRIES INC. SUB-TOTAL	NWNB INTERNAL MANAGED FUN 69,200 SHARES	714,875 1,586,025 2,300,900
24,000 58,300 32,900 78,700	HOWARD SVGS BK LIVINGSTON HUFFMAN KOOS INC HUMANA INC. HUMANA INC. SUB-TOTAL	LIEBER BMI NWNB INTERNAL MANAGED FUN 111,600 SHARES	519,000 480,975 847,175 2,026,525 2,873,700
60,000 9,600 7,500 53,100 28,250 26,500 68,000 99,500	HUNT J.B. ILLINOIS POWER CORP INDIANA NATL CORP INLAND STEEL IND. INC. INSILCO CORP. INTEGRATED DEVICE TECH. INTEL CORP. INTEL CORP.	IDS NWNB LIEBER ALGER NWNB RMA ALGER ALLIANCE	1,425,000 258,000 294,375 1,393,875 663,875 354,438 2,992,000 4,378,000

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
	SUB-TOTAL	167,500 SHARES	7,370,000
18,100 53,900 43,700 26,400 4,600 16,100 25,300 29,000 51,200 55,000 18,000 15,000 6,300 22,200 31,600	INTERCO INTERGRAPH CORP. INTERLEAF INC INTL MINERALS & CHEM. INTL ALUMINUM CORP. INTL. BUSINESS MACHINES INTL. BUSINESS MACHINES	NWNB RMA ALGER F.L.A. LIEBER ALGER ALLIANCE BEUTEL F.L.A. HELLMAN IDS IAI LIEBER NWNB RMA 269,700 SHARES	821,288 1,212,750 693,738 1,102,200 93,150 2,616,250 4,111,250 4,712,500 8,320,000 8,937,500 2,925,000 2,437,500 1,023,750 3,607,500 5,135,000 43,826,250
33,200 50,000	INTL. PAPER CO. INTL. PAPER CO. SUB-TOTAL	F.L.A. IDS 83,200 SHARES	1,610,200 2,425,000 4,035,200
85,000 30,000	ITT CORP ITT CORP SUB-TOTAL	BEUTEL HELLMAN 115,000 SHARES	4,993,750 1,762,500 6,756,250
	IU INTL CORP JAMES RIV CORP VA JEFFERSON BANKSHRS. VA. JEFFERSON PILOT CORP. JOHNSON & JOHNSON JOHNSON CONTROLS K MART CORPORATION K MART CORPORATION K MART CORPORATION SUB-TOTAL	LIEBER IAI LIEBER NWNB RMA NWNB BEUTEL LIEBER NWNB 135,750 SHARES	462,500 502,500 132,750 230,400 1,855,875 514,750 4,436,250 633,750 665,438 5,735,438
1,700 53,500 43,000 20,000	KELLWOOD CO. KERR MCGEE CORP. KIDDE INC. KOPPERS INC KRAFT INC. KRAFT INC. SUB-TOTAL	BMI INTERNAL MANAGED FUN NWNB RMA ALLIANCE IDS 63,000 SHARES	1,470,000 2,109,450 82,025 2,160,063 2,585,375 1,202,500 3,787,875
27,332	LADD FURNITURE	LIEBER	560,306

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
75,000 17,400 8,000 22,000 60,400 25,100 96,600	LAIDLAW TRANSP. CL B LEE ENTERPRISES INC LIBERTY FINL GP. INC LILLY ELI & CO LILLY ELI & CO WT LIN BROADCAST. CORP. LIN BROADCAST. CORP. SUB-TOTAL	IDS \$ LIEBER LIEBER IDS F.L.A. ALGER ALLIANCE 121,700 SHARES	1,115,625 474,150 336,000 2,065,250 2,166,850 1,044,788 4,020,975 5,065,763
4,500 20,400 57,800 80,000	LINCOLN NATL CORP IND LITTON INDS INC. LIZ CLAIBORNE INC. LIZ CLAIBORNE INC. SUB-TOTAL	NWNB INTERNAL MANAGED FUN ALGER IDS 137,800 SHARES	230,625 1,864,050 2,008,550 2,780,000 4,788,550
82,500 34,400	LOCKHEED AIRCRAFT CORP LOCKHEED AIRCRAFT CORP SUB-TOTAL	BEUTEL INTERNAL MANAGED FUN 116,900 SHARES	4,259,063 1,775,900 6,034,963
16,400 19,500 154,800 100,000 64,000	LOEWS CORP LOMAS & NETTLETON FINL LONG ISLAND LTG CO LOTUS LOTUS SUB-TOTAL	F.L.A. LIEBER INTERNAL MANAGED FUN IDS RMA 164,000 SHARES	1,074,200 548,438 1,431,900 2,925,000 1,872,000 4,797,000
75,700 76,000 76,300	LOUISIANA PAC. CORP. LSI LOGIC CORP. LSI LOGIC CORP. SUB-TOTAL	RMA HELLMAN RMA 152,300 SHARES	2,356,163 779,000 782,075 1,561,075
100,000 35,000 34,600 41,200 14,000 14,400	LUCKY STORES LYPHOMED INC M.D.C. HOLDINGS,INC MACMILLAN BLOEDEL LTD MACMILLAN BLOEDEL LTD MACMILLAN BLOEDEL LTD SUB-TOTAL	BMI ALGER NWNB ALGER F.L.A. RMA 69,600 SHARES	3,037,500 848,750 410,875 829,150 281,750 289,800 1,400,700
10,000 51,000 27,500	MANITOWOC INC MANPOWER INC MANPOWER INC SUB-TOTAL	NWNB IAI RMA 78,500 SHARES	205,000 2,792,250 1,505,625 4,297,875
48,900 52,000	MARION LABS INC MARION LABS INC SUB-TOTAL	ALGER IDS 100,900 SHARES	1,760,400 1,872,000 3,632,400

NO. OF SHARES	SECURITY	ADVISOR		MARKET VALUE
63,000 60,000 75,000	MARRIOTT CORP. MARRIOTT CORP. MARRIOTT CORP. SUB-TOTAL	ALGER IDS IAI 198,000 SHARES	\$	2,464,875 2,347,500 2,934,375 7,746,750
3,000 38,600 60,000 13,600 6,500 117,200 23,900 145,692 27,200 2,000 70,000 9,000	MARSH & MCCLENNAN MARTIN MARIETTA MASCO CORP MATERIAL SCIENCES CORP MATSUSHITA EL. IND. MATTEL INC MAXICARE HEALTH PLANS MAXUS ENERGY CORP MAY DEPT. STORES CO. MAYFAIR SUPER MKTS INC MCA INC. SUB-TOTAL	LIEBER INTERNAL MANAGED FU IDS LIEBER RMA ALGER NWNB BMI LIEBER LIEBER ALLIANCE LIEBER 79,000 SHARES	Ν	186,375 1,785,250 2,122,500 302,600 996,125 1,201,300 340,575 1,985,054 1,292,000 71,500 3,395,000 436,500 3,831,500
86,700 40,000 21,000 45,000	MCDERMOTT INTL INC MCDONALDS CORP. MCDONALDS CORP. MCDONALDS CORP. SUB-TOTAL	RMA ALLIANCE IDS IAI 106,000 SHARES		2,590,163 2,120,000 1,113,000 2,385,000 5,618,000
200,000 46,300 306,400	MCI COMMUNICATION MCI COMMUNICATION MCI COMMUNICATION SUB-TOTAL	ALLIANCE NWNB INTERNAL MANAGED FU 552,700 SHARES	N	1,500,000 347,250 2,298,000 4,145,250
39,100 18,000 35,000 18,500 32,700	MCORP MEDITRUST MEDTRONIC INC. MELLON BANK CORP MELLON BANK CORP SUB-TOTAL	NWNB NWNB IAI NWNB INTERNAL MANAGED FU 51,200 SHARES	N	361,675 344,250 3,272,500 659,063 1,164,938 1,824,000
13,000 22,600 27,000 12,000 20,000 10,000	MERCHANTS NATL CORP MERCK & COMPANY INC. MERCK & COMPANY INC. MERCK & COMPANY INC. MERCK & COMPANY INC. MERCK & COMPANY INC. SUB-TOTAL	LIEBER ALGER ALLIANCE HELLMAN IAI RMA 91,600 SHARES		351,000 3,853,300 4,603,500 2,046,000 3,410,000 1,705,000 15,617,800
4,723 27,500	MERIDIAN BNCP PFD 2.50 METRO MOBILE CTS INC	LIEBER RMA		213,716 721,875

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
39,000 15,000 25,000 121,000 24,000 15,000	MFRS. HANOVER CORP. MICHIGAN NATL CORP MICROSEMI CORP MIDDLE SOUTH UTILS INC MILLER HERMAN INC. MILLER HERMAN INC. SUB-TOTAL	INTERNAL MANAGED FUN \$ LIEBER LIEBER INTERNAL MANAGED FUN LIEBER NWNB 39,000 SHARES	1,740,375 626,250 234,375 1,285,625 555,000 346,875 901,875
30,000 65,000	MILLIPORE CORP. MILLIPORE CORP. SUB-TOTAL	ALGER BMI 95,000 SHARES	1,203,750 2,608,125 3,811,875
36,000 30,000 40,000 40,100	MINNESOTA MNG & MFG CO MINSTAR INC MOBIL CORPORATION MOBIL CORPORATION SUB-TOTAL	IDS IAI IDS INTERNAL MANAGED FUN 80,100 SHARES	2,551,500 720,000 2,035,000 2,040,088 4,075,088
23,500 17,700 256 4,700 52,700 59,000 33,000 60,000	MONSANTO CO. MOORE CORP LTD MORGAN J P & COMPANY INC. MORRISON KNUDSEN CORP MOTOROLA INC. MOTOROLA INC. MOTOROLA INC. SUB-TOTAL	INTERNAL MANAGED FUN NWNB IDS NWNB ALGER ALLIANCE HELLMAN IDS 204,700 SHARES	1,965,188 451,350 12,256 230,888 2,852,388 3,193,375 1,786,125 3,247,500 11,079,388
25,000 21,500 28,125 18,500 66,950	NATIONAL DISTILLERS & CHE NATL PRESTO NATL. COMPUTER SYSTEMS NATL. MEDICAL ENTER. INC. NATL. MEDICAL ENTER. INC. SUB-TOTAL	NWNB LIEBER	1,696,875 704,125 390,234 506,438 1,832,756 2,339,194
270,000 7,800 71,300 47,800 100,000 25,000	NATL. SEMICONDUCTOR NCH CORP NCNB CORP. NCR CORP. NETWORK SYSTEMS CORP. NETWORK SYSTEMS CORP. SUB-TOTAL	BEUTEL NWNB INTERNAL MANAGED FUN ALGER IDS NWNB 125,000 SHARES	3,510,000 265,200 1,844,888 3,561,100 987,500 246,875 1,234,375
25,500 46,500 130,000 16,400	NEW YORK ST ELEC & GAS C NEW YORK TIMES CO NEWMONT MINING NEWPORT CORP	NWNB ALGER BEUTEL NWNB	701,250 2,185,500 6,126,250 192,700

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
33,600 102,900	NIAGARA MOHAWK PWR CORP NIAGARA MOHAWK PWR CORP SUB-TOTAL	NWNB \$ INTERNAL MANAGED FUN 136,500 SHARES	558,600 1,710,713 2,269,313
52,900 17,400 6,400 100,000 12,000	NO. STS. POWER CO. MINN. NORFOLK SOUTHERN CORP NORTON CO NOVO INDS-ADR NOVO INDS-ADR SUB-TOTAL	INTERNAL MANAGED FUN NWNB BMI NWNB 112,000 SHARES	1,666,350574,200296,0003,950,000474,0004,424,000
20,500 22,000 30,000 37,700 105,900 8,750 60,000 50,000 43,100 23,100 67,000 43,700 17,900 48,600 10,000 210,600 10,000 12,000 77,200 80,000 4,400	NOWSCO WELL SERVICE LTD NUMERCA FINL CORP NWA INC. OCCIDENTAL PETE CORP OCEAN DRILLING & EXPL CO OLD REP INTL CORP OUTBOARD MARINE CORP OVERSEAS SHIPHOLDING GROU OWENS CORNING FIBERGLAS (OXFORD INDS INC PACIFIC GAS & ELEC. CO. PACIFIC TELESIS GP. PACIFICARE HEALTH SYS I PACIFICORP PACO PHARMACEUTICAL SVCS PAN AM CORPORATION PANHANDLE EASTN CORP PAR TECHNOLOGY PAYLESS CASHWAYS PENN CENT CORP	LIEBER LIEBER IDS ALGER INTERNAL MANAGED FUN LIEBER RMA IDS ALGER NWNB INTERNAL MANAGED FUN NWNB INTERNAL MANAGED FUN NWNB INTERNAL MANAGED FUN LIEBER ALGER LIEBER LIEBER ALGER BEUTEL NWNB	312,625 445,500 2,100,000 1,418,463 2,832,825 267,969 2,017,500 1,250,000 1,002,075 381,150 1,348,375 1,158,050 196,900 1,743,525 168,750 1,131,975 312,500 144,000 1,794,900 4,630,000 254,650
56,400 46,800	SUB-TOTAL PENNEY J.C. INC. PENNEY J.C. INC. SUB-TOTAL	84,400 SHARES ALGER RMA 103,200 SHARES	4,884,650 2,961,000 2,457,000 5,418,000
41,600 65,900 80,500 34,200 36,000 10,000 99,400 55,000 20,000	PEOPLES ENERGY CORP PEPSICO INCORPORATED PERCEPTION TECHNOLOGY COR PERKIN ELMER PERMIAN BASIN RTY TR PFIZER INCORPORATED PHILADELPHIA ELEC. CO. PHILIPS N.V. PIC N SAVE CORP.	NWNB ALGER BMI RMA NWNB LIEBER INTERNAL MANAGED FUN RMA IAI	847,600 2,372,400 1,348,375 1,081,575 265,500 720,000 2,099,825 1,375,000 487,500

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
14,000 2,254 14,900 9,000 30,000 100,000	PICCADILLY CAFETERIAS INC PIEDMONT AVIATION PIONEER HI-BRED INTL. PLANTRONICS INC POLAROID CORP. POLAROID CORP. SUB-TOTAL	NWNB \$ LIEBER NWNB LIEBER ALGER BMI 130,000 SHARES	287,000 156,090 543,850 200,250 1,151,250 3,837,500 4,988,750
40,000 11,900 33,200	PRESTON CORP PRICE CO PRICE CO SUB-TOTAL	NWNB F.L.A. RMA 45,100 SHARES	670,000 534,013 1,489,850 2,023,863
41,900 25,300 60,000 24,000 26,900 34,700 44,700 18,000 10,100	PRIME MEDICAL SERVICES IN PRIME MTR INNS INC PROGRESSIVE CORP OHIO PROTECTIVE LIFE CORP PROVIDENT LIFE & ACC INS PUGET SOUND PWR & LT CO QUAKER OATS CO QUAKER ST OIL REFNG CORP QUAKER ST OIL REFNG CORP SUB-TOTAL	NWNB RMA ALLIANCE LIEBER NWNB F.L.A. LIEBER NWNB 28,100 SHARES	183,313 1,053,113 1,800,000 333,000 544,725 694,000 2,324,400 398,250 223,463 621,713
16,000 16,700 14,900 23,100	QUANTUM CORP. RAYTHEON COMPANY RAYTHEON COMPANY RAYTHEON COMPANY SUB-TOTAL	NWNB ALGER RMA INTERNAL MANAGED FUN 54,700 SHARES	258,000 1,260,850 1,124,950 1,744,050 4,129,850
50,000 31,500 30,000 46,800 5,500 68,400 9,300 37,000	REEBOK INTERNATIONAL LTD RENT A CENTER REUTERS HOLDINGS PLC RHODES INC ROCHESTER TEL CORP ROCKWELL INTL CORP ROHR INDS INC ROHR INDS INC SUB-TOTAL	IDS LIEBER IDS NWNB NWNB INTERNAL MANAGED FUN NWNB RMA 46,300 SHARES	2,106,250 685,125 2,478,750 807,300 243,375 1,846,800 274,350 1,091,500 1,365,850
128,000 20,000 16,000 16,700 37,700 7,000 76,000	ROPER CORP ROSES STORES INC ROSES STORES INC. ROYAL DUTCH PET. GLDRS. RUBBERMAID INC RUSS BERRIE & CO. RUSSELL CORP	BMI LIEBER LIEBER INTERNAL MANAGED FUN IAI LIEBER IDS	3,168,000 370,000 300,000 2,204,400 1,126,288 259,875 1,292,000

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
11,900 50,000 45,150	RYDER SYSTEMS INC. RYDER SYSTEMS INC. RYDER SYSTEMS INC. SUB-TOTAL	F.L.A. \$ IAI INTERNAL MANAGED FUN 107,050 SHARES	431,375 1,812,500 1,636,688 3,880,563
27,000 45,400	SALOMON INC SALOMON INC SUB-TOTAL	NWNB INTERNAL MANAGED FUN 72,400 SHARES	887,625 1,492,525 2,380,150
20,000 22,100 6,000 36,000 34,000 189,600 11,300	SANFORD CORP ILL SAVANNAH FOODS & INDS INC SCHEIB EARL INC SCHLUMBERGER LTD SCOTTYS INC SEA CONTAINERS LTD. SUB-TOTAL	LIEBER IDS NWNB BEUTEL	545,000 596,700 103,500 1,647,000 467,500 4,171,200 248,600 4,419,800
10,000 70,000 8,900 26,000	SEALED POWER CORP SEARS ROEBUCK & COMPANY SEARS ROEBUCK & COMPANY SEARS ROEBUCK & COMPANY SUB-TOTAL	NWNB BEUTEL F.L.A. NWNB 104,900 SHARES	360,000 3,543,750 450,563 1,316,250 5,310,563
17,500 47,100	SECURITY PACIFIC CORP. SECURITY PACIFIC CORP. SUB-TOTAL	NWNB INTERNAL MANAGED FUN 64,600 SHARES	735,000 1,978,200 2,713,200
300,000 36,600 25,500 9,000 52,400	SENSORMATIC ELECTRS CORP SERVICE MERCHANDISE SEVEN OAKS INTL INC SHARED MED. SYSTEMS CORP. SHARED MED. SYSTEMS CORP. SUB-TOTAL	BMI NWNB NWNB INTERNAL MANAGED FUN 61,400 SHARES	3,525,000 288,225 309,188 252,000 1,467,200 1,719,200
17,000 5,000 14,900	SIGMA ALDRICH SILICONE SYSTEMS INC. SINGER CO. SMITHKLINE-BECKMAN CORP. SNYDER OIL PARTNERS SONAT INC. SUB-TOTAL	IAI NWNB LIEBER NWNB NWNB INTERNAL MANAGED FUN 66,500 SHARES	2,670,000 488,813 641,750 298,750 149,000 347,500 1,963,375 2,310,875
58,600 102,000 64,900	SOUTHERN CALIF. EDISON SOUTHERN CO SOUTHERN CO	ALGER IAI INTERNAL MANAGED FUN	1,801,950 2,473,500 1,573,825

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
	SUB-TOTAL	166,900 SHARES	4,047,325
5,000 40,000 33,000	SOUTHINGTON SVGS BK CONN SOUTHLAND CORP. SOUTHLAND CORP. SUB-TOTAL	LIEBER \$ BEUTEL INTERNAL MANAGED FUN 73,000 SHARES	77,500 2,680,000 2,211,000 4,891,000
18,200 46,800 13,600 9,400 40,400 44,000	SOUTHMARK CORP. SOUTHWESTERN BELL CORP. SPRINGS INDS INC SQUARE D CO SQUIBB CORP. SQUIBB CORP. SUB-TOTAL	NWNB INTERNAL MANAGED FUN LIEBER NWNB ALGER HELLMAN 84,400 SHARES	170,625 1,819,350 453,900 500,550 3,504,700 3,817,000 7,321,700
25,000 22,000 11,500 6,060 7,000 5,000 20,800	ST. PAUL COS. INC. STALEY CONTL INC STANDARD BRANDS PAINT CO STANDARD OIL CO WTS STATEWIDE BANCORP NJ STERLING DRUG INC STERLING DRUG INC SUB-TOTAL	HELLMAN NWNB NWNB RMA LIEBER NWNB RMA 25,800 SHARES	1,143,750 627,000 271,688 0 166,250 286,875 1,193,400 1,480,275
16,000 10,000 20,500 11,025 55,000 37,500 30,200 11,600 19,000 75,000 23,100 1,413 24,000 40,000 44,000 60,000 31,600	STEWART INFORMATION SVCS STOP & SHOP INC. STORAGE EQUITIES INC STRAWBRIDGE & CLOTHIER E STUDENT LN MARKETING ASSN SUBARU OF AMERICA INC. SUNAIR ELEC. INC. SUNAIR ELEC. INC. SUNDSTRAND CORP SUNRISE MED INC. SUPER FOOD SVCS INC SUPERMARKETS GEN CORP SUSQUEHANNA BNKSHRS. INC. SYNTEX CORPORATION SYNTEX CORPORATION SYNTEX CORPORATION SYNTEX CORPORATION SUB-TOTAL	ALLIANCE NWNB INTERNAL MANAGED FUN LIEBER RMA BMI LIEBER LIEBER	308,000 686,250 294,688 496,125 4,365,625 450,000 1,981,875 72,500 1,085,375 693,750 609,263 55,814 510,000 1,720,000 1,892,000 2,580,000 1,358,800 7,550,800
60,000 43,200 72,500 35,400	TANDEM COMPUTERS INC TCBY ENTERPRISES INC. TELE COMMUNICATIONS INC TELE COMMUNICATIONS INC	IAI RMA ALGER F.L.A.	1,897,500 702,000 2,555,625 1,247,850

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
45,000	TELE COMMUNICATIONS INC SUB-TOTAL	IDS \$ 152,900 SHARES	1,586,250 5,389,725
153,100 8,500 96,000 52,400	TELERATE INC TENNECO INC. TEXACO INC. TEXACO INC. SUB-TOTAL	F.L.A. NWNB BEUTEL INTERNAL MANAGED FUN 148,400 SHARES	6,659,850 417,563 3,888,000 2,122,200 6,010,200
11,900 35,000	TEXAS AIR CORP TEXAS AIR CORP SUB-TOTAL	F.L.A. HELLMAN 46,900 SHARES	443,275 1,303,750 1,747,025
17,100 20,000 50,900	TEXAS INSTRUMENTS TEXAS UTILITIES CO. TEXAS UTILITIES CO. SUB-TOTAL	RMA NWNB INTERNAL MANAGED FUN 70,900 SHARES	1,040,963 645,000 1,641,525 2,286,525
10,000 24,460 60,000 50,000 29,000 90,000 49,400 93,750 68,000 46,000	TEXTRON INC THOMAS INDS INC TIE COMMUNICATIONS TJX COS INC TODD SHIPYARDS CORP TONKA TOYS R US TOYS R US TOYS R US TOYS R US SUB-TOTAL	NWNB NWNB BMI NWNB BMI ALGER ALLIANCE HELLMAN IDS 257,150 SHARES	303,750 480,028 262,500 1,237,500 286,375 1,473,750 1,790,750 3,398,438 2,465,000 1,667,500 9,321,688
63,700 0 14,500 37,300 20,300 20,300 60,000 48,000 60,000	TRANS WORLD AIRLINES TRANS WORLD AIRLINES INC TRANSAMERICA CORP TRANSCANADA PIPELINES LTD TRANSCO ENERGY CO. TRAVELERS CORP. TRIANGLE INDS INC TRIBUNE COMPANY TRIBUNE COMPANY SUB-TOTAL	ALGER HELLMAN NWNB NWNB NWNB BMI ALGER IAI 108,000 SHARES	1,887,113 18 587,250 494,225 738,413 913,500 2,160,000 1,932,000 2,415,000 4,347,000
62,400 12,600	TRW INC. TRW INC. SUB-TOTAL	ALGER NWNB 75,000 SHARES	3,283,800 663,075 3,946,875
20,000 70,600	TURNER EQUITY INVS INC TW SERVICES INC	NWNB RMA	150,000 1,332,575

NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
26,700 19,500 32,200	U.S. HEALTHCARE INC. U.S. WEST CORP U.S. WEST CORP SUB-TOTAL	NWNB NWNB INTERNAL MANAGED FUN 51,700 SHARES	\$ 383,813 1,026,188 1,694,525 2,720,713
84,000 1,700 67,500 30,000 1,700	ULTIMATE CORP. UNILEVER N V UNION CAMP CORP. UNISYS CORP. UNISYS CORP. SUB-TOTAL	ALGER LIEBER IDS IDS INTERNAL MANAGED FUN 31,700 SHARES	2,247,000 563,550 2,801,250 3,697,500 209,525 3,907,025
14,200 122,225 8,000 33,600 27,500 61,800	UNITED BKS COLO INC UNITED CABLE TV CORP. UNITED SAVERS BANCORP INC UNITED TECHNOLOGIES CORP. UNITED TELECOM. INC. UNITED TELECOM. INC. SUB-TOTAL	NWNB ALLIANCE LIEBER INTERNAL MANAGED FUN NWNB INTERNAL MANAGED FUN 89,300 SHARES	262,700 3,957,034 202,000 1,755,600 752,813 1,691,775 2,444,588
14,000 80,000 56,000	UNITRODE CORP UNOCAL CORP. UNOCAL CORP. SUB-TOTAL	LIEBER ALLIANCE INTERNAL MANAGED FUN 136,000 SHARES	194,250 3,170,000 2,219,000 5,389,000
115,000 61,500 6,000 27,500 52,000	UNUM CORP UPJOHN COMPANY US AIR GROUP US AIR GROUP US AIR GROUP SUB-TOTAL	BEUTEL ALGER LIEBER RMA INTERNAL MANAGED FUN 85,500 SHARES	2,745,625 2,782,875 284,250 1,302,813 2,463,500 4,050,563
14,900 45,000 15,000 13,900 12,000 350,000 8,820 60,600 60,000	US FIDELITY & GUAR. CO. USG CORP HOLDING CO. USX CORP USX CORP. UTAH POWER & LIGHT CO. I VALERO ENERGY CORP VERMONT FIN'L SVCS WAL-MART STORES INC. WAL-MART STORES INC. SUB-TOTAL	NWNB INTERNAL MANAGED FUN IAI IAI NWNB BMI LIEBER ALLIANCE IDS 120,600 SHARES	564,338 1,541,250 791,250 437,850 286,500 4,068,750 264,600 4,098,075 4,057,500 8,155,575
39,000 35,000 25,600	WARNER COMMUNICATIONS WARNER COMMUNICATIONS WARNER COMMUNICATIONS SUB-TOTAL	HELLMAN IDS RMA 99,600 SHARES	1,360,125 1,220,625 892,800 3,473,550

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NO. OF SHARES	SECURITY	ADVISOR	MARKET VALUE
17,200 23,400 89,400 52,000 110,000	WASHINGTON POST B WASHINGTON WTR PWR CO WASTE MANAGEMENT WASTE MANAGEMENT WASTE MANAGEMENT SUB-TOTAL	ALLIANCE NWNB ALGER ALLIANCE IDS 251,400 SHARES	\$ 3,784,000 637,650 3,508,950 2,041,000 4,317,500 9,867,450
6,600 15,000 5,000 17,000 57,600 119,000	WAUSAU PAPER MLS CO WEBB DEL E CORP WEIS MARKETS INC. WELLS FARGO MTG & EQUITY WENDYS INTL INC WENDYS INTL INC SUB-TOTAL	LIEBER NWNB NWNB NWNB RMA 176,600 SHARES	198,000 307,500 163,125 314,500 561,600 1,160,250 1,721,850
22,000 45,000 50,000	WESTINGHOUSE ELEC. CO. WEYERHEUSER CO. WEYERHEUSER CO. SUB-TOTAL	IDS IDS IAI 95,000 SHARES	1,399,750 2,261,250 2,512,500 4,773,750
11,200 506,250 32,000 170,000 35,700 80,000 35,000	WHITEHALL CORP. WICKES COS INC NEW WILEY JOHN + SON WILLIAMS COMPANIES INC WOOLWORTH F W CO WOOLWORTH F W CO WOOLWORTH F W CO SUB-TOTAL	LIEBER HELLMAN BMI BEUTEL ALGER BEUTEL IDS 150,700 SHARES	225,400 2,214,844 1,352,000 5,843,750 1,901,025 4,260,000 1,863,750 8,024,775
34,700 65,000 2,700	WYMAN-GORDON CO. XEROX CORP XEROX CORP SUB-TOTAL	NWNB BEUTEL NWNB 67,700 SHARES	615,925 5,021,250 208,575 5,229,825
50,000 54,300	YELLOW FREIGHT SYSTEM YELLOW FREIGHT SYSTEM SUB-TOTAL	IDS INTERNAL MANAGED FUN 104,300 SHARES	1,725,000 1,873,350 3,598,350
82,400	ZENITH ELECTRONICS CORP	RMA	2,121,800
TOTAL EQ	UITY PORTFOLIO	\$ 1	L,144,761,593

BEUTEL GOODMAN CAPITAL MANAGEMENT

PAR VALUE	SECURITY	MATURITY	COUPON		MARKET VALUE
15,000,000	NATIONAL MED ENTERPRISES	12/04/2004	0.000%	\$	4,800,000
TOTAL BON	D PORTFOLIO			\$	4,800,000
	FORSTMANN LEFF A	SSOCIATES			
700,000 3,400,000 2,355,000	GENERAL INSTR CORP CV PRICE CO CV U.S.A. TREASURY NOTE	06/15/2012 02/28/2012 05/15/1996		\$	812,000 3,604,000 2,200,441
TOTAL BON	D PORTFOLIO			\$	6,616,441
	HELLMAN JORDAN M	ANAGEMENT			
17,200,000	U.S.A. TREASURY NOTE	06/30/1989	7.375%	\$	17,167,664
TOTAL BON	D PORTFOLIO			\$	17,167,664
	INVESTMENT ADVI	SORS INC.			
1,000,000	SUN MICROSYSTEMS CV	02/15/2012	5.250%	\$	1,165,000
TOTAL BON	D PORTFOLIO			\$	1,165,000
	WADDELL &	REED			
2,200,000 1,450,000 990,000 120,000 990,000 1,023,000 1,100,000 TOTAL BON	ANITEC IMAGE TECH. CV LYPHOMED INC CV MAXTOR CORP CV MUNSINGWEAR INC. CV PRICE CO CV PRIME COMPUTER CV SEAGATE TECHNOLOGY CV D PORTFOLIO	03/15/2012 03/15/2012 03/01/2012 10/01/2006 02/28/2012 02/01/2012 05/01/2012	5.875% 5.500% 5.750% 8.000% 5.500% 5.750% 6.750%	\$	1,936,000 1,326,750 727,650 82,800 1,049,400 1,130,415 1,135,750 7,388,765
TOTAL BON	D PORTFOLIO			\$	7,388,

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND INVESTMENT ADVISORS ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR				MARKET
VALUE	SECURITY	MATURITY	COUPON	VALUE
965 , 250	COUPON TREAS RCPT	08/15/1988	0.000% \$	891,852
769 , 625	COUPON TREAS RCPT	08/15/1988	0.000%	711,103
427,500	COUPON TREAS RCPT	08/15/1988	0.000%	394,997
1,992,848	FED HM LN POOL # 490001	10/01/1996	8.500%	1,855,840
1,817,576	FED HOME LN PC # 200059	11/01/2001	8.500%	1,692,618
2,000,000	FEDERAL HOME LOAN BANK	03/25/1991	7.750%	1,969,380
1,525,429	FORD MTR CR CO	09/01/1991	7.166%	1,489,200
50,000	INDIANA & MICH ELEC	02/01/1988	3.875%	49,041
1,000,000	MORGAN GTY TR CO NEW YORK	12/01/1987	9.610%	985,880
1,000,000	PRIVATE EPT FDG CORP	10/30/1987	11.750%	1,012,950
831,000	PRIVATE EXPT FDG CORP	11/01/1990	12.350%	856,154
3,500,000	TREASURY INVT GROWTH RCPT	05/15/1988	0.000%	3,295,110
3,000,000	U.S.A. TREASURY NOTE	11/15/1992	10.500%	3,305,610
4,000,000	U.S.A. TREASURY NOTE	05/15/1993	10.125%	4,355,000
3,000,000	U.S.A. TREASURY NOTE	11/15/1990	13.000%	3,444,360
2,000,000	U.S.A. TREASURY NOTE	07/15/1993	7.250%	1,912,500
3,000,000	U.S.A. TREASURY NOTE	10/15/1993	7.125%	2,840,610
3,000,000	U.S.A. TREASURY NOTE	01/15/1994	7.000%	2,815,320
4,700,000	U.S.A. TREASURY NOTES	11/15/1996	7.250%	4,344,539

TOTAL BOND PORTFOLIO

\$

38,222,064

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND LEHMAN MANAGEMENT INC. ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
8,500,000	AMOCO CORP	08/01/2007	7.875%	\$ 7,406,985
4,000,000	ATLANTIC RICHFIELD CO	10/15/1989	9.750%	4,103,640
3,000,000	CAROLINA PWR & LT CO	07/01/1996	8.125%	2,800,380
5,394,136	COLLATERALIZED MTG OBLIG	04/01/2009	5.000%	4,423,192
9,097,876	FED HM LN PC # 186428	05/01/2003	6.500%	7,687,705
2,772,491	FED HM LN POOL # 140532	10/01/1996	4.500%	2,408,463
172,672	FED HM LN POOL # 182064	06/01/2011	9.000%	165,225
1,880,232	FEDERAL NATL MTG ASSN STR		0.000%	961,174
1,030,120	FNMA POOL # 031027	07/01/2016	9.000%	988,267
1,870,486	FNMA POOL # 031122	08/01/2016	9.000%	1,794,469
794,363	FNMA POOL # 031561	08/01/2016	9.000%	762,080
192,442	FNMA POOL # 043229	05/01/2017	8.500%	179,569
464,110	FNMA POOL # 043671	03/01/2017	8.500%	433,066
4,092,037	FNMA POOL # 046957	05/01/2017	8.500%	3,818,362
367,789	FNMA POOL # 047022	05/01/2017	8.500%	343,191
1,024,312	FNMA POOL # 047246	05/01/2017	8.500%	955,806
2,048,781	FNMA POOL # 047802	05/01/2017	8.500%	1,911,759
1,000,000	FORD MTR CR CO	04/01/1997	8.000%	916,310
2,000,000	GENERAL MTRS ACCEP CORP	06/01/1990	8.375%	1,999,860
1,960,505	GNMA POOL # 005671	01/15/2005	7.250%	1,763,807
1,474,382	GNMA POOL # 009004	12/15/2005	7.250%	1,326,457
1,500,000	HELLER FINANCIAL INC	04/01/1993	7.750%	1,429,965
2,000,000	HOME OWNERS SVGS & LN ASS	02/15/1992	7.500%	1,911,800
5,000,000	IBM CR CORP	06/15/1990	9.625%	5,101,600
3,000,000	KNIGHT RIDDER INC	01/15/1992	7.250%	2,860,590
2,000,000	PHH GROUP INC	01/01/1997	8.000%	1,829,820
4,000,000	STANDARD OIL CO OHIO	09/15/1993	8.000%	3,830,720
2,325,000	TEXACO CAP INC	01/15/2000	10.750%	1,987,875
3,825,000	U.S.A. TREASURY NOTE	09/30/1988	11.375%	4,011,469
5,000,000	U.S.A. TREASURY NOTE	12/31/1988	10.625%	5,235,950
4,800,000	U.S.A. TREASURY NOTE	11/15/1990	9.625%	5,042,976
2,500,000	U.S.A. TREASURY NOTE	03/31/1989	11.250%	2,655,475
2,000,000	U.S.A. TREASURY NOTE	08/15/1990	9.875%	2,111,880
5,600,000	U.S.A. TREASURY NOTE	12/31/1989	8.375%	5,694,472
15,200,000	U.S.A. TREASURY NOTE	02/15/1996	8.875%	15,613,288
2,000,000	U.S.A. TREASURY NOTE	05/15/1991	8.125%	2,013,740
21,225,000	U.S.A. TREASURY NOTE	05/15/1996	7.375%	19,832,003
9,600,000	U.S.A. TREASURY NOTE	06/30/1990	7.250%	9,470,976
9,200,000	U.S.A. TREASURY NOTE	06/30/1989	9.625%	9,562,204
13,800,000	U.S.A. TREASURY NOTE	05/15/1989	6.875%	13,662,000 1,893,740
2,000,000 13,600,000	U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	10/15/1993 11/15/1991	7.125% 6.500%	12,881,784
17,000,000	U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	03/31/1991	6.750%	16,378,480
17,500,000	U.S.A. TREASURY NOTE	05/15/1990	7.875%	17,565,625
2,000,000	U.S.A. TREASURY NOTES	11/15/1996	7.250%	1,848,740
2,000,000	XEROX CR CORP	07/01/1990	8.250%	1,998,800
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TOTAL BOND PORTFOLIO

\$

213,575,739

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND MORGAN STANLEY ASSET ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
10,000,000	CFC-1 GRANTOR TR	05/15/1992	8.300% \$	10,050,000
36,248,092	FED HM LN POOL # 170170	06/01/2016	9.000%	34,684,712
14,426,514	FED HM LN POOL # 274081	07/01/2016	7.500%	12,767,465
9,821,601	FED HM LN POOL # 278917	09/01/2016	8.000%	8,906,915
9,641,883	GMAC 1987-C GRANTOR TR	05/15/1992	8.350%	9,629,831
22,000,000	U.S.A. TREASURY NOTE	03/31/1991	6.750%	21,195,680
30,000,000	U.S.A. TREASURY NOTE	05/15/1990	7.875%	30,112,500
35,000,000	U.S.A. TREASURY NOTE	06/30/1989	7.375%	34,934,200
20,000,000	U.S.A. TREASURY NOTE	06/30/1991	7.875%	19,956,200

TOTAL BOND PORTFOLIO

\$ 182,237,503

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND MILLER ANDERSON ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
	SECURITY BARCLAYS AMERICAN CORPORA BURLINGTON NORTH RR CO CATERPILLAR INC CHRYSLER CORP CHRYSLER FIN CORP CHRYSLER FIN CORP CHRYSLER FINL CORP CITYPLACE CTR EAST CORP COMERICA INC DOMINION BANKSHARES CORP EATON CORP FED HM LN PC # 259082 FED HM LN PC # 259082 FED HM LN POL # 140086 FED HM LN POL # 140086 FED HM LN POOL # 183218 FED HM LN POOL # 183218 FED HM LN POOL # 183218 FED HM LN POOL # 252993 FED HM LN POOL # 252993 FED HM LN POOL # 255850 FED HM LN POOL # 255850 FED HM LN POOL # 256079 FHLMC TBA FIDELITY FED SVGS & LN AS FIRST NATL TENN CORP FLETCHER CHALLENGER FNMA POOL # 019720 FNMA POOL # 019720 FNMA POOL # 042770 FNMA POOL # 042770 FNMA POOL # 042770 FNMA POOL # 042770 FNMA POOL # 045962 FNMA POOL # 044997 FNMA POOL # 046279 FNMA POOL # 048559 FNMA POOL # 048599 FNMA POOL # 048999 FNMA POOL # 048999 FNMA POOL # 048999 FNMA POOL # 049077 FNMA POOL # 049077	MATURITY 08/15/1998 10/01/2006 11/01/2001 03/01/1997 11/01/1999 04/15/1999 04/15/1999 04/15/1999 06/15/1999 08/15/2006 04/01/2009 08/01/2008 04/01/2008 04/01/2008 04/01/2008 04/01/2008 04/01/2008 04/01/2008 04/01/2015 07/01/2003 04/01/2015 07/01/2003 04/01/2017 04/15/1997 11/01/2010 10/01/2008 01/01/2002 06/01/2002	7.875% \$ 9.250% 8.000% 13.000% 12.750%	
100,000 2,512,013 155,902 484,932 516,931 1,000,896 4,438,641 4,991,820 2,367,191 578,744	FNMA POOL # 049454 FNMA POOL # 049462 FNMA POOL # 049496 FNMA POOL # 049502 FNMA POOL # 051341 FNMA POOL # 051509 FNMA POOL # 30417 FORTUNE MORTGAGE CORP GEM SVGS ASSN GNMA POOL # 23465	06/01/2002 06/01/2002 06/01/2002 06/01/2002 06/01/2002 09/01/2006 05/01/2003 03/01/2000 09/15/2008	8.000% 8.000% 8.000% 8.000% 8.000% 7.750% 7.943% 8.088% 9.000%	90,812 2,281,209 141,578 440,376 469,435 908,934 3,989,229 4,800,533 2,188,918 555,594

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND MILLER ANDERSON ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
$1, 300, 000 \\ 1, 400, 000 \\ 531, 493 \\ 2, 650, 470 \\ 2, 400, 000 \\ 2, 600, 000 \\ 5, 200, 000 \\ 1, 300, 000 \\ 1, 300, 000 \\ 1, 400, 000 \\ 2, 000, 000 \\ 2, 000, 000 \\ 2, 200, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 400, 000 \\ 1, 102, 958 \\ 13, 600, 000 \\ 14, 800, 000 \\ 7, 755, 000 \\ 4, 600, 000 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	GREAT WESTERN FINL CORP HARTFORD NATL CORP HILL FINL PART CERT HOUSEHOLD BANK ICI NORTH AMER INC IMPERIAL SAVINGS & LN ASS IMPERIAL SVGS & LN MARINE MIDLAND BKS INC MARRIOTT CORP MIDWEST FEDERAL SAVINGS & MNC FINL INC PHILADELPHIA SVG FD SOC PHILLIPS PETE CO ROOSEVELT FED SVGS & LN A SANTA BARBARA SVGS & LN A SECURITY PACIFIC CORP SOUTHTRUST CORP SOUTHTRUST CORP SOVRAN FINL CORP TALMAN FED SVGS & LN TRI CITY PPTY INV CORP U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	07/01/1997 06/01/1999 01/01/1989 05/01/2002 11/15/2006 08/01/1996 08/15/2011 03/01/1997 06/15/2007 04/01/2011 05/01/1997 11/15/1994 03/15/1995 03/01/1992 12/31/1996 05/15/1999 06/01/1999 06/01/1999 06/15/1999 03/01/2008 03/01/2008 03/01/2008 03/01/2008 03/01/2008 03/01/2008 03/01/2009 05/15/1992 11/15/1993	9.500% 9.850% 5.825% 7.809% 8.875% 8.500% 8.625% 9.375% 8.810% 9.375% 12.000% 8.063% 7.375% 8.000% 9.750% 9.950% 9.750% 9.950% 9.750% 9.165% 0.000% 13.750% 9.125% 8.875% 7.250%	1,291,875 1,418,816 490,791 2,354,280 2,267,784 2,463,058 4,937,556 1,205,698 1,405,250 3,658,656 1,190,256 2,293,980 895,375 2,088,218 1,268,960 1,413,860 1,414,000 1,003,020 7,885,019 3,453,575 16,643,000 16,488,117 15,355,000 7,965,858 4,398,750
29,975,000 2,300,000 9,525,564 3,834,714	U.S.A. TREASURY NOTE UNION OIL OF CALIFORNIA UNITED SAVINGS HOUSTON VIRGINIA BEACH FED SAVING	10/15/1993 03/01/1994 05/01/2008 02/01/2000	7.125% 9.750% 9.041% 8.247%	28,382,428 2,288,523 9,874,867 3,590,136

TOTAL BOND PORTFOLIO

\$

231,319,804

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND PEREGRINE CAPITAL ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
VALUE 3,000,000 2,000,000 2,060,000 1,800,000 1,000,000 2,000,000 2,000,000 2,000,000 2,000,000 1,000,000 1,500,000 1,500,000 1,50,496 1,045,832 849,540 2,898,804 3,662,478 833,477 2,024,002 1,016,089 1,064,360 995,078 440,697 508,391 1,050,884 1,052,124 1,450,519 4,000,000 3,000,000 3,000,000 2,000,000 525,174	ASSOCIATES CORP NORTH AME BANK OF BOSTON CORP BARCLAYS AMERICAN CORPORA BRITISH COLUMBIA HYDRO & CANADIAN NATL RY CO CHASE MANHATTAN CORP CHICAGO ILL O'HARE INTL A CHRYSLER CORP CITICORP COLUMBIA ALA INDL DEV BRD CONTINENTAL ILLINOIS CORP FED HM LN PC # 140186 FED HM LN PC # 287482 FED HM LN PC # 287482 FED HM LN POOL # 161099 FED HM LN POOL # 161099 FED HM LN POOL # 188354 FED HM LN POOL # 188844 FED HM LN POOL # 188689 FED HM LN POOL # 188844 FED HM LN POOL # 210229 FED HM LN POOL # 210388 FED HM LN POOL # 210388 FED HM LN POOL # 210572 FED HM LN POOL # 210572 FED HM LN POOL # 210589 FED HM LN POOL # 210589 FED HM LN POOL # 210589 FED HM LN POOL # 21338 FEDERAL HOME LOAN MORTGAG FIRST CHICAGO CORP GANNETT INC GEORGIA ST MUNI ELEC GNMA II POOL # 115563	06/01/1996 02/15/1998 04/15/1991 07/15/2004 11/01/1995 01/01/2016 11/15/2015 10/15/1993 11/01/2015 10/15/1993 11/01/2017 01/01/2017 01/01/2010 12/01/2010 12/01/2001 10/01/2000 09/01/2020 10/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2000 12/01/2018 06/01/1998 02/01/1996 01/01/2018	8.375 7.250 7.875 14.500 9.700 7.188 8.750 12.000 8.250 9.250 9.125 7.000 7.000 7.000 7.000 7.000 12.500 6.000 7.500 8.000 7.500 11.500 11.500 11.000 11.250 11.000 11.250 11.875 1.875 8.500	<pre>\$ 2,979,120 1,950,000 1,805,672 1,891,296 1,004,090 2,917,500 2,078,800 2,165,000 3,030,000 1,102,020 1,443,960 1,002,964 904,645 734,852 3,094,473 3,021,545 737,627 1,835,487 899,238 1,017,468 454,187 519,505 1,074,529 1,006,735 1,269,204 4,435,000 2,875,020 2,032,320 710,828 576,379</pre>
1,078,730 204,207 346,085 546,717	GNMA II POOL # 121529 GNMA POOL # 050936 GNMA POOL # 051011 GNMA POOL # 052820 CNMA POOL # 054838	02/21/2015 10/15/2011 02/15/2012 07/15/2012	15.000%	1,173,777 234,583 397,566 628,041
194,459 653,661 506,203 597,284 929,886 1,665,305 18,616 1,725,000 311,939 3,000,000 3,000,000	GNMA POOL # 054838 GNMA POOL # 068121 GNMA POOL # 115029 GNMA POOL # 122005 GNMA POOL # 128012 GNMA POOL # 142763 GNMA POOL # 167686 GRAND RIVER DAM AUTH OKLA GUARANTEED MTG CORP II GUARDIAN SAV & LN HERTZ CORP	09/15/2012 05/15/2013 12/15/2014 01/15/2015 03/15/2015 11/15/2015 01/15/2001 06/01/2011 10/01/1994 03/28/1995 03/01/1996	12.000% 13.000% 12.500% 13.000% 11.500% 10.750% 6.000%	223,385 711,255 561,253 655,520 1,031,011 1,790,703 19,267 1,301,478 346,252 2,955,000 2,975,850

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MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND PEREGRINE CAPITAL ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
3,000,000 1,000,000 2,000,000 2,000,000 3,000,000 1,200,000 1,200,000 1,850,000 2,500,000 1,000,000 3,000,000 1,000,000 1,000,000 1,000,000 1,000,000 2,800,000	HOUSEHOLD FIN CORP ILLINOIS ST INTERMOUNTAIN PWR AGY UTA INTERMOUNTAIN PWR AGY UTA INTERMOUNTAIN PWR AGY UTA ITT FINL CORP LINCOLN NATIONAL CORP. LOUISIANA ST NORTH CAROLINA EASTN MUN OCCIDENTAL PETE CORP PENNSYLVANIA ST HIGHER ED PHILLIPS PETE CO PUERTO RICO COMWLTH SANTA BARBARA SVGS & LN A SOUTH CAROLINA ST. PUB SV XEROX CR CORP	02/15/1993 09/01/1999 07/01/2019 07/01/2023 07/01/2016 08/15/1994 09/15/1992 08/01/2002 01/01/2021 03/15/1991 07/01/2008 08/01/1995 07/01/2002 12/31/1996 07/01/2021 09/15/1991	8.400% 9.200% 9.000% 7.000% 12.750% 13.875% 7.000% 7.250% 10.000% 9.250% 7.500% 8.063% 7.125% 8.000% 7.300% 16.000%	<pre>\$ 2,958,300 1,122,470 1,103,940 1,703,440 1,295,260 3,454,620 1,327,080 1,689,291 2,175,000 1,997,920 1,117,940 2,895,930 2,827,500 917,500 1,812,800 907,830 3,051,636</pre>

TOTAL BOND PORTFOLIO

\$

101,962,497

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND WESTERN ASSET MANAGEMENT ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
2,500,000 2,500,000 7,250,000 4,500,000 2,475,000 5,200,000 17,400,000 8,785,000 3,442,898 5,978,869 7,915,000 2,763,565 4,000,000 750,431 3,025,000 1,882,813 8,462,165	AMERICAN MED INTL CHASE MANHATTAN CORP CHEMICAL NEW YORK CORP CHRYSLER CORP CITICORP PERSON TO PERSON COMMONWEALTH EDISON DEERE & CO. DELTA AIRLINES INC FED HM LN POOL # 181257 FED HM LN POOL # 220013 FEDERAL FARM CREDIT BANK FEDERAL FARM CREDIT BANK FEDERAL HOME LN MTG CORP FEDERAL NATIONAL MTG. AS. FEDERAL NATIONAL MTG. AS. FEDERAL NATL MTG ASSN STR FEDERAL NATL MTG ASSN ST	07/15/1991 06/01/1990 06/15/1999 11/15/2015 03/01/1998 05/01/2016 11/15/2002 05/15/2016 01/01/2009 10/C1/2001 01/20/1993 12/31/2014 02/10/1996 03/01/2009 06/12/1995 11/08/2008 01/01/2006	8.750% 9.500% 8.000% 8.000% 8.750% 10.650% 10.250% 7.000% 6.500% 11.150% 6.000% 5.000%	2,518,750 7,210,270 4,871,250 2,311,972 4,976,816 15,660,522 8,111,191 3,122,261 5,754,661 8,553,107 2,768,705 4,775,000 686,171 3,407,844 1,569,795 6,663,955
14,005,282 3,558,866 4,310,891 13,858,593 33,624,490 998,465 998,758 998,660 998,487 998,608 499,309 998,543 1,996,907 2,995,132 998,767 3,994,253 1,999,532	FHA CITICORP #136 FHA CITICORP 1985-5 FNMA POOL # 000797 FNMA POOL # 007239 GNMA POOL # 152586 GNMA POOL # 189232 GNMA POOL # 189233 GNMA POOL # 189234 GNMA POOL # 189241 GNMA POOL # 190317 GNMA POOL # 194157 GNMA POOL # 194941 GNMA POOL # 200680 GNMA POOL # 200914 GNMA POOL # 204660 GNMA POOL # 205929 GNMA POOL # 208547	05/01/2023 12/01/2023 01/01/2023 08/01/2008 06/15/2016 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017 03/15/2017	7.430% 7.375% 7.250% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000% 8.000%	12,065,831 3,039,770 3,777,418 12,585,265 32,279,511 908,603 908,870 908,780 908,780 908,623 908,733 454,371 908,674 1,817,185 2,725,570 908,878 3,634,771 1,819,575
4,400,000 5,000,000 3,423,000 4,500,000 4,500,000 4,325,000 2,250,000 6,500,000 2,500,000 7,500,000 214,000 214,000 5,850,000	GREAT WESTERN FINL CORP IMPERIAL SVGS & LN LITTON INDS INC LOUISIANA PWR. & LT. CO. MANUFACTURERS HANOVER COR MCI COMMUNICATIONS MELLON BK N A OCCIDENTAL PETE CORP PENNSYLVANIA PWR & LT CO PENNSYLVANIA PWR & LT CO STANDARD OIL CO STANDARD OIL CO STUDENT LN MKT ASSOC	07/01/1997 08/15/2011 07/01/2005 11/01/2016	9.500% 8.000% 12.625% 10.375% 8.500% 10.000% 7.450%	4,372,500 4,747,650 3,935,115 2,747,623 3,958,110 3,762,750 2,077,583 6,857,500 2,861,400 8,322,150 158,728 141,045 5,316,188

MINNESOTA STATE BOARD OF INVESMENT POOLED BOND FUND WESTERN ASSET MANAGEMENT ALPHABETICAL BOND HOLDINGS JUNE 30,1987

PAR VALUE	SECURITY	MATURITY	COUPON	MARKET VALUE
5,500,000 800,000 4,400,000 2,900,000 5,500,000	SYSTEM ENERGY RESOURCES TEXAS UTIL ELEC CO U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE U.S.A. TREASURY NOTE	09/01/1996 04/01/2017 02/15/1991 05/15/1996 08/15/1989	10.500% 9.125% 7.375%	\$ 4,922,500 785,104 4,565,000 2,709,673 5,403,750
TOTAL BON	D PORTFOLIO			\$ 233,588,340

MINNESOTA STATE BOARD OF INVESMENT MINNESOTA VENTURE CAPITAL FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

NO. OF SHARES		ı	MARKET VALUE
3,196,406 2,500,000 10,000,000 3,750,000 25,375,000 15,715,890 7,500,000 8,642 7,482,246 1,661,250	ALLIED VENTURE PARTNERS CENTURY PTN III DSV PARTNERS IV G & K VENTURE PARTNERSHI K K R INVT. FD KKR INVT FUND II MATRIX PARTNERS II L.P. NORTHWEST VENTURE PARTNER SUMMIT VENTURE LTD PARTN SUPERIOR VENTURE PARTNERS	\$	3,176,067 2,744,038 10,261,880 3,540,101 25,375,000 15,715,890 7,618,792 7,932,943 8,202,801 1,614,996

TOTAL EQUITY PORTFOLIO

\$

86,182,508

MINNESOTA REAL ESTATE POOL ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

20,744	AETNA REAL EST. FUND	\$ 54,978,566
13,709	EQUIT. LIFE ASSUR. SOCIE	64,115,557
6,000	HEITMAN ADV. REALTY II	31,895,636
20,000	HEITMAN ADVISORY CORP. GR	19,808,892
2,000	HEITMAN ADVISORY III	10,000,000
10,438	PRUDENTIAL REAL EST FUND	58,564,175
19,783	SSB REAL ESTATE FD III	21,937,748
14,801	SSB REAL ESTATE FUND IV	15,592,150
1,800	TCW REALITY FUND IV	8,999,686
8,000	TCW REALTY FUND III	41,184,229
67,000,000	THE RREEF FUNDS USA III	69,266,007

TOTAL EQUITY PORTFOLIO

\$ 396,342,647

MINNESOTA RESOURCES FUND ALPHABETICAL EQUITY HOLDINGS JUNE 30,1987

16,771	AMGO I	\$ 4,407,400
2,156,240	AMGO II	5,385,000
804,534	APACHE CORP LTD I PART	804,534
22,285,466	APACHE CORP LTD II PART	22,170,450
30,000,000	APACHE CORP LTD III PART	\$ 30,000,000
TOTAL EQUITY	PORTFOLIO	62,767,384

MINNESOTA STATE BOARD OF INVESTMENT MANAGERS FEES FY87

ACTIVE EQUITY ACCOUNT*

Fred Alger	\$	-0-
Alliance Capital		970,175.60
Beutel Goodman		-0-
Forstmann-Leff Associates		202,986.81
Hellman Jordan		541,088.49
IDS Advisory		352,373.58
Investment Advisers		242,131.19
BMI Capital Corporation		605,370.54
Waddell & Reed		461,559.59
Lieber & Company		363,279.82
Peregrine Capital Management		242,456.60
	\$3	,981,422.22

PASSIVE EQUITY ACCOUNT

Wilshire

\$ 254,000.01

BOND MANAGERS ACCOUNT

Investment Advisers	\$	83,801.39
Lehman Management		470,193.62
Miller Anderson		483,990.27
Morgan Stanley		464,254.17
Peregrine Capital Management		223,172.30
Western Asset Management		353,984.81
	\$2	,079,396.56

* Active equity managers are compensated on a performance-based fee formula. Fees earned may range from zero to twice the manager's base fee, depending on the manager's performance relative to an established benchmark. (See page 82 in Part I of the Annual Report for a more complete description of this formula.)