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1990  
ANNUAL  
REPORT

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MINNESOTA STATE  
BOARD OF  
INVESTMENT

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*Pursuant to Mn Stat 11A.07*

*Volume 1 of 2 volumes*

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# **1990 ANNUAL REPORT**

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## **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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MEMBERS OF THE BOARD:  
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



EXECUTIVE DIRECTOR  
HOWARD J. BICKER

STATE OF MINNESOTA  
STATE BOARD OF INVESTMENT

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**The Minnesota State Board of Investment is pleased to submit its 1990 Annual Report.**

In general, fiscal year 1990 was a favorable period for institutional investors such as the Board. The stock market reached new record highs in May and June 1990. The bond market generated more modest returns as a result of on-going uncertainty about economic growth and inflation. Returns on financial assets easily exceeded the rate of inflation for the year.

**Several events 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 10.8% for fiscal year 1990.** Over the last five fiscal years the Basic Funds have generated a cumulative return of 92.1%, excluding alternative assets. Strong performance in the financial markets during recent years has been the primary factor in generating these favorable returns. (Refer to page 7.)
- **The Post Retirement Investment Fund generated earnings that will provide a life-time benefit increase of 5.1% for eligible retirees beginning January 1, 1991.** Over the last five years, benefit increases have been 6.7% on an annualized basis. (Refer to page 29.)
- **At the Board's request, a Task Force on Manager Retention was convened by the Board's Investment Advisory Council to review a variety of issues surrounding the Board's use of active stock and bond managers.** The Task Force endorsed the Board's existing policies concerning the mix of active and passive management and the use of customized benchmarks to evaluate individual managers. In addition, the Task Force recommended that the Board offset style bias among the active stock managers by modifying the characteristics of the index fund. (Refer to page 65.)

**On June 30, 1990, assets under management totaled \$16.3 billion.** This total is the aggregate 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 each fund 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,

A handwritten signature in cursive script that reads "Howard Bicker".

Howard J. Bicker  
Executive Director

## INVESTMENT ADVISORY COUNCIL

---

The Legislature has established a 17-member Investment Advisory Council to advise the Board and its staff on investment-related matters.

- The Board appoints ten members experienced in finance and investment. These members traditionally have come from the Minneapolis and St. Paul corporate investment community.
- The Commissioner of Finance and the Executive Directors of the three statewide retirement systems are permanent members of the Council.
- Two active employee representatives and one retiree representative are appointed to the Council by the Governor.

The Council has formed four committees organized around broad investment subjects relevant to the Board's decision-making: Asset Allocation, Equity Managers, Fixed Income Managers and Alternative Investments.

All proposed investment policies are reviewed by the appropriate Committee and the full Council before they are presented to the Board for action.

### Members of the Council (as of December 1990)

Henry H. Adams, Jr.	Executive Sec. & Investment Mgr., Mpls. Teachers Ret. Fund
John E. Bohan	Vice President, Pension Investments, The Pillsbury Co.
James R. Eckmann	Assistant Treasurer, Dayton Hudson Corporation
Elton Erdahl	Executive Director, Teachers Retirement Association
Paul L. Groschen	Executive Director, Minnesota State Retirement System
Kenneth F. Gudorf	Board Appointee
Peter Hutchinson	Commissioner, Minnesota Department of Finance
Vernell Jackels	Active Employee Representative
David B. Jeffery	Vice President and Resident Manager, Shearson Hamill
Malcolm W. McDonald**	Director & Corporate Secretary, Space Center, Inc.
Gary R. Norstrem	Treasurer, City of St. Paul
Joseph T. Rukavina	Active Employee Representative
Mary Most Vanek	Acting Executive Director, Public Employees Retirement Assoc.
Raymond B. Vecellio	Retiree Representative
Deborah Veverka	Manager, Pension Investments, Honeywell, Inc.
Jan Yeomans*	Director, Benefit Funds & Financial Markets, 3M Co.

\*Chair

\*\*Vice-Chair

### CONSULTANT

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Richards & Tierney, Inc. Chicago, Illinois

## **INVESTMENT BOARD STAFF**

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Howard Bicker	Executive Director
Beth Lehman	Assistant Executive Director
James E. Heidelberg	Assistant to the Executive Director

### **External Money Management**

Doug Gorence	Manager, External Portfolios
John Griebenow	Manager, Alternative Investments
James H. Lukens	Investment Analyst, Fixed Income
Michael J. Menssen	Investment Analyst, Equities
Mansco Perry III	Investment Analyst, Alternative Investments
Deborah F. Griebenow	Investment Analyst, Management Reporting

### **Internal Money Management - Stocks and Bonds**

Roger W. Henry	Manager, Internal Portfolios
A. Arthur Kaese	Senior Equity Analyst
N. Robert Barman	Senior Fixed Income Analyst
Arthur M. Blauzda	Senior Analyst, Shareholder Services
Harold L. Syverson	Security Trader

### **Internal Money Management - Cash Accounts**

Grant A. Feldman	Manager, Short-Term Accounts
John T. Kinne	Portfolio Manager, Short-Term

### **Administrative Staff**

L. Michael Schmitt	Administrative Director
Mable E. Patrick	Accounting Supervisor
Thomas L. Delmont	Accounting Officer, Intermediate
Nancy Wold	Accounting Officer
Kathy Sears	Computer Operator
Harriet Balian	Secretary to the Executive Director
Charlene Olson	Secretary, External Programs
Lin Nadeau	Secretary, Internal Programs
Lavern Jagg	Receptionist

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PART TWO of the Minnesota State Board of Investment's 1990 Annual Report contains financial statements, asset listings and accounting data.

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 *Minnesota Statutes*, Chapter 11A and Chapter 356A.

### **Prudent Person Rule**

The prudent person rule, as codified in *Minnesota Statutes* 11A.09, 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.” *Minnesota Statutes* 356A.04 contains similar codification of the prudent person rule applicable to the investment of pension fund assets.

### **Authorized Investments**

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.

### **Investment Policies**

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, asset allocation, investment management structure, and specific performance standards.

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 Trust Fund. The results of these studies guide the on-going management of these funds and will be updated periodically.

### **Report Format**

**This annual report is published in two separate volumes.** This volume, **Part One**, 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, **Part Two**, contains audited financial statements, asset listings and accounting data.



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# **FUNDS UNDER MANAGEMENT**

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**Basic Retirement Funds**

**Post Retirement Investment Fund**

**Supplemental Investment Fund**

**State Cash Accounts**

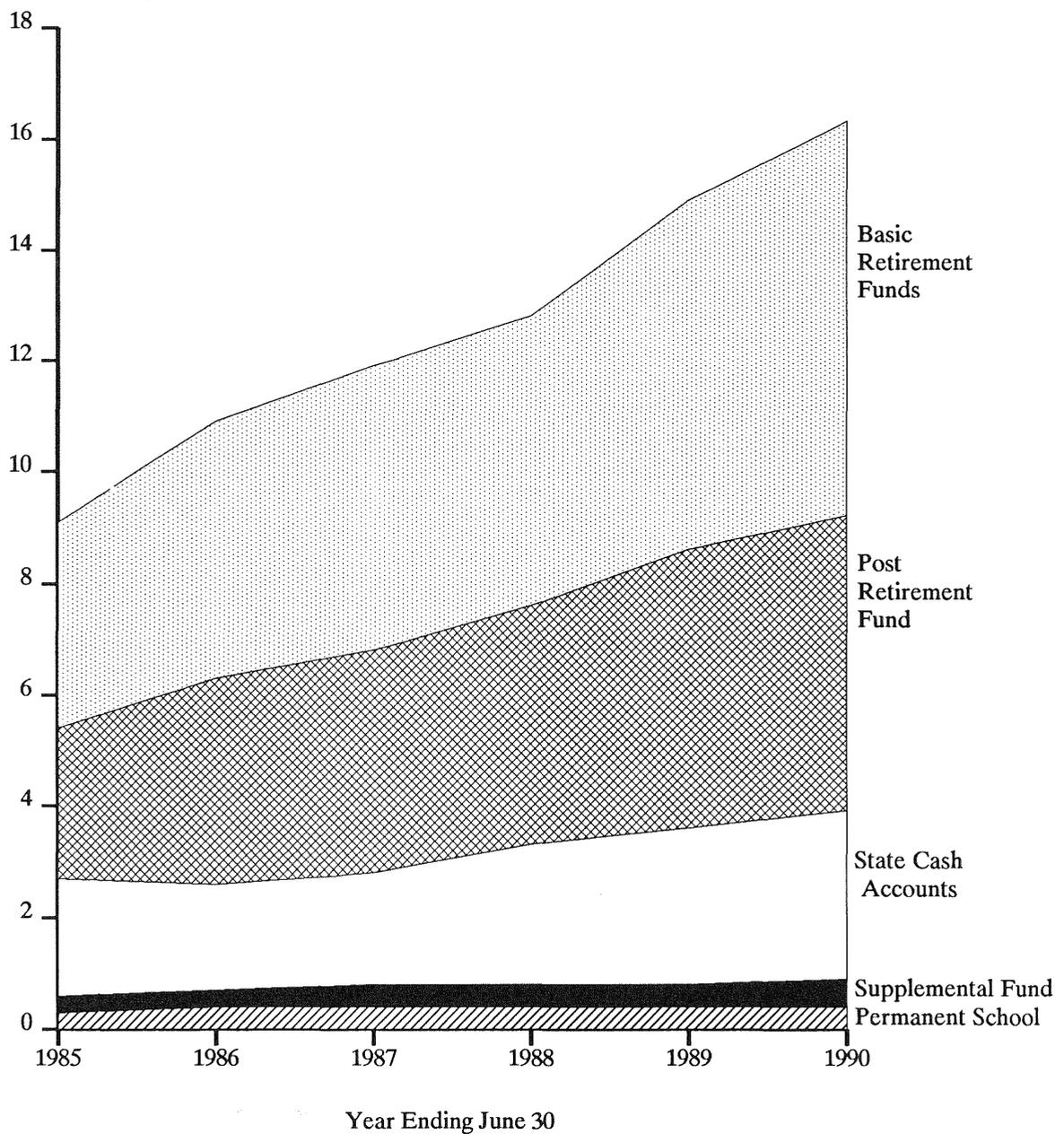
**Permanent School Trust Fund**

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# Growth in Assets

Fiscal Years 1986 - 1990

\$ BILLIONS



## FUNDS UNDER MANAGEMENT

---

**Market Value  
June 30, 1990**

### **Basic Retirement Funds**

**\$ 7.1 billion**

The Basic Retirement Funds contain the pension assets of the currently working participants in eight major statewide retirement plans:

• Teachers Retirement Fund	\$ 3,268 million
• Public Employees Retirement Fund	1,608 million
• State Employees Retirement Fund	1,408 million
• Public Employees Police and Fire Fund	595 million
• Highway Patrol Retirement Fund	105 million
• Correctional Employees Fund	69 million
• Police and Fire Consolidation Fund	43 million
• Judges Retirement Fund	3 million

### **Post Retirement Investment Fund**

**\$ 5.3 billion**

The Post Retirement Investment Fund is composed of the reserves for retirement benefits to be paid to retired employees. Permanent retirement benefit increases are permitted based on excess earnings from dividends, interest, and net realized capital gains.

### **Supplemental Investment Fund**

**\$ 0.5 billion**

The Supplemental Investment Fund includes the assets of the state deferred compensation plan, supplemental benefit arrangements, various retirement programs for local police and firefighters, and the unclassified employees of the state. Participants may choose among six separate accounts with different investment emphases designed to meet a wide range of investor needs and objectives.

• Income Share Account	stocks and bonds	\$ 245 million
• Growth Share Account	actively managed stocks	74 million
• Common Stock Index Account	passively managed stocks	10 million
• Bond Market Account	actively managed bonds	6 million
• Money Market Account	short-term securities	82 million
• Guaranteed Return Account	guaranteed investment contracts	60 million

### **State Cash Accounts**

**\$ 3.0 billion**

These accounts are the cash balances of state government funds, including the Invested Treasurers Cash Fund, transportation funds, and other miscellaneous cash accounts. All assets are invested in high quality, liquid short-term debt securities.

### **Permanent School Trust Fund**

**\$0.4 billion**

The Permanent School Trust Fund is a trust established for the benefit of Minnesota public schools.

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### **Total Assets**

**\$16.3 billion**



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# **BASIC RETIREMENT FUNDS**

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**Investment Objectives**

**Asset Allocation**

**Investment Management**

**Investment Performance**

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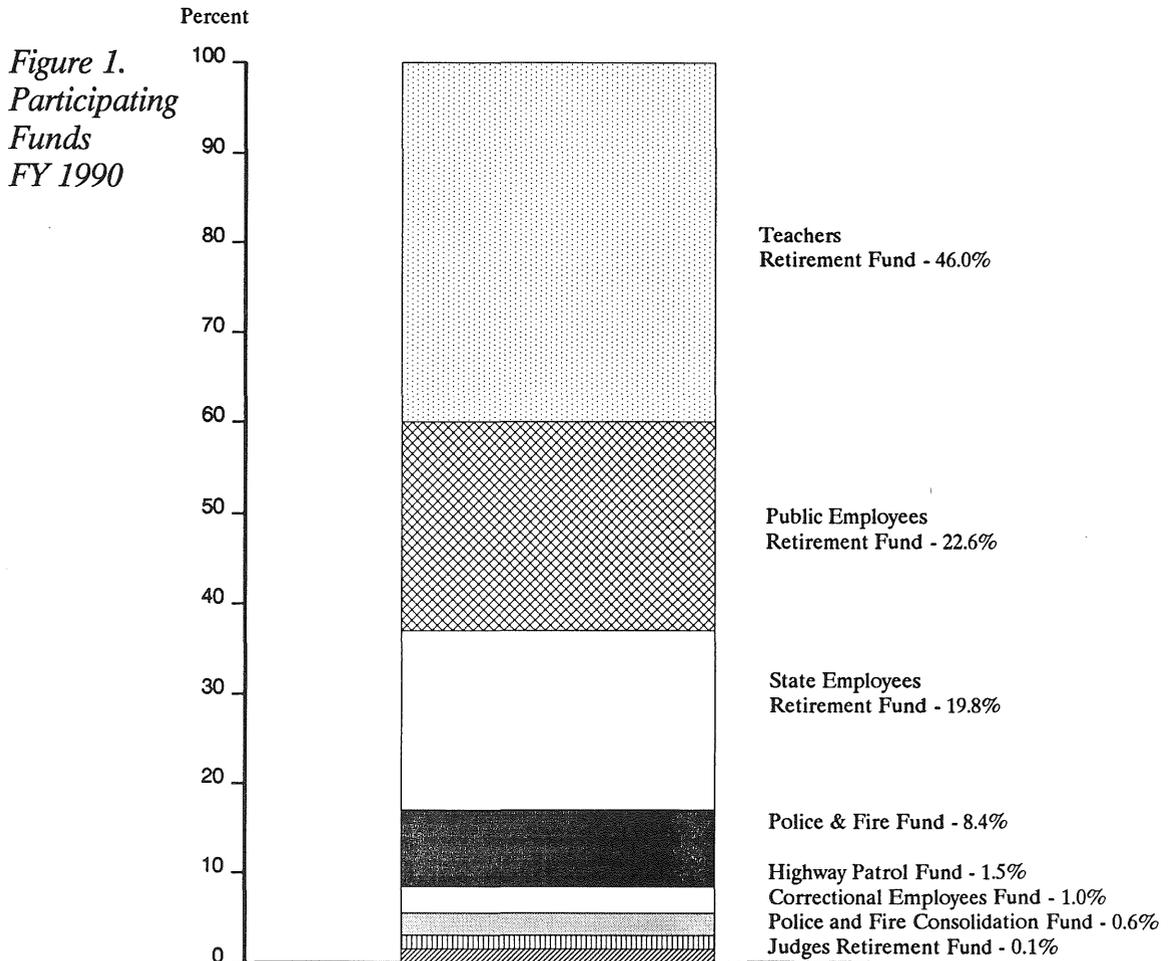


# BASIC RETIREMENT FUNDS

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The Basic Retirement Funds are composed of the retirement assets for currently working participants in eight statewide retirement funds.

Figure 1 identifies the individual retirement funds which comprise the Basic Funds. The 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 250,000 public employees participate in the Basic Funds. On June 30, 1990 the market value of the Funds was \$7.1 billion.



**INVESTMENT OBJECTIVES**

The State Board of Investment (SBI) has one overriding responsibility with respect to its management of the Basic Funds: to ensure that sufficient funds are available to finance promised retirement benefits.

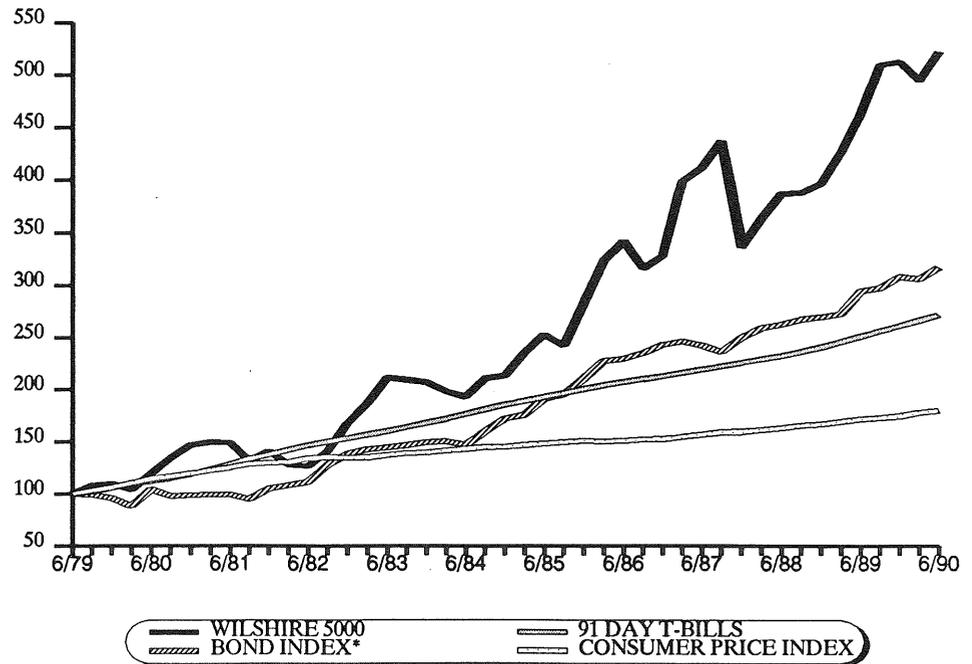
**Actuarial  
Assumed  
Return**

The Basic Funds invest the pension contributions of most public employees in the State of Minnesota during their working years. Employee and employer contribution rates are specified in state law as a percentage of an employee's salary. The rates are set so that contributions plus expected investment earnings will cover the projected cost of promised pension benefits. In order to meet these projected pension costs, the Basic Retirement Funds must generate investment returns of at least 8.5% on an annualized basis, over time.

**Time  
Horizon**

Normally, pension assets will accumulate in the Basic Retirement Funds for thirty to forty years during an employee's years of active service. This provides the Basic Funds with a long investment time horizon and permits the Board to take

*Figure 2.  
Performance of  
Capital Markets  
FY 1980-1990*



\* Salomon Broad Investment Grade Bond Index

advantage of the long run return opportunities offered by the capital markets in order to meet its actuarial return target.

As illustrated in Figure 2, historical evidence strongly indicates that common stocks will provide the greatest opportunity to maximize investment returns over the long-term. As a result, the Board has chosen to incorporate a large commitment to common stocks in its asset allocation policy for the Basic Funds. In order to limit the short run volatility of returns exhibited by common stocks, the Board includes other asset classes such as bonds and real estate in the total portfolio. These assets diversify the Basic Funds and reduce wide fluctuations in investment returns on a year to year basis. This diversification benefit should not impair the Basic Funds' ability to meet or exceed their actuarial return target over the long-term.

### **Long-Term Objectives**

Within this context, the Board has established several long-term investment objectives for the Basic Retirement Funds. Monitoring actual performance against these return objectives helps the Board to ensure that the Basic Funds will meet their long-term funding obligations:

- **Provide Real Returns.** Over a ten year period, the Basic Funds are expected to generate total returns that are 3-5 percentage points greater than the rate of inflation.
- **Exceed Market Returns.** Over a five year period, the Basic Funds are expected to outperform a composite of market indices weighted in a manner that reflects their long-term asset allocation policy.
- **Exceed Median Fund Returns.** Over a five year period, the Basic Funds are expected to outperform the median fund from a representative universe of public and private funds with a balanced asset mix of stocks and bonds.

## **ASSET ALLOCATION**

The allocation of assets among common stocks, bonds, 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 allocation policy for the Basic Funds.

## BASIC RETIREMENT FUNDS

### Long-Term Allocation Policy

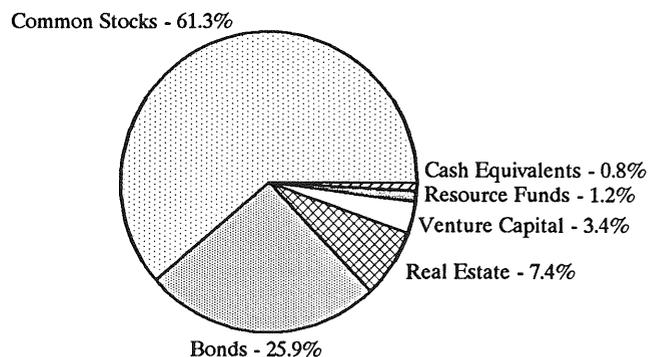
Based on the Basic Funds' investment objectives and the expected long run performance of the capital markets, the Board has adopted the following long-term asset allocation policy for the Basic Funds:

- Domestic Common Stocks 60.0%
- Domestic Bonds 24.0%
- Real Estate 10.0%
- Venture Capital 2.5%
- Resource Funds 2.5%
- Unallocated Cash 1.0%

It should be noted that the Board has approved the addition of international stocks to the Basic Funds. When an appropriate implementation plan has been approved the asset allocation targets shown above will be adjusted by adding a 10.0% allocation to international stocks and lowering the domestic bond allocation to 14.0%.

Figure 3 presents the actual asset mix of the Basic Funds at the end of fiscal year 1990. Historical data on the Basic Funds' actual asset mix over the last five years are displayed in Figure 4.

Figure 3.  
Asset Mix  
June 30, 1990



	Market Value \$Millions	Actual Asset Mix	Policy Target
Common Stocks	\$4,358	61.3%	60.0%
Bonds	1,840	25.9	24.0
Alternative Assets:			
Real Estate	525	7.4	10.0
Venture Capital	241	3.4	2.5
Resource Funds	84	1.2	2.5
Unallocated Cash	58	0.8	1.0
<b>Total</b>	<b>\$7,106</b>	<b>100.0%</b>	<b>100.0%</b>

## **BASIC RETIREMENT FUNDS**

---

### **Total Return Vehicles**

The SBI invests the majority of the Basic Funds' assets in common stocks. A 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 presents a practical limit to the amount that may be allocated 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 policy focused on fixed income securities. 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 compensate for the additional volatility.

### **Diversification Vehicles**

The Board includes other asset classes in the Basic Funds both to provide some insulation against highly inflationary or deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility.

Real estate and resource (oil and gas) 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 more normal financial conditions such as low to moderate inflation, the returns on these assets are not highly correlated with common stocks. Thus, their inclusion in the Basic Funds serves to dampen return volatility.

The bond component of the Basic Funds 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 protect principal and generate significant capital gains. And, like real estate and resource funds, under normal financial conditions bonds help to diversify the Basic Funds, thereby controlling return volatility.

## **INVESTMENT MANAGEMENT**

All assets in the Basic Retirement Funds are managed externally by private money management firms under contracts or agreements with the SBI.

## BASIC RETIREMENT FUNDS

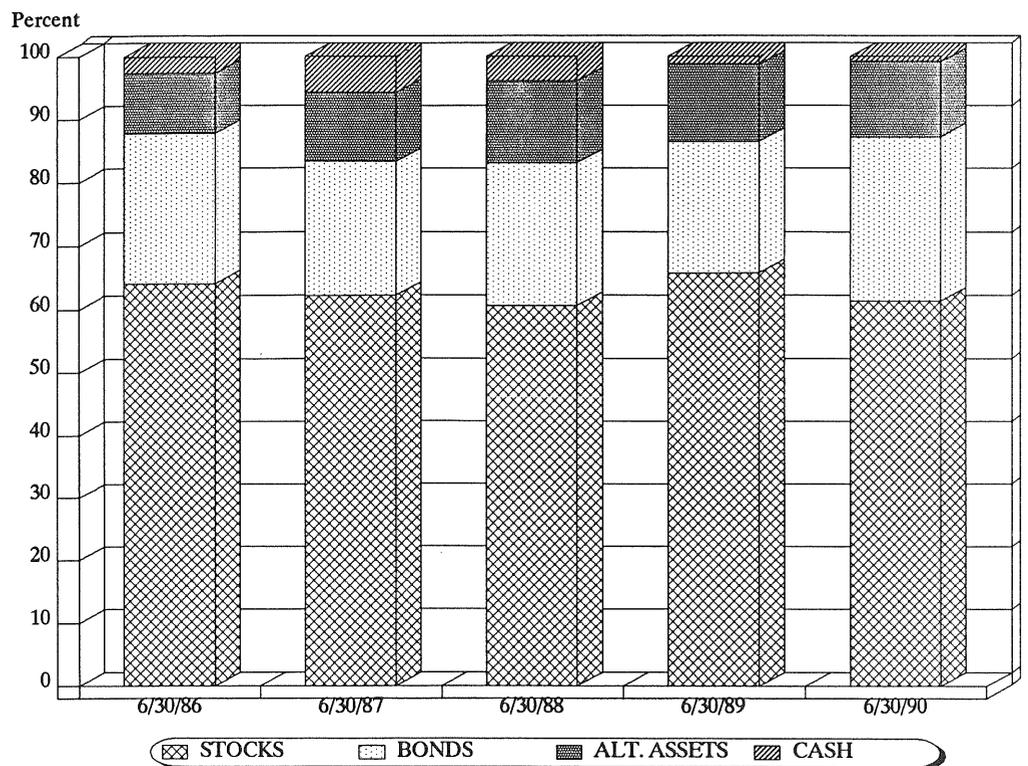
### Common Stock Segment

The Board allocates 60% of the Basic Funds to common stocks. The SBI utilizes a two-part approach to the management of the common stock segment:

- **Passive Management.** On an on-going basis, at least one-half of the stock segment will be passively managed, i.e. invested in an **index fund**. At the end of fiscal year 1990, approximately 60% of the stock segment was indexed.
- **Active Management.** No more than one-half of the stock segment will be actively managed. At the end of fiscal year 1990, approximately 40% of the stock segment was actively managed by a group of eleven external money managers.

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.

*Figure 4.  
Historical  
Asset Mix  
FY 1986-1990*



## BASIC RETIREMENT FUNDS

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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 their 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 established for each of the Board's managers. These benchmarks enable the SBI to evaluate more effectively the managers' decision-making, both individually and in aggregate, with respect to risk incurred and returns achieved. More information on benchmarks and the Board's monitoring policies is included in the Major Policy Initiatives Section.

*Figure 4 (con't).*  
*Historical*  
*Asset Mix*  
*FY 1986-1990*

	Market Value				
	1986	1987	June 30, 1988	1989	1990
<b>Common Stocks</b>					
\$Million	2,927.0	3,188.0	3,164.0	4,154.0	4,358.0
Percent	64.1	62.1	60.6	65.7	61.3
<b>Bonds</b>					
\$Million	1,083.0	1,089.0	1,178.0	1,318.0	1,840.0
Percent	23.7	21.2	22.5	20.8	25.9
<b>Real Estate</b>					
\$Million	331.0	405.0	465.0	502.0	525.0
Percent	7.3	7.9	8.9	7.9	7.4
<b>Venture Capital</b>					
\$Million	65.0	93.0	138.0	181.0	241.0
Percent	1.4	1.8	2.6	2.9	3.4
<b>Resource Funds</b>					
\$Million	42.0	68.0	78.0	96.0	84.0
Percent	0.9	1.3	1.5	1.5	1.2
<b>Unallocated Cash</b>					
\$Million	116.0	294.0	203.0	74.0	58.0
Percent	2.6	5.7	3.9	1.2	0.8
<b>Total Fund</b>					
\$Million	4,564.0	5,137.0	5,224.0	6,325.0	7,106.0

### **FY 1990 Changes**

During fiscal year 1990, the SBI terminated its relationship with BMI Capital. In April 1990, GeoCapital Corporation was retained as a replacement manager for a small capitalization stock portfolio.

**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.**

### **Bond Segment**

The Board allocates 24% of the Basic Funds to bonds. The SBI uses a two-part approach to the management of the bond segment:

- **Semi-Passive Management.** On an on-going basis, at least one-half of the assets allocated to bonds will be managed by semi-passive managers. At the end of fiscal year 1990, approximately 50% of the bond segment was invested using an **enhanced index** approach.
- **Active Management.** No more than one-half of the bond segment will be actively managed. At the end of the fiscal year 1990, approximately 50% of the bond segment was actively managed by a group of five external money managers.

The group of **active 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 active 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 purchase only high quality (BAA or better) fixed income assets. In addition, to avoid extreme variability in total bond segment returns, the SBI constrains the maximum duration (average life) of the managers' portfolios to a band of three to seven years.

The goal of the **enhanced index managers** is to add incremental value to the Salomon Broad Investment Grade (BIG) Index through the superior selection of bonds for the portfolios. The

enhanced index portfolios adhere very closely to characteristics of the Salomon BIG and match its duration and maturity structure. The semi-passive managers seek to add value by exploiting perceived mispricings among individual securities or by making minor alterations in the sector weightings within the portfolio. Although the enhanced index managers seek to exceed the performance of the index, the possibility exists that the semi-passive approach may slightly underperform the target index during some periods.

### **FY 1990 Changes**

At the end of fiscal year 1990, the SBI terminated its relationship with Morgan Stanley Capital Management, one of its active bond managers. The assets in the portfolio were transferred to other managers within the existing bond manager group.

**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.**

### **Real Estate Segment**

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 law does not permit investment in real estate through direct investments, separate accounts or individual transactions.

By investing in several open-end and closed-end commingled funds, the SBI has created a large core portfolio of real estate 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 select less diversified, special orientation managers for the remaining portion of the real estate segment. 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.

**FY 1990  
Changes**

At year-end the market value of the real estate portfolio comprised 7.4% of the Basic Funds. The SBI will continue to review and add new real estate investments, as needed, to fulfill the target 10% allocation.

During fiscal year 1990, the SBI elected to withdraw its investment with Prudential Investment Management, one of its open-end commingled real estate fund managers, in order to free assets for more targeted investment vehicles. In June 1990, the SBI approved commitments with two new specialty fund managers: LaSalle Income Parking Fund managed by LaSalle Partners Limited; and Copley Value Fund managed through a joint venture by Copley Real Estate Advisers, the Robert M. Bass Group and General Electric Capital Corporation. The LaSalle fund will focus on the acquisition and management of parking garages in selective markets. The Copley fund will invest opportunistically in large real estate portfolios including those controlled by sellers under intense financial pressure.

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

**Venture  
Capital  
Segment**

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, and the Board's investment may not exceed 20% of a particular limited partnership.

The SBI maintains a broadly diversified venture capital portfolio that 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.

**FY 1990  
Changes**

At year-end, the market value of Basic Funds' venture capital segment was 3.4%, somewhat above its long-term target. The SBI intends to make additional investments to replenish commitments that will expire in the mid-1990's when several of the SBI's current venture capital partnerships mature.

## **BASIC RETIREMENT FUNDS**

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During fiscal year 1990, the SBI approved additional commitments with three existing venture capital managers: Venture Partners Acquisition Fund II, a secondary interests fund managed by Brinson Partners (formerly First Chicago Investment Advisers); IAI Venture Partners II managed by IAI Venture Capital Group, and Matrix Fund III managed by Matrix Partners. In addition, the SBI committed assets to a new manager, Zell/Chilmark, which will invest in corporate restructurings.

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

### **Resource Fund Segment**

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 pension funds and other tax-exempt investors. 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 based on the managers' experience, investment strategy and performance history.

### **FY 1990 Changes**

At year-end, the market value of the resource fund segment was 1.2% of the Basic Funds. During fiscal year 1990, the SBI liquidated one of its investments with Apache Corporation and approved an additional commitment with First Reserve Corporation, manager of the AMGO oil and gas funds. The Board plans to continue to review resource investments for possible inclusion in the portfolio.

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

### **Unallocated Cash**

The Board allocates 1% of the Basic Funds to cash. Given the long-term objectives of the Basic Funds and their limited liquidity needs, the Board believes that a minimal commitment to short-term investments is most appropriate.

These cash reserves, as well as any cash held by stock and bond managers, 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.

### INVESTMENT PERFORMANCE

The Board has adopted performance objectives which are consistent with the objectives of the Basic Funds and realistic because 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.

#### Evaluation Framework

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.

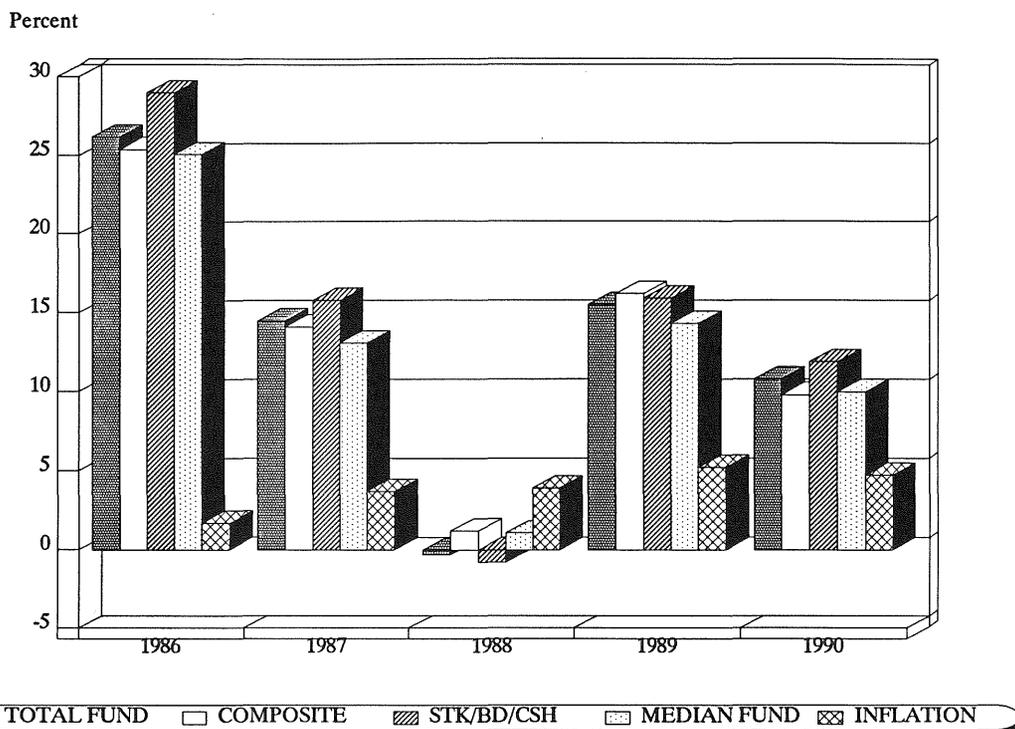
The Basic Funds' multi-manager structure requires that investment performance be evaluated on two distinct levels:

- **Total Fund.** Risk-return targets for the total fund ensure that long run strategic decisions which affect the total performance of the Basic Funds are implemented in a manner consistent with their investment policy. Specific standards have been selected to monitor performance on a total fund level.
- **Individual Managers.** Risk-return objectives for the 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. Individual benchmarks have been developed for each manager to monitor performance at the manager level.

#### Total Fund Performance

To a significant degree, the risk level of the total fund is set implicitly when the asset allocation and investment management structure are determined. Given the adequate funding levels and long-term investment time horizon of the Basic Funds, the Board believes an above-average risk posture is appropriate.

**Figure 5.**  
**Total Fund Performance**  
**Fiscal Years 1986 - 1990**



	1986	1987	1988	1989	1990	(Annualized)	
						3 YR.	5 YR.
<b>Total Fund</b>	<b>26.2%</b>	<b>14.5%</b>	<b>-0.3%</b>	<b>15.5%</b>	<b>10.8%</b>	<b>8.5%</b>	<b>13.0%</b>
Composite Index*	25.4	14.1	1.2	16.2	9.8	8.9	13.0
<b>Stocks, Bonds, Cash Only</b>	<b>29.0</b>	<b>15.8</b>	<b>-0.8</b>	<b>15.9</b>	<b>11.9</b>	<b>8.7</b>	<b>13.9</b>
Median Fund**	25.1	13.1	1.1	14.3	10.0	8.9	13.3
Inflation	1.7	3.7	3.9	5.2	4.7	4.6	3.8

\* 60% Wilshire 5000/24% Salomon Broad Investment Grade Bond Index/10% Wilshire Real Estate Index/1% 91 Day T-Bills/2.5% Venture Capital Funds/2.5% Resource Funds since July 1989.

\*\* Wilshire Assoc. Trust Universe Comparison Service (TUCS) median balanced portfolio. TUCS contains returns of more than 800 public and private funds.

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 by committing the majority of the Basic Funds' assets to common stocks.

The Basic Funds' **risk objectives** are implicitly met by attaining the targeted policy asset mix. In this regard, the common stock and bond targets have been achieved. The Basic Funds began commitments to real estate, venture capital and resource funds in the early to middle 1980's. With alternative investments near their policy targets, only moderate additional activity is expected over the next several years.

The Basic Funds' **return objectives** are evaluated relative to three specific standards:

- **Real Return.** Over a ten year period, the Basic Funds are expected to produce returns that exceed inflation by 3-5 percentage points annually.
- **Composite Index.** Over a five year period, 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' long-term asset allocation.
- **Median Fund.** Over a five year period, the Basic Funds, excluding alternative assets, are expected to outperform the median return produced by a representative sample of other public and private pension and trust funds with a balanced asset mix of stocks and bonds.

Overall, the Basic Funds have performed well compared to these standards:

- **Real Return.** Over the last ten years, the Basic Funds have exceeded inflation by 8.4 percentage points annualized. For fiscal year 1990, the Funds' return surpassed inflation by 6.1 percentage points.
- **Composite Index.** Over the last five years, the Basic Funds have equaled their market index composite. For fiscal year 1990, the Funds outperformed the composite by 1.0 percentage point.

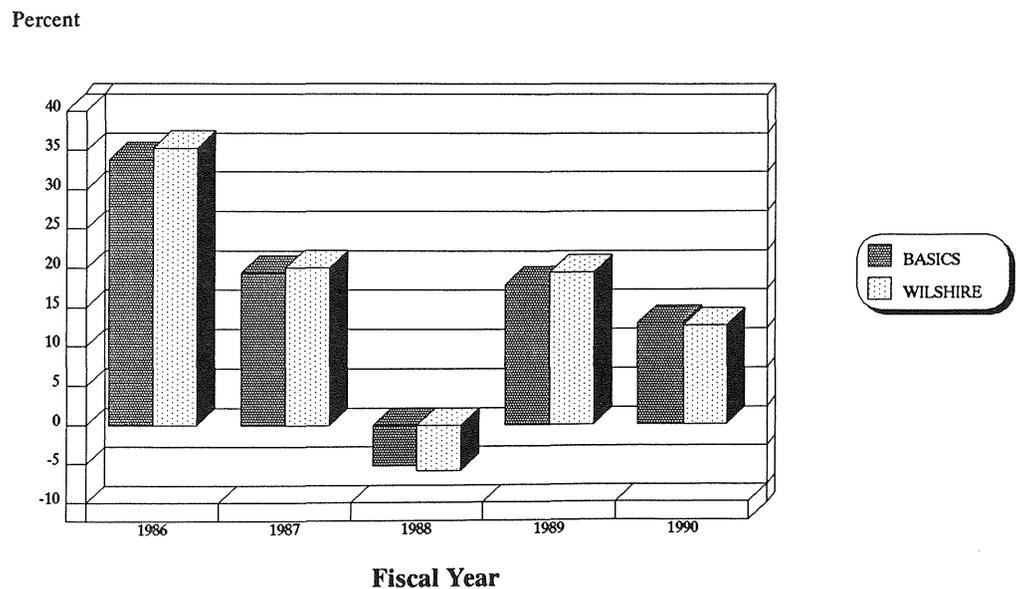
## BASIC RETIREMENT FUNDS

- **Median Fund.** Over the last five years the Basic Funds, excluding alternative assets, were in the top third (33rd percentile) of public and private pension funds in the Wilshire Associates Trust Universe Comparison Service (TUCS). The Basic Funds ranked in the top third (31st percentile) of TUCS for fiscal year 1990, as well.

Fiscal year 1990 was a favorable period for institutional investors such as the SBI. The stock market continued its rally, hitting new record highs in May and June 1990. The bond market generated more modest returns as a result of on-going uncertainty about economic growth and inflation. Returns on financial assets easily exceeded the rate of inflation for the year.

Despite the dramatic stock market drop in October 1987 and subsequent market volatility, the financial markets have provided very strong returns in recent years. Given its long-term asset allocation, the Basic Funds have been well positioned to take advantage of these favorable markets. Over the last five years, the Basic Funds have provided a cumulative return of 92.1%, excluding alternative assets.

*Figure 6.  
Stock Segment  
Performance  
FY 1986 -1990*



	1986	1987	1988	1989	1990	(Annualized)	
						3 YR.	5 YR.
STOCK SEGMENT	33.8%	19.4%	-5.2%	18.0%	13.0%	8.1%	15.1%
Wilshire 5000	35.3	20.1	-5.9	19.5	12.7	8.2	15.5

## BASIC RETIREMENT FUNDS

Performance relative to total fund targets is presented in Figure 5. Common stock and bond segment performance are shown in Figure 6 and Figure 7.

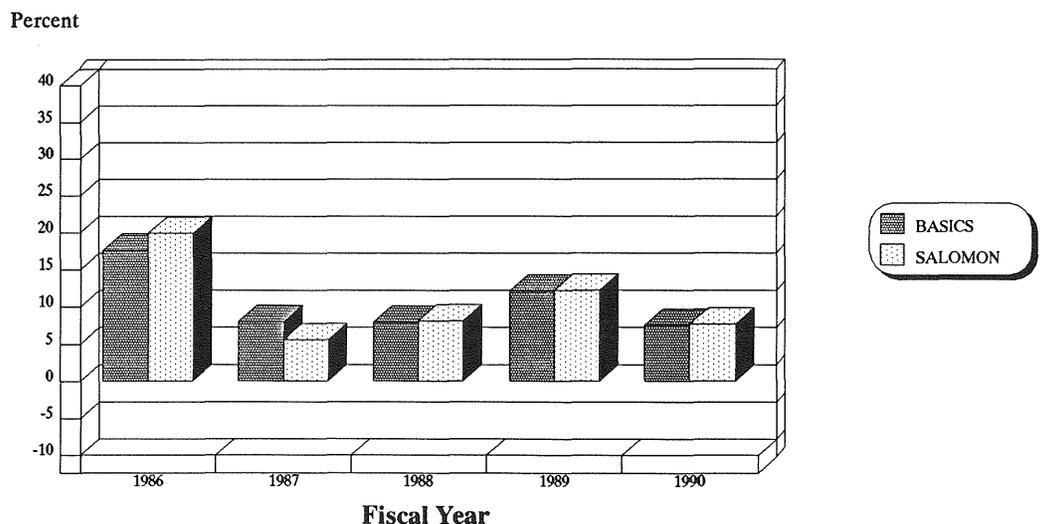
### Stock Manager Performance

Two primary long run risk objectives have been established for the Basic Funds' common stock managers:

- **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.
- **Diversification.** Each active common stock manager is expected to hold a highly non-diversified portfolio, while the index fund manager is expected to hold a well-diversified portfolio that tracks the entire stock market.

In the short run, the active common stock managers may depart from these two risk targets as part of their specific investment strategies.

Figure 7.  
Bond Segment  
Performance  
FY 1986-1990



	1986	1987	1988	1989	1990	(Annualized)	
						3 Yr.	5 Yr.
BOND SEGMENT	17.6%	7.9%	7.9%	12.1%	7.5%	9.1%	10.5%
Salomon Index*	19.9	5.6	8.1	12.2	7.7	9.3	10.6

\* Salomon Broad Investment Grade Bond Index

The common stock managers successfully fulfilled their long term risk objectives during fiscal year 1990. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained appropriate levels of diversification.

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 return targets against which to judge the managers' performances than are broad market indices.

From a return perspective, common stock manager performance was favorable. Eight active managers (Alliance, Concord, Franklin, IDS, Investment Advisers, Lieber, Rosenberg, Waddell) exceeded their benchmarks for the year while two (Forstmann, Sasco) underperformed their individual targets. The index fund manager tracked the performance of the Wilshire 5000 within an acceptable range. As a group, the active and

*Figure 8.  
Stock Manager  
Performance  
FY 1990*

	<b>Total Portfolio Return</b>	<b>Benchmark Return</b>
Alliance Capital	23.6%	14.8%
Concord Capital	9.4	7.2
Forstmann Leff	7.6	10.5
Franklin	7.5	5.4
IDS Advisory	24.2	11.3
Investment Advisers	15.7	14.5
Lieber & Company	5.2	2.2
Rosenberg	11.4	11.3
Sasco Capital	3.4	6.4
Waddell & Reed	15.0	8.9
Wilshire Associates (index fund)	12.3	12.7
<b>Basic Funds' Common Stock Segment*</b>	<b>13.0%</b>	
<b>Stock Segment Performance Standards</b>		
Wilshire 5000	12.7%	
TUCS Median Managed Equity Portfolio	12.4	
<b>Inflation</b>	<b>4.7%</b>	

\* includes performance of any manager retained for less than the full fiscal year

## BASIC RETIREMENT FUNDS

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passive managers outperformed the broad market by 0.3 percentage points during fiscal year 1990.

**Fiscal year 1990 performance data for the individual common stock managers are presented in Figure 8. Historical information is included in the Statistical Data Appendix.**

### **Bond Manager Performance**

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

The bond managers successfully fulfilled their long-term risk objective during fiscal year 1990. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained appropriate levels of quality and duration.

As with the stock segment, the returns of each of the Board's active bond managers is evaluated relative to customized **benchmark portfolios**. Relative performance by the bond managers was somewhat disappointing. None of the active

*Figure 9.  
Bond Manager  
Performance  
FY 1990*

	<b>Total Portfolio Return</b>	<b>Benchmark Return</b>
Investment Advisers	6.0%	7.3%
Lehman Management	7.2	7.8
Miller, Anderson & Sherrerd	7.0	7.7
Morgan Stanley	6.7	8.5
Western Asset	7.8	8.1
Fidelity Management (enhanced index)	7.9	7.7
Lincoln Capital (enhanced index)	7.6	7.7
<b>Basic Funds' Bond Segment</b>	<b>7.5%</b>	
<b>Bond Segment Performance Standards</b>		
Salomon Broad Investment		
Grade Bond Index	7.7	
TUCS Median Managed Bond Portfolio	7.1	
<b>Inflation</b>	<b>4.7%</b>	

managers exceeded their respective benchmarks for the year. One of the semi-passive managers (Fidelity) outperformed its target for the year while the other (Lincoln) lagged the index by a modest amount. As a group, the active and semi-passive bond managers trailed the performance of the broad bond market by 0.2 percentage points for the year.

**Fiscal year 1990 performance data for the individual bond managers are presented in Figure 9. Historical information is included in the Statistical Data Appendix.**

### **Alternative Asset Managers**

The SBI reviews performance of its real estate investments relative to two standards:

- the Wilshire Associates Real Estate Index, an index of commingled real estate funds
- inflation, as measured by changes in the Consumer Price Index (CPI)

During the last year, the SBI's real estate portfolio has compared favorably to both standards (SBI real estate 5.9%, Wilshire Real Estate Index 3.3%, CPI 4.7%). Comparisons over the last five years are positive as well (SBI real estate 7.4% annualized, Wilshire index 7.1% annualized, CPI 3.8% annualized).

At this time, specific performance objectives have not been established for the venture capital and resource fund managers. The long-term nature of these investments and the lack of comprehensive data on the returns provided by the resource and venture capital markets preclude comprehensive performance evaluation. In the future, as markets for these assets become more institutionalized, the SBI will fully integrate appropriate performance standards for these assets into its performance analysis.



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# **POST RETIREMENT FUND**

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**Investment Objectives**

**Asset Allocation**

**Investment Management**

**Investment Performance**

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**T**he Post Retirement Investment Fund contains the pension assets of retired public employees covered by nine 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, 1990, the Post Fund had a market value of \$5.3 billion with over 60,000 retiree participants.

### **INVESTMENT OBJECTIVES**

**Actuarial  
Assumed  
Return**

Public employees participating in the statewide retirement plans are promised benefits based on their total years of service and their “high five” average salaries. When an employee retires, a sum of money sufficient to finance a fixed monthly annuity is 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.

**Earnings  
Objectives**

Within this framework, the State Board of Investment (SBI) pursues two objectives for the Post Fund:

- To generate 5% realized earnings each year to maintain current benefits.
- To generate at least 3% additional realized earnings each year to provide annual benefit increases to eligible retirees.

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 realized 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. (More information on the benefit increase formula is included in the Statistical Data Appendix.)

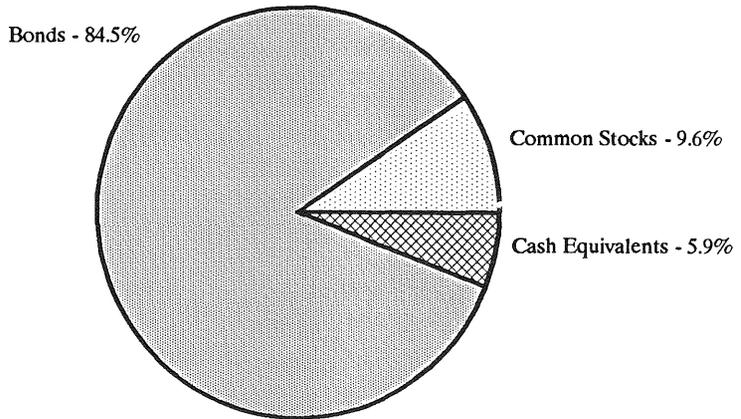
As a result, the Post Fund is not oriented toward long-term total rate of return maximization. Rather, the SBI attempts to generate a high, consistent stream of earnings for the Post Fund that will maintain current benefits, as well as produce income sufficient to increase benefits over time.

**ASSET ALLOCATION**

The Board has designed the asset mix of the Post Fund to generate the sizable stable earnings stream referred to in the

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*Figure 10.  
Asset Mix  
June 30, 1990*



	Market Value	
	\$Millions	Percent
Common Stocks	\$ 514	9.6%
Bonds	4,512	84.5
Unallocated Cash	313	5.9
<b>Total</b>	<b>\$5,339</b>	<b>100.0%</b>

previous section. The Post Fund's year-end asset mix is presented in Figure 10. Historical asset allocation data is shown in Figure 11.

**Dedicated  
Bond  
Portfolio**

The SBI invests the majority of the Post Fund's assets in a dedicated bond portfolio. A dedicated bond portfolio is a collection of high quality bonds with various maturities which generate cash flows from income and principal payments that match a specific stream of liabilities or benefit payments. 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.

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 an annual basis. If the portfolio yield is greater than 8% or if stock investments do well, as was 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 large benefit increases.

**Unallocated  
Cash**

Cash equivalents make up the remainder of the Post Fund's portfolio. Because the Post Fund's cash 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 1990, the asset mix of the Post Fund did not change significantly. In the mid-1980's, the substantial decline in interest rates 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.

### INVESTMENT MANAGEMENT

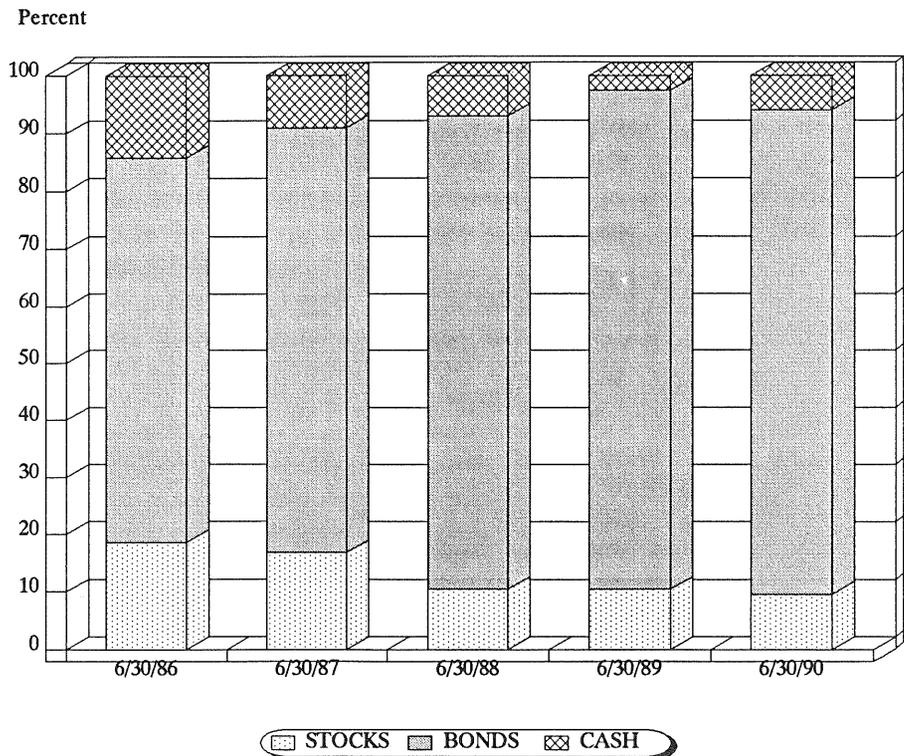
The Post Fund is managed almost entirely by SBI staff. The Board relies heavily on internal management for two reasons:

- **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 manager 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.

#### Bond Management

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.

Figure 11.  
Historical  
Asset Mix  
FY 1986-1990



**POST RETIREMENT INVESTMENT FUND**

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The management of the dedicated bond portfolio requires that the State's actuary supply the SBI 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 benefit payments. Staff then attempt to purchase the recommended issues. If these bonds are not available, substitute bonds are purchased. Staff rebalance the dedicated bond portfolio annually following the receipt of the benefit payment 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 implement less aggressive investment strategies than those utilized by the Basic Retirement Funds' active stock managers. As the only common stock manager for the Post Fund, staff recognize the diversification requirements of the Post Fund's stock portfolio. Further, SBI staff are 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.

SBI staff attempt to identify stocks that have attractive expected returns, yet do not possess significantly high levels of market

*Figure 11 (con't).  
Historical  
Asset Mix  
FY 1986-1990*

	Market Value				
	1986	1987	1988	1989	1990
<b>Common Stocks</b>					
\$Million	681.0	673.0	446.0	524.0	514.0
Percent	18.6	16.8	10.5	10.5	9.6
<b>Bonds</b>					
\$Million	2,457.0	2,965.0	3,511.0	4,358.0	4,512.0
Percent	67.2	74.2	82.5	86.9	84.5
<b>Unallocated Cash</b>					
\$Million	520.0	359.0	301.0	132.0	313.0
Percent	14.2	9.0	7.0	2.6	5.9
<b>Total Fund</b>					
\$Million	3,658.0	3,997.0	4,258.0	5,014.0	5,339.0
Percent	100.0	100.0	100.0	100.0	100.0

volatility. Staff use recommendations generated by quantitative valuation models as the primary source of investment candidates. Staff always maintain a fully invested position in the equity segment.

**Cash  
Enhancement**

The SBI has established a cash enhancement program using financial futures for a portion of the Post Fund's cash reserves. Low risk stock index futures investment strategies are employed to improve the rate of return earned on cash equivalents. The strategies are low risk because each investment is fully hedged. That is, stock index futures contracts are simultaneously bought and sold, thereby eliminating market risk. The underlying mispricings between the contracts provide the source of returns to the cash enhancement program.

The Board has retained BEA Associates, New York, NY, a firm specializing in the management of financial futures, to manage the cash enhancement program.

## **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 common stock portfolio maintains a relatively high level of diversification and a moderate level of relative market volatility.

**Total Fund  
Performance**

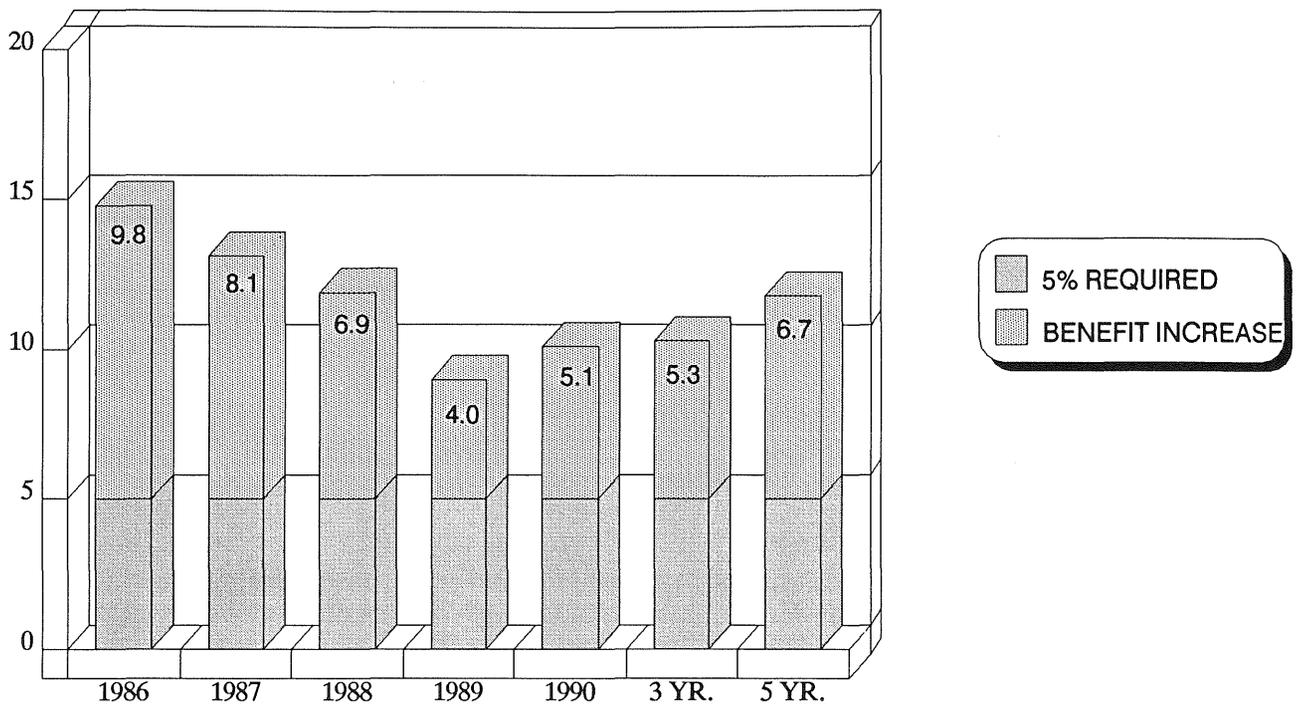
In terms of long-term rate of return objectives, the Fund's investment results are compared to two standards:

- **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 assumption of 5% per year.
- **Benefit Increase Level.** The Post Fund is expected to produce additional earnings sufficient to allow benefits to increase by at least 3% per year.

The Post Fund's total portfolio met all of the prescribed risk targets during the 1990 fiscal year. Approximately 85% of the fund was invested in bonds with an average quality rating of AAA. The Post Fund's common stock portfolio maintained a slightly above average level of relative market volatility and was consistently well diversified.

**Figure 12.  
Realized Earnings  
Fiscal Years 1986-1990**

PERCENT



	1986	1987	1988	1989	1990	(Annualized)	
						3 YR.	5 YR.
Realized Earnings*	14.8%	13.1%	11.9%	9.0%	10.1%	10.3%	11.7%
Benefit Increase**	9.8	8.1	6.9	4.0	5.1	5.3	6.7
Inflation	1.7	3.7	3.9	5.2	4.7	4.6	3.8

\* Interest, dividends and net realized capital gains.

\*\* Payable starting January 1 of the following calendar year.

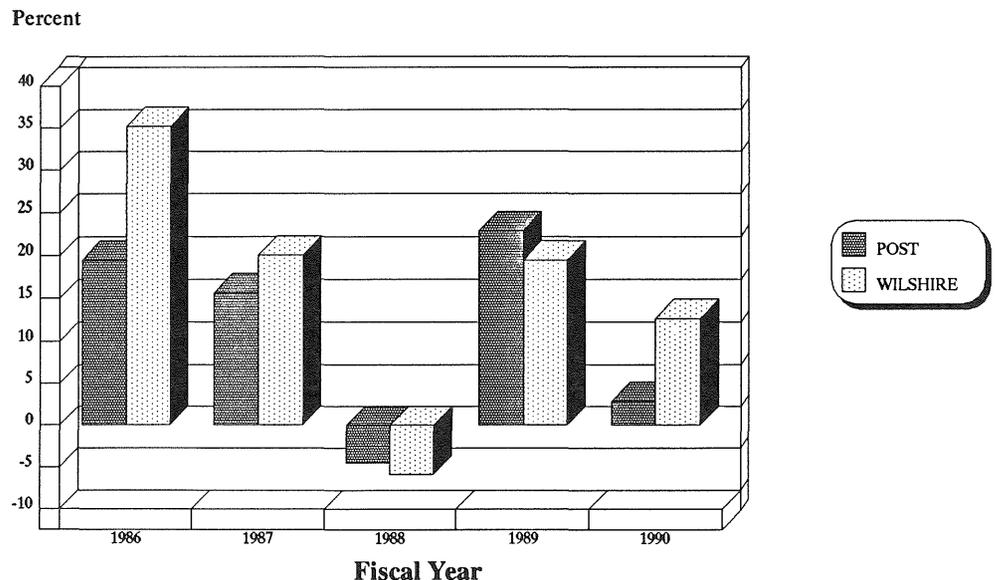
## POST RETIREMENT INVESTMENT FUND

Overall, investment returns relative to performance objectives were satisfactory for the 1990 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 5.1% beginning January 1, 1991.

As shown in Figure 12, the Post Fund has generated benefit increases of 6.7% on an annualized basis over the last five years. During this period, investment returns were high compared to inflation, which increased at an annualized rate of 3.8%. The formula used to compute benefit increases was revised in 1980. During the eleven years since the revised formula was instituted, benefit increases have been 6.7% on an annualized basis. This compares to an annualized inflation rate of 5.5% for the same period.

More information on the benefit increase formula is included in the Statistical Data Appendix.

*Figure 13.  
Stock Segment  
Performance  
FY 1986-1990*



	1986	1987	1988	1989	1990	(Annualized)	
						3 YR.	5 YR.
<b>STOCK SEGMENT</b>	19.5%	15.7%	-4.5%	22.9%	2.9%	6.5%	10.8%
<b>Wilshire 5000</b>	35.3	20.1	-5.9	19.5	12.7	8.2	15.5

## POST RETIREMENT INVESTMENT FUND

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### Segment Performance

Common stock performance, on a relative basis, was not favorable in FY90. The contrarian value style pursued by the Post Fund's internal equity manager underperformed the Wilshire 5000 by 9.8 percentage points for the fiscal year. Historical performance data on the stock segment of the Post Fund is shown in Figure 13.

At the end of fiscal year 1990, the **dedicated bond portfolio** had a duration or average life of 7.8 years and a current yield of 7.8%. This is consistent with the design of the dedicated bond portfolio. More information on the dedicated bond portfolio is shown in Figure 14.

During fiscal year 1990, the **cash enhancement program** produced a 14.5% total rate of return. This is substantially above the rate of return generated by investments in 91 Day Treasury Bills and indicates the cash enhancement program met its objective during its third year of operation.

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*Figure 14.  
Bond Portfolio  
Statistics  
June 30, 1990*

Value at Market	\$ 4,512,158,804
Value at Cost	4,135,028,828
Average Coupon	5.58%
Current Yield	7.83
Yield to Maturity	8.92
Current Yield at Cost	8.38
Time to Maturity	15.36 Years
Average Duration	7.75 Years
Average Quality Rating	AAA
Number of Issues	436



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# **SUPPLEMENTAL INVESTMENT FUND**

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**Income Share Account**

**Growth Share Account**

**Common Stock Index Account**

**Bond Market Account**

**Money Market Account**

**Guaranteed Return Account**

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**T**he 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 20,000 individuals. On June 30, 1990, the market value of the entire fund was \$477 million.

### **Fund Structure**

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 Management**

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

**Range of  
Investment  
Options**

Participants in the Supplemental Fund have six different investment options:

- **Income Share Account**, a balanced portfolio of stocks and bonds
- **Growth Share Account**, a portfolio of actively managed common stocks
- **Common Stock Index Account**, a passively managed common stock portfolio
- **Bond Market Account**, an actively managed fixed income portfolio
- **Money Market Account**, a portfolio of liquid, short-term debt securities
- **Guaranteed Return Account**, an investment option utilizing guaranteed investment contracts (GIC's)

**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 share values, which in turn are a function of the income and capital appreciation (or depreciation) generated by the securities in the accounts.

In the Money Market 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.

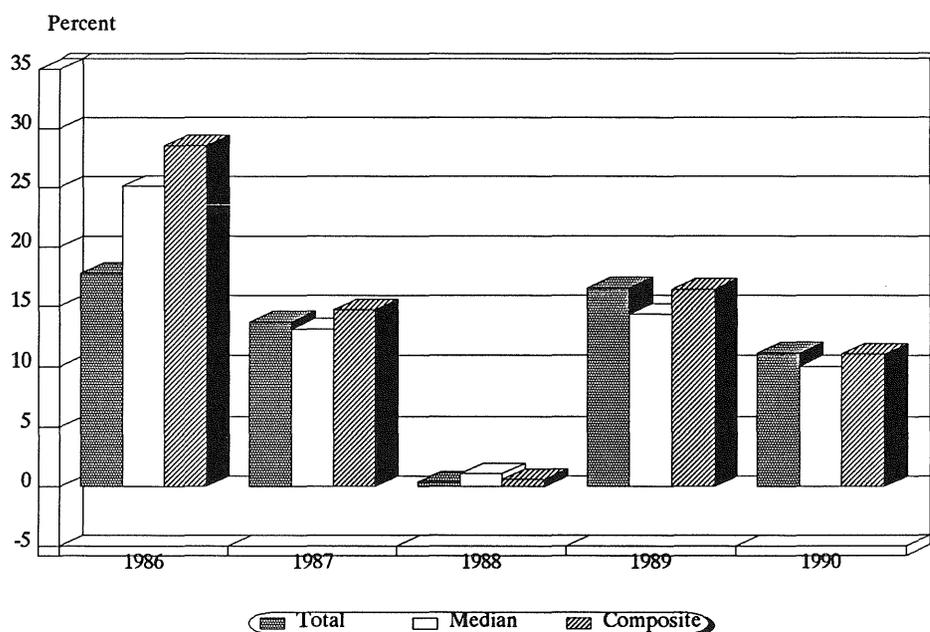
## INCOME SHARE ACCOUNT

### Objective

The \$245 million Income Share Account resembles the Basic Retirement Funds in terms of investment objectives. The 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.

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

*Figure 15.  
Income Share  
Account  
FY 1986-1990*



	1986	1987	1988	1989	1990	(Annualized)	
						3 YR.	5 YR.
<b>TOTAL ACCOUNT</b>	17.8%	13.7%	0.4%	16.5%	11.1%	9.1%	11.7%
Median Fund*	25.1	13.1	1.1	14.3	10.0	8.9	13.3
Composite**	28.5	14.7	0.6	16.4	11.0	9.1	13.8

\* TUCS Median Balanced Portfolio

\*\* 60% Wilshire 5000/35% Salomon Broad Investment Grade Bond Index/5% 91 day T-Bills

- Management** The Income Share Account's investment management structure combines internal and external management. SBI staff manage the entire fixed income segment. Currently, the entire common stock segment is managed by Wilshire Associates as part of a passively managed index fund designed to track the Wilshire 5000. Prior to April 1988, a significant portion of the stock segment was actively managed.
- Performance** Similar 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 over the long-term.
  - **Individual Manager.** The passive stock manager is expected to track closely the performance of the Wilshire 5000. The internal bond manager for the account is expected to exceed the performance of the Salomon Broad Investment Grade Bond Index.

The Income Share Account provided a return of 11.1% for fiscal year 1990, outperforming its market index composite and the median fund. A five year history of performance results is presented in Figure 15.

## GROWTH SHARE ACCOUNT

- Objective** The Board has established above-average capital appreciation as the primary investment objective of the \$74 million Growth Share Account. To achieve this objective, the Account maintains a large equity exposure with the following long-term asset allocation: **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.

## SUPPLEMENTAL INVESTMENT FUND

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.

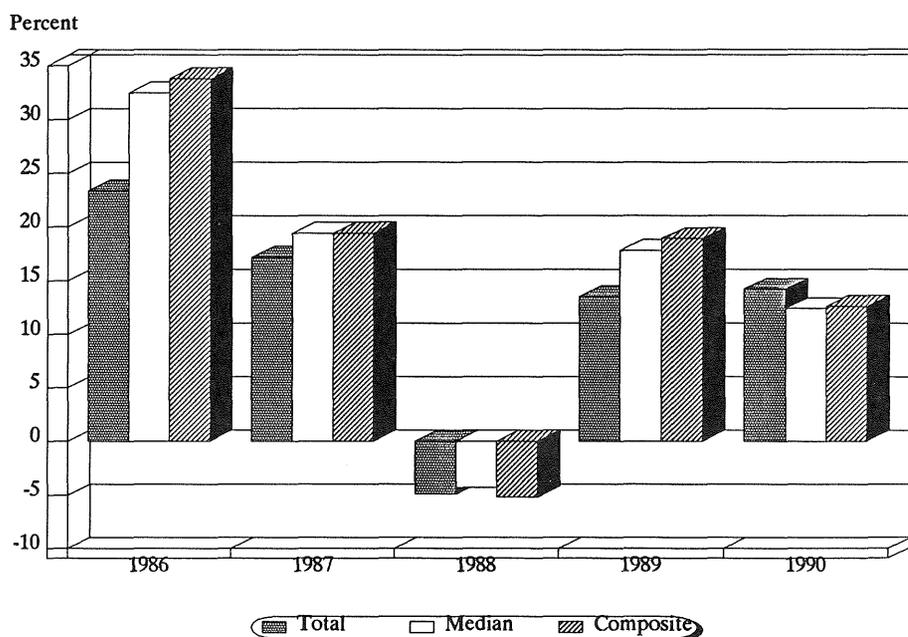
### Management

The SBI has assigned the entire common stock portfolio of the Growth Share Account to external managers. The allocation to active common stock managers, rather than to an index fund, reflects the more aggressive investment policy of the Growth Share Account. Currently, these assets are managed by the same active managers utilized by the Basic Retirement Funds. Prior to April 1988, a significant portion of the account was invested by other active managers.

### Performance

Like the Income Share Account, the Board evaluates the performance of the Growth Share Account on two levels:

Figure 16.  
Growth Share  
Account  
FY 1986-1990



	1986	1987	1988	1989	1990	(Annualized)	
						3 YR.	5 YR.
<b>TOTAL ACCOUNT</b>	23.4%	17.2%	-4.9%	13.5%	14.2%	7.2%	12.3%
Median Fund*	32.5	19.4	-4.3	17.8	12.4	8.8	15.8
Composite**	33.8	19.4	-5.2	18.9	12.6	8.3	15.2

\* TUCS Median Managed Equity Portfolio

\*\* 95% Wilshire 5000/5% 91 Day T-Bills

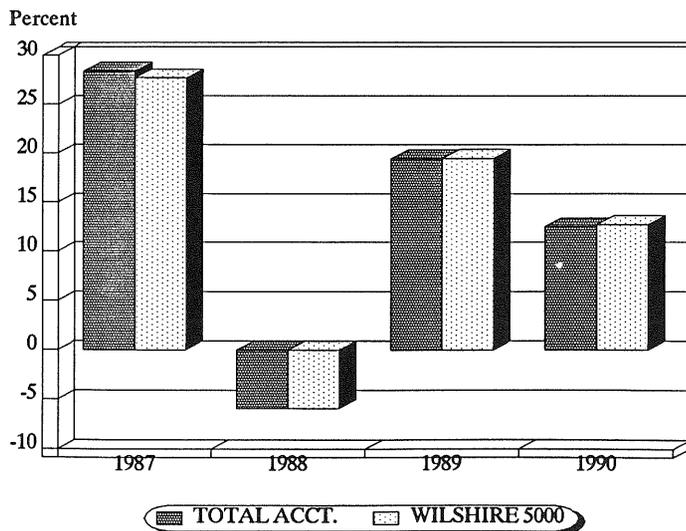
- **Total Account.** The Growth Share Account is expected to exceed the returns of a composite of market indices weighted in the same proportion as its policy asset allocation. The Account's performance is also expected to surpass the performance of the median portfolio from a universe of managed equity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

The Growth Share Account outperformed both the composite and median manager for the year by a substantial margin. A five year history of performance results is shown in Figure 16.

### COMMON STOCK INDEX ACCOUNT

The Common Stock Index Account began accepting contributions at the end of July 1986. At the end of fiscal year 1990, it had a market value of \$10 million.

*Figure 17.  
Common Stock  
Index Account  
FY 1987-1990*



	1987*	1988	1989	1990	(Annualized)	
					3 Yr.	Since Incept.*
Total Account	28.4%	-5.9%	19.4%	12.5	8.1%	13.2%
Wilshire 5000	27.7	-5.9	19.5	12.7	8.2	13.1

\* Since July 30, 1986.

**Objective**                    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 common stocks**.

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.

**Management**                The Common Stock Index Account is invested entirely by Wilshire Associates, the SBI's passive stock manager.

**Performance**                The performance objective of the Common Stock Index Account is 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 or tracking error.

During fiscal year 1990, the Common Stock Index Account produced a return of 12.5%, 20 basis points under the Wilshire 5000. This is within the range of acceptable tracking error.

Total account results for prior years are shown in Figure 17.

## **BOND MARKET ACCOUNT**

The Bond Market Account began accepting contributions at the end of July 1986. At the end of fiscal year 1990, the market value of the Account was \$6 million.

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

**SUPPLEMENTAL INVESTMENT FUND**

The Account earns investment returns through interest income and capital appreciation. Because bond prices move inversely with interest rates, the Account entails some risk for investors. However, historically, it represents a lower risk alternative than the investment options that include only common stocks.

**Management**

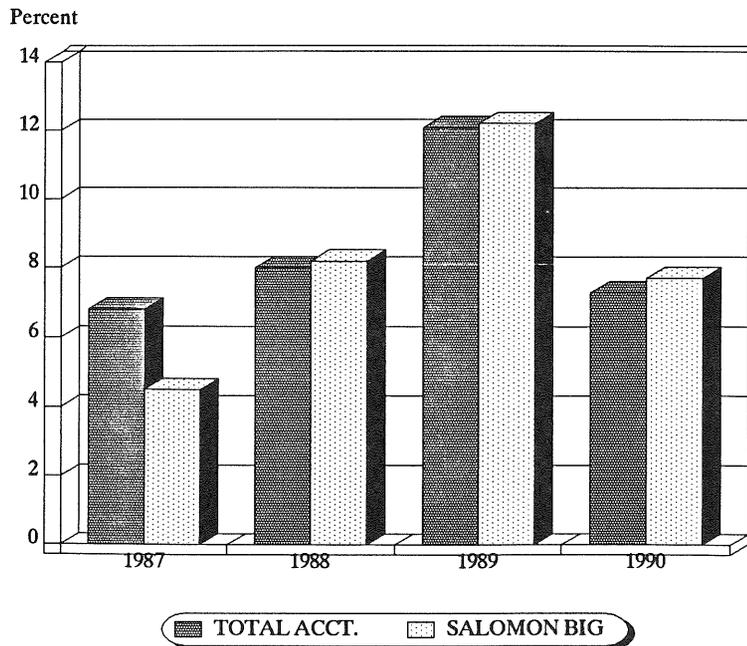
The SBI has assigned the entire bond portfolio to external managers. These assets are managed by the same active managers utilized by the Basic Retirement Funds. A discussion of the SBI's active bond managers is presented in the Basic Funds section.

**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 fiscal year 1990, the Bond Market Account trailed this target, with a 7.3% return compared to the Salomon index return of 7.7%.

Total account results for prior years are shown in Figure 18.

*Figure 18.  
Bond Market  
Account  
FY 1987-1990*



	1987*	1988	1989	1990	(Annualized)	
					3 Yr.	Since Incept.*
Total Account	6.8%	8.0%	12.1%	7.3%	9.1%	8.7%
Salomon Index	4.5	8.2	12.2	7.7	9.3	8.3

\* Since July 30, 1986.

**MONEY MARKET ACCOUNT**

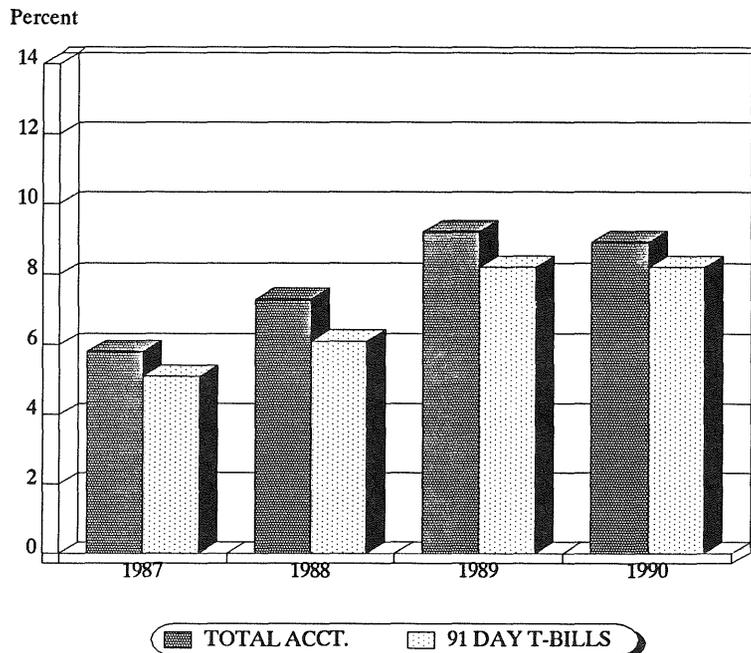
**Objective** The Money Market Account invests solely in **short-term, liquid debt securities**. The Account's investment objectives are to preserve capital and offer competitive money market returns. At the end of fiscal year 1990, the Money Market Account had a market value of \$82 million.

**Management** The Account utilizes the same short-term investment manager as the Basic Retirement Funds, which is State Street Bank and Trust Company.

**Performance** The Account is expected to produce returns competitive with those available from short-term debt securities. The Money Market Account exceeded that target in fiscal year 1990 with a 8.9% return versus a return on 91 Day Treasury Bills of 8.2%.

Total account results for prior years are shown in Figure 19.

*Figure 19.  
Money Market  
Account  
FY 1987-1990*



	1987*	1988	1989	1990	(Annualized)	
					3 Yr.	Since Incept.*
Total Account	5.8%	7.3%	9.2%	8.9%	8.5%	8.0%
91 Day T-Bills	5.1	6.1	8.2	8.2	7.5	7.0

\* Since July 30, 1986.

**GUARANTEED RETURN ACCOUNT**

**Objective** The Guaranteed Return Account opened for subscription in November 1986. The Guaranteed Return Account is designed to offer participants a fixed rate of return for a specified period of time with negligible risk. At the end of fiscal year 1990, the account totaled \$60 million.

**Management** The SBI invests the Guaranteed Return Account in **three-year guaranteed investment contracts (GIC's)** offered by major U.S. insurance companies and banks. Annually, the SBI accepts bids from banks and insurance companies that meet financial quality criteria defined by State statute. Generally, the insurance company or bank 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.

Within the constraints of permitting only top-rated U.S. insurance companies and banks 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.

**Performance** The Board was very satisfied with the winning bid of 8.40% on the 1989-1992 GIC, which was 59 basis points over prevailing interest rates on three-year Treasury Notes at the time of the bid.

<b>Contract Period</b>	<b>Annual Effective Interest Rate</b>
Nov. 1, 1987 - Oct. 31, 1990	8.45%
Nov. 1, 1988 - Oct. 31, 1991	9.01%
Nov. 1, 1989 - Oct. 31, 1992	8.40%

The 1987-1990 contract was awarded to Principal Mutual Life, Des Moines, IA. The 1988-1991 contract was awarded to Mutual of America, New York, NY and the 1989-1992 contract was placed with John Hancock, Boston, MA.

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# **PERMANENT SCHOOL TRUST FUND**

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**Investment Objectives**

**Asset Allocation**

**Investment Management**

**Investment Performance**

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**T**he Permanent School Trust 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, lakeshore and other leases are invested in the Fund.

Income generated by the Fund's assets is used to offset state school aid payments. During fiscal year 1990, investment income reported to the Minnesota Department of Finance totaled \$33 million.

### **INVESTMENT OBJECTIVES**

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

#### **Investment Constraints**

The Fund's investment objectives are influenced by the restrictive legal provisions under which its investments must be managed. These provisions require that the Fund's principal remain inviolate. Further, any net realized capital gains from stock or bond investments must be added to principal. Moreover, if the 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 legal provisions limit the investment time horizon over which the Permanent School Trust Fund is managed. 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 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 Trust Fund's assets in fixed income securities.

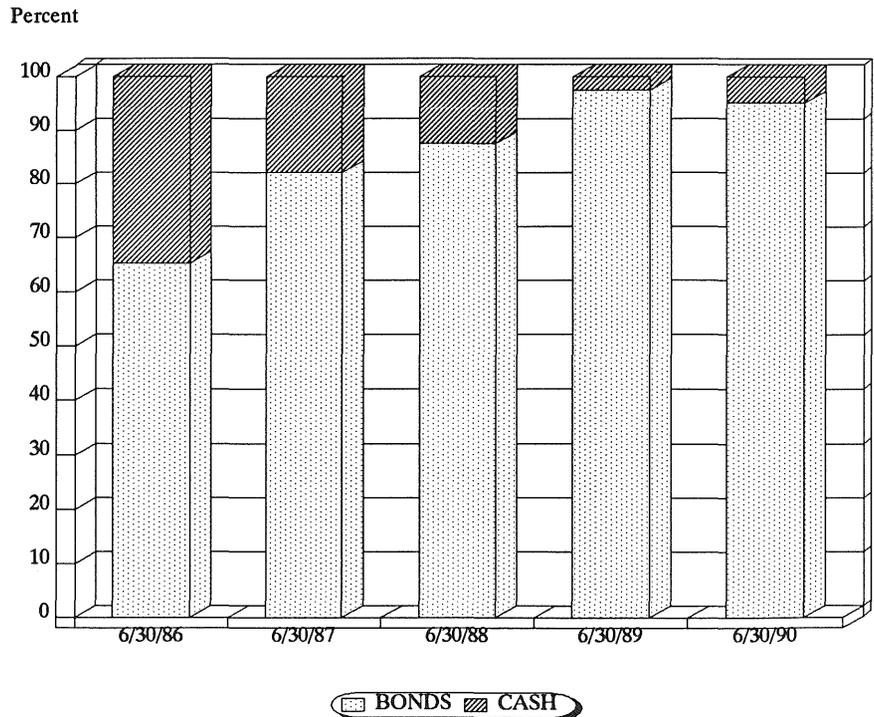
The SBI has a strong incentive not to invest in equity assets for several reasons:

- 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 Trust 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 including past realized capital gains in spendable income.

Considering these constraints, the Board completely eliminated the Fund's small common stock component in fiscal year 1986,

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*Figure 20.  
Historical  
Asset Mix  
FY 1986-1990*



investing the proceeds in fixed income securities. Historical asset mix data for the Fund are shown in Figure 20.

## INVESTMENT MANAGEMENT

SBI staff manage all assets of the Permanent School Trust Fund. Given the existing legal restrictions of the Fund, external managers would find it extremely difficult to invest the Fund's portfolio.

The 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 Fund is the most cost-effective approach.

The staff manage the Fund's bond portfolio primarily through a buy-and-hold, laddered maturity approach. Virtually all securities are held to maturity after purchase. To minimize reinvestment risk and reduce exposure to dramatic interest rate fluctuations, the portfolio purchases securities with uniformly staggered maturity dates.

*Figure 20 (con't).  
Historical  
Asset Mix  
FY 1986-1990*

	Market Value				
	1986	1987	June 30, 1988	1989	1990
<b>Bonds</b>					
\$Million	239.0	297.0	313.6	375.0	359.0
Percent	65.4	82.2	87.6	97.5	95.2
<b>Unallocated Cash</b>					
\$Million	126.0	64.0	44.2	9.6	18.2
Percent	34.6	17.8	12.4	2.5	4.8
<b>Total Fund</b>					
\$Million	365.0	361.0	357.8	384.6	377.2
Percent	100.0	100.0	100.0	100.0	100.0

## INVESTMENT PERFORMANCE

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

From a total portfolio **risk perspective**, the 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 control risk by establishing a laddered portfolio structure, thereby avoiding significant interest rate bets. Further, the staff purchase only investment-grade bonds and seek to maintain an overall portfolio quality rating of at least AA.

From a **rate of return perspective**, the Board is not concerned with the Fund's total rate of return. Market value changes have no effect on the Fund's ability to produce spendable income. Spendable income is affected only to the extent that any securities are sold at losses. Thus, the Fund's return objective is to maintain a high current yield on new investments.

The Fund achieved its risk-return performance objectives during the year. On June 30, 1990, the Fund's bond portfolio had a duration of 7.2 years, an average quality rating of AAA and a current yield of 9.0%. Further, for fiscal year 1990 the Fund generated income in excess of the Minnesota Department of Finance's spendable income target.

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*Figure 21.*  
*Bond Portfolio*  
*Statistics*  
*June 30, 1990*

Value at Market	\$358,956,742
Value at Cost	343,574,060
Average Coupon	9.00%
Current Yield	9.00
Yield to Maturity	8.96
Current Yield at Cost	9.22
Time to Maturity	15.11 Years
Average Duration	7.22 Years
Average Quality Rating	AAA
Number of Issues	132

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# **CASH MANAGEMENT**

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**Internal Cash Pools**

**Securities Lending Program**

**Certificate of Deposit Program**

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## INTERNAL CASH POOLS

### State Cash Accounts

The State Board of Investment (SBI) manages the cash balances in more than 400 state agency accounts with the objectives of preserving capital and providing competitive money market returns. To this end, the SBI invests these 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. On June 30, 1990, the combined value of all agency cash balances was \$3 billion.

### Pool Structure

Most of the cash accounts are managed by SBI staff through two pooled investment vehicles, which operate much like money market mutual funds:

- **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 an average daily balance of \$ 0.2 billion.
- **Treasurer's Cash Pool.** This pool contains cash balances from the Invested Treasurer's Cash and other accounts necessary for the operation of state agencies . The Treasurer's Cash Pool has an average daily balance of \$2.2 billion.

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

### Performance

For fiscal year 1990, both the Trust Fund Pool and the Invested Treasurer's Cash Pool outperformed the total return on 91 Day Treasury Bills:

Trust Fund Pool	8.8%
Treasurer's Cash Pool	9.0
91Day Treasury Bills	8.2%

## **SECURITIES LENDING PROGRAM**

As part of its internal 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 generated approximately \$3.3 million in additional income for the funds managed by the Board in fiscal year 1990.

## **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).

The Minnesota Certificate of Deposit program provides a reliable source of capital to Minnesota financial institutions, regardless of size, many of which do not have access to the national CD market. The Board designed the program so that no single institution is favored in the allocation of assets.

During fiscal year 1990, the SBI purchased over \$121 million of CD's from Minnesota financial institutions. Since it began the program in 1980, the SBI has purchased over \$1.5 billion of CD's from over 465 financial institutions throughout the state.

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# **MAJOR POLICY INITIATIVES**

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**Task Force on Manager Retention**

**Custom Tilted Index Fund**

**Benchmark Portfolios**

**Performance-Based Fees**

**Manager Continuation Policy**

**Police and Fire Fund Consolidation**

**Resolution on South Africa**

**Mandate on Northern Ireland**

**Proxy Voting**

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## **TASK FORCE ON MANAGER RETENTION**

At the request of the State Board of Investment (SBI), the Investment Advisory Council (IAC) formed a special study group to examine a variety of issues relating to the use of stock and bond managers in the Basic Retirement Funds. The Task Force on Manager Retention was chaired by Judith Mares and included four additional members of the IAC: James Eckmann, James Hacking, Deborah Veverka and Jan Yeomans.

### **Issues Addressed**

The Task Force began its review in October 1989 and presented its final report in June 1990. The group addressed four questions:

- should the SBI continue to use both active and passive managers?
- should the SBI continue to use customized benchmarks to measure manager performance?
- should the SBI change the guidelines it uses to make retention and termination decisions regarding its managers?
- should the SBI take action to reduce the existing bias toward small capitalization growth in the stock manager group?

### **Active/Passive Mix**

As outlined in the Basic Retirement Funds section, Board policy calls for at least one-half of the stock and bond segments of the Basic Funds to be managed passively.

- **Stocks.** Passive (index) management was first used in 1983. At that time, two-thirds of the stock segment was indexed and one-third was placed with active managers. This proportion has remained fairly constant since that time.
- **Bonds.** Semi-passive (enhanced index) management was introduced at the start of fiscal year 1989. At that time, one-half of the bond segment was moved from active managers to enhanced index managers. This division has remained quite stable during the last two years.

## MAJOR POLICY INITIATIVES

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The Task Force recommended no change to the Board's policy on active/passive mix. The group based its endorsement of the existing guideline on two conclusions:

- **Potential for Value Added.** The Task Force believed that active management can add value over the long-term. As a result, the group concluded that it is appropriate for the SBI to utilize active stock and bond managers in the Basic Funds.
- **Size Constraints.** Given the large size of the Basic Funds, the Task Force concluded that the assets committed to active management must be constrained. The one-half active, one-half passive policy guideline means the SBI would maintain more than \$3 billion under active management over the next few years. This translates to at least 15-20 active stock and bond managers with portfolios of \$150-200 million each. The Task Force believed that the universe of managers capable of effectively handling accounts of this size is somewhat limited. In addition, there are constraints on the number of active managers that can be monitored and evaluated effectively by SBI staff. The current guideline addressed these constraints on a practical level.

### **Benchmarks**

The SBI began using customized benchmarks to measure the performance of its active managers in 1986. The Task Force reviewed the SBI's experience with benchmarks and concluded that they should continue to be used as an evaluation tool. The Task Force believed that a customized benchmark is a better representation of a manager's specialized investment style or approach than a broad market index. Therefore, the group endorsed the SBI's existing policy to use benchmarks as the quantitative standard against which managers are measured. (For more information see "Benchmark Portfolios" which appears later in this section of the Annual Report.)

### **Retention/ Termination Decisions**

The SBI has used both qualitative and quantitative standards to evaluate managers since external management was introduced in the Basic Funds in 1983. These standards were formalized in 1988 when the Board adopted its Manager Continuation Policy, a set of comprehensive guidelines that are used to make retention and termination decisions. (For a more complete description, see "Manager Continuation Policy" which appears later in this section of the Annual Report).

The Task Force reviewed the policy to determine if modifications were advisable. The group endorsed the underlying

## **MAJOR POLICY INITIATIVES**

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structure of the evaluation framework. However, the Task Force concluded that the existing focus on cumulative performance might allow recent deterioration to be overlooked. As a result, the Task Force recommended changes that would trigger an in-depth analysis at various intervals. The analysis would include all aspects of a manager's organization, investment approach and performance history.

### **Bias/Misfit Control**

The Task Force concluded that the use of multiple specialized active managers is appropriate as long as the manager group covers the entire market adequately (i.e. the aggregate benchmark of the manager group approximates the broad market or asset class target). The group observed that the SBI has not provided this coverage with its stock manager program. The active manager group has shown a persistent over exposure to small, growth oriented stocks during a prolonged period when this segment of the market has underperformed significantly. The Task Force noted that this bias or "misfit" is the primary reason why the SBI's active stock managers, in aggregate, have underperformed the broad market.

The Task Force concluded that unintended misfit is counter productive and should be minimized as efficiently as possible. The group recommended that the characteristics of the index fund should be modified or "tilted" to compensate for misfit in the stock segment of the Basic Funds. (More information on this recommendation is presented in the following section.)

### **Board Action**

At its meeting in June 1990, the Board adopted all recommendations of the Task Force on Manager Retention.

## **CUSTOM TILTED INDEX FUND**

“Misfit” is the difference between the aggregate benchmarks of the active managers and the asset class target. The Basic Funds’ active stock manager group has shown a significant misfit versus its target, the Wilshire 5000, in three major areas:

- persistent over-exposure to small capitalization stocks
- persistent over-exposure to growth oriented stocks
- persistent under-exposure to yield oriented stocks

The active manager group has held the bias toward small, growth oriented stocks during a prolonged period when this segment has underperformed significantly. This is the primary reason why the manager’s benchmarks, individually and in aggregate, have underperformed the broad market in the past.

Analysis showed that the aggregate benchmarks of the current active managers group could be expected to vary up to 3.2 percentage points above or below the Wilshire 5000 on an annual basis. This variance can easily overwhelm any value added through active management.

### **Alternatives**

The State Board of Investment (SBI) could take one of three basic courses of action with respect to misfit:

- It could make an explicit choice to leave the misfit in place indefinitely. This amounts to a judgement that small growth stocks will outperform the market in the future.
- It could take action to reduce the misfit using one or more of the following strategies: reallocating assets among existing managers, adding new managers, establishing a completeness fund, or modifying the characteristics of the current index fund.
- It could leave the current bias toward small growth stocks in place for the time being and then take action to reduce the misfit at some point in the future.

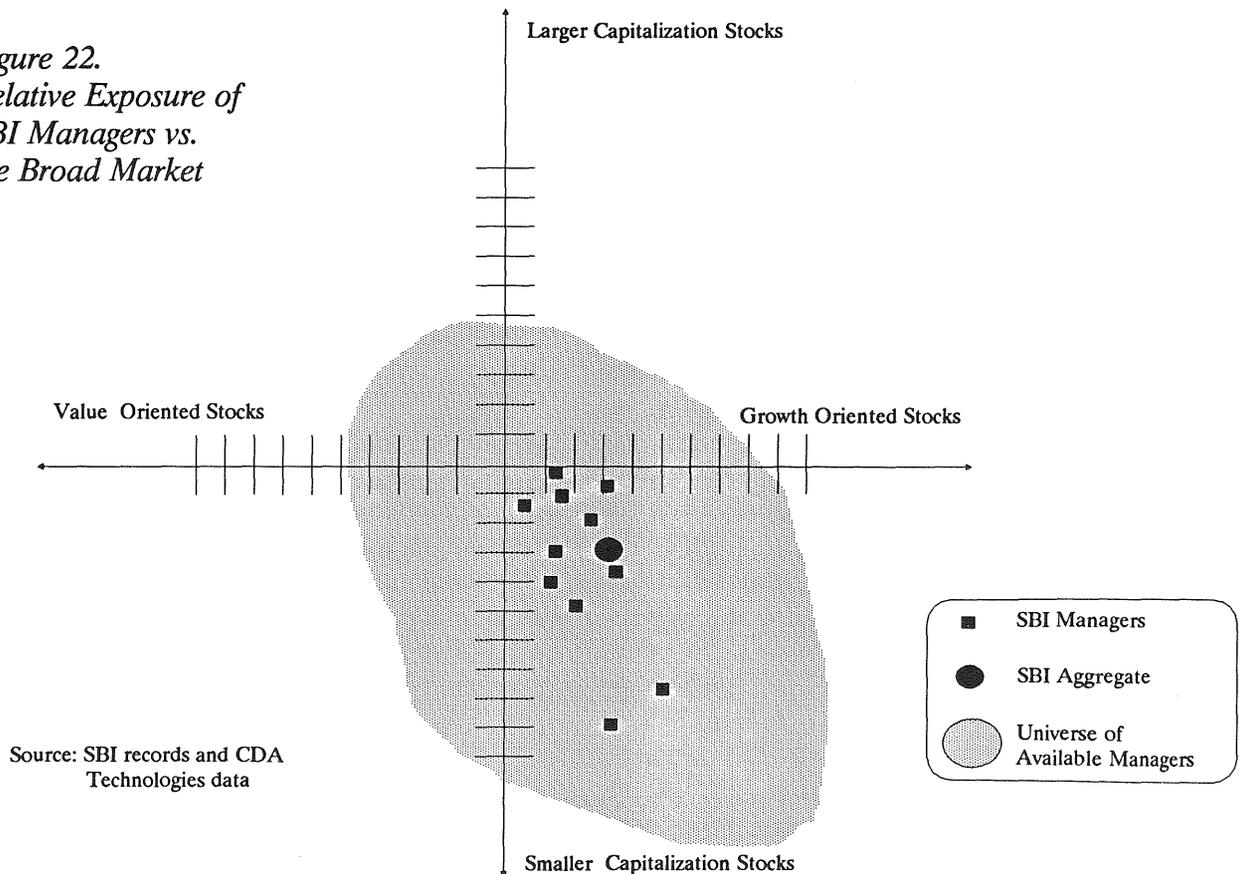
The SBI believes that unintended misfit is counter-productive over the long-term and may mask the value added by active management. Therefore, the SBI has concluded that it should reduce its exposure to misfit risk in a cost efficient manner.

**Implementation Options**

With the assistance of the Task Force on Manager Retention (see previous section) the SBI examined several strategies to control misfit risk:

- **Reallocating Assets Among Existing Managers.** In varying degrees, all of the SBI active managers have a bias toward the small-growth area of the market. As a result, reallocating assets among the existing managers will do little to offset the existing bias (see Figure 22).
- **Adding New Active Managers.** The universe of available active managers is oriented toward the small-growth area of the market (see Figure 22). Efforts to offset the existing bias by adding new active managers will be relatively ineffective. In 1989, the SBI attempted to reduce its growth bias by adding four managers with a value orientation (Concord, Franklin, Rosenberg, Sasco). While the new managers did impact the characteristics of the stock segment, they did not reduce the overall misfit significantly.

*Figure 22.  
Relative Exposure of  
SBI Managers vs.  
the Broad Market*



- **Adding a Large-Value Index Portfolio.** The SBI could attempt to counter balance the existing misfit by adding a passive portfolio that is indexed to large-value stocks. However, since the existing misfit is not solely a small-growth bias, this strategy would not reduce misfit dramatically. Further, the performance of this portfolio would vary widely on a year-to-year basis relative to the Wilshire 5000.
- **Establishing a Completeness Fund.** A completeness fund is a portfolio specifically designed to compensate for misfit. It “completes” the active manager group by investing in those areas of the market that are not covered by the aggregate benchmarks of the active managers. A completeness fund could be managed passively or actively but is constrained by the amount of assets devoted to it. A \$200-250 million completeness fund would reduce misfit in the Basic Funds somewhat. However, like the large-value index, the performance of a

*Figure 23.  
Relative  
Efficiency of  
Misfit Control  
Strategies*

<b>Strategy</b>	<b>Resulting Misfit</b>	<b>Net Change</b>
Current Active Stock Managers Combined with:		
Current Index	±1.43	—
Large Value Style Index		
● \$300 million	±1.33	-0.10
● \$500 million	±1.35	-0.08
● \$700 million	±1.45	+0.02
Active Manager Completeness Fund	±1.14	-0.29
Tilted Index Fund	±0.59	-0.84

Note: All figures are annualized percentage points.  
Source: SBI data using BARRA analytics.

completeness fund of this size would vary widely on a year-to-year basis.

- **Tilting the Characteristics of the Index Fund.** The index fund represents approximately 60% of the entire common stock segment of the Basic Funds. Because of its large size, the index fund can be a powerful lever in managing the characteristics of the entire stock segment. With relatively minor changes in its holdings, the index fund could be modified or “tilted” to compensate for the existing misfit in the active manager group.

A summary of the analysis of the various alternatives is shown in Figure 23. The SBI concluded that use of a tilted index fund is clearly the most efficient method available to control its misfit risk.

Due to the changes in its composition, the returns of the tilted index will not track the Wilshire 5000 as closely as the current index fund. However, the combination of active manager benchmarks and the tilted index fund should vary no more than 60 basis points above or below the Wilshire 5000 on an annualized basis. This is very close to the tracking error expectation for the current index fund.

### Transition

The SBI acknowledges that misfit has reduced investment returns in the Basic Funds. From January 1984-December 1989, the cumulative dollar impact of misfit in the stock segment was negative \$65 million. Strong relative performance in the small-growth area of the market in the future could reverse this impact. However, the Board does not believe it is prudent to delay implementation of misfit control indefinitely.

Therefore, the SBI concurred with the recommendation of the Task Force on Manager Retention that the tilted index fund be phased in on a quarterly basis over a period not exceeding two years. If the cumulative impact of the misfit is neutralized (reduced to approximately \$0) prior to the end of the two year period, any remaining portion of the “tilt” to the index will be made immediately. This implementation schedule will minimize the transaction costs associated with the transition.

## BENCHMARK PORTFOLIOS

The State Board of Investment (SBI) has utilized benchmark portfolios for each of its active stock and bond managers in recent years. These benchmarks are an integral component of the Board's manager evaluation process and provide the foundation for a performance-based fee system.

### Purpose

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.

A benchmark portfolio is a more appropriate target to use in measuring the performance of an individual manager than a broad market index. 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.

### Characteristics

A benchmark which fairly represents a manager's investment process should possess the following characteristics:

- **Unambiguous.** The names and weights of securities comprising the benchmark are clearly delineated.
- **Investable.** The option is available to forego active management and simply hold the benchmark.
- **Measurable.** It is possible to calculate the return of the benchmark at predetermined intervals.
- **Reflective of current investment opinions.** The manager has current investment knowledge (be it positive, negative, or neutral) of the securities which make up the benchmark.
- **Specified in advance.** The benchmark is constructed prior to the start of an evaluation period.

With these characteristics in mind, a benchmark is constructed by identifying the salient features of the manager's investment process, selecting securities for the benchmark that are consistent with that process and developing a weighting scheme for the securities as well as a normal cash position. The benchmark must be rebalanced on a predetermined schedule.

The description above was drawn from material developed by the SBI's consultant, Richards & Tierney.

### **Development**

SBI staff developed the initial benchmark portfolios for the Board's active common stock managers in fiscal year 1986. During the following year, responsibility for maintaining appropriate benchmarks was shifted from staff to the individual managers. During fiscal years 1988 and 1989 benchmark portfolios were developed and adopted for each of the Board's active bond managers.

### **Monitoring**

All benchmarks are monitored by Board staff and the Board's consultant. Individual manager performance relative to benchmarks is calculated by the consultant 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 in manager evaluation and are integral to the application of performance-based fees.

**More detail on historical manager performance relative to benchmark portfolios is contained in the Statistical Data Appendix.**

## **PERFORMANCE-BASED FEES**

After the Securities and Exchange Commission removed its prohibition on performance-based fees, the State Board of Investment (SBI) was among the first institutional investors to implement this method of compensation.

### **Structure**

In general, the Board uses symmetrical fulcrum fee systems. These fee systems establish 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.

### **Active Stock Managers**

Since fiscal year 1987, each of the Board's external active stock managers has been paid using a fee schedule that compensates managers for their performance relative to their benchmark portfolios. The current formula is summarized below:

- As assets under management increase, the base fee rate paid to the manager decreases in line with the manager's sliding fee scale.
- All excess performance calculations reflect base fee payments. The manager's actual portfolio return is calculated net of the base fee. The manager is expected to outperform the benchmark portfolio, net of the base fee, by 150 basis points.
- Performance fees are calculated by assigning a one-quarter weight to the return of the most recent year and a three-quarters weight to the returns over the most recent three years.
- Regardless of the base fee, the manager reaches the maximum performance fee rate at 900 basis points above the benchmark return. Performance at 600 basis points below the benchmark results in a fee rate of zero.
- The minimum fee rate is zero and the maximum total fee rate is twice the base fee.

The Board believes this fee structure retains the simplicity and non-volatile nature of a 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.

**Enhanced  
Bond Index  
Managers**

The Board uses a performance based fee to compensate its enhanced bond index managers. In several respects, the performance fee for these managers is similar to the schedule described above:

- The excess performance calculation is calculated net of the base fee.
- The manager receives one additional basis point in fee for every fifteen basis points of performance above the Salomon Broad Investment Grade Bond Index. Performance below the index generates reductions in fees by the same proportion.
- The minimum fee is 5 basis points and the maximum is 10 basis points.

The Board believes this formula ensures that the managers maintain a level of risk that is appropriate for a semi-passive investment approach.

## **MANAGER CONTINUATION POLICY**

Evaluating the performance of a diverse group of money managers is an integral feature of the Board's investment policy. In order to make informed judgments regarding the current capabilities of its managers, the State Board of Investment (SBI) has adopted a set of specific evaluation guidelines. These guidelines form a "**manager continuation policy**" that assists the Board in its decisions concerning retention and termination of money managers.

The Board believes its manager continuation policy offers three primary benefits:

- It encourages a comprehensive and consistently applied analysis.
- It fosters a long-term attitude toward performance evaluation.
- It communicates investment objectives between the Board, its managers and its staff.

Investment skill is difficult to confirm statistically. Reliance solely on portfolio returns is inadvisable so qualitative aspects of a manager's operation must also be considered. Therefore, the Board's manager continuation policy includes both quantitative and qualitative performance criteria.

### **Qualitative Criteria**

Qualitative performance evaluation criteria relate to those aspects of a money manager's investment operation that cannot be expressed as measurable targets. Investors such as the Board must attempt to deduce the skills of money managers by searching for the presence or absence of basic building blocks of sound investment management within a manager's firm:

- **Elements of an Efficient Organization**
  - Experienced and talented staff
  - Organizational stability
  - Clear leadership
  - Planned growth
  - Adequate client support

- **Elements of a Well-Defined Investment Approach**

- Clearly specified investment style
- Well-conceived decision-making process
- Adequate feed-back and control mechanisms

Failure to meet one or more of these criteria is not sufficient reason to terminate a manager. As a general rule, qualitative evaluation is applied in conjunction with quantitative evaluation to determine whether a manager is meeting the Board's expectations. However, it is important to specify exceptions to this general rule. Certain changes in a manager's organization or investment approach will dictate reevaluation of the Board's relationship with the firm: a change in the firm's ownership or important members of its management team, a significant gain or loss of accounts within the preceeding year, a change in the manager's investment style, or an inability to create or maintain an appropriate benchmark portfolio.

### **Quantitative Criteria**

Quantitative performance evaluation criteria relate to those aspects of a money manager's operation that can be analyzed relative to measurable targets. A manager's return relative to an appropriate benchmark represents "the bottom line" for a plan sponsor. However, the Board recognizes that investment performance of superior and inferior managers exhibits a large amount of variability, even when returns are measured relative to a customized benchmark.

Quantitative performance criteria must take this variability into account. A poorly designed measure could lead a plan sponsor to erroneously classify managers as inferior. This, in turn, could create costly and excessive manager turnover.

Figure 24 depicts a statistically valid method of assessing the variability of manager performance relative to a benchmark. The horizontal line represents the return on the manager's customized benchmark. Cumulative performance exceeding the benchmark will plot above the horizontal line; cumulative performance falling below the benchmark will plot below the line. The area between the two curved lines represents a confidence interval based on the manager's actual return relative to its benchmark.

Returns within the confidence interval represent performance due either to skill or to chance. Returns falling outside the confidence interval represent superior or inferior performance significant enough that the odds of it being due to chance are

low. Since performance results are reviewed on a cumulative and annualized basis, the confidence interval range narrows over time. As more information is received, the ability to make judgments about a manager's investment skill increases. The Board has incorporated this confidence interval approach in the quantitative evaluation of its stock and bond managers.

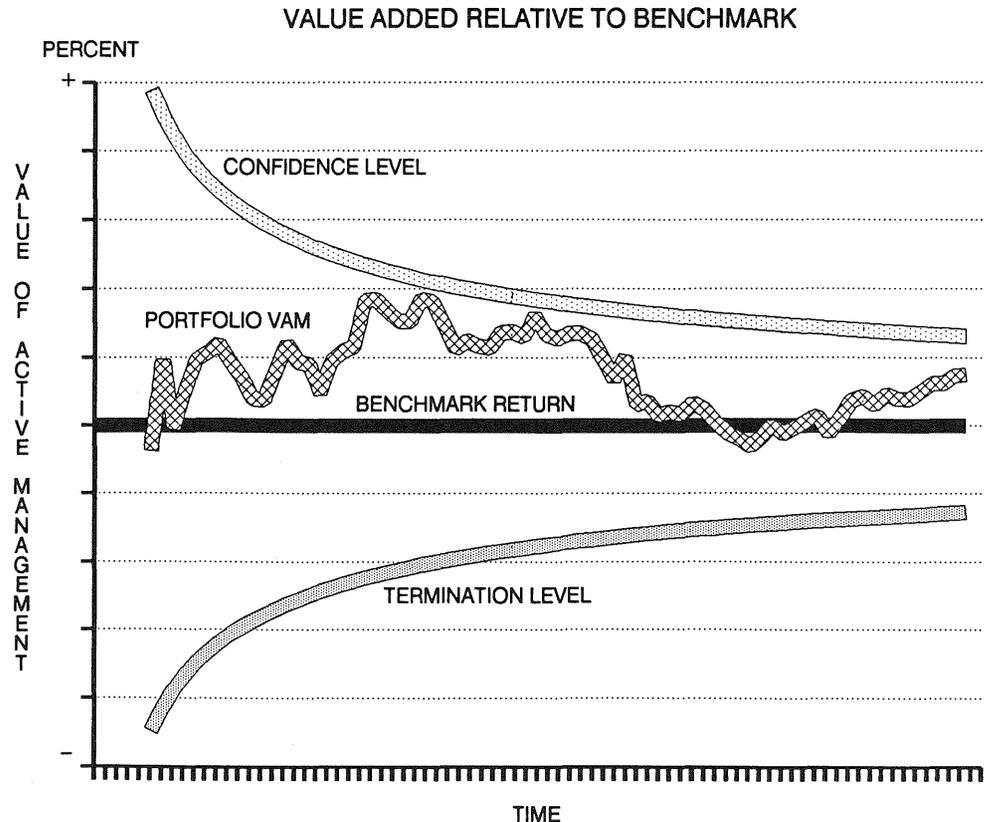
**Review Cycle**

Staff review the results of summary qualitative and quantitative evaluations for each manager with the Investment Advisory Council on a quarterly basis.

In addition, each active manager receives a detailed review at least once every three years. This review covers all aspects of the manager's organization and investment approach as well as an in-depth performance attribution analysis. A similar detailed review is conducted if a manager's performance over the most recent five year period trails its benchmark.

These analyses are the foundation for recommendations to the Board concerning the retention and termination of the Board's active stock and bond managers. They provide a comprehensive and consistent approach to performance evaluation and offer a clearer measure of a manager's ability to add value over time.

*Figure 24.  
Confidence Interval*



## POLICE AND FIRE FUND CONSOLIDATION

In 1987, legislation was enacted that establishes procedures for voluntary consolidation of local police and fire plans with the Public Employees Retirement Association (PERA). When a merger is approved, assets are transferred from the local plan to the Basic Retirement Funds and Post Retirement Fund.

By statute, the executive director of the State Board of Investment (SBI) has authority to accept assets in-kind or to require that individual holdings be converted to cash prior to the transfer. Since the investments made by local plans are similar to those made by the SBI, most assets can be transferred at their market value.

During fiscal years 1988-1990, twelve plans with assets totaling \$73 million merged with PERA under the procedures established by *Minnesota Statutes* Chapter 353A:

- Anoka Police Relief Association
- Buhl Police Relief Association
- Duluth Police Pension Association
- Hibbing Firemen's Relief Association
- Hibbing Police Relief Association
- Red Wing Fire Relief Association
- Red Wing Police Relief Association
- Rochester Police Relief Association
- St. Cloud Firefighter's Relief Association
- St. Louis Park Fire Department Relief Association
- West St. Paul Firemen's Relief Association
- Winona Fire Relief Association

Several other organizations are in various stages of the approval process and are expected to merge during fiscal year 1991.

## RESOLUTION ON SOUTH AFRICA

In October 1985, the State Board of Investment (SBI) adopted a resolution concerning its holdings in companies doing business in countries of South Africa and Namibia. In March 1989, the SBI revised and restated the resolution.

### Original Resolution

The original resolution established a four phase timetable for the SBI's divestment program which was tied to a company's rating on its implementation of the Sullivan Principles, a set of fair employment guidelines established by Dr. Leon Sullivan. In addition, the resolution required that the divestment action associated with each phase of the resolution would not take place before the Board obtained legal and financial advice concerning any impact on its fiduciary responsibilities.

After reviewing reports from its financial and legal advisers, the Board decided not to immediately liquidate holdings affected by the resolution. Rather, it chose to implement the requirements of each phase by instituting a policy of "**divestment through attrition.**" Under this policy, the Board's active stock managers were directed to discontinue purchases of stock in companies affected by the resolution unless the manager determined that the failure to buy a particular securities would be a violation of its fiduciary responsibility. As existing holdings were sold during the normal course of business, it was expected that stock holdings in the restricted companies would decline.

During fiscal years 1986-1988, substantial progress was made toward full divestment using the divestment through attrition policy. The reduction was due both to sales of shares during the normal course of business and the decision of many companies to withdraw their operations from South Africa.

### Revised Resolution

In March 1989, the Board revised the original resolution to reflect the divestment through attrition policy and to recognize the continual change in the specific companies that have South African operations.

The revised resolution provides that the Board will divest from its actively managed stock portfolios the remaining holdings of all companies doing business in South Africa by March 1, 1991. In the event a stock becomes subject to divestiture after March 1, 1991, the stock is to be divested within two years.

The SBI relies on information available through the Investor Responsibility Research Center (IRRC) in Washington, D.C. to

identify companies with direct investment in South Africa. The Board directs its active stock managers to discontinue purchases of these companies unless the manager determines that failure to complete a purchase would be a breach of the manager's fiduciary responsibility.

At the time the Board adopted the revised resolution, the SBI's active stock managers held shares in 21 companies with direct investments in South Africa. By the end of fiscal year 1990, the number had been lowered to 9 companies indicating that progress continues to be made through the Board's divestment through attrition policy.

### **Task Force**

When the original resolution was adopted, the Board created a Task Force on South Africa to advise the SBI on its implementation process. Designees of each of the five Board members serve as members of the Task Force along with a representative from the statewide retirement systems, a representative of public employees and a representative from the private sector. The Task Force continues under the revised resolution and meets periodically to monitor the SBI's progress in implementing the resolution.

**MANDATE ON NORTHERN IRELAND**

**Requirements**

In 1988, the Legislature enacted statutory provisions concerning the Board's investments in U.S. companies with operations in Northern Ireland. The statute requires the State Board of Investment (SBI) to:

- Annually compile a list of U.S. corporations with operations in Northern Ireland in which the SBI invests.
- Annually determine whether those corporations have taken affirmative action to eliminate religious or ethnic discrimination. The statute lists nine goals modeled after the MacBride Principles.
- Sponsor, co-sponsor and support resolutions that encourage U.S. companies to pursue affirmative action in Northern Ireland, where feasible.

The statute does not require the SBI to divest existing holdings in any companies and does not restrict future investments by the SBI.

**Implementation**

The SBI uses the services of the Investor Responsibility Research Center (IRRC), Washington D.C., to determine corporate activity in Northern Ireland. In January 1990 the SBI held stocks or bonds in 27 out of 35 corporations identified by IRRC as having operations in Northern Ireland.

The SBI filed shareholder resolutions with 26 of these corporations during the 1990 proxy season. The resolutions asked corporations to sign the MacBride Principles, to implement affirmative action programs or to report on the steps they have taken to alleviate religious or ethnic discrimination. Ten (10) resolutions were withdrawn when the targeted companies agreed to provide information on their employment activity in Northern Ireland. The voting results on the remaining 16 resolutions are shown below:

Affirmative		Affirmative	
Company	Vote	Company	Vote
Baker Hughes	9.9%	McDonnell Douglas	6.3%
Ball	5.5	Minnesota Mining	4.1
Dun & Bradstreet	12.5	Mobil	10.6
DuPont	3.9	NCR	7.9
Exxon	5.7	Sonoco Products	5.6
General Motors	9.4	United Technologies	5.0
IBM	11.7	Unisys	14.0
Marsh & McLennan	8.8	Xerox	11.5

## **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.

### **Voting Process**

The Board recognizes its fiduciary responsibility to cast votes on proxy issues. The SBI does not delegate the duty to its external investment managers. Rather, the SBI actively votes all shares according to guidelines established by its Proxy Committee.

The Board delegates proxy voting responsibilities to its Proxy Committee which is comprised of a designee of each Board member. The five member Committee meets only if it has a quorum and casts votes on proxy issues based on a majority vote of those present. In the unusual event that it reaches a tie vote or a quorum is not present, the Committee will cast a vote to abstain.

### **Voting Guidelines**

The Committee has formulated guidelines by which it casts votes on a wide range of corporate governance and social responsibility issues. Each year the Proxy Committee reviews existing guidelines and determines which issues it will review on a case-by-case basis.

### **Corporate Governance Issues**

- **Routine Matters.** In general, the SBI supports management on routine matters such as uncontested election of directors; selection of auditors; management proposals on compensation issues including savings plans and stock options; and limits on director and officer liability or increases in director and officer indemnification permitted under the laws of the state of incorporation.
- **Shareholder Rights Issues.** In general, the SBI opposes proposals that would restrict shareholder ability to effect change. Such proposals include instituting supermajority requirements to ratify certain actions or events; creating classified boards; barring shareholders from participating in the determination of the rules governing the board's actions, such as quorum requirements and the duties of

directors; prohibiting or limiting shareholder action by written consent; and granting certain stockholders superior voting rights over other stockholders.

In general, the SBI **supports** proposals that preserve shareholder rights to effect change. Such proposals include requiring shareholder approval of poison pill plans; repealing classified boards; adopting secret ballot of proxy votes; reinstating cumulative voting; and adopting anti-greenmail provisions.

### Social Responsibility Issues

- **Buyout Proposals.** In general, the SBI **supports** friendly takeovers and management buyouts.
- **Special Cases.** The Proxy Committee evaluates hostile takeovers, contested election of directors, compensation agreements that are contingent upon corporate change in control, and recapitalization plans on a case-by-case basis. In addition, the Committee reviews all corporate governance issues affecting companies incorporated or headquartered in Minnesota on a case-by-case basis.
- **South Africa and Namibia.** The SBI **supports** a variety of proposals regarding South Africa including those that encourage the signing of the Statement of Principles (formerly Sullivan Principles); encourage withdrawal from South Africa; sever all company ties with South Africa; promote the welfare of black employees and improve the quality of black life outside the work environment; limit strategic sales to South Africa; apply economic pressures on the South African government; or request a report on operations in South Africa.
- **Northern Ireland.** The SBI **supports** resolutions that call for the adoption of the MacBride Principles as a means to encourage equal employment opportunities in Northern Ireland. Also, the SBI **supports** resolutions that request companies to submit reports to shareholders concerning their labor practices or their sub-contractors' labor practices in Northern Ireland.
- **Environmental Protection/Awareness.** In general, the SBI **supports** resolutions that require a corporation to report or disclose to shareholders company efforts in the environmental arena. In addition, the SBI **supports** resolutions that request a corporation to report on progress toward achieving the objectives of the Valdez

## MAJOR POLICY INITIATIVES

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Principles, an environmental code of conduct for corporations.

- **Other Social Responsibility Issues.** In general, the SBI **supports** proposals that require a company to report or disclose to shareholders company efforts concerning a variety of social responsibility issues. In the past, these reporting resolutions have included issues such as affirmative action programs, animal testing procedures, nuclear plant safety procedures and criteria used to evaluate military contract proposals.

In general, the SBI **opposes** proposals that require a company to institute a specific business action in response to such issues. As an example, the SBI voted against a shareholder proposal which would have required a utility to phase out operations of a nuclear power plant.

### **FY 1990 Proposals**

During fiscal year 1990, the SBI voted proxies for more than 1,900 corporations.

In the corporate governance area, shareholders submitted over 30 proposals to redeem "poison pills" (an anti-takeover device) or submit them to shareholder vote. These proposals passed at 11 companies. More than 40 proposals were submitted concerning confidential voting; 4 proposals received more than half of the shares cast and 13 firms agreed to adopt the procedure.

In the social responsibility area, South Africa again was the dominant social issue with over 70 proposals. Other social responsibility issues included proposals regarding environmental protection and awareness and the campaign against religious discrimination in Northern Ireland.



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# **INVESTMENT MANAGER SUMMARIES**

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**Common Stock Managers**

**Bond Managers**

**Alternative Investment Managers**

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**COMMON STOCK MANAGERS**

**Alliance  
Capital  
Management**

Alliance searches for companies likely to experience high rates of earnings growth on either a cyclical or secular basis. Alliance invests in a wide range of growth opportunities from small, emerging growth to large, cyclically sensitive companies. There is no clear 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.

**Concord  
Capital  
Management**

Concord is an opportunistic theme investor that does not limit itself to any particular group of stocks, avoiding preconceptions about where value currently lies. Concord believes that the marketplace is generally efficient but feels that isolated opportunities exist due to biases inherent in the traditional approaches used by the majority of the investment profession. Concord's non-traditional approach allows the firm to discover these opportunities early and to capture the total appreciation of the undervalued stocks. Concord's goal is to remain as fully invested as possible; the firm rarely raises cash above a minimal level.

**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.

**Franklin  
Portfolio  
Associates**

Franklin Portfolio Associate's investment decisions are quantitatively driven and controlled. The firm believes that consistent application of integrated multiple valuation models produces superior investment results. The firm's stock selection model is a composite model comprised of 30 valuation measures each of which falls into one of the following groups: fundamental momentum, relative value, future cash flow, and economic cycle analysis. The firm believes that a multi-dimensional approach to stock selection provides greater consistency than reliance on a limited number of valuation criteria. The firm attributes its value-added to its stock picking ability. Franklin's portfolio management process focuses on buying and selling the right stock rather than attempting to time the market or pick the right sector or industry groups. The firm always remains fully invested.

### **GeoCapital Corp.**

GeoCapital invests primarily in small capitalization equities with the intent to hold them as they grow into medium and large capitalization companies. The firm uses a theme approach and an individual stock selection analysis to invest in the growth/technology and intrinsic value areas of the market. In the growth/technology area, GeoCapital looks for companies that will have above average growth due to a good product development program and limited competition. In the intrinsic value area, the key factors in this analysis are the corporate assets, free cash flow, and a catalyst that will cause a positive change in the company. The firm generally stays fully invested, with any cash positions due to the lack of attractive investment opportunities.

### **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 invests in a wide range of industries. It tends to buy liquid, large capitalization stocks. While IDS makes occasional significant asset mix shifts over a market cycle, the firm is a less aggressive market timer than most rotational managers.

### **Investment Advisers Inc.**

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 invests 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.

### **Rosenberg Institutional Equity Management**

Rosenberg Institutional Equity Management believes the market is inefficient in the relative valuation of individual companies within groups of similar companies. Rosenberg uses quantitative techniques to identify and purchase undervalued stocks. The firm’s valuation system, as embodied in several computer programs, analyzes accounting data on over 3,500 companies. Unlike traditional analysis which assigns an entire company to one industry, Rosenberg compares each company’s separate business segments with similar business operations of other companies. These separate valuations are then integrated into a single valuation for the total company. The difference between Rosenberg’s valuation and

the current market price is the expected profit opportunity. Stocks with large positive profit opportunity are candidates for purchase. The firm does not strive to outperform its benchmark by timing the market or by “betting” on factors. The firm always remains fully invested.

### **Sasco Capital Inc.**

Sasco is a long term investor that concentrates exclusively on stock selection. Sasco looks for companies that are selling at a discount to both their asset value and future earnings power. Sasco analyzes a corporation’s individual business segments and invests in those that are undergoing major fundamental and structural change to increase their value. Sasco does not attempt to time the market. The firm strives to remain fully invested at all times.

### **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 the Wilshire 5000. This index is 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 the active equity managers can be found in the Statistical Data Appendix.**

## BOND MANAGERS

**Investment  
Advisers  
Inc.**

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 interest rate forecasts. Individual security selection receives very limited emphasis, focusing largely on specific bond characteristics such as call provisions.

**Fidelity  
Management  
Trust**

Fidelity Management Trust manages a diversified semi-passive portfolio of fixed income securities designed to simulate the characteristics of the Salomon Broad Investment Grade (BIG) index, a diversified market indicator composed of government, mortgage and corporate securities. The BIG index represents virtually the entire investment grade fixed income market. While matching the risk profile of the BIG index, Fidelity seeks to enhance returns by actively managing yield curve, sector, and issue exposure. The objective is to provide modest increments to the BIG index return on a consistent basis.

**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. In August, 1989, Lehman completed a management buyout and became Lehman Ark.

**Lincoln  
Capital  
Management**

Lincoln Capital manages a diversified semi-passive portfolio of fixed income securities designed to simulate the Salomon Broad Investment Grade (BIG) index. Lincoln employs quantitative disciplines that model the BIG index according to a variety of risk variables. Lincoln seeks to enhance returns relative to the BIG index by modest alterations to the BIG index sector weightings, the use of undervalued securities, and an aggressive trading strategy in mortgage securities. The objective is to provide modest increments to the BIG index return on a consistent basis.

**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. In addition, the firm will move in and out of cash gradually over an interest rate cycle. The firm never takes extremely high cash positions and keeps total portfolio maturity within an intermediate three-to-seven year duration band. Unlike other firms that also invest in mortgage securities, Miller Anderson intensively researches and, in some cases, manages the mortgage pools in which it invests.

### **Morgan Stanley Capital Management**

Morgan 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.

### **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 the active bond managers can be found in the Statistical Data Appendix.**

**ALTERNATIVE INVESTMENT MANAGERS**

**Real Estate**

**Fund: RESA**

**Aetna Life  
& Casualty**

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**

**Equitable  
Real Estate  
Group**

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.

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

**Heitman  
Advisory Corp.  
(HAC)**

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 trusts' wholly-owned properties. Properties that are partially owned by the trusts may be managed by joint venture partners. Heitman Advisory is based in Chicago.

**Fund: PRISA I**

**Prudential  
Investment  
Management**

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.

**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. 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: AEW - State Street Real Estate Fund III  
AEW - State Street Real Estate Fund IV  
AEW - State Street Real Estate Fund V**

**State Street  
Bank & Trust**

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.

**Funds: TCW Realty Fund III  
TCW Realty Fund IV**

**Trust Company  
of the West  
(TCW)**

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.

## Venture Capital

**Fund: Allied Venture Partnership**

**Allied  
Capital**

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.

### **Funds: Venture Partnership Acquisition Fund I**

#### **Brinson Partners**

Brinson Partners Venture Partnership Acquisition Funds I was formed in 1988. The limited partnership has a ten year term. Brinson Partners is based in Chicago, Illinois. Fund I invests exclusively in secondary venture capital limited partnership interests which are sold by investors who for a variety of reasons have decided to sell some or all of their venture capital holdings.

### **Fund: DSV Partners IV**

#### **DSV Management Ltd.**

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: Golder, Thoma and Cressey Fund III**

#### **Golder, Thoma & Cressey**

Golder, Thoma and Cressey Fund III, a venture capital limited partnership, was formed in October, 1987. The fund is based in Chicago, Illinois and has a ten year term. The fund will invest in growing private businesses, found and build companies in fragmented industries and invest in small leveraged buyouts. In addition, the portfolio will be diversified geographically and by industry.

### **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.

### **Fund: Superior Venture Partners**

#### **IAI Venture Capital Group**

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.

## INVESTMENT MANAGER SUMMARIES

**Funds: KKR 1984 LBO Fund  
KKR 1986 LBO Fund  
KKR 1987 LBO Fund**

**Kohlberg, Kravis,  
Roberts & Co.  
(KKR)**

KKR's Leveraged Buyout Funds are structured as limited partnerships. The funds invest in large 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.

**Fund: Matrix Partners II**

**Matrix  
Partners**

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 general partners with offices in Boston, San Jose, and San Francisco.

**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 Growth Fund, a small business investment company (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.

**Fund: First Century III**

**Smith Barney  
Venture  
Corp.**

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: Summit Ventures I  
Summit Ventures II**

**Stamps,  
Woodsum & Co.**

Summit Ventures are limited partnerships with ten-year terms. The funds were formed 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 partnerships investments are in high tech firms. Investments are diversified by location and industry type.

### **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 capitalization and illiquid stocks.

## Resource Funds

### **Funds: Apache Equipment Financing Notes Apache Acquisition Net Profits Interest**

### **Apache Corporation**

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. The 2% additional interest will be paid to noteholders throughout the life of producing properties. Apache Corp. is based in Denver.

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.

### **Fund: British Petroleum Prudoe Bay Royalty Trust**

### **British Petroleum Company**

The British Petroleum Prudhoe Bay Royalty Trust is an overriding royalty interest (ORI) in the Prudhoe Bay Field, Alaska, the largest oil and gas producing field in the U.S. The ORI will equal 15.35% of the first 90,000 barrels per day of oil production net to British Petroleum's interest in the Prudhoe Bay Field. British Petroleum's current total production from the field is over seven times greater than this amount.

## **INVESTMENT MANAGER SUMMARIES**

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Under terms of the agreement, production costs are fixed and can vary only with inflation. The oil price is tied directly to the West Texas Intermediate spot price. British Petroleum has guaranteed an average minimum price of \$15 per barrel for the first 2.5 years.

**Funds: AMGO I  
AMGO II  
AMGO IV  
AMGO V**

**First  
Reserve  
Corp.**

American Gas and Oil (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.

**Fund: Morgan Petroleum Fund II**

**J.P. Morgan  
Investment  
Management**

Morgan Petroleum Fund II was formed in July 1988 and is managed by J.P. Morgan Investment Management, Inc. The fund managers have an office in Houston, Texas. Fund investments will be diversified geographically and by company. Most investments will take the form of an overriding royalty interest and will include, primarily, property acquisitions and development drilling.

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



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# **STATISTICAL DATA APPENDIX**

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**Manager Portfolio Statistics**

**Historical Performance Summaries**

**Time-weighted Rate of Return**

**Benefit Increase Formula**

**Fee and Commission Data**

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## STOCK MANAGER RISK FACTOR EXPOSURE GLOSSARY

The following definitions describe the risk factors that the State Board of Investment (SBI) uses in monitoring its stock managers. The terms are referred to in Table 1.

SBI analysis of a stock manager's portfolio, in part, utilizes the BARRA E2 risk model. The BARRA model contains a number of risk factors that the SBI has found to correlate highly with a manager's investment style. That is, a manager tends to exhibit consistent exposures to many of these risk factors over time. The benchmark construction process includes identifying these persistent exposures and capturing them in the benchmark portfolio.

Factor exposures are calibrated relative to approximately 1400 of the largest market capitalization (HICAP) companies. An exposure level of 0 for a particular stock to a particular factor indicates that the stock has the same exposure as the capitalization-weighted average of the HICAP stocks. Around that zero exposure, deviations are measured in standard deviation units. Thus, an exposure level of +1 indicates that the stock has an exposure to the factor larger than roughly 68% of the HICAP stocks.

<b>Beta</b>	Forecasts the sensitivity of a stock's return to the return on the market portfolio. The BARRA E2 beta is a forecasted beta, based on a company's exposure to thirteen common risk factors and fifty-five industries.
<b>Book-to-Price (B/P)</b>	Measures the book value of a company's common equity divided by market capitalization.
<b>Dividend Yield (Div. Yld.)</b>	Used as a predictor of dividend yield for the coming year.
<b>Earnings-to-Price (E/P)</b>	Incorporates several variants of a company's earnings-price ratio. Includes the current earnings-price ratio, the normalized (5 year) earnings-price ratio, and analysts's forecasted earnings-price ratio as compiled by the Institutional Brokerage Estimate Services (IBES).
<b>Earnings Variability (Earn. Var.)</b>	Indicates the variability of a company's earnings. Comprised of six descriptors: historical earnings variance, cash flow variance, earnings covariability with the economy, the level of concentration of the company's earnings from various sources, the incidence of extraordinary items, and the variability of the company's earnings estimates as compiled by IBES.
<b>Equity Allocation (Eq. Alloc.)</b>	Measures the percent of the manager's total portfolio invested in common stocks, preferred stocks and convertible securities.
<b>Financial Leverage (Finl.)</b>	Measures the extent to which a company utilizes financial leverage to finance its operations. Comprised of three descriptors: debt-to-total assets (at market), debt-to-total assets (at book), and uncovered fixed charges.
<b>Foreign Income (For. Inc.)</b>	Measures the extent to which a company's operating income is generated outside of the U.S.

## STOCK MANAGER RISK FACTOR EXPOSURE GLOSSARY

<b>Growth</b>	Indicates potential growth in a company's earnings over the next five years. Comprised of seven descriptors: most recent five-year dividend payout, most recent five-year dividend yield, most recent five-year earnings-price ratio, change in capital structure, normalized (5 year) earnings-price ratio, recent earnings change, and forecasted earnings growth.
<b>Labor Intensity (Labor Int.)</b>	Measures the degree to which labor, as opposed to capital, is used by a company as a factor of production. Derived from three descriptors: labor expense relative to assets, fixed plant and equipment (inflation adjusted) relative to equity, and depreciated plant value relative to gross plant value.
<b>Monthly Turnover (Mo. T/O)</b>	Measures the total equity asset sales divided by the average value of the equity assets in the manager's portfolio.
<b>Size</b>	Indicates the relative size of the company. It includes three descriptors: market capitalization, total assets, and the length of earnings history.
<b>Success (Suc.)</b>	Describes the extent to which a company has been "successful" in the recent past, in terms of both earnings and stock prices. Composed of six descriptors: most recent five-year earnings growth, most recent one-year earnings growth, forecasted next year's earnings growth, historical alpha, and relative strength. (The last two descriptors are calculated over the most recent year and most recent five-years).
<b>Trading Activity (Trad. Act.)</b>	Measures the trading characteristics of a company's stock. Comprised of six descriptors: most recent five-year share turnover, most recent year share turnover, quarterly share turnover, stock price, trading volume relative to stock price variance, and the number of IBES analysts following the stock.
<b>Variability in Markets (Var. Mkts.)</b>	Measures the volatility of a stock's return related to its past behavior and the behavior of its options. Variants of the factor are calculated for optioned stocks, listed but not optioned stocks, and thinly traded stocks. A partial list of the descriptors that make up this factor include: historical beta, option-implied standard deviation of return, daily standard deviation of return, cumulative price range, stock price, and share turnover.

Table 1.

## EXTERNAL ACTIVE STOCK MANAGERS

Risk Factor Exposures  
July 1985 - June 1990

	Beta	Var. Mkts.	Suc.	Size	Trad. Act.	Growth	E/P	B/P	Earn. Var.	Finl.	For. Inc.	Labor Int.	Div. Yld.	Mo. T/O	Eq. Alloc.
<b>Alliance Capital</b>															
Minimum	1.09	0.13	0.15	-0.28	0.17	0.41	-0.25	-0.55	-0.12	-0.12	-0.33	0.18	-0.80	0.81	90%
Average	1.14	0.26	0.32	0.06	0.42	0.57	-0.13	-0.36	0.04	0.08	0.06	0.28	-0.66	4.71	97%
Maximum	1.19	0.45	0.51	0.31	0.61	0.72	-0.04	-0.25	0.22	0.28	0.26	0.37	-0.50	10.91	100%
Bmrk. Avg.	1.16	0.37	0.01	-0.42	0.26	0.50	-0.04	-0.20	0.06	-0.03	-0.03	0.44	-0.55	N.A.	95%
<b>Concord Capital*</b>															
Minimum	1.12	0.23	-0.42	-0.77	0.43	0.14	0.10	0.16	0.20	0.01	-0.02	0.16	-0.24	0.00	97%
Average	1.15	0.32	-0.29	-0.57	0.51	0.20	0.25	0.22	0.24	0.06	0.10	0.22	-0.19	2.39	98%
Maximum	1.19	0.51	-0.21	-0.42	0.63	0.29	0.37	0.28	0.29	0.11	0.24	0.33	-0.13	6.31	99%
Bmrk. Avg.	1.04	0.18	-0.12	-0.72	0.12	0.11	0.02	0.09	0.15	-0.05	-0.36	0.01	-0.09	N.A.	95%
<b>Forstmann Leff</b>															
Minimum	1.01	0.05	-0.16	-1.35	0.19	-0.14	-0.35	-0.45	-0.04	-0.08	-0.37	-0.19	-1.08	1.69	44%
Average	1.16	0.52	0.27	-0.37	0.59	0.36	0.04	-0.16	0.26	0.13	0.13	0.11	-0.49	17.33	65%
Maximum	1.42	1.26	0.70	0.20	1.37	1.07	0.36	0.03	0.56	0.40	0.58	0.38	-0.14	57.51	94%
Bmrk. Avg.	1.13	0.36	0.02	-0.50	0.24	0.36	-0.04	-0.04	0.16	0.07	-0.04	0.23	-0.35	N.A.	70%
<b>Franklin Portfolio*</b>															
Minimum	1.04	0.22	-0.07	-0.95	0.06	0.14	0.15	0.10	0.18	-0.10	-0.61	-0.14	-0.26	3.62	94%
Average	1.06	0.27	0.03	-0.83	0.10	0.22	0.26	0.16	0.27	-0.03	-0.56	0.03	-0.18	7.40	98%
Maximum	1.09	0.31	0.15	-0.78	0.17	0.31	0.41	0.25	0.38	0.06	-0.52	0.16	-0.09	10.28	99%
Bmrk. Avg.	1.04	0.21	-0.11	-0.74	0.14	0.11	-0.01	0.10	0.16	-0.07	-0.39	0.01	-0.10	N.A.	95%
<b>GeoCapital Corp.**</b>															
Minimum	1.22	0.90	-0.41	-2.21	0.49	0.94	-0.72	-0.46	0.53	0.46	-0.45	0.50	-0.98	0.00	76%
Average	1.22	0.95	-0.35	-2.15	0.54	0.99	-0.67	-0.42	0.56	0.60	-0.43	0.51	-0.93	1.10	85%
Maximum	1.23	1.00	-0.24	-2.09	0.57	1.06	-0.61	-0.38	0.59	0.70	-0.40	0.52	-0.91	2.31	93%
Bmrk. Avg.	1.19	0.78	-0.02	-2.00	0.42	0.93	-0.42	-0.22	0.38	0.18	-0.38	0.53	-0.80	N.A.	95%
<b>IDS Advisory</b>															
Minimum	1.07	0.17	0.05	-0.47	0.07	0.20	-0.22	-0.37	0.00	-0.18	-0.43	0.03	-0.53	0.84	86%
Average	1.12	0.34	0.34	-0.12	0.28	0.35	-0.06	-0.24	0.15	-0.03	0.05	0.25	-0.44	7.44	95%
Maximum	1.16	0.55	0.57	0.12	0.50	0.47	0.11	-0.13	0.36	0.21	0.51	0.37	-0.09	17.36	100%
Bmrk. Avg.	1.01	0.05	-0.03	-0.17	0.04	0.04	0.02	0.03	0.03	-0.02	-0.09	0.00	-0.04	N.A.	90%

Bmrk. Avg. = Benchmark average.

Aggregate Active figures include data only for managers retained on 6/30/90.

\* Manager retained on 4/1/89. Data covers period from 4/1/89 - 6/30/90 only.

\*\* Manager retained on 4/1/90. Data covers period from 4/1/90 - 6/30/90 only.

Table 1. Con't.

## EXTERNAL ACTIVE STOCK MANAGERS

Risk Factor Exposures  
July 1985 - June 1990

	Beta	Var. Mkts.	Suc.	Size	Trad. Act.	Growth	E/P	B/P	Earn. Var.	Finl.	For. Inc.	Labor Int.	Div. Yld.	Mo. T/O	Eq. Alloc.
<b>Investment Advisers</b>															
Minimum	1.05	0.01	-0.13	-0.45	0.21	0.22	-0.33	-0.36	-0.16	-0.16	-0.17	-0.08	-0.64	0.00	66%
Average	1.09	0.21	0.24	-0.10	0.39	0.35	-0.11	-0.23	0.04	-0.01	0.32	0.17	-0.42	5.28	80%
Maximum	1.16	0.49	0.43	0.13	0.79	0.51	0.14	0.18	0.34	0.13	0.62	0.35	-0.24	35.58	94%
Bmrk. Avg.	1.03	0.04	-0.01	0.07	0.07	0.05	0.00	-0.03	-0.01	-0.01	0.12	0.04	-0.05	N.A.	85%
<b>Lieber &amp; Co.</b>															
Minimum	1.03	0.10	-0.32	-1.98	0.02	0.34	-0.10	-0.18	-0.02	-0.20	-0.63	0.35	-0.63	0.10	87%
Average	1.07	0.34	0.01	-1.60	0.13	0.40	0.04	-0.02	0.10	-0.02	-0.47	0.51	-0.51	3.85	95%
Maximum	1.11	0.55	0.36	-1.34	0.29	0.51	0.16	0.10	0.24	0.10	-0.27	0.64	-0.40	11.43	100%
Bmrk. Avg.	1.09	0.48	-0.07	-2.00	0.02	0.58	-0.04	-0.05	0.27	0.04	-0.40	0.57	-0.61	N.A.	95%
<b>Rosenberg Institutional*</b>															
Minimum	1.01	0.03	-0.12	-0.33	0.01	0.01	0.24	0.29	0.07	-0.05	-0.08	-0.11	-0.06	1.81	99%
Average	1.02	0.06	-0.03	-0.25	0.04	0.04	0.28	0.32	0.11	-0.02	-0.02	-0.06	-0.04	4.51	100%
Maximum	1.03	0.09	0.04	-0.17	0.08	0.07	0.30	0.35	0.17	0.02	0.04	-0.02	0.01	6.43	100%
Bmrk. Avg.	1.01	0.06	-0.05	-0.24	0.03	0.06	-0.01	0.05	0.05	0.00	-0.14	-0.01	-0.05	N.A.	98%
<b>Sasco Capital*</b>															
Minimum	1.06	0.15	-0.53	-1.11	0.13	0.31	-0.34	0.23	0.86	0.33	-0.13	-0.01	-0.30	0.00	94%
Average	1.07	0.25	-0.32	-0.92	0.18	0.44	-0.25	0.32	0.93	0.38	-0.04	0.05	-0.24	2.34	97%
Maximum	1.09	0.42	-0.16	-0.78	0.23	0.59	-0.15	0.40	0.98	0.49	0.08	0.20	-0.18	6.07	99%
Bmrk. Avg.	1.09	0.38	-0.18	-1.02	0.26	0.31	-0.10	0.14	0.71	0.29	-0.03	0.13	-0.22	N.A.	95%
<b>Waddell &amp; Reed</b>															
Minimum	1.10	0.28	-0.09	-1.29	0.40	0.16	-0.38	-0.24	0.16	-0.24	-0.35	0.07	-0.80	0.00	45%
Average	1.20	0.62	0.16	-0.73	0.78	0.50	-0.18	-0.02	0.45	0.01	0.01	0.37	-0.51	11.41	73%
Maximum	1.30	0.92	0.35	-0.16	1.20	0.79	0.24	0.19	0.75	0.25	0.50	0.54	-0.05	27.19	90%
Bmrk. Avg.	1.17	0.56	-0.10	-1.17	0.39	0.57	-0.21	0.03	0.37	0.29	-0.12	0.37	-0.56	N.A.	80%
<b>Aggregate Active</b>															
Minimum	1.09	0.24	-0.07	-0.53	0.30	0.28	-0.11	-0.22	0.17	0.01	-0.10	0.07	-0.60	N.A.	N.A.
Average	1.13	0.37	0.11	-0.38	0.48	0.40	-0.05	-0.06	0.23	0.09	0.04	0.21	-0.45	N.A.	N.A.
Maximum	1.19	0.52	0.25	-0.24	0.63	0.53	0.02	0.08	0.29	0.18	0.19	0.35	-0.28	N.A.	N.A.

Bmrk. Avg. = Benchmark average.

Aggregate Active figures include data only for managers retained on 6/30/90.

\* Manager retained on 4/1/89. Data covers period from 4/1/89 - 6/30/90 only.

\*\* Manager retained on 4/1/90. Data covers period from 4/1/90 - 6/30/90 only.

Table 2.

## EXTERNAL ACTIVE STOCK MANAGERS

Sector Weights  
Actual Portfolio Less Benchmark Portfolio  
July 1985 - June 1989

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
<b>Alliance Capital</b>									
Minimum	-6.03%	-1.88%	-9.93%	-6.40%	-14.86%	-12.08%	-4.12%	-13.94%	-5.16%
Average	5.27	0.50	-5.03	-1.61	-1.89	-0.75	2.22	-2.31	3.59
Maximum	25.52	2.79	2.68	3.96	7.09	7.33	8.66	6.39	19.02
Bmrk. Avg.	37.09	4.35	11.68	7.11	6.27	13.80	2.80	5.19	11.71
<b>Concord Capital*</b>									
Minimum	-8.65	-2.49	-1.65	-0.03	-3.81	10.35	-0.22	-12.92	-4.57
Average	-6.71	-1.99	6.07	0.90	-0.37	13.77	0.87	-12.13	-0.41
Maximum	-4.24	-1.16	11.65	1.93	1.24	16.28	1.85	-11.48	4.45
Bmrk. Avg.	28.14	4.31	11.85	5.83	5.28	5.32	3.31	16.10	19.87
<b>Forstmann Leff</b>									
Minimum	-17.35	-5.77	-4.39	-7.29	-7.69	-10.55	-3.69	-10.60	-16.64
Average	1.86	-2.50	8.26	-3.49	4.58	-1.88	-0.49	-3.10	-3.24
Maximum	23.04	3.34	21.83	2.43	26.09	13.57	6.03	14.14	21.04
Bmrk. Avg.	33.34	4.89	13.64	7.45	5.44	9.93	3.45	6.71	15.14
<b>Franklin Portfolio*</b>									
Minimum	-2.59	-1.94	-0.55	-1.43	-4.57	-1.17	-2.38	-8.41	-1.19
Average	1.45	-0.83	1.08	-0.07	0.35	0.64	-0.67	-3.08	1.14
Maximum	6.57	0.09	2.03	0.94	2.36	2.76	0.62	1.63	3.51
Bmrk. Avg.	29.99	4.08	10.82	6.28	5.29	5.15	2.66	16.59	19.14
<b>GeoCapital Corp.**</b>									
Minimum	12.50	-3.67	-2.64	-3.53	-6.45	-10.86	-3.07	5.10	7.20
Average	13.68	-3.63	-2.36	-1.58	-6.42	-10.21	-3.06	5.66	7.93
Maximum	14.45	-3.56	-2.09	-0.36	-6.40	-9.09	-3.06	5.95	8.57
Bmrk. Avg.	51.85	3.62	6.20	6.09	6.43	14.33	3.07	4.15	4.29
<b>IDS Advisory</b>									
Minimum	-7.87	-2.94	-2.55	-6.56	-11.76	-10.61	-2.26	-14.81	-13.22
Average	0.48	1.01	8.70	2.30	-1.23	-1.69	2.90	-8.32	-4.16
Maximum	8.25	6.74	20.60	9.71	5.68	7.42	10.92	4.06	9.91
Bmrk. Avg.	28.96	4.48	10.58	6.78	9.31	9.86	2.66	15.30	12.08

Bmrk. Avg. = Benchmark average

Aggregate Active figures include data only for managers retained on 6/30/90.

\* Manager retained effective 4/1/89. Data covers period from 4/1/89 to 6/30/90 only.

\*\* Manager retained effective 4/1/90. Data covers period from 4/1/90 to 6/30/90 only.

Table 2 Con't.

## EXTERNAL ACTIVE STOCK MANAGERS

Sector Weights  
Actual Portfolio Less Benchmark Portfolio  
July 1985 - June 1989

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
<b>Investment Advisers</b>									
Minimum	-17.79	-5.32	-1.71	-4.35	-11.14	-5.26	-2.68	-14.06	-9.16
Average	7.26	-3.35	5.89	-0.39	-5.24	2.58	2.21	-4.74	-4.22
Maximum	15.58	1.42	9.75	5.90	4.64	10.44	9.15	3.45	11.80
Bmrk. Avg.	31.80	5.12	10.78	7.10	11.14	9.68	2.85	12.76	8.78
<b>Lieber &amp; Co.</b>									
Minimum	-8.67	-2.30	-8.20	-7.90	-2.28	-6.56	-1.48	-5.68	-18.86
Average	5.33	0.18	-1.43	-3.98	-0.38	-2.48	1.07	-1.98	3.67
Maximum	16.29	5.01	5.49	0.12	1.73	2.92	4.15	0.14	21.95
Bmrk. Avg.	31.54	6.37	11.02	9.88	3.20	9.63	2.38	3.82	22.15
<b>Rosenberg Institutional*</b>									
Minimum	0.07	-0.81	2.56	-2.57	0.41	-1.78	0.26	-3.60	-6.44
Average	1.99	0.25	4.22	-1.83	1.58	-0.15	0.49	-2.12	-4.43
Maximum	3.44	1.47	5.42	-1.27	4.18	2.06	0.75	-0.49	-1.73
Bmrk. Avg.	27.35	5.17	9.33	6.38	8.71	8.06	2.29	17.48	15.22
<b>Sasco Capital*</b>									
Minimum	-6.21	-2.19	-6.04	-2.72	8.60	0.09	-1.40	-0.44	-1.63
Average	-3.14	-0.62	-4.49	-1.49	10.49	1.17	-0.90	0.25	-1.27
Maximum	-1.08	0.26	-2.32	-0.71	13.09	2.53	0.05	0.73	-0.81
Bmrk. Avg.	22.06	3.44	21.01	9.48	14.78	7.79	5.08	6.70	9.66
<b>Waddell &amp; Reed</b>									
Minimum	-18.41	-6.45	-7.49	-6.17	-9.37	-5.76	-5.85	-2.34	-0.94
Average	-5.26	0.15	-2.12	-0.46	-3.05	2.20	-0.51	3.18	5.88
Maximum	9.71	5.11	5.41	4.67	7.73	16.75	4.50	18.80	21.00
Bmrk. Avg.	36.12	7.55	18.68	10.41	8.60	11.05	5.77	0.75	1.07
<b>Aggregate Active</b>									
Minimum	-3.72	-1.98	-2.87	-4.64	-8.92	-3.38	-1.74	-7.12	-7.90
Average	2.04	-0.41	1.95	-1.31	-1.22	0.17	1.37	-3.01	0.41
Maximum	7.56	2.37	7.07	2.10	5.74	6.95	5.22	0.54	14.19

Bmrk. Avg. = Benchmark average

Aggregate Active figures include data only for managers retained on 6/30/90.

\* Manager retained effective 4/1/89. Data covers period from 4/1/89 to 6/30/90 only.

\*\* Manager retained effective 4/1/90. Data covers period from 4/1/90 to 6/30/90 only.

Table 3.

**EXTERNAL ACTIVE STOCK MANAGERS****Five Year Quarterly Performance Summary**

	3Q 85	4Q 85	1Q86	2Q86	3Q86	4Q86	1Q87	2Q87	3Q87	4Q87
<b>Alliance Capital</b>										
Actual Portfolio	-3.2%	17.8%	19.3%	5.9%	-11.8%	5.2%	27.4%	4.7%	10.8%	-21.4%
Benchmark Portfolio	-5.9	17.3	15.5	3.7	-9.9	2.6	22.8	3.2	5.1	-24.2
<b>Concord Capital</b>										
Actual Portfolio	Manager not retained until 2Q89.									
Benchmark Portfolio	Manager not retained until 2Q89.									
<b>Forstmann Leff</b>										
Actual Portfolio	-4.2	16.3	18.8	8.9	-10.8	3.4	19.8	1.6	8.4	-17.6
Benchmark Portfolio	-3.1	12.9	11.0	3.8	-5.6	2.6	16.1	2.1	4.2	-16.1
<b>Franklin Portfolio</b>										
Actual Portfolio	Manager not retained until 2Q89.									
Benchmark Portfolio	Manager not retained until 2Q89.									
<b>GeoCapital Corp.</b>										
Actual Portfolio	Manager not retained until 2Q90.									
Benchmark Portfolio	Manager not retained until 2Q90.									
<b>IDS Advisory</b>										
Actual Portfolio	-5.9	19.7	17.2	7.5	-10.1	4.5	22.4	3.7	5.9	-20.7
Benchmark Portfolio	-4.1	16.2	13.9	5.7	-7.4	3.9	20.5	3.2	5.2	-19.5
<b>Investment Advisers</b>										
Actual Portfolio	-7.2	18.5	12.4	4.6	-8.9	4.1	19.7	4.0	8.8	-15.2
Benchmark Portfolio	-4.1	16.2	13.9	5.7	-7.4	3.9	20.5	3.2	5.7	-18.9
<b>Lieber &amp; Company</b>										
Actual Portfolio	-1.9	14.6	13.9	11.0	-9.5	0.1	20.1	-1.4	2.7	-23.0
Benchmark Portfolio	-3.1	15.8	14.1	5.9	-10.8	2.2	20.4	0.1	4.1	-24.8
<b>Rosenberg Institutional</b>										
Actual Portfolio	Manager not retained until 2Q89.									
Benchmark Portfolio	Manager not retained until 2Q89.									
<b>Sasco Capital</b>										
Actual Portfolio	Manager not retained until 2Q89.									
Benchmark Portfolio	Manager not retained until 2Q89.									
<b>Waddell &amp; Reed</b>										
Actual Portfolio	-2.0	10.4	16.4	2.0	-6.4	5.1	18.4	2.4	9.8	-20.8
Benchmark Portfolio	-3.5	13.0	12.1	2.7	-6.9	3.0	22.1	3.6	6.0	-21.0
<b>Aggregate Active*</b>	-4.7	15.2	15.2	4.5	-8.6	3.9	21.0	2.3	6.9	-21.8
<b>Market Index</b>										
Wilshire 5000	-4.3	16.8	14.4	5.8	-7.7	4.0	21.2	3.3	6.2	-23.1

\* Aggregate Active performance numbers include returns of any managers retained during the time period shown but subsequently terminated by the Board.

Table 3 Con't.

## EXTERNAL ACTIVE STOCK MANAGERS

## Five Year Quarterly Performance Summary

	1Q 88	2Q 88	3Q88	4Q88	1Q89	2Q89	3Q89	4Q89	1Q90	2Q90
<b>Alliance Capital</b>										
Actual Portfolio	4.0%	9.6%	-3.5%	0.6%	10.0%	11.7%	15.2%	0.3%	-2.6%	9.7%
Benchmark Portfolio	6.8	6.0	-0.9	1.3	6.7	8.3	10.7	-3.6	-0.9	8.5
<b>Concord Capital</b>										
Actual Portfolio	Manager not retained until 2Q89.					6.8	7.3	-2.5	-1.2	5.8
Benchmark Portfolio						8.4	9.1	-1.5	-3.8	3.7
<b>Forstmann Leff</b>										
Actual Portfolio	6.9	3.4	-2.6	2.6	8.3	2.1	9.8	-2.2	-2.7	2.9
Benchmark Portfolio	6.7	5.5	0.1	1.6	6.3	6.2	7.8	-1.0	-1.3	5.0
<b>Franklin Portfolio</b>										
Actual Portfolio	Manager not retained until 2Q89.					9.7	11.1	-2.5	-3.2	2.4
Benchmark Portfolio						8.4	7.4	-2.2	-3.6	4.1
<b>GeoCapital Corp.</b>										
Actual Portfolio	Manager not retained until 2Q90.									6.0
Benchmark Portfolio										6.1
<b>IDS Advisory</b>										
Actual Portfolio	0.6	7.1	-3.7	1.6	8.2	7.5	15.8	-0.5	0.3	7.6
Benchmark Portfolio	7.5	5.3	0.3	2.3	6.6	8.6	8.8	-0.3	-2.7	5.5
<b>Investment Advisers</b>										
Actual Portfolio	-1.5	4.6	-1.0	1.9	7.4	6.5	12.4	0.2	-2.9	5.8
Benchmark Portfolio	5.6	5.8	0.7	3.0	6.4	7.2	9.4	0.9	-2.0	5.8
<b>Lieber &amp; Company</b>										
Actual Portfolio	16.2	4.6	0.8	0.1	7.2	6.1	8.8	-3.9	-5.3	6.2
Benchmark Portfolio	15.0	6.9	-1.0	0.3	7.1	6.4	8.0	-3.6	-3.8	2.1
<b>Rosenberg Institutional</b>										
Actual Portfolio	Manager not retained until 2Q89.					8.7	10.7	-0.6	-2.4	3.7
Benchmark Portfolio						8.2	9.5	0.1	-3.3	4.9
<b>Sasco Capital</b>										
Actual Portfolio	Manager not retained until 2Q89.					7.4	9.1	-1.8	-2.0	-1.4
Benchmark Portfolio						6.2	8.5	-2.0	-1.2	1.3
<b>Waddell &amp; Reed</b>										
Actual Portfolio	8.1	7.3	-5.9	1.2	5.2	10.4	12.1	-2.7	-0.3	5.8
Benchmark Portfolio	11.1	5.5	-1.7	1.0	6.5	5.9	7.9	-2.5	-0.3	3.9
<b>Aggregate Active*</b>	7.3	6.8	-2.8	0.5	8.1	7.9	11.7	-1.4	-2.2	5.8
<b>Market Index</b>										
Wilshire 5000	8.0	6.5	0.2	2.3	7.4	8.5	10.1	0.6	-3.5	5.5

\* Aggregate Active performance numbers include returns of any managers retained during the time period shown but subsequently terminated by the Board.

Table 4.

**EXTERNAL STOCK MANAGERS**  
**Five Year Annualized Performance Summary**

	Year Ending 6/30/90		Two Years Ending 6/30/90		Three Years Ending 6/30/90		Five Years Ending 6/30/90	
	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio
<b>Active Managers</b>								
Alliance Capital	23.6%	14.8%	21.4%	15.4%	13.5%	6.3%	21.1%	13.2%
Concord Capital	9.4	7.2	Manager retained effective 4/1/89					
Forstmann Leff	7.6	10.5	9.0	12.7	5.5	7.7	13.7	12.6
Franklin	7.5	5.4	Manager retained effective 4/1/89					
GeoCapital	6.0	6.1	Manager retained effective 4/1/90					
IDS	24.2	11.3	18.9	15.0	8.5	8.2	16.7	15.3
Investment Advisers	15.7	14.5	15.5	16.4	8.2	9.0	14.1	15.8
Lieber & Company	5.2	2.2	9.9	7.5	5.1	3.6	12.1	10.6
Rosenberg	11.4	11.3	Manager retained effective 4/1/89					
Sasco Capital	3.4	6.4	Manager retained effective 4/1/89					
Waddell & Reed	15.0	8.9	12.8	10.4	8.7	6.2	14.5	12.8
<b>Passive Manager</b>								
Wilshire Associates	12.3%	12.7%	15.8%	16.0%	8.1%	8.2%	15.4%	15.5%
<b>Total Basic Retirement Funds' Common Stock Segment*</b>								
	13.0%	11.7%	15.5%	15.0%	8.1%	7.9%	15.1%	15.0%
<b>Capital Markets Data</b>								
Wilshire 5000	12.7%	—	16.1%	—	8.2%	—	15.5%	—
91-Day Treasury Bills	8.2	—	8.2	—	7.5	—	7.1	—
Inflation	4.7	—	4.9	—	4.6	—	3.8	—

\* Total segment performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

## BOND MANAGER PORTFOLIO CHARACTERISTICS GLOSSARY

The bond manager portfolio statistics glossary is designed to define terminology the State Board of Investment uses in evaluating a bond manager's investment philosophy, risk characteristics and performance data. The definitions refer to categories shown in Table 5.

<b>Average Quality Weightings (Avg. Qual.)</b>	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.
<b>Bond Allocation (Bond Alloc.)</b>	The percent of the manager's total portfolio invested in bonds.
<b>Coupon</b>	The annual interest payment received on the manager's total portfolio stated as a percent of the portfolio's face value.
<b>Current Yield (Cur. Yield)</b>	The annual interest payment produced by the manager's total portfolio stated as a percent of the portfolio's market value.
<b>Duration (Dur.)</b>	A measure of the average life of the total portfolio. Duration is a weighted average maturity where 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.
<b>Number of Issues (# of Issues)</b>	The number of different bond issues held in the manager's portfolio.
<b>Quarterly Turnover (Qtr. T/O)</b>	The manager's total bond sales during the quarter divided by the average value of the manager's bond portfolio over the quarter.
<b>Term to Maturity (Term to Mat.)</b>	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.
<b>Yield to Maturity (Yield to Mat.)</b>	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.

**Table 5.**  
**EXTERNAL ACTIVE BOND MANAGERS**  
**Portfolio Characteristics**  
**July 1985 - June 1990**

	<b>Qtr. T/O</b>	<b># Of Issues</b>	<b>Bond Alloc.</b>	<b>Coupon</b>	<b>Cur. Yield</b>	<b>Yield To Mat.</b>	<b>Avg. Qual.</b>	<b>Dur.</b>	<b>Term To Mat.</b>
<b>Investment Advisers</b>									
Minimum	0.0%	13	88%	7.60%	7.60%	8.00%	AAA	3.10 Yrs.	4.00 Yrs.
Average	15.2	18	96	8.49	8.30	8.68	AAA	4.54	8.06
Maximum	42.0	25	99	9.90	9.30	9.90	AAA	7.00	16.37
<b>Lehman Management</b>									
Minimum	14.0	26	81	7.70	7.80	7.30	AA	3.50	5.00
Average	40.0	40	93	8.82	8.69	8.68	AAA	3.96	7.20
Maximum	103.0	54	100	11.40	10.90	10.20	AAA	4.50	8.60
<b>Miller Anderson</b>									
Minimum	11.0	37	73	6.90	7.18	7.80	A	3.10	5.50
Average	45.2	56	91	8.59	8.70	9.58	AA	4.94	9.67
Maximum	86.0	76	99	10.50	10.20	13.00	AAA	6.60	16.11
<b>Morgan Stanley</b>									
Minimum	9.0	7	73	7.60	7.90	8.20	AA	2.20	3.40
Average	53.7	15	95	8.95	9.07	9.14	AAA	45.03	11.28
Maximum	160.0	20	100	11.20	11.50	11.00	AAA	6.66	23.00
<b>Western Asset</b>									
Minimum	12.0	34	84	8.40	8.50	8.30	AA	4.20	8.40
Average	43.2	45	92	8.94	9.08	9.45	AA	5.31	12.07
Maximum	97.0	55	100	10.70	11.00	11.10	AAA	6.70	18.90

**Table 6.**  
**EXTERNAL ACTIVE BOND MANAGERS**  
**Sector Weights**  
**July 1985 - June 1990**

	(In Percentages)								
	Govt	Agcy	Ind	Util	Fin	Tran	Mtgs	Misc	Cash
<b>Investment Advisers</b>									
Minimum	46	0	0	0	2	0	0	0	1
Average	68	6	6	0	10	0	7	0	4
Maximum	83	18	25	3	19	0	15	0	12
<b>Lehman Management</b>									
Minimum	46	0	2	0	5	0	5	0	0
Average	59	2	7	2	11	0	12	0	6
Maximum	71	12	14	8	26	0	20	0	19
<b>Miller Anderson</b>									
Minimum	0	0	2	0	3	0	20	0	1
Average	23	0	6	0	20	1	41	1	7
Maximum	45	4	9	5	59	2	64	5	18
<b>Morgan Stanley</b>									
Minimum	0	0	0	0	0	0	0	0	0
Average	28	1	8	0	9	0	46	2	4
Maximum	60	10	43	1	28	0	75	13	27
<b>Western Asset</b>									
Minimum	6	3	7	5	1	0	23	0	0
Average	16	8	15	10	7	2	35	1	7
Maximum	33	13	24	17	18	4	54	4	13

**Abbreviations:**

Govt	Government
Agcy	Government agencies
Ind	Industrials
Util	Utilities
Fin	Financials
Tran	Transportation
Mtgs	Mortgages
Misc	Miscellaneous or other

Table 7.

**EXTERNAL ACTIVE BOND MANAGERS**  
**Five Year Quarterly Performance Summary**

	3Q85	4Q85	1Q86	2Q86	3Q86	4Q86	1Q87	2Q87	3Q87	4Q87
<b>Investment Advisers</b>										
Actual Portfolio	2.3%	6.3%	5.9%	0.9%	2.4%	2.7%	1.0%	-0.9%	-1.9%	5.1%
Benchmark Portfolio	2.0	7.7	7.9	1.1	2.5	3.3	1.3	-1.6	-2.8	5.8
<b>Lehman Management</b>										
Actual Portfolio	2.1	6.5	6.5	1.1	2.9	2.8	1.1	-1.6	-2.1	5.3
Benchmark Portfolio	2.2	6.8	6.9	1.4	2.3	2.9	1.5	-1.3	-2.1	5.2
<b>Miller Anderson</b>										
Actual Portfolio	4.3	8.7	4.2	0.2	2.2	10.3**	2.8	-1.6	-3.6	6.3
Benchmark Portfolio	2.0	7.7	7.9	1.1	2.5	3.3	1.3	-1.6	-2.8	5.8
<b>Morgan Stanley</b>										
Actual Portfolio	2.4	7.7	8.3	-1.3	3.1	4.5	2.9	-3.1	-0.5	4.8
Benchmark Portfolio	2.2	6.8	5.7	1.2	3.2	3.2	1.4	-1.1	-1.9	5.2
<b>Western Asset</b>										
Actual Portfolio	1.9	9.3	6.9	1.3	2.2	4.9	2.6	-3.4	-3.1	5.3
Benchmark Portfolio	2.0	7.5	7.6	1.1	2.4	3.2	1.3	-1.4	-2.7	5.6
<b>Aggregate Active*</b>										
Actual Portfolio	2.7	7.7	6.2	0.4	2.7	5.3	2.3	-2.3	-2.2	5.3
Benchmark Portfolio	2.1	7.3	7.1	1.2	2.6	3.2	1.4	-1.4	-2.4	5.5
<b>Market Index</b>										
Salomon Broad Investment Grade Bond Index	2.0	7.7	7.9	1.1	2.5	3.3	1.3	-1.6	-2.8	5.8

\* Aggregate Active performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

\*\* Performance reflects positive impact of pricing adjustment made during the quarter.

Table 7 Con't.

**EXTERNAL ACTIVE BOND MANAGERS****Five Year Quarterly Performance Summary**

	1Q88	2Q88	3Q88	4Q88	1Q89	2Q89	3Q89	4Q89	1Q90	2Q90
<b>Investment Advisers</b>										
Actual Portfolio	3.2%	1.1%	1.9%	0.6%	1.3%	9.8%	0.4%	4.2%	-2.7%	4.0%
Benchmark Portfolio	3.8	1.2	2.0	0.8	1.1	8.4	0.9	3.9	-1.2	3.7
<b>Lehman Management</b>										
Actual Portfolio	3.2	0.7	3.3	0.8	1.3	7.0	1.1	3.2	-0.5	3.2
Benchmark Portfolio	3.4	1.1	1.8	0.9	1.2	7.2	1.2	3.5	-0.4	3.4
<b>Miller Anderson</b>										
Actual Portfolio	3.6	1.5	1.9	1.6	1.4	4.4	0.4	3.4	-0.7	3.8
Benchmark Portfolio	3.8	1.2	2.0	0.8	1.2	7.9	1.0	3.7	-0.8	3.6
<b>Morgan Stanley</b>										
Actual Portfolio	3.1	0.4	1.8	0.3	1.1	6.8	1.5	3.3	-1.7	3.4
Benchmark Portfolio	3.8	1.2	1.7	0.3	1.1	7.1	1.2	3.6	-0.1	3.6
<b>Western Asset</b>										
Actual Portfolio	5.3	1.5	2.7	1.5	1.5	8.2	1.8	3.5	-1.4	3.7
Benchmark Portfolio	4.0	1.4	2.2	0.9	1.2	7.8	1.0	3.6	-0.4	3.7
<b>Aggregate Active*</b>										
Actual Portfolio	3.8	1.1	2.4	1.1	1.4	6.9	1.2	3.5	-1.3	3.7
Benchmark Portfolio	3.8	1.2	2.0	0.7	1.2	7.6	1.1	3.6	-0.5	3.6
<b>Market Index</b>										
Salomon Broad Investment Grade Bond Index	3.8	1.2	2.0	0.8	1.2	7.9	1.0	3.7	-0.8	3.6

\* Aggregate Active performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

Table 8.

**EXTERNAL BOND MANAGERS**  
**Five Year Annualized Performance Summary**

	Year Ending 6/30/90		Two Years Ending 6/30/90		Three Years Ending 6/30/90		Five Years Ending 6/30/90	
	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio	Actual Portfolio	Benchmark Portfolio
<b>Active Managers</b>								
Investment Advisers	6.0%	7.3%	9.9%	9.9%	9.1%	9.3%	9.7%	10.6%
Lehman Management	7.2	7.8	9.9	9.6	9.0	9.0	9.8	10.1
Miller Anderson	7.0	7.7	8.3	9.9	8.1	9.3	11.3	10.6
Morgan Stanley	6.7	8.5	8.4	9.5	8.2	9.2	9.9	10.2
Western Asset	7.8	8.1	11.1	10.2	10.4	9.6	11.5	10.6
<b>Semi-Passive Managers</b>								
Fidelity Management	7.9%	7.7%	9.9%	9.9%	Manager retained effective 7/1/88			
Lincoln Capital	7.6	7.7	9.9	9.9	Manager retained effective 7/1/88			
<b>Total Basic Retirement Funds' Bond Segment*</b>								
	7.5%	7.7%	9.8%	9.9%	9.1%	9.3%	10.5%	10.4%
<b>Capital Markets Data</b>								
Salomon BIG Index**	7.7%	—	9.9%	—	9.3%	—	10.6%	—
91 Day Treasury Bills	8.2	—	8.2	—	7.5	—	7.1	—
Inflation	4.7	—	4.9	—	4.6	—	3.8	—

\* Total segment performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

\*\*Salomon Broad Investment Grade Bond Index

Table 9.

**ALTERNATIVE ASSETS**

**Summary of Commitments  
As of June 30, 1990**

	<b>Total Fund Size (Millions)</b>	<b>SBI Incept Date</b>	<b>SBI Commitment</b>	<b>SBI Funded</b>	<b>SBI To Be Funded</b>	<b>Fund Description</b>
<b>Real Estate:</b>						
Aetna	\$1,573	Apr-82	\$40,000,000	\$40,000,000	\$0	Open End/Diversified
Equitable	\$3,613	Oct-81	\$40,000,000	\$40,000,000	\$0	Open End/Diversified
Prudential	\$3,560	Sep-81	\$40,000,000	\$40,000,000	\$0	Open End/Diversified
Heitman I	\$113	Aug-84	\$20,000,000	\$20,000,000	\$0	Closed End/Diversified
Heitman II	\$238	Nov-85	\$30,000,000	\$30,000,000	\$0	Closed End/Diversified
Heitman III	\$200	Jan-87	\$20,000,000	\$20,000,000	\$0	Closed End/Diversified
RREEF	\$773	Sep-84	\$75,000,000	\$75,000,000	\$0	Closed End/Diversified
State Street III	\$103	Sep-85	\$20,000,000	\$20,000,000	\$0	Closed End/Specialized
State Street IV	\$86	Sep-86	\$15,000,000	\$15,000,000	\$0	Closed End/Specialized
State Street V	\$82	Dec-87	\$15,000,000	\$15,000,000	\$0	Closed End/Specialized
TCW III	\$216	Aug-85	\$40,000,000	\$40,000,000	\$0	Closed End/Specialized
TCW IV	\$250	Nov-86	\$30,000,000	\$30,000,000	\$0	Closed End/Specialized
<b>Total Real Estate</b>			<b>\$385,000,000</b>	<b>\$385,000,000</b>	<b>\$0</b>	
<b>Resources:</b>						
AMGO I	\$144	Sep-81	\$15,000,000	\$15,000,000	\$0	Debt with Equity
AMGO II	\$36	Feb-83	\$7,000,000	\$7,000,000	\$0	Debt with Equity
AMGO IV	\$75	Jul-88	\$12,300,000	\$12,300,000	\$0	Debt with Equity
AMGO V	\$85	May-90	\$16,800,000	\$10,500,000	\$6,300,000	Debt with Equity
Apache I	\$100	May-84	\$3,000,000	\$2,000,000	\$1,000,000	Debt with Equity
Apache III	\$190	Dec-86	\$30,000,000	\$30,000,000	\$0	Net Profits Interest
Morgan O&G	\$135	Aug-88	\$15,000,000	\$8,400,000	\$6,600,000	Debt with Equity
British Pet. Royalty	\$500	Feb-89	\$25,000,000	\$25,000,000	\$0	Royalty
<b>Total Resources</b>			<b>\$124,100,000</b>	<b>\$110,200,000</b>	<b>\$13,900,000</b>	

Table 9. Con't.

**ALTERNATIVE ASSETS**

**Summary of Commitments  
As of June 30, 1990**

	<b>Total Fund Size (Millions)</b>	<b>SBI Incept Date</b>	<b>SBI Commitment</b>	<b>SBI Funded</b>	<b>SBI To Be Funded</b>	<b>Fund Description</b>
<b>Venture Capital:</b>						
Allied	\$40	Sep-85	\$5,000,000	\$5,000,000	\$0	Later Stage
DSV	\$60	Apr-85	\$10,000,000	\$10,000,000	\$0	Early Stage
First Century	\$100	Dec-84	\$10,000,000	\$6,500,000	\$3,500,000	Early Stage
First Chicago	\$50	May-88	\$5,000,000	\$3,800,000	\$1,200,000	Secondary Interests
Golder Thoma	\$225	Oct-87	\$14,000,000	\$6,300,000	\$7,700,000	Later Stage
Inman/Bowman	\$44	Jun-85	\$7,500,000	\$5,300,000	\$2,200,000	Early Stage
KKR I	\$1,000	Mar-84	\$25,000,000	\$25,000,000	\$0	LBO
KKR II	\$2,000	Dec-85	\$18,400,000	\$18,400,000	\$0	LBO
KKR III	\$5,600	Oct-87	\$146,600,000	\$133,700,000	\$12,900,000	LBO
Matrix	\$70	Aug-85	\$10,000,000	\$10,000,000	\$0	Early Stage
Matrix II	\$80	May-90	\$10,000,000	\$1,000,000	\$9,000,000	Early Stage
Norwest	\$60	Jan-84	\$10,000,000	\$10,000,000	\$0	Early Stage
Summit I	\$93	Dec-84	\$10,000,000	\$10,000,000	\$0	Later Stage
Summit II	\$230	May-88	\$30,000,000	\$7,500,000	\$22,500,000	Later Stage
Superior	\$35	Jun-86	\$6,600,000	\$4,200,000	\$2,400,000	Early Stage - MN.
T. Rowe Price	—	Nov-87	\$1,100,000	\$1,100,000	\$0	IPO Manager
<b>Total Venture Capital</b>			<b>\$319,200,000</b>	<b>\$257,800,000</b>	<b>\$61,400,000</b>	

**Summary**

<b>Real Estate</b>	<b>\$385,000,000</b>	<b>\$385,000,000</b>	<b>\$0</b>
<b>Resources</b>	<b>\$124,100,000</b>	<b>\$110,200,000</b>	<b>\$13,900,000</b>
<b>Venture Capital</b>	<b>\$319,200,000</b>	<b>\$257,800,000</b>	<b>\$61,400,000</b>
<b>Total Alternative Assets</b>	<b>\$828,300,000</b>	<b>\$753,000,000</b>	<b>\$75,300,000</b>

## 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 time-weighted 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 time-weighted 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:

$$VB \cdot (1+R) + \sum_{i=1}^n C_i \cdot (1+R)^{t_i} = VE$$

Where:

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

VE = Value of the fund at the end of the month

C<sub>i</sub> = Net cash flow on the i<sup>th</sup> day of the month

n = Number of cash flows in the month

R = Internal rate of return

t<sub>i</sub> = Time from cash flow i to the end of the period, expressed as a percentage of the total number days in the month

The internal rate of return, R, is a proxy for the true time-weighted 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:

$$TWRQ = (1+R1) \cdot (1+R2) \cdot (1+R3) - 1$$

## BENEFIT INCREASE FORMULA

In order to support currently promised benefits, the Post Retirement Investment Fund must generate 5% realized earnings on its invested assets each year. All realized earnings in excess of 5% are used to finance permanent lifetime benefit increases for current retirees. The benefit increase calculation is specified in Minnesota Statutes Chapter 11A.18, subdivision 9. A summary of the methodology is shown below:

$$\begin{array}{rcccl} \boxed{\text{Investment Earnings (1)}} & - & \boxed{\text{Required Return of 5\% (2)}} & = & \boxed{\text{Income Available for Benefit Increase}} \\ \\ \boxed{\text{Income Available for Benefit Increase}} & \div & \boxed{\text{Required Reserves(3)}} & = & \boxed{\text{Benefit Increase (4)}} \end{array}$$

- (1) Investment earnings are defined as dividends, interest, accruals and realized capital gains or losses applicable to the most recent fiscal year ending June 30.
- (2) Each cash flow in or out of the Post Fund is adjusted by 5% multiplied by the fraction of a year from the date of the cash flow to the end of the fiscal year on June 30.
- (3) Total required reserves are calculated by the State's actuary retained by the Legislative Commission on Pensions and Retirement.
- (4) A retiree who has been receiving an annuity or benefit for at least one year as of the end of the fiscal year will receive the full benefit increase. A retiree who has been receiving an annuity or benefit for less than one year will receive one twelfth of the full increase for each month the person was retired during the fiscal year. Full or partial increases are effective beginning January 1 of the following calendar year.

## EXTERNAL STOCK AND BOND MANAGER FEES

### Total Payments for Fiscal Year 1990

#### Active Stock Managers (1)

Alliance Capital	\$ 2,007,928
BMI Capital	177,349
Concord Capital Management	507,020
Forstmann Leff Associates	355,089
Franklin Portfolio Associates	902,072
GeoCapital Corp.	95,809
IDS Advisory	616,851
Investment Advisers Inc.	263,484
Lieber & Company	1,293,578
Rosenberg Institutional Equity Management	698,512
Sasco Capital, Inc.	380,647
Waddell & Reed	783,924

#### Passive Stock Manager (2)

Wilshire Associates	\$ 318,810
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#### Active Bond Managers (2)

Investment Advisers Inc.	\$ 193,144
Lehman Management	244,130
Miller, Anderson & Sherrerd	352,852
Morgan Stanley Capital Management	233,061
Western Asset Management	359,864

#### Semi-Passive Bond Managers(3)

Fidelity Management Trust	\$ 342,542
Lincoln Capital Management	299,036

- (1) Active stock 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.
- (2) The passive stock manager and active bond managers are compensated based on a specified percentage of assets under management.
- (3) The semi-passive bond managers are compensated on a performance-based fee formula. Fees earned may range from 5 to 10 basis points of assets under management, depending on the manager's performance relative to an established benchmark.

# COMMISSIONS AND TRADING VOLUME

## By Broker for Fiscal Year 1990

Broker	Stock \$ Volume	Stock \$ Commissions	Bond \$ Volume	Bond \$ Commissions	Short Term \$ Volume
Abel/Noser Corp.	\$ 13,205,666	\$ 34,621	\$ 0	\$ 0	\$ 0
Adams Harkness & Hill	1,494,985	3,698	0	0	0
Adler, Coleman & Co.	374,100	516	0	0	0
Allison-Williams	0	0	17,512,363	62,500	0
Alpha Managment, Inc.	3,003,952	5,268	0	0	0
American Express Credit	0	0	0	0	36,400,000
American National Bank	0	0	470,239	0	0
Arbours Securities, Inc.	0	0	2,143,125	0	0
Arnhold & S. Bleichroeder	852,902	1,100	0	0	0
Associates Corp. of N.A.	0	0	10,000,000	0	76,010,000
Autranet	44,383,276	53,728	45,380,366	0	0
Bank of America	0	0	0	0	3,000,000
Bank of NY Securities Inc.	0	0	5,000,000	0	30,183,000
Bankers Discount Corp.	0	0	0	0	376,010,000
Bankers Trust	0	0	0	0	50,900,000
Barclays American Corp.	0	0	0	0	24,800,000
Bateman Eichler	40,075	35	0	0	0
Baum George K. & Co.	5,145,238	5,755	0	0	0
Bear Stearns & Co.	171,750,091	219,550	113,581,327	0	0
Bernstein, Sanford & Co.	25,949,182	36,305	6,622,891	0	0
Birr, Wilson & Co.	98,076	180	0	0	0
Blunt Ellis & Loewi	459,371	1,938	0	0	0
Brandt (Robert) & Co.	9,164,800	18,948	0	0	0
Brean Murray	40,430,233	92,449	0	0	0
Bridge Trading Co.	51,326,585	71,517	0	0	0
Broadcort Capital	135,436,447	223,617	0	0	0
Brophy, Gaston	0	0	23,017,633	0	0
Brown (Alex) & Sons, Inc.	13,829,227	20,529	0	0	0
Brown Bros. Harriman	563,250	480	0	0	0
Brown Brosche	0	0	10,130,398	0	0
BT Securities Corp.	0	0	0	0	50,000,000
BTSEC-BT Securities	0	0	2,326,967	0	0
Cantor Fitzgerald	98,545,080	174,672	0	0	0
Capital Inst. Services	24,580,283	45,286	72,031,954	0	0
Carl Marks & Co.	4,100	10	0	0	0
Carroll McEntee & McGinley	0	0	41,295,906	0	0
Charles Schwab & Co., Inc.	35,641,508	46,928	0	0	0
Chase Manhattan Bank	0	0	0	0	7,176,000
Chemical Bank New York	0	0	0	0	11,300,000
Citibank	0	0	16,221,063	0	1,000,000
Citicorp	0	0	36,455,159	0	40,000,000
Citicorp Sec. Markets, Inc.	0	0	88,762,844	0	9,700,000
CL Glazer Inc.	3,427,892	5,378	0	0	0
Cleary Gull Reiland	1,155,000	2,450	0	0	0
County Securities	15,959,136	23,245	0	0	0
Cowen & Co.	27,871,202	23,137	0	0	0
CRT Govt. Securities Ltd.	0	0	46,551,630	0	3,670,757,000
Cyrus J. Lawrence	28,378,356	37,987	10,331,250	0	0
D.W. Taylor	0	0	22,431	0	0
Dain Bosworth, Inc.	8,005,878	4,782	1,222,604	0	0
Daiwa Sec. America	122,013	301	125,649,014	5,000	398,000,000
Daniels & Bell	3,692,929	5,172	0	0	0
Dean Witter Reynolds	13,118,026	17,880	96,460,452	0	6,366,600,000
Deere (John) Capital Corp.	0	0	0	0	51,270,000
Dillon Read	2,050,013	364	171,510,902	0	6,459,120,000
Discover Credit Corp.	0	0	0	0	55,400,000
DLJ Fixed Income	0	0	118,510,741	0	0
Dominion Sec. H & P	0	0	0	0	2,600,000
Donaldson Lufkin	1,124,250	2,960	38,990,721	40,000	0
Drexel Burnham Lambert	20,167,994	33,881	510,571,117	0	7,709,212,000
Edwards A.G. & Sons	1,683,830	2,560	9,325,737	0	0
Ernst & Co.	47,368,906	64,524	0	0	0
Execution Services Inc.	11,872,572	10,808	0	0	0
Factset Data	3,182,800	2,910	0	0	0
Fahnestock & Co.	1,419,067	2,160	0	0	0
FBS Investment Services Inc.	0	0	4,517,955	0	0
Federal Reserve Mpls.	0	0	44,536,900	0	0
Financial Clearing	1,100,250	1,190	0	0	0
First Albany	1,502,699	2,088	0	0	0
First Bank Nat'l. Assoc.	133,292,285	186,826	247,115,658	703	11,495,000
First Boston Corp.	8,035,693	8,866	187,610,255	46,250	1,294,708,000

# COMMISSIONS AND TRADING VOLUME

## By Broker for Fiscal Year 1990

Broker	Stock \$ Volume	Stock \$ Commissions	Bond \$ Volume	Bond \$ Commissions	Short Term \$ Volume
First Chicago Corp.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 75,000,000
First Manhattan Company	25,325,229	48,210	0	0	0
First Nat'l. Bank Chicago	0	0	2,000,000	0	118,567,696
Ford Financial Services	0	0	0	0	72,480,000
Fourteen Research Corp.	5,343,490	7,833	0	0	0
Fox Pitt Kelton Inc.	195,000	0	0	0	0
Furman Selz Mager	1,454,322	2,500	0	0	0
Gartner Group	0	0	863,389	0	0
General Electric Capital Corp.	0	0	0	0	265,888,000
General Electric Financial Serv.	0	0	0	0	46,800,000
General Motors Acceptance	0	0	20,000,000	0	36,000,000
Gerard Klaver Madison	791,974	1,260	0	0	0
Gintelco, Inc.	7,536,359	14,116	0	0	0
Goldman Sachs & Co.	89,573,935	86,962	1,468,531,793	153,328	180,000,000
Goodrich Securities	5,686,774	9,250	0	0	0
Gordon Haskett & Co.	5,483,419	0	0	0	0
Greenwich Capital Markets, Inc.	0	0	189,809,361	0	4,013,085,000
Gruntal & Co.	3,051,174	5,710	0	0	0
Heller Financial, Inc.	0	0	0	0	359,630,000
Herzog Heine Geduld	8,121,341	4,160	0	0	0
Household Finance	0	0	0	0	10,000,0000
I/JL Capital Markets Group	2,917,304	3,040	0	0	0
Impact Securities Co.	1,245,954	2,226	0	0	0
Income Reinvestment	23,202,177	0	454,916	0	0
Instinet	323,766,470	412,528	0	0	0
Institutional	0	0	3,667,386	0	0
ITT Financial	0	0	3,000,000	0	0
ITT Financial Sec. Inc.	0	0	0	0	30,000,000
J.C. Bradford & Co.	294,300	720	0	0	0
J.P. Morgan & Co.	0	0	27,999,145	0	33,480,000
J.P. Morgan Securities Inc.	0	0	4,549,800	0	0
Jefferies & Co.	212,380,118	308,111	0	0	0
Jones & Assoc.	10,669,341	19,740	0	0	0
Josephthal & Co.	195,305	160	0	0	0
Keefe Bruyette & Woods	1,285,825	2,496	0	0	0
Kidder Peabody	27,101,755	136,618	197,763,585	25,000	2,378,107,838
Kuhn Loeb & Company.	0	0	95,469	0	0
Lazard Freres & Co.	1,100,335	315	0	0	0
Lehman Govt. Securities	0	0	310,176,784	0	2,005,511,000
Lewco Securities, Inc.	39,281,193	67,158	0	0	0
Lieber & Company	77,449,572	159,487	21,876	93	0
Lipper Analytical Dist.	1,818,420	4,524	0	0	0
Louis Pauls & Co.	0	0	66,116,469	0	0
Lynch, Jones & Ryan	11,999,691	19,877	0	0	0
Mabon Nugent & Co.	4,992,450	7,330	0	0	0
Manufacturers Hanover Sec. Corp.	0	0	0	0	28,750,000
Manufacturers Hanover Trust	0	0	0	0	1,000,000
Marquette National Bank	0	0	35,006,250	0	23,596,000
McDonald & Company	281,231	700	0	0	0
Merrill Lynch PF&S	123,220,233	186,529	1,091,134,470	31,250	4,055,960,771
Mesirow & Company	3,721,934	8,476	0	0	0
Midland Canadian Corp.	0	0	87,299,097	0	0
Midwest Discount Securities	512,833	780	0	0	0
Montgomery Securities	49,669,998	62,254	1,200,000	0	0
Moore, Schley & Cameron	3,082,484	7,272	0	0	0
Moran & Co.	492,245	0	0	0	0
Morgan Guaranty	596,846,358	517,100	711,201,657	0	35,747,914
Morgan Kegan Inc.	218,625	0	0	0	0
Morgan Stanley & Co.	22,521,572	29,210	390,617,935	0	0
National Financial	1,194,640	4,782	0	0	0
NCNB Texas National	1,771,275	0	0	0	0
Neuberger & Berman	15,211,228	22,615	0	0	0
New York & Foreign Sec.	130,800	80	0	0	0
Newbridge Securities	198,000	0	0	0	0
Newhard Cooke & Co.	7,157,238	6,426	0	0	0
Nomura Securities Int'l.	3,586,682	4,756	75,399,607	0	6,925,000
Norwest Bank Mpls.	0	0	0	0	54,995,000
Norwest Investment Services Inc.	0	0	0	0	96,609,000
Oppenheimer & Co.	25,101,545	38,155	0	0	0
Oscar Grussman	936,919	2,464	0	0	0
Paine Webber J & C	67,690,521	99,288	85,475,695	0	10,961,806

# COMMISSIONS AND TRADING VOLUME

## By Broker for Fiscal Year 1990

Broker	Stock \$ Volume	Stock \$ Commissions	Bond \$ Volume	Bond \$ Commissions	Short Term \$ Volume
Penney J.C. Funding Corp.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 10,000,000
Pershing	21,519,567	25,443	46,536,420	0	0
Pforzheimer Carl H.	541,200	1,327	0	0	0
Piper Jeffray & Hopwood	13,043,178	17,930	0	0	0
Pittsburgh National Bank	0	0	0	0	20,000,000
PNC Securities Inc.	0	0	0	0	31,000,000
Prescott Ball & Turban	2,576,743	5,331	0	0	0
Prudential	40,630,202	61,211	176,997,745	0	0
Prudential Bache Securities	8,133,532	18,446	174,969,171	0	0
Rauscher Pierce Refsnes	1,684,534	3,058	0	0	0
Raymond James & Associates	3,914,850	7,350	0	0	0
Republic Nat'l. Bank N.Y.	0	0	0	0	25,000,000
Reynders Gray & Co.	694,200	3,204	0	0	0
Robert Fleming	2,355,624	1,620	0	0	0
Robertson Colman & Stephens	3,277,770	0	0	0	0
Robinson-Humphrey Co.	9,648,887	16,050	0	0	0
Rochdale Securities Corp.	925,498	2,000	0	0	0
Roulston & Company	893,995	2,209	463,497	0	0
Salomon Brothers	40,880,371	63,275	1,827,904,665	21,250	2,548,873,768
San Jacinto	183,750	0	0	0	0
Sanwa-BGK	0	0	24,220,891	0	0
Sears Roebuck Acceptance	0	0	0	0	274,151,000
Securities Settlement Corp.	18,127,643	20,080	0	0	35,200,000
Security Pacific Bank	0	0	0	0	45,000,000
SEI Funds Evaluation	23,600,329	41,636	0	0	0
Shawmut Bank of Boston	0	0	2,553,707	0	0
Shearson Lehman Hutton	61,313,343	83,324	1,886,524,871	106,250	36,233,176
Smith Barney & Company	35,949,749	58,971	35,605,667	0	2,027,595,000
State Board of Investment	3,830,787	0	30,146,281	0	0
Stechler Associates	0	0	60,535,608	0	0
Stephens, Inc.	0	0	2,374,088	0	0
Sutro & Company, Inc.	2,388,027	2,935	0	0	0
The Chicago Corp.	273,900	220	0	0	0
Toronto Domin	0	0	0	0	168,479,830
Tucker Anthony & R.L. Day, Inc.	3,991,640	6,240	0	0	0
UBS Securities	7,578,690	5,258	14,876,427	0	0
UBS-DB Corporation	0	0	2,854,332	0	0
Volpe & Covington	569,875	0	0	0	0
W.H. Newbold Son & Co.	1,476,000	1,968	0	0	0
W.E. Pollock & Co., Inc.	0	0	7,000,000	0	0
Wagner Stott & Co.	64,018,323	97,213	0	0	0
Wall Street Clearing	3,499,818	9,718	0	0	0
Warburg S.G.	8,125,896	19,411	0	0	0
Weeden & Company	57,980,802	96,660	0	0	0
Wertheim Schroder & Co. Inc.	637,250	1,000	0	0	0
Wessels, Arnold & Henderson	7,093,229	9,245	0	0	0
Westinghouse Credit	0	0	0	0	417,000
Westpac Pollock, & Co.	0	0	112,916,491	0	0
Westinghouse Securities Corp.	0	0	0	0	40,000,000
Wheaton First Securities, Inc.	805,969	1,400	0	0	0
William Blair & Co.	3,489,496	4,164	0	0	0
Wilshire Associates	165,923	545	0	0	0
Yamaichi Intl. (Amer), Inc.	0	0	0	0	330,400,000
Broker Unavailable*	306,817,769	66,640	390,730,729	0	1,059,255,990
<b>All Brokers Combined</b>	<b>\$ 3,585,757,340</b>	<b>\$ 4,557,087</b>	<b>\$ 11,673,474,874</b>	<b>\$ 491,623</b>	<b>\$ 47,326,341,790</b>

\* Includes transactions where broker data was incomplete.

\*\* Totals may not add due to rounding.



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MINNESOTA STATE  
BOARD OF  
INVESTMENT

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FINANCIAL STATEMENTS, ASSET LISTINGS AND ACCOUNTING DATA

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1990  
v.2

*Pursuant to Mn Stat 11A.07*

*Volume 2 of 2 volumes*

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# 1990 ANNUAL REPORT

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## 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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**Financial Statements, Asset Listings and Accounting Data**

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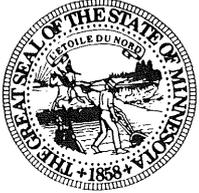
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STATE OF MINNESOTA

**OFFICE OF THE LEGISLATIVE AUDITOR**

VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612/296-4708

JAMES R. NOBLES, LEGISLATIVE AUDITOR

Independent Auditor's Report

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

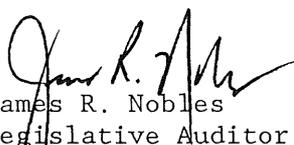
We have audited the accompanying financial statements of the Supplemental Retirement Fund and the Post Retirement Investment Fund which constitute the Investment Trust Funds of the State of Minnesota as of and for the year ended June 30, 1990, as shown on pages 2 to 7. These financial statements are the responsibility of the State Board of Investment's management. Our responsibility is to express an opinion on these financial statements based on our audit.

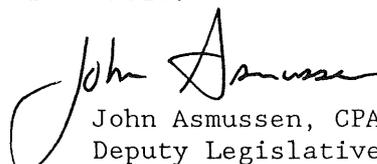
We conducted our audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

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, in all material respects, the net assets and participation of the Investment Trust Funds of the State of Minnesota at June 30, 1990, 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 audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The combining financial statements and supporting schedules on pages 10 to 69 are presented for the purposes of additional analysis and are not a required part of the Investment Trust Funds of the State of Minnesota. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

  
James R. Nobles  
Legislative Auditor

  
John Asmussen, CPA  
Deputy Legislative Auditor

December 3, 1990

**STATE BOARD OF INVESTMENT  
INVESTMENT TRUST FUNDS  
STATEMENT OF ASSETS AND LIABILITIES  
JUNE 30, 1990  
AMOUNTS IN (000)'S**

	SUPPLEMENTAL(5) INVESTMENT FUND TOTAL	POST RETIREMENT(6) INVESTMENT FUND
<b>ASSETS:</b>		
<b>INVESTMENTS(at market value) (3)</b>		
COMMON STOCK	\$ 227,629	\$ 511,425
ALTERNATIVE EQUITIES	0	0
FIXED INCOME SECURITIES	144,071	4,425,192
SHORT TERM SECURITIES	102,707	299,952
<b>TOTAL INVESTMENTS (4)</b>	\$ 474,407	\$ 5,236,569
CASH	0	15
SECURITY SALES RECEIVABLE	0	8,194
ACCOUNTS RECEIVABLE-FEE REFUNDS	0	0
ACCOUNTS RECEIVABLE-MORTALITY	0	9,107
ACCOUNTS RECEIVABLE-PARTICIPANTS	0	24,392
ACCRUED INTEREST	1,568	86,967
ACCRUED DIVIDENDS	0	2,607
ACCRUED SHORT TERM GAIN	705	4,176
<b>TOTAL ASSETS</b>	\$ 476,680	\$ 5,372,027
<b>LIABILITIES:</b>		
MANAGEMENT FEES PAYABLE	130	181
SECURITY PURCHASES PAYABLE	0	0
ACCOUNTS PAYABLE-PARTICIPANTS	0	7,097
OPTIONS PREMIUMS RECEIVED	0	0
<b>TOTAL LIABILITIES</b>	\$ 130	\$ 7,278
<b>NET ASSETS AT JUNE 30, 1990</b>	\$ 476,550	\$ 5,364,749

**STATE BOARD OF INVESTMENT  
INVESTMENT TRUST FUNDS  
STATEMENT OF CHANGES IN NET ASSETS  
YEAR ENDED JUNE 30, 1990  
AMOUNTS IN (000)'S**

	SUPPLEMENTAL INVESTMENT FUND TOTAL	POST RETIREMENT INVESTMENT FUND
<b>FROM INVESTMENT ACTIVITY:</b>		
NET INVESTMENT INCOME	\$ 43,632	\$ 437,867
REALIZED GAINS (LOSSES)	2,650	20,263
UNREALIZED GAINS (LOSSES)	442	( 191,377 )
TOTAL INCOME	\$ 46,724	\$ 266,753
LESS DISTRIBUTION TO		
PARTICIPANT ACCOUNTS	( 46,724 )	( 224,865 )
UNDISTRIBUTED DEDICATED INCOME	0	0
NET CHANGE IN UNDISTRIBUTED INCOME	\$ 0	\$ 41,888
<b>FROM PARTICIPANT TRANSACTIONS:</b>		
ADDITIONS TO PARTICIPANT ACCOUNTS		
PARTICIPANT CONTRIBUTIONS	26,774	538,817
INCOME DISTRIBUTION	46,724	224,865
INCOME TO BE DISTRIBUTED	0	0
TOTAL ADDITIONS	\$ 73,498	\$ 763,682
DEDUCTIONS FROM PARTICIPANT ACCOUNTS		
WITHDRAWALS	22,399	446,117
TOTAL DEDUCTIONS	\$ 22,399	\$ 446,117
NET CHANGE IN PARTICIPATION	\$ 51,099	\$ 317,565
TOTAL CHANGE IN ASSETS	\$ 51,099	\$ 359,453
<b>NET ASSETS:</b>		
BEGINNING OF PERIOD	425,451	5,005,296
END OF PERIOD	\$ 476,550	\$ 5,364,749

**STATE BOARD OF INVESTMENT  
INVESTMENT TRUST FUNDS  
STATEMENT OF OPERATIONS  
YEAR ENDED JUNE 30, 1990  
AMOUNTS IN (000)'S**

	<u>SUPPLEMENTAL INVESTMENT FUND TOTAL</u>	<u>POST RETIREMENT INVESTMENT FUND</u>
<b>INVESTMENT INCOME:</b>		
<b>INTEREST</b>	\$ 11,990	\$ 400,859
<b>DIVIDENDS</b>	23,264	21,797
<b>SHORT TERM GAINS</b>	8,545	16,044
<b>INCOME BEFORE EXPENSES</b>	<u>\$ 43,799</u>	<u>\$ 438,700</u>
<b>MANAGEMENT FEES</b>	167	833
<b>NET INCOME</b>	<u><u>\$ 43,632</u></u>	<u><u>\$ 437,867</u></u>
<b>REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS</b>		
<b>REALIZED:</b>		
<b>PROCEEDS FROM SALES</b>	\$ 55,446	\$ 331,663
<b>COST OF SECURITIES SOLD</b>	52,796	311,400
<b>NET REALIZED GAIN (LOSS)</b>	<u>\$ 2,650</u>	<u>\$ 20,263</u>
<b>UNREALIZED:</b>		
<b>BEGINNING OF PERIOD</b>	17,215	398,633
<b>END OF PERIOD</b>	<u>17,657</u>	<u>207,256</u>
<b>INCREASE (DECREASE) IN     UNREALIZED APPRECIATION</b>	<u>\$ 442</u>	<u>(\$ 191,377 )</u>
<b>NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS</b>	<u><u>\$ 3,092</u></u>	<u><u>(\$ 171,114 )</u></u>

## NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 1990

### 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 and the Post Retirement Investment 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.

Authorized Investments: **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; international securities; restricted participation as a limited partner in venture capital, real estate or resource equity investments; and restricted participation in registered mutual funds.

Risk Categories: At June 30, 1990, 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. The state's investment risk for 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.

Security Valuation: 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.

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

Income Recognition: 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".

Loaning Securities: 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 19 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, 1990, the cost of investments for the Investment Trust Funds was:

Supplemental Retirement Fund	\$ 456,750,414
Post Retirement Fund	\$ 5,029,313,216

**NOTES TO THE FINANCIAL STATEMENTS  
JUNE 30, 1990**

**4. LOANED SECURITIES**

The market value of loaned securities outstanding at June 30, 1990 was:

Supplemental Retirement Fund	\$ 8,811,789
Post Retirement Fund	\$ 398,837,106

**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 1990 the fund included six 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 10 to 13 of this report. Participation in the Supplemental Investment 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, 1990. 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 1990 investment income of the Post Retirement Investment Fund is available for distribution as a benefit increase to pension fund participants in January 1991. This amount is increased by 2.5%

from Fiscal Year 1991 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 May 31, 1990 are eligible to receive the January 1, 1991 benefit increase, which will be 5.100%. Past increases paid to retirees on January 1st have been:

1981	3.209 %	1986	7.884 %
1982	7.436 %	1987	9.792 %
1983	6.853 %	1988	8.054 %
1984	7.449 %	1989	6.918 %
1985	6.905 %	1990	4.040 %

**7. POOLED INVESTMENT ACCOUNTS**

The State Board of Investment manages seven pooled investment accounts for the Investment Trust Funds, the Supplemental Investment Fund 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 14 to 17 of this report.

**8. SOUTH AFRICA POLICY**

At its March 1, 1989 meeting the Minnesota State Board of Investment adopted a resolution relating to companies doing business in South Africa. The resolution calls for the divestment through attrition of the stock of companies not meeting predetermined guidelines by March 1991.

The resolution also calls for the SBI to receive financial and legal advise to insure it is not violating its fiduciary responsibility. As of June 30, 1990, the Board's actively managed portfolios contained stocks of only nine companies doing business in South Africa.

It cannot 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, 1990  
AMOUNTS IN (000)'S**

	<b>SUPPLEMENTAL RETIREMENT FUND TOTAL</b>	<b>POST RETIREMENT FUND</b>
Teacher's Retirement Fund	\$ 0	\$ 2,025,603
Public Employees Retirement Fund	0	1,763,685
State Employees Retirement Fund	0	766,790
Public Employees Police & Fire Fund	0	181,703
Public Employees Consolidation Fund	0	40,666
Highway Patrolmen's Retirement Fund	0	84,931
Legislators & Survivors Retirement Fund	0	8,809
Correctional Employees Retirement Fund	0	31,241
Judges Retirement Fund	0	24,949
Income Share Account	244,633	0
Growth Share Account	73,962	0
Money Market Account	81,929	0
Index Account	9,538	0
Bond Market Account	6,594	0
G.I.C. Account	59,898	0
<b>TOTAL PARTICIPATION</b>	<b>\$ 476,554</b>	<b>\$ 4,928,377</b>
<b>Adjustments</b>		
Admitted Value Increment	0	0
Unrealized Appreciation		
(Depreciation) of Investments	0	207,256
Undistributed Earnings	( 4 )	229,116
<b>NET ASSETS</b>	<b>\$ 476,550</b>	<b>\$ 5,364,749</b>

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**SUPPLEMENTAL FINANCIAL STATEMENTS**

**STATE BOARD OF INVESTMENT  
MINNESOTA SUPPLEMENTAL INVESTMENT FUND  
COMBINING STATEMENT OF ASSETS AND LIABILITIES  
JUNE 30, 1990  
AMOUNTS IN (000)'S**

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT	INDEX ACCOUNT	BOND MARKET ACCOUNT	G.I.C. ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
<b>ASSETS:</b>							
INVESTMENTS(at market value) (2)							
COMMON STOCK	\$ 144,020	\$ 74,070	\$ 0	\$ 9,539	\$ 0	\$ 0	\$ 227,629
ALTERNATIVE EQUITIES	0	0	0	0	0	0	0
FIXED INCOME SECURITIES	77,985	0	0	0	6,597	59,489	144,071
SHORT TERM SECURITIES	21,334	3	81,370	0	0	0	102,707
TOTAL INVESTMENTS (3)	<u>\$ 243,339</u>	<u>\$ 74,073</u>	<u>\$ 81,370</u>	<u>\$ 9,539</u>	<u>\$ 6,597</u>	<u>\$ 59,489</u>	<u>\$ 474,407</u>
CASH	0	0	0	0	0	0	0
SECURITY SALES RECEIVABLE	0	0	0	0	0	0	0
ACCOUNTS RECEIVABLE-FEE REFUNDS	0	0	0	0	0	0	0
ACCOUNTS RECEIVABLE-MORTALITY	0	0	0	0	0	0	0
ACCOUNTS RECEIVABLE-PARTICIPANTS	0	0	0	0	0	0	0
ACCRUED INTEREST	1,159	0	0	0	0	409	1,568
ACCRUED DIVIDENDS	0	0	0	0	0	0	0
ACCRUED SHORT TERM GAIN	146	0	559	0	0	0	705
TOTAL ASSETS	<u>\$ 244,644</u>	<u>\$ 74,073</u>	<u>\$ 81,929</u>	<u>\$ 9,539</u>	<u>\$ 6,597</u>	<u>\$ 59,898</u>	<u>\$ 476,680</u>
<b>LIABILITIES:</b>							
MANAGEMENT FEES PAYABLE	11	111	2	1	3	2	130
SECURITY PURCHASES PAYABLE	0	0	0	0	0	0	0
ACCOUNTS PAYABLE-PARTICIPANTS	0	0	0	0	0	0	0
OPTIONS PREMIUMS RECEIVED	0	0	0	0	0	0	0
TOTAL LIABILITIES	<u>\$ 11</u>	<u>\$ 111</u>	<u>\$ 2</u>	<u>\$ 1</u>	<u>\$ 3</u>	<u>\$ 2</u>	<u>\$ 130</u>
NET ASSETS AT JUNE 30, 1990	<u>\$ 244,633</u>	<u>\$ 73,962</u>	<u>\$ 81,927</u>	<u>\$ 9,538</u>	<u>\$ 6,594</u>	<u>\$ 59,896</u>	<u>\$ 476,550</u>

**STATE BOARD OF INVESTMENT  
MINNESOTA SUPPLEMENTAL INVESTMENT FUND  
COMBINING STATEMENT OF CHANGES IN NET ASSETS  
YEAR ENDED JUNE 30, 1990  
AMOUNTS IN (000)'S**

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT	INDEX ACCOUNT	BOND MARKET ACCOUNT	G.I.C. ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
<b>FROM INVESTMENT ACTIVITY:</b>							
NET INVESTMENT INCOME	\$ 23,143	\$ 8,066	\$ 6,740	\$ 623	\$ 453	\$ 4,607	\$ 43,632
REALIZED GAINS (LOSSES)	1,384	1,241	0	22	3	0	2,650
UNREALIZED GAINS (LOSSES)	(117)	480	0	196	(117)	0	442
TOTAL INCOME	\$ 24,410	\$ 9,787	\$ 6,740	\$ 841	\$ 339	\$ 4,607	\$ 46,724
<b>LESS:</b>							
DISTRIBUTION TO PARTICIPANT ACCOUNTS	(24,410)	(9,787)	(6,740)	(841)	(339)	(4,607)	(46,724)
UNDISTRIBUTED DEDICATED INCOME	0	0	0	0	0	0	0
NET CHANGE IN UNDISTRIBUTED INCOME	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
<b>FROM PARTICIPANT TRANSACTIONS:</b>							
<b>ADDITIONS TO PARTICIPANT ACCOUNTS</b>							
PARTICIPANT CONTRIBUTIONS	6,958	455	4,716	4,147	3,179	7,319	26,774
INCOME DISTRIBUTION	24,410	9,787	6,740	841	339	4,607	46,724
INCOME TO BE DISTRIBUTED	0	0	0	0	0	0	0
TOTAL ADDITIONS	\$ 31,368	\$ 10,242	\$ 11,456	\$ 4,988	\$ 3,518	\$ 11,926	\$ 73,498
<b>DEDUCTIONS FROM PARTICIPANT ACCOUNTS</b>							
WITHDRAWALS	8,428	9,083	3,890	179	95	724	22,399
TOTAL DEDUCTIONS	\$ 8,428	\$ 9,083	\$ 3,890	\$ 179	\$ 95	\$ 724	\$ 22,399
NET CHANGE IN PARTICIPATION	\$ 22,940	\$ 1,159	\$ 7,566	\$ 4,809	\$ 3,423	\$ 11,202	\$ 51,099
TOTAL CHANGE IN ASSETS	\$ 22,940	\$ 1,159	\$ 7,566	\$ 4,809	\$ 3,423	\$ 11,202	\$ 51,099
<b>NET ASSETS:</b>							
BEGINNING OF PERIOD	221,693	72,803	74,361	4,729	3,171	48,694	425,451
END OF PERIOD	\$ 244,633	\$ 73,962	\$ 81,927	\$ 9,538	\$ 6,594	\$ 59,896	\$ 476,550

**STATE BOARD OF INVESTMENT  
MINNESOTA SUPPLEMENTAL INVESTMENT FUND  
COMBINING STATEMENT OF OPERATIONS  
YEAR ENDED JUNE 30, 1990  
AMOUNTS IN (000)'S**

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT	INDEX ACCOUNT	BOND MARKET ACCOUNT	G.I.C. ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
<b>INVESTMENT INCOME:</b>							
INTEREST	\$ 6,921	\$ 0	\$ 0	\$ 0	\$ 456	\$ 4,613	\$ 11,990
DIVIDENDS	14,535	8,105	0	624	0	0	23,264
SHORT TERM GAINS	1,718	78	6,749	0	0	0	8,545
INCOME BEFORE EXPENSES	\$ 23,174	\$ 8,183	\$ 6,749	\$ 624	\$ 456	\$ 4,613	\$ 43,799
MANAGEMENT FEES	31	117	9	1	3	6	167
NET INCOME	<u>\$ 23,143</u>	<u>\$ 8,066</u>	<u>\$ 6,740</u>	<u>\$ 623</u>	<u>\$ 453</u>	<u>\$ 4,607</u>	<u>\$ 43,632</u>
<b>REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS</b>							
<b>REALIZED:</b>							
PROCEEDS FROM SALES	\$ 39,236	\$ 8,460	\$ 0	\$ 179	\$ 95	\$ 7,476	\$ 55,446
COST OF SECURITIES SOLD	37,852	7,219	0	157	92	7,476	52,796
NET REALIZED GAIN (LOSS)	\$ 1,384	\$ 1,241	\$ 0	\$ 22	\$ 3	\$ 0	\$ 2,650
<b>UNREALIZED:</b>							
BEGINNING OF PERIOD	11,746	5,142	0	289	38	0	17,215
END OF PERIOD	11,629	5,622	0	485	(79)	0	17,657
<b>INCREASE (DECREASE) IN</b>							
UNREALIZED APPRECIATION	( \$ 117 )	\$ 480	\$ 0	\$ 196	( \$ 117 )	\$ 0	\$ 442
NET REALIZED AND UNREALIZED	<u>\$ 1,267</u>	<u>\$ 1,721</u>	<u>\$ 0</u>	<u>\$ 218</u>	<u>( \$ 114 )</u>	<u>\$ 0</u>	<u>\$ 3,092</u>

**STATE BOARD OF INVESTMENT  
MINNESOTA SUPPLEMENTAL INVESTMENT FUND  
SCHEDULE OF PARTICIPATION  
JUNE 30, 1990  
AMOUNTS IN (000)'S**

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT	INDEX ACCOUNT	BOND MARKET ACCOUNT	G.I.C. ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
Albert Lea Firemen's Relief	\$ 3,145	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,154	\$ 4,299
Austin Fire Relief	560	0	0	0	0	0	560
Austin Police Relief	613	0	0	0	0	0	613
Bloomington Fire Dept. Relief	12,506	837	0	0	0	0	13,343
Bloomington Police Relief	1,340	733	0	0	0	0	2,073
Chaska Fire Relief	0	0	6	0	0	0	6
Clear Lake Fire Relief	0	21	52	0	0	0	73
Clearbrook Fire Relief	0	0	5	0	0	0	5
Hennepin County Supplemental Ret.	20,520	10,510	4,025	1,066	592	0	36,713
Medicine Lake Fire Relief	57	0	0	0	0	0	57
MSRS Deferred Compensation	31,149	18,815	54,229	5,610	1,654	45,090	156,547
MSRS Unclassified Employee Escrow	37,169	10,503	14,899	2,356	2,021	6,420	73,368
Osseo Fire Relief	33	0	0	0	0	0	33
PERA - DCP	17	3	6	3	9	9	47
Rush City Fire Relief	0	0	0	0	0	16	16
Scandia Valley Fire Relief	23	0	0	0	0	0	23
South St. Paul Police Relief	170	0	0	0	0	150	320
St. Paul Fire - General	840	0	0	0	0	0	840
St. Paul Fire - Special	36,899	0	0	0	0	3,745	40,644
St. Paul Police Relief	28,983	0	0	0	0	0	28,983
Stillwater Fire Relief	45	0	0	0	0	0	45
Teacher's Supplemental Retirement	70,564	32,540	8,707	503	2,318	3,314	117,946
<b>TOTAL PARTICIPATION</b>	<b>\$ 244,633</b>	<b>\$ 73,962</b>	<b>\$ 81,929</b>	<b>\$ 9,538</b>	<b>\$ 6,594</b>	<b>\$ 59,898</b>	<b>\$ 476,554</b>
<b>Adjustments</b>							
Unrealized Appreciation							
(Depreciation) of Investments	0	0	0	0	0	0	0
Undistributed Earnings	0	0	(2)	0	0	(2)	(4)
<b>NET ASSETS</b>	<b>\$ 244,633</b>	<b>\$ 73,962</b>	<b>\$ 81,927</b>	<b>\$ 9,538</b>	<b>\$ 6,594</b>	<b>\$ 59,896</b>	<b>\$ 476,550</b>

**STATE BOARD OF INVESTMENT  
MINNESOTA POOLED INVESTMENT ACCOUNTS  
SCHEDULE OF ASSETS AND LIABILITIES  
JUNE 30, 1990  
AMOUNTS IN (000)'S**

	<u>ACTIVE EQUITY ACCOUNT</u>	<u>PASSIVE EQUITY ACCOUNT</u>	<u>ACTIVE BOND ACCOUNT</u>	<u>PASSIVE BOND ACCOUNT</u>	<u>REAL ESTATE ACCOUNT</u>	<u>RESOURCE ACCOUNT</u>	<u>VENTURE CAPITAL ACCOUNT</u>
<b>ASSETS:</b>							
INVESTMENTS(at market value) (2)							
COMMON STOCK	\$ 1,615,499	\$ 2,738,512	\$ 2,482	\$ 0	\$ 0	\$ 0	\$ 0
ALTERNATIVE EQUITIES	0	0	0	0	477,808	83,308	238,504
FIXED INCOME SECURITIES	54,980	341	759,695	945,632	0	0	0
SHORT TERM SECURITIES	124,080	30,410	40,750	62,487	41,837	317	1,932
TOTAL INVESTMENTS (3)	<u>\$ 1,794,559</u>	<u>\$ 2,769,263</u>	<u>\$ 802,927</u>	<u>\$ 1,008,119</u>	<u>\$ 519,645</u>	<u>\$ 83,625</u>	<u>\$ 240,436</u>
CASH	0	0	0	17	0	0	0
SECURITY SALES RECEIVABLE	20,419	519	10,147	21,268	0	0	21
ACCOUNTS RECEIVABLE-FEE REFUNDS	156	0	0	0	0	0	0
ACCOUNTS RECEIVABLE-MORTALITY	0	0	0	0	0	0	0
ACCOUNTS RECEIVABLE-PARTICIPANTS	0	0	0	0	0	0	0
ACCRUED INTEREST	1,660	12	14,085	15,594	0	0	0
ACCRUED DIVIDENDS	3,328	7,983	0	0	1,605	0	39
ACCRUED SHORT TERM GAIN	844	128	250	535	170	2	113
TOTAL ASSETS	<u>\$ 1,820,966</u>	<u>\$ 2,777,905</u>	<u>\$ 827,409</u>	<u>\$ 1,045,533</u>	<u>\$ 521,420</u>	<u>\$ 83,627</u>	<u>\$ 240,609</u>
<b>LIABILITIES:</b>							
MANAGEMENT FEES PAYABLE	2,774	81	365	137	0	0	0
SECURITY PURCHASES PAYABLE	11,484	1,791	6,830	19,136	0	0	0
ACCOUNTS PAYABLE-PARTICIPANTS	0	0	0	0	0	0	0
OPTIONS PREMIUMS RECEIVED	0	0	0	0	0	0	0
TOTAL LIABILITIES	<u>\$ 14,258</u>	<u>\$ 1,872</u>	<u>\$ 7,195</u>	<u>\$ 19,273</u>	<u>\$ 0</u>	<u>\$ 0</u>	<u>\$ 0</u>
NET ASSETS AT JUNE 30, 1990	<u>\$ 1,806,708</u>	<u>\$ 2,776,033</u>	<u>\$ 820,214</u>	<u>\$ 1,026,260</u>	<u>\$ 521,420</u>	<u>\$ 83,627</u>	<u>\$ 240,609</u>

**STATE BOARD OF INVESTMENT  
MINNESOTA POOLED INVESTMENT ACCOUNTS  
SCHEDULE OF CHANGES IN NET ASSETS  
YEAR ENDED JUNE 30, 1990  
AMOUNTS IN (000)'S**

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	ACTIVE EQUITY ACCOUNT	PASSIVE EQUITY ACCOUNT	ACTIVE BOND ACCOUNT	PASSIVE BOND ACCOUNT	REAL ESTATE ACCOUNT	RESOURCE ACCOUNT	VENTURE CAPITAL ACCOUNT
<b>FROM INVESTMENT ACTIVITY:</b>							
NET INVESTMENT INCOME	\$ 44,758	\$ 102,594	\$ 64,371	\$ 82,558	\$ 9,949	\$ 193	\$ 1,428
REALIZED GAINS (LOSSES)	139,858	173,101	5,193	4,296	14,901	(11,387)	2,566
UNREALIZED GAINS (LOSSES)	38,444	58,528	(16,577)	(17,169)	3,589	(1,720)	(1,243)
TOTAL INCOME	\$ 223,060	\$ 334,223	\$ 52,987	\$ 69,685	\$ 28,439	(\$ 12,914)	\$ 2,751
<b>LESS DISTRIBUTION TO</b>							
PARTICIPANT ACCOUNTS	(186,073)	(275,674)	(69,654)	(86,922)	(25,453)	11,194	(3,955)
UNDISTRIBUTED DEDICATED INCOME	1,457	(21)	90	68	603	0	(39)
NET CHANGE IN UNDISTRIBUTED INCOME	\$ 38,444	\$ 58,528	(\$ 16,577)	(\$ 17,169)	\$ 3,589	(\$ 1,720)	(\$ 1,243)
<b>FROM PARTICIPANT TRANSACTIONS:</b>							
<b>ADDITIONS TO PARTICIPANT ACCOUNTS</b>							
PARTICIPANT CONTRIBUTIONS	84,436	211,769	103,229	301,751	0	9,204	57,131
INCOME DISTRIBUTION	186,073	275,674	69,654	86,922	25,453	(11,194)	3,955
INCOME TO BE DISTRIBUTED	(1,457)	21	(90)	(68)	(603)	0	39
TOTAL ADDITIONS	\$ 269,052	\$ 487,464	\$ 172,793	\$ 388,605	\$ 24,850	(\$ 1,990)	\$ 61,125
<b>DEDUCTIONS FROM PARTICIPANT ACCOUNTS</b>							
WITHDRAWALS	113,626	529,634	140	1,751	14,000	9,000	0
TOTAL DEDUCTIONS	\$ 113,626	\$ 529,634	\$ 140	\$ 1,751	\$ 14,000	\$ 9,000	\$ 0
NET CHANGE IN PARTICIPATION	\$ 155,426	(\$ 42,170)	\$ 172,653	\$ 386,854	\$ 10,850	(\$ 10,990)	\$ 61,125
TOTAL CHANGE IN ASSETS	\$ 193,870	\$ 16,358	\$ 156,076	\$ 369,685	\$ 14,439	(\$ 12,710)	\$ 59,882
<b>NET ASSETS:</b>							
BEGINNING OF PERIOD	1,612,838	2,759,675	664,138	656,575	506,981	96,337	180,727
END OF PERIOD	<u>\$ 1,806,708</u>	<u>\$ 2,776,033</u>	<u>\$ 820,214</u>	<u>\$ 1,026,260</u>	<u>\$ 521,420</u>	<u>\$ 83,627</u>	<u>\$ 240,609</u>

**STATE BOARD OF INVESTMENT  
MINNESOTA POOLED INVESTMENT ACCOUNTS  
SCHEDULE OF OPERATIONS  
YEAR ENDED JUNE 30, 1990  
AMOUNTS IN (000)'S**

	ACTIVE EQUITY ACCOUNT	PASSIVE EQUITY ACCOUNT	ACTIVE BOND ACCOUNT	PASSIVE BOND ACCOUNT	REAL ESTATE ACCOUNT	RESOURCE ACCOUNT	VENTURE CAPITAL ACCOUNT
<b>INVESTMENT INCOME:</b>							
INTEREST	\$ 3,243	\$ 393	\$ 61,176	\$ 73,588	\$ 0	\$ 0	\$ 0
DIVIDENDS	35,491	95,053	0	0	8,787	0	1,251
SHORT TERM GAINS	14,106	7,467	4,578	9,612	1,167	193	177
INCOME BEFORE EXPENSES	\$ 52,840	\$ 102,913	\$ 65,754	\$ 83,200	\$ 9,954	\$ 193	\$ 1,428
MANAGEMENT FEES	8,082	319	1,383	642	5	0	0
NET INCOME	<u>\$ 44,758</u>	<u>\$ 102,594</u>	<u>\$ 64,371</u>	<u>\$ 82,558</u>	<u>\$ 9,949</u>	<u>\$ 193</u>	<u>\$ 1,428</u>
<b>REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS</b>							
<b>REALIZED:</b>							
PROCEEDS FROM SALES	\$ 1,162,120	\$ 754,099	\$ 1,156,988	\$ 2,064,404	\$ 37,507	\$ 19,936	\$ 8,940
COST OF SECURITIES SOLD	1,022,262	580,998	1,151,795	2,060,108	22,606	31,323	6,374
NET REALIZED GAIN (LOSS)	\$ 139,858	\$ 173,101	\$ 5,193	\$ 4,296	\$ 14,901	(\$ 11,387)	\$ 2,566
<b>UNREALIZED:</b>							
BEGINNING OF PERIOD	192,173	735,364	16,386	15,808	106,640	(11,368)	2,132
END OF PERIOD	230,617	793,892	(191)	(1,361)	110,229	(13,088)	889
<b>INCREASE (DECREASE)</b>							
IN UNREALIZED APPRECIATION	\$ 38,444	\$ 58,528	(\$ 16,577)	(\$ 17,169)	\$ 3,589	(\$ 1,720)	(\$ 1,243)
NET REALIZED AND UNREALIZED	<u>\$ 178,302</u>	<u>\$ 231,629</u>	<u>(\$ 11,384)</u>	<u>(\$ 12,873)</u>	<u>\$ 18,490</u>	<u>(\$ 13,107)</u>	<u>\$ 1,323</u>

**STATE BOARD OF INVESTMENT  
MINNESOTA POOLED ACCOUNTS  
SCHEDULE OF PARTICIPATION  
JUNE 30, 1990  
AMOUNTS IN (000)'S**

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	<u>ACTIVE EQUITY ACCOUNT</u>	<u>PASSIVE EQUITY ACCOUNT</u>	<u>ACTIVE BOND ACCOUNT</u>	<u>PASSIVE BOND ACCOUNT</u>	<u>REAL ESTATE ACCOUNT</u>	<u>RESOURCE ACCOUNT</u>	<u>VENTURE CAPITAL ACCOUNT</u>	<u>POOLED ACCOUNT TOTAL</u>
Teachers Retirement Fund	\$ 798,271	\$ 1,207,392	\$ 374,839	\$ 472,794	\$ 240,163	\$ 38,538	\$ 110,832	\$ 3,242,829
Public Employees Retirement Fund	392,215	593,735	184,206	232,348	118,051	18,933	54,474	1,593,962
State Employees Retirement Fund	343,509	520,004	161,330	203,494	103,391	16,582	47,710	1,396,020
Public Employees Police & Fire Fund	145,152	219,732	68,172	85,988	43,689	7,007	20,160	589,900
Highway Patrolmen's Retirement Fund	25,715	38,926	12,077	15,233	7,739	1,241	3,572	104,503
Judges Retirement Fund	809	1,312	360	456	242	35	110	3,324
Police & Fire Consolidation Fund	10,459	16,226	4,833	6,104	3,144	489	1,443	42,698
Correctional Employees Retire. Fund	16,615	25,152	7,803	9,843	5,001	802	2,308	67,524
Supplemental Income Share Account	0	144,016	0	0	0	0	0	144,016
Supplemental Growth Share Account	73,963	0	0	0	0	0	0	73,963
Supplemental Index Share Account	0	9,538	0	0	0	0	0	9,538
Supplemental Bond Market Account	0	0	6,594	0	0	0	0	6,594
<b>TOTAL PARTICIPATION</b>	<b>\$ 1,806,708</b>	<b>\$ 2,776,033</b>	<b>\$ 820,214</b>	<b>\$ 1,026,260</b>	<b>\$ 521,420</b>	<b>\$ 83,627</b>	<b>\$ 240,609</b>	<b>\$ 7,274,871</b>

**NOTES TO THE SUPPLEMENTAL FINANCIAL STATEMENTS  
JUNE 30, 1990**

**1. PORTFOLIO LISTING:**

A listing of all securities held by these funds can be found starting on page 19 of this report. Fixed income and equity securities are presented at market value. Securities held as cash equivalents are not listed.

**2. COST OF INVESTMENTS:**

At June 30, 1990 the cost of investments for the Minnesota Pooled Investment Accounts and the individual accounts of the Minnesota Supplemental Investment Fund was:

Active Equity Account	\$ 1,563,942,552
Passive Equity Account	\$ 1,975,370,769
Active Bond Account	\$ 803,118,199
Passive Bond Account	\$ 1,009,480,246
Real Estate Account	\$ 409,416,943
Resource Account	\$ 96,712,984
Venture Capital Account	\$ 239,546,600
Income Share Account	\$ 231,710,555
Growth Share Account	\$ 68,451,025
Money Market Account	\$ 81,370,311
Index Account	\$ 9,054,018
Bond Market Account	\$ 6,675,436
G.I.C. Account	\$ 59,489,069

**3. LOANED SECURITIES:**

The market value of loaned securities outstanding at June 30, 1990 for the Minnesota Pooled Investment Accounts and the individual accounts of the Minnesota Supplemental Investment Fund was:

Active Equity Account	\$ 77,273,719
Passive Equity Account	\$ 199,740,278
Active Bond Account	\$ 86,521,546
Passive Bond Account	\$ 65,935,760

## **ASSET LISTINGS**

**MINNESOTA STATE BOARD OF INVESTMENT  
POST RETIREMENT INVESTMENT FUND  
ALPHABETICAL EQUITY HOLDINGS  
JUNE 30, 1990**

NO. OF SHARES	SECURITY	MARKET VALUE
10,215	AEROVOX INCORPORATED	\$ 40,860
141,700	AETNA LIFE & CASUALTY CO.	7,403,825
95,800	AIR PRODUCTS & CHEM. INC.	5,412,700
159,000	ALASKA AIR GROUP	3,577,500
121,650	ALCAN ALUMINUM LTD.	2,737,125
194,800	ALLIED-SIGNAL INC.	7,158,900
54,700	ALUMINUM CO. OF AMERICA	3,487,125
120,800	AMAX INC	2,944,500
146,000	AMDAHL CORP	2,372,500
82,500	AMERADA HESS CORP.	3,640,313
107,200	AMERICAN GENERAL CORP	5,145,600
144,100	AMERICAN GREETINGS	5,043,500
117,700	AMERITRUST CORP	2,118,600
149,900	AMP INC.	7,064,038
72,000	ARMCO INC	540,000
104,300	ASARCO INC.	2,763,950
75,200	ATLANTIC RICHFIELD	8,836,000
234,900	AVON PRODS INC	8,632,575
103,000	BANK BOSTON CORP	1,274,625
203,600	BANKAMERICA CORP.	6,031,650
70,600	BANKERS TRUST NY CORP.	2,956,375
190,500	BAXTER INTL INC	4,572,000
102,000	BETHLEHEM STEEL	1,644,750
123,100	BLOCK H & R INC.	5,231,750
81,700	BOWATER INC.	1,879,100
153,800	BRIGGS & STRATTON CORP	5,056,175
95,000	CALFED INC	1,591,250
135,000	CANADIAN PACIFIC LTD	2,379,375
179,200	CENTERIOR ENERGY CORP	3,360,000
75,200	CHAMPION INTL.	2,293,600
94,000	CHASE MANHATTAN CORP.	2,244,250
106,400	CHEMICAL BKG CORP	2,713,200
102,650	CHRYSLER CORP.	1,616,738
84,000	CHUBB CORPORATION	3,759,000
50,000	CIGNA CORPORATION	2,506,250
259,900	CITICORP	5,880,238
96,500	CITIZENS & SOUTHERN CORP GA	2,303,938
132,500	CMS ENERGY CORP	4,223,438
84,500	COLUMBIA GAS SYSTEM INC	3,739,125
237,000	COMMODORE INTL LTD	1,866,375
86,000	COMMONWEALTH EDISON CO.	2,816,500
120,500	COMMUNICATIONS SATELLITE CORP	3,961,438
252,400	CONTEL CORP	6,499,300
204,300	COOPER INDS. INC.	8,657,213
326,500	CORE INDS INC	3,550,688
128,100	CYPRUS MINERALS CORP	2,866,238
97,400	DELTA AIR LINES INC.	7,122,375
346,400	DETROIT EDISON CO	9,049,700
161,000	DOMINION BANKSHARES CORP	2,334,500
50,800	DUN & BRADSTREET COS INC	2,349,500
231,100	EASTERN ENTERPRISES	6,673,013
160,250	EASTMAN KODAK CO.	6,490,125
246,200	ENTERGY CORP	4,893,225
140,000	FEDERAL PAPER BRD INC	2,852,500
276,000	FIRST BANK SYSTEM	3,967,500
200,600	FIRST CHICAGO CORP	5,867,550
139,300	FORD MOTOR CO.	6,094,375
132,300	FPL GROUP INC.	4,051,688
46,100	GENERAL DYNAMICS	1,475,200
67,000	GENERAL MOTORS CORP.	3,190,875
58,800	GENERAL RE CORP.	5,027,400
112,400	GENUINE PARTS CO.	4,467,900
61,500	GEORGIA PACIFIC CORP.	2,544,563

NO. OF SHARES	SECURITY	MARKET VALUE
178,400	GOLDEN WEST FIN'L	\$ 5,418,900
139,000	HOMEFED CORPORATION	3,005,875
157,000	HUMANA INC.	7,693,000
61,000	IMPERIAL OIL CO. LTD.	2,867,000
99,000	INCO INC.	2,833,875
34,900	INTERNATIONAL BUSINESS MACH	4,100,750
95,000	JAMES RIV CORP VA	2,541,250
266,600	K MART CORPORATION	9,331,000
64,000	KIMBERLY CLARK CORP	4,584,000
147,000	KLM ROYAL DUTCH AIR	2,829,750
55,830	LOCKHEED AIRCRAFT CORP	1,870,305
57,400	LOEWS CORP	6,292,475
274,300	LONG ISLAND LTG CO	5,280,275
78,000	LOUISIANA PAC. CORP.	2,993,250
293,200	MANUFACTURERS HANOVER	10,115,400
54,100	MARTIN MARIETTA	2,319,538
102,600	MCDONNELL DOUGLAS CORP.	3,744,900
91,600	MELLON BANK CORP	2,393,050
102,100	MERRILL LYNCH & CO. INC.	2,297,250
42,000	MORGAN STANLEY GROUP INC	3,055,500
97,000	NIKE INC.	7,444,750
171,300	NORWEST CORP.	3,725,775
280,900	OCCIDENTAL PETE CORP	7,233,175
134,000	OHIO CAS CORP	5,695,000
63,600	ORYX ENERGY COMPANY	2,726,850
247,800	P S I RESOURCES INC	4,305,525
205,000	PACIFIC GAS & ELEC. CO.	4,766,250
106,700	PERKIN ELMER	2,574,138
412,000	PHILIPS INDS. INC.	7,467,500
111,100	PIONEER HI-BRED INTL.	4,610,650
260,000	PRIME MTR INNS INC	2,340,000
246,500	PUBLIC SVC CO N MEX	2,495,813
115,300	REYNOLDS & REYNOLDS CO	2,277,175
61,500	REYNOLDS METALS CO	3,559,313
120,800	ROCKWELL INTL CORP	3,306,900
43,000	ROYAL DUTCH PETE CO NY REG	3,235,750
380,000	SAFECARD SVCS INC	4,037,500
147,500	SALOMON INC	3,613,750
167,000	SCIENTIFIC ATLANTA INC	4,404,625
260,000	SEAGATE TECHNOLOGY	3,672,500
127,500	SEARS ROEBUCK & COMPANY	4,653,750
78,700	SECURITY PACIFIC CORP.	2,911,900
96,700	SIGNET BANKING CORP.	2,224,100
87,500	SONAT INC.	4,418,750
118,000	SOUTHERN CO	2,979,500
135,400	STONE CONTAINER CORP	2,217,175
63,600	SUN COMPANY INC	2,361,150
181,800	SYNTEX CORPORATION	10,658,025
236,300	TEKTRONIX INC	3,662,650
87,700	TEXAS UTILITIES CO.	3,102,388
242,000	THIokol CORPORATION	2,813,250
80,000	THOMAS & BETTS CORP	4,380,000
73,800	TRANSAMERICA CORP	2,896,650
111,000	TRAVELERS CORP.	3,302,250
122,100	U S F & G CORP.	3,250,913
311,900	UNISYS CORP.	4,132,675
107,000	UNITED ILLUM CO	3,169,875
295,600	UNITED TELECOM. INC.	11,713,150
122,000	VALLEY NATIONAL CORP.	1,967,250
70,000	VISTA CHEM CO	2,765,000
225,100	WEYERHEUSER CO.	5,740,050
46,900	XEROX CORP	2,198,438

TOTAL EQUITY PORTFOLIO

\$ 511,425,340

**MINNESOTA STATE BOARD OF INVESTMENT  
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ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 25,000,000	1600 ARCH CORP SEC NT SER Z	00.0000%	05/01/94	\$ 15,437,500
2,565,000	AMER AIRLINES EQMT TR CERT	09.8500%	01/15/04	2,598,217
2,888,000	AMER AIRLINES EQMT TR CERT	09.7500%	01/15/02	2,902,584
696,000	AMER AIRLINES EQMT TR CERT	09.9000%	01/15/08	683,208
3,750,000	AMERICAN GENERAL FIN	07.7500%	01/15/97	3,401,175
745,000	AMOCO CORP	09.2000%	07/15/04	746,520
9,500,000	ARCHER DANIELS MIDLAND CO	00.0000%	05/01/92	8,070,725
2,102,000	ATLANTIC RICHFIELD	10.8750%	07/15/05	2,352,390
2,293,111	ATLANTIC RICHFIELD CO.	08.7500%	12/01/01	2,093,106
2,905,843	ATLANTIC RICHFIELD CO.	09.2500%	07/15/96	2,827,967
21,000,000	B.E.A. CASH ENHANCEMENT POOL	00.0000%		21,000,000
15,000,000	BANK OF NEW ENGLAND	08.7500%	04/01/99	2,400,000
15,000,000	BANK OF NOVA SCOTIA	10.2500%	09/15/98	14,970,750
10,000,000	BANKAMERICA CORP.	07.8750%	12/01/03	8,724,600
9,750,000	BELL TEL OF CANADA	09.0000%	01/15/08	9,324,315
6,000,000	BENEFICIAL CORP	08.4000%	12/01/07	5,277,420
15,000,000	BENEFICIAL CORP.	07.5000%	07/15/02	12,714,600
6,000,000	BOSTON EDISON	09.2500%	04/15/07	5,870,580
7,000,000	BP NORTH AMERICA	09.5000%	06/15/17	6,892,690
6,000,000	BRITISH COLUMBIA HYDRO	08.3750%	06/15/07	5,570,640
78,174	BURLINGTON NORTHERN	08.5000%	07/03/93	76,475
783,241	BURLINGTON NORTHERN	08.7500%	09/01/93	767,420
6,000,000	C.I.T. FINANCIAL	08.7500%	03/15/08	5,491,740
6,000,000	C.I.T. FINANCIAL	09.8500%	08/15/04	6,032,580
7,790,000	C.I.T. FINANCIAL CORP.	08.3750%	04/01/01	7,208,554
1,000,000	CANADIAN PACIFIC, LTD.	08.6250%	01/15/92	997,820
6,000,000	CAROLINA POWER & LIGHT	08.7500%	08/01/00	5,803,140
7,000,000	CATERPILLAR INC	06.0000%	05/01/07	4,934,790
5,000,000	CENTRAL POWER & LIGHT	10.9375%	06/01/04	4,948,950
750,000	CERTIFICATES ACCRUAL TREAS	00.0000%	11/15/98	366,255
6,000,000	CHEMICAL N.Y. CORP	08.2500%	08/01/02	5,116,380
7,500,000	CHESAPEAKE & POTOMAC TEL MD	09.1250%	07/01/26	7,154,175
18,140,000	CHEVRON CORP.	08.7500%	07/01/05	17,452,675
6,000,000	CHRYSLER CORP	08.0000%	11/01/98	5,387,580
3,750,000	CHRYSLER CORP	12.7500%	11/15/15	3,262,500
1,500,000	CHRYSLER CORP	12.0000%	03/01/92	1,554,075
15,000,000	CHRYSLER CORPORATION	11.0400%	08/01/92	14,938,800
5,000,000	CHRYSLER FINANCIAL	09.6500%	05/15/93	4,811,750
7,020,000	CITICORP	08.4500%	03/15/07	6,216,350
7,000,000	CITICORP	08.1250%	07/01/07	6,085,870
1,000,000	CITIZENS UTILITIES	04.8000%	12/31/91	963,590
7,000,000	COLGATE PALMOLIVE	09.6250%	07/15/17	6,923,840
4,100,000	COMERICA INC	09.7500%	05/01/99	4,072,202
4,200,000	COMMONWEALTH EDISON	08.1250%	06/01/07	3,665,844
5,800,000	CONOCO INC	09.3750%	04/01/09	5,781,034
5,000,000	CORESTATES CAPITAL	08.3750%	11/01/96	4,700,650
6,000,000	COUPON TREASURY RCPT	00.0000%	02/15/99	2,857,980
668,990	COUPON TREASURY RCPTS	00.0000%	11/15/98	326,695
1,656,250	COUPON TREASURY RCPTS	00.0000%	11/15/98	808,813
250,000	COUPON TREASURY RCPTS	00.0000%	08/15/91	228,300
1,320,000	COUPON TREASURY RCPTS	00.0000%	08/15/91	1,205,424
166,875	COUPON TREASURY RCPTS	00.0000%	08/15/91	152,390
945,000	COUPON TREASURY RCPTS	00.0000%	11/15/98	461,481
1,734,375	COUPON TREASURY RCPT	00.0000%	11/15/93	1,308,447
4,821,000	COUPON TREASURY RCPTS	00.0000%	11/15/00	1,977,044
4,875,000	DANA CORP	08.8750%	11/15/08	4,266,893
770,000	DELTA AIRLINES ETC SER J	10.0000%	05/17/09	761,877
2,327,000	DELTA AIRLINES ETC SER H	10.0000%	05/17/10	2,304,242
2,115,000	DELTA AIRLINES ETC SER H	10.0000%	05/17/09	2,092,687
346,000	DELTA AIRLINES ETC SER J	10.0000%	05/17/10	342,616
2,327,000	DELTA AIRLINES ETC SER I	10.0000%	05/17/10	2,304,242
2,115,000	DELTA AIRLINES ETC SER I	10.0000%	05/17/09	2,092,687
9,350,000	DETROIT EDISON	09.0000%	02/15/17	8,515,045
6,000,000	DETROIT EDISON	07.3750%	11/15/01	5,144,280
6,000,000	DETROIT EDISON	08.1250%	06/15/01	5,420,700

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 1,255,000	DOW CHEMICAL	08.6250%	02/15/08	\$ 1,184,231
7,000,000	DOW CHEMICAL COMPANY	07.8750%	07/15/07	6,204,730
4,000,000	DU PONT (E.I.) DENEMOURS	06.0000%	12/01/01	3,121,680
7,000,000	DUQUESNE	09.0000%	06/01/06	6,615,000
1,500,000	E.I. DUPONT DE NEMOURS	08.5000%	04/15/96	1,377,660
10,000,000	EASTMAN KODAK	09.7500%	10/01/04	9,979,300
1,800,000	FEDERAL FARM CREDIT BANK	09.1000%	07/22/91	1,814,058
10,000,000	FEDERAL FARM CREDIT BANK	10.6000%	10/21/91	10,265,600
5,000,000	FEDERAL FARM CREDIT BANK	11.4500%	12/01/94	5,487,500
2,300,000	FEDERAL FARM CREDIT BANK	13.0000%	09/01/94	2,647,875
5,000,000	FEDERAL FARM CREDIT BANK	11.5000%	01/20/92	5,220,300
7,000,000	FEDERAL FARM CREDIT BANK	10.6500%	01/20/93	7,321,580
9,100,000	FEDERAL FARM CREDIT BANK	13.7500%	07/20/92	10,010,000
50,000,000	FEDERAL FARM CREDIT BANK	11.9000%	10/20/97	58,437,500
15,000,000	FEDERAL FARM CREDIT BANK	14.1000%	04/22/91	15,670,350
665,000	FEDERAL FARM CREDIT BANK	13.6500%	12/02/91	711,131
5,000,000	FEDERAL FARM CREDIT BANK	12.3500%	03/01/94	5,587,500
2,300,000	FEDERAL FARM CREDIT BANK	14.2500%	04/20/94	2,716,875
12,000,000	FEDERAL FARM CREDIT BANK	11.8000%	10/20/93	13,087,440
4,285,000	FEDERAL HOME LOAN BANK	12.5000%	09/25/90	4,326,522
250,000	FEDERAL HOME LOAN BANK	08.1250%	05/25/93	247,265
12,500,000	FEDERAL HOME LOAN BANK	08.0000%	07/25/96	12,035,125
775,000	FEDERAL HOME LOAN BANK	07.7500%	07/26/93	757,074
375,000	FEDERAL HOME LOAN BANK	09.5000%	01/25/93	382,616
2,865,000	FEDERAL HOME LOAN BANK	11.7500%	09/25/91	2,975,131
5,775,000	FEDERAL HOME LOAN BANK	10.0000%	06/26/95	6,054,741
2,515,000	FEDERAL HOME LOAN BANK	12.1500%	12/27/93	2,775,931
900,000	FEDERAL HOME LOAN BANK	07.5500%	04/26/93	874,971
2,100,000	FEDERAL HOME LOAN BANK	08.1000%	03/25/96	2,038,302
1,050,000	FEDERAL HOME LOAN BANK	10.8000%	03/25/93	1,104,138
7,000,000	FEDERAL HOME LOAN BANK	11.9500%	08/25/93	7,630,000
47,000,000	FEDERAL HOME LOAN BANK	08.2500%	09/25/96	45,854,140
5,000,000	FEDERAL HOME LOAN BANK	11.7000%	04/27/92	5,270,300
7,150,000	FEDERAL HOME LOAN BANK	09.7500%	07/25/90	7,154,433
5,000,000	FEDERAL HOME LOAN BANK	10.7000%	01/25/93	5,242,200
3,525,000	FEDERAL HOME LOAN BANK	07.7500%	04/25/96	3,363,062
950,000	FEDERAL HOME LOAN BANK	07.8750%	10/25/93	929,813
6,295,000	FEDERAL HOME LOAN BANK	13.7000%	11/26/90	6,432,672
10,300,000	FEDERAL HOME LOAN BANK	07.3000%	01/25/94	9,894,386
6,470,000	FEDERAL HOME LOAN BANK	11.4500%	02/25/92	6,765,161
1,075,000	FEDERAL HOME LOAN BANK	07.9500%	09/27/93	1,052,823
31,200,000	FEDERAL HOME LOAN BANK	11.7000%	07/26/93	33,774,000
7,000,000	FEDERAL HOME LOAN BANK	10.3000%	07/25/95	7,435,330
200,000	FEDERAL HOME LOAN BANK	07.3750%	12/27/93	192,624
25,600,000	FEDERAL HOME LOAN BANK	08.2500%	06/25/96	24,967,936
50,000,000	FEDERAL HOME LOAN MORTGAGE COR	00.0000%	11/29/19	4,078,000
5,000,000	FEDERAL NATIONAL MORTGAGE ASSN	10.9000%	01/11/93	5,268,750
8,000,000	FEDERAL NATIONAL MORTGAGE ASSN	10.8750%	04/12/93	8,442,480
350,000	FEDERAL NATIONAL MORTGAGE ASSN	07.1000%	12/10/97	319,375
50,000,000	FEDERAL NATIONAL MORTGAGE ASSN	00.0000%	10/09/19	4,125,000
2,025,000	FEDERAL NATIONAL MORTGAGE ASSN	11.5000%	02/10/95	2,224,969
5,150,000	FEDERAL NATIONAL MORTGAGE ASSN	09.2000%	01/10/96	5,232,091
5,000,000	FEDERAL NATIONAL MORTGAGE ASSN	07.7500%	11/10/93	4,881,250
22,000,000	FEDERAL NATIONAL MORTGAGE ASSN	00.0000%	07/05/14	2,708,640
3,000,000	FEDERAL NATIONAL MORTGAGE ASSN	08.2000%	03/10/16	2,784,360
8,320,000	FEDERAL NATIONAL MORTGAGE ASSN	11.9500%	01/10/95	9,323,558
25,000,000	FEDERAL NATIONAL MORTGAGE ASSN	08.5000%	01/10/92	25,023,500
24,400,000	FEDERAL NATIONAL MORTGAGE ASSN	10.3500%	12/10/15	27,861,628
500,000	FEDERAL NATIONAL MORTGAGE ASSN	10.1500%	10/10/90	502,655
5,000,000	FINANCING CORP	00.0000%	12/06/02	1,629,600
23,100,000	FINANCING CORP	00.0000%	12/06/05	6,356,658
12,950,000	FINANCING CORP	00.0000%	06/06/05	3,695,801
42,000,000	FINANCING CORP	09.4000%	02/08/18	43,417,500
5,000,000	FINANCING CORP	10.3500%	08/03/18	5,648,450
10,000,000	FINANCING CORP	09.8000%	04/06/18	10,721,900

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 5,000,000	FINANCING CORP	10.7000%	10/06/17	\$ 5,826,550
25,000,000	FINANCING CORP	00.0000%	09/07/15	2,791,750
28,000,000	FINANCING CORP FICO STRIP S 15	00.0000%	03/07/02	9,784,880
9,200,000	FINANCING CORP FICO STRIP S 15	00.0000%	09/07/07	1,995,296
12,500,000	FINANCING CORP FICO STRIP S 15	00.0000%	03/07/09	2,388,875
28,935,000	FINANCING CORP FICO STRIP S 15	00.0000%	03/07/04	8,545,663
17,300,000	FINANCING CORP FICO STRIP S 15	00.0000%	03/07/07	3,916,547
23,950,000	FINANCING CORP FICO STRIP S 15	00.0000%	09/07/00	9,635,085
27,800,000	FINANCING CORP FICO STRIP S 15	00.0000%	09/07/06	6,568,028
28,900,000	FINANCING CORP FICO STRIP S 15	00.0000%	03/07/06	7,123,272
22,500,000	FINANCING CORP FICO STRIP S 15	00.0000%	03/07/05	6,060,600
5,000,000	FIRST CHICAGO CORP	09.0000%	06/15/99	4,663,050
3,300,000	FIRST CHICAGO MED TERM NOTE	09.7000%	03/31/92	3,342,966
5,650,000	FMC CORP	09.5000%	01/15/00	5,311,000
5,000,000	FNMA CAPITAL DEBENTURE	07.4000%	10/01/97	4,637,500
5,000,000	FORD MOTOR CREDIT CORP	10.0000%	02/01/99	5,113,950
7,700,000	FPL GROUP CORP	08.8750%	03/01/17	7,091,469
30,000,000	FUNDING CORPORATION	00.0000%	01/15/14	3,881,100
10,000,000	FUNDING CORPORATION	00.0000%	04/15/96	6,053,100
15,620,000	FUNDING CORPORATION	00.0000%	04/15/04	4,642,108
30,000,000	FUNDING CORPORATION	00.0000%	04/15/14	3,815,700
15,620,000	FUNDING CORPORATION	00.0000%	04/15/03	5,066,659
10,000,000	FUNDING CORPORATION	00.0000%	10/15/04	2,843,700
10,000,000	FUNDING CORPORATION	00.0000%	10/15/98	4,853,100
30,000,000	FUNDING CORPORATION	00.0000%	07/15/13	4,040,700
10,000,000	FUNDING CORPORATION	00.0000%	04/15/97	5,531,200
15,620,000	FUNDING CORPORATION	00.0000%	04/15/02	5,535,259
30,000,000	FUNDING CORPORATION	00.0000%	10/15/13	3,956,100
30,000,000	FUNDING CORPORATION	00.0000%	07/15/14	3,740,700
5,000,000	GENERAL FOODS INC	06.0000%	06/15/01	3,843,400
5,000,000	GENERAL MOTORS ACCEPT CORP	08.7500%	06/15/01	4,773,400
8,500,000	GENERAL MOTORS ACCEPT CORP	08.8750%	06/01/99	8,291,495
4,200,000	GENERAL MOTORS ACCEPT CORP	08.7500%	02/01/00	4,024,440
7,000,000	GENERAL MOTORS ACCEPT CORP	08.0000%	07/15/07	6,038,760
5,000,000	GENERAL MOTORS ACCEPT CORP	08.2500%	11/15/06	4,425,500
3,100,000	GENERAL MOTORS CORPORATION	08.6250%	04/01/05	2,975,969
3,500,000	GENERAL MOTORS CORPORATION	08.1250%	04/15/16	2,989,035
1,000,000	GENERAL TEL CO (FLA)	04.5000%	05/01/93	890,000
1,200,000	GENERAL TEL OF CALIF.	09.3750%	06/15/26	1,156,392
6,500,000	GMAC	08.2500%	04/01/16	5,633,810
8,150,000	GREYHOUND LEASING	13.6250%	04/01/94	8,412,349
8,500,000	GTE CORP	09.1250%	12/01/16	7,937,725
6,300,000	GTE CORP	08.5000%	04/01/17	5,641,272
192,000	HARBOR TUG & BARGE	08.1500%	03/15/01	184,836
7,600,000	HOUSEHOLD FINANCE CORP	08.2000%	09/15/07	6,620,132
325,000	HOUSEHOLD FINANCE CORP	09.6250%	06/15/04	325,052
7,320,000	HOUSEHOLD FINANCE CORP.	08.3750%	10/01/03	6,568,382
525,000	HOUSTON LTG & POWER	08.3750%	10/01/07	467,366
14,000,000	HYDRO QUEBEC	08.5000%	12/01/29	12,827,080
3,500,000	HYDRO-QUEBEC	08.2500%	04/15/26	3,100,965
6,000,000	HYDRO-QUEBECK	08.6000%	09/15/06	5,528,820
2,035,000	INDIANA & MICH ELECTRIC	09.5000%	03/01/08	2,033,413
6,000,000	INTER-AMERICAN DEV. BANK	09.6250%	01/15/04	6,000,000
12,000,000	INTERNORTH INC.	09.6250%	03/15/06	11,717,040
7,000,000	ITT FINANCIAL	09.8800%	05/15/98	7,198,660
3,600,000	ITT FINANCIAL CORP	08.3750%	03/01/07	3,317,436
4,950,000	JEWEL CO'S INC.	11.5000%	12/01/92	4,956,138
5,000,000	KANSAS POWER & LIGHT	08.7500%	02/01/08	4,679,400
3,600,000	KMART	12.5000%	03/01/05	4,370,940
7,000,000	LOEWS CORP	09.0000%	03/15/16	6,467,510
5,700,000	LOEWS CORP	08.2500%	01/15/07	5,041,479
1,000,000	LONG ISLAND LIGHTING	04.4000%	04/01/93	906,400
672,682	LOUISVILLE & NASHVILLE	09.0000%	10/20/91	671,316
6,000,000	MANITOBA HYDRO	08.6250%	12/01/06	5,557,620
5,440,000	MANITOBA HYDRO ELEC BD	07.6500%	10/15/97	4,988,589

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 4,300,000	MANUF. HANOVER CORP	08.1250%	03/01/04	\$ 3,520,238
800,000	MARATHON OIL COMPANY	08.5000%	02/01/00	707,960
9,000,000	MARTIN-MARIETTA CORP.	07.0000%	03/15/11	6,870,780
5,000,000	MCDONALDS CORP	09.7500%	05/01/19	5,025,850
3,197,699	MHFA SER. A 1988	00.0000%	02/01/93	2,442,243
9,650,000	MHFA SER. A 1989	00.0000%	08/01/96	5,019,930
4,525,000	MHFA SER. B 1988	00.0000%	08/01/95	2,526,081
8,060,000	MINNESOTA HOUSING FIN AGY	00.0000%	08/01/97	3,974,789
921,741	MISSOURI PACIFIC RR	09.7500%	06/01/94	936,360
664,297	MISSOURI PACIFIC RR	12.7500%	06/01/95	718,537
1,700,000	MOBIL CORP	08.5000%	06/15/01	1,667,292
5,000,000	MOBIL OIL	07.3750%	10/01/01	4,376,100
3,535,000	MONSANTO CO.	08.7500%	05/15/08	3,390,913
6,000,000	N. BRUNSWICK ELECTRIC	09.3750%	05/01/01	5,882,700
3,000,000	N. Y. LIFE FUNDING CORP	09.2500%	05/15/95	3,035,340
6,000,000	NATIONAL ARCHIVES	08.5000%	09/01/19	5,815,740
5,000,000	NATIONAL CREDIT CARD TR	10.1500%	04/15/93	5,120,800
5,848,000	NATIONAL RURAL UTIL.	09.7500%	09/01/09	5,791,976
7,000,000	NO. AMER PHILLIPS	08.7500%	03/01/17	6,240,080
6,000,000	NORTHERN IND. PUB. SERV.	08.5000%	11/01/07	5,489,940
6,000,000	NORTHERN IND. PUB. SERV.	08.3750%	10/15/06	5,465,040
3,125,000	NORTHERN STATES POWER CO. MINN	08.3750%	01/01/04	2,890,125
6,400,000	NOVA SCOTIA POWER CORP	09.6250%	06/01/08	6,365,632
3,500,000	NOVA SCOTIA POWER COMM	07.7500%	03/15/97	3,227,315
10,000,000	OCCIDENTAL PETROLEUM	10.1250%	09/15/09	9,526,100
10,000,000	OCCIDENTAL PETROLEUM CORP	10.1250%	11/15/01	9,746,800
5,700,000	OCCIDENTAL PETE CORP	07.0000%	04/15/11	3,967,485
3,600,000	ONTARIO PROV. OF	08.4000%	01/15/07	3,344,364
5,100,000	ONTARIO PROV. OF	09.2500%	11/15/05	5,010,444
6,000,000	ONTARIO PROVINCE	09.7500%	03/01/09	6,119,820
6,000,000	ONTARIO PROVINCE	09.8750%	09/20/09	6,147,120
1,000,000	ONTARIO PROVINCE OF CANADA	09.1250%	06/15/05	972,870
7,000,000	ONTARIO, PROVINCE OF	09.3750%	06/01/08	6,973,820
6,920,000	ONTARIO, PROVINCE OF	09.3750%	11/30/08	6,879,933
7,000,000	PACIFIC BELL TEL	08.6250%	04/15/23	6,352,150
1,600,000	PACIFIC BELL TEL	08.7500%	08/15/25	1,472,256
3,765,000	PACIFIC GAS & ELECTRIC	08.2500%	09/01/08	3,362,522
6,000,000	PACIFIC GAS & ELECTRIC	08.5000%	02/01/09	5,486,280
3,000,000	PACIFIC GAS & ELECTRIC	09.4000%	04/01/19	2,882,280
15,000,000	PACIFIC GAS & ELECTRIC	09.1250%	10/01/19	14,220,450
15,000,000	PACIFIC GAS & ELECTRIC	08.6500%	01/01/20	13,407,750
5,000,000	PACIFIC TEL & TEL	08.6500%	04/01/05	4,755,450
5,000,000	PACIFIC TEL & TEL	06.5000%	07/01/03	4,005,950
5,000,000	PACIFIC TEL & TEL CO	08.7500%	10/01/06	4,726,100
7,930,000	PENNEY J.C. CO.	06.0000%	05/01/06	5,706,349
10,000,000	PENNZOIL CO	10.1250%	11/15/09	10,103,400
7,000,000	PHILADELPHIA ELEC CO	09.3750%	04/01/17	6,667,360
6,000,000	PHILADELPHIA ELECTRIC	07.5000%	01/15/99	5,272,680
3,060,000	PHILADELPHIA ELECTRIC	08.6250%	03/15/07	2,746,075
6,000,000	PHILADELPHIA ELECTRIC	09.1250%	03/01/06	5,601,060
2,777,000	PHILADELPHIA ELECTRIC	09.1250%	03/15/08	2,583,054
755,000	PHILADELPHIA ELECTRIC	09.6250%	08/01/02	735,317
4,075,000	PHILADELPHIA ELECTRIC	08.5000%	01/15/04	3,677,036
5,000,000	PHILLIPS PETE CO	13.8750%	03/15/97	5,456,100
5,000,000	POTOMIC ELECTRIC POWER	08.7500%	11/15/16	4,611,750
2,675,000	PRIMERICA CORP	11.1250%	10/15/92	2,759,477
5,000,000	PRIVATE EXP FUNDING CORP	09.5000%	03/31/99	5,174,950
3,500,000	PROCTOR & GAMBLE	08.1250%	01/15/17	3,099,810
6,000,000	PUBLIC SERVICE ELEC & GAS	08.1250%	09/01/07	5,309,400
1,648,959	PUBLIC SERVICE ELEC & GAS	09.7500%	07/01/09	1,640,517
4,400,000	QUEBEC-HYDRO ELECTRIC	08.2500%	01/01/04	4,021,820
13,000,000	RALSTON PURINA	09.2500%	10/15/09	12,480,390
20,280,882	SBI MONEY FUND	00.0000%		20,280,882
8,775,000	SASKATCH., PROVINCE OF	09.2500%	04/15/08	8,429,353
6,000,000	SASKATCHEWAN CDA	08.6250%	05/15/07	5,507,220

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 6,000,000	SASKATCHEWAN CDA	08.7000%	11/15/06	\$ 5,594,700
1,731,999	SEABOARD COAST LINE RR	09.6250%	09/01/93	1,744,313
1,508,153	SEABOARD COAST LINE RR	08.2500%	10/01/92	1,479,363
3,000,000	SEARS	07.0000%	11/15/01	2,471,220
13,000,000	SEARS ROEBUCK & CO.	06.0000%	05/01/00	10,044,060
5,000,000	SHEARSON LEHMAN	09.8750%	10/15/00	4,765,800
5,000,000	SHEARSON LEHMAN	08.7500%	03/01/96	4,641,350
5,000,000	SIGNET BANKING CORP	09.6250%	06/01/99	4,829,700
5,000,000	SOUTH CENTRAL BELL TEL	08.2500%	12/01/04	4,602,300
3,000,000	SOUTH CENTRAL BELL TEL	07.3750%	11/01/07	2,542,200
5,000,000	SOUTHERN CAL EDISON	08.6250%	03/15/18	4,591,950
15,000,000	SOUTHERN CALIF EDISON CO	09.5000%	07/01/20	14,791,350
3,100,000	SOUTHWESTERN BELL TEL	05.8750%	06/01/03	2,346,607
5,000,000	SOUTHWESTERN BELL TEL	08.7500%	08/01/07	4,641,350
7,000,000	SOUTHWESTERN BELL TEL	08.6250%	04/15/20	6,299,650
685,148	STANDARD OIL OF CALIF.	07.7000%	03/02/97	614,894
737,852	STANDARD OIL OF CALIF.	07.7000%	03/30/97	660,990
685,149	STANDARD OIL OF CALIF.	07.7000%	02/10/97	630,576
2,499,577	STANDARD OIL OF CALIF.	08.5000%	07/02/99	2,294,412
10,000,000	STRPD U.S. TREAS. BONDS	00.0000%	05/15/06	2,612,300
50,000,000	STUDENT LN MRKTG ASSN	00.0000%	10/03/22	3,422,000
11,385,000	TENNESSEE GAS PIPELINE	13.7000%	09/01/92	12,329,158
5,700,000	TENNESSEE GAS PIPELINE	09.3750%	01/15/17	5,374,245
4,300,000	TEXAS ELEC. SERVICE	09.5000%	02/01/09	4,050,901
2,500,000	TEXAS POWER & LIGHT	09.3750%	02/01/09	2,337,225
3,000,000	TEXAS POWER & LIGHT	08.6000%	01/01/06	2,676,930
15,000,000	TEXAS UTIL.	09.2500%	02/01/17	13,957,200
7,000,000	TORCHMARK	08.6250%	03/01/17	5,477,500
1,619,000	TREASURY INVT GROWTH RCPTS	00.0000%	11/15/00	790,622
250,000	TREASURY INVT GROWTH RCPTS	00.0000%	02/15/99	119,083
258,670,987	TRUST FUND POOL	00.0000%		258,670,987
50,000,000	U.S.A. TREASURY BOND	10.3750%	05/15/95	53,750,000
36,075,000	U.S.A. TREASURY BOND	10.7500%	05/15/03	42,128,746
56,904,000	U.S.A. TREASURY BOND	11.6250%	11/15/04	70,898,970
88,500,000	U.S.A. TREASURY BOND	12.5000%	08/15/14	120,138,750
36,400,000	U.S.A. TREASURY BOND	10.0000%	05/15/10	40,460,784
55,900,000	U.S.A. TREASURY BOND	10.3750%	11/15/09	63,656,125
22,900,000	U.S.A. TREASURY BOND	09.1250%	05/15/09	23,816,000
7,500,000	U.S.A. TREASURY BOND	10.6250%	08/15/15	9,096,075
53,326,000	U.S.A. TREASURY BOND	12.0000%	08/15/13	69,507,241
5,100,000	U.S.A. TREASURY BOND	08.5000%	02/15/20	5,133,456
8,500,000	U.S.A. TREASURY BOND	08.7500%	05/15/17	8,720,490
24,500,000	U.S.A. TREASURY BOND	14.2500%	02/15/02	34,629,280
5,100,000	U.S.A. TREASURY BOND	09.0000%	11/15/18	5,385,294
50,000,000	U.S.A. TREASURY BOND	10.3750%	11/15/12	57,672,000
40,000,000	U.S.A. TREASURY BOND	09.0000%	02/15/94	40,787,600
50,000,000	U.S.A. TREASURY BOND	11.5000%	11/15/95	56,422,000
65,350,000	U.S.A. TREASURY BOND	10.7500%	02/15/03	76,194,179
5,100,000	U.S.A. TREASURY BOND	13.7500%	08/15/04	7,224,456
40,350,000	U.S.A. TREASURY BOND	07.8750%	02/15/00	38,572,179
50,110,000	U.S.A. TREASURY BOND	11.6250%	11/15/02	61,666,368
2,000,000	U.S.A. TREASURY BOND	08.6250%	11/15/93	2,016,880
13,500,000	U.S.A. TREASURY BOND	09.2500%	02/15/16	14,508,315
9,450,000	U.S.A. TREASURY BOND	08.2500%	05/15/05	9,210,821
8,925,000	U.S.A. TREASURY BOND	13.1250%	05/15/01	11,764,221
28,020,000	U.S.A. TREASURY BOND	08.3750%	08/15/00	27,661,064
29,475,000	U.S.A. TREASURY BOND	07.6250%	02/15/07	27,135,275
61,800,000	U.S.A. TREASURY BOND	10.7500%	08/15/05	72,924,000
63,925,000	U.S.A. TREASURY BOND	13.8750%	05/15/11	92,271,902
40,000,000	U.S.A. TREASURY BOND	12.6250%	05/15/95	46,537,600
62,600,000	U.S.A. TREASURY BOND	12.7500%	11/15/10	84,079,312
50,000,000	U.S.A. TREASURY BOND	08.5000%	05/15/99	50,031,000
50,000,000	U.S.A. TREASURY BOND	13.2500%	05/15/14	71,234,500
45,500,000	U.S.A. TREASURY BOND	11.7500%	11/15/14	58,737,770
50,000,000	U.S.A. TREASURY BOND	12.0000%	05/15/05	64,062,500

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 15,000,000	U.S.A. TREASURY BOND	08.0000%	08/15/01	\$ 14,418,750
16,600,000	U.S.A. TREASURY BOND	08.3750%	08/15/08	16,278,292
94,800,000	U.S.A. TREASURY BOND	11.7500%	02/15/10	118,766,388
22,500,000	U.S.A. TREASURY BOND	07.5000%	11/15/16	20,158,650
20,000,000	U.S.A. TREASURY BOND	07.2500%	05/15/16	17,412,400
10,000,000	U.S.A. TREASURY BOND	09.3750%	02/15/06	10,728,100
39,650,000	U.S.A. TREASURY BOND	11.7500%	02/15/01	48,373,000
32,100,000	U.S.A. TREASURY BOND	13.3750%	08/15/01	42,993,777
22,300,000	U.S.A. TREASURY BOND	10.5000%	02/15/95	24,000,375
1,600,000	U.S.A. TREASURY BOND	08.7500%	11/15/08	1,619,504
45,000,000	U.S.A. TREASURY BOND	14.0000%	11/15/11	65,742,300
11,600,000	U.S.A. TREASURY BOND	11.1250%	08/15/03	13,894,596
15,745,000	U.S.A. TREASURY BOND	12.3750%	05/15/04	20,517,624
7,075,000	U.S.A. TREASURY BOND	11.8750%	11/15/03	8,903,463
14,360,000	U.S.A. TREASURY COUPON	00.0000%	05/15/98	7,396,836
20,000,000	U.S.A. TREASURY COUPON	00.0000%	11/15/06	5,008,200
5,400,000	U.S.A. TREASURY COUPON	00.0000%	11/15/91	4,834,620
49,250,000	U.S.A. TREASURY COUPON	00.0000%	08/15/10	9,154,098
20,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/17	2,248,600
61,500,000	U.S.A. TREASURY COUPON	00.0000%	08/15/07	14,498,625
11,500,000	U.S.A. TREASURY COUPON	00.0000%	11/15/07	2,659,375
50,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/12	8,197,500
22,400,000	U.S.A. TREASURY COUPON	00.0000%	05/15/10	4,243,904
2,500,000	U.S.A. TREASURY COUPON	00.0000%	05/15/93	1,972,025
11,850,000	U.S.A. TREASURY COUPON	00.0000%	11/15/99	5,383,692
25,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/11	4,364,750
21,800,000	U.S.A. TREASURY COUPON	00.0000%	11/15/97	11,737,338
85,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/12	13,365,400
25,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/14	3,372,000
5,500,000	U.S.A. TREASURY COUPON	00.0000%	08/15/92	4,618,955
40,500,000	U.S.A. TREASURY COUPON	00.0000%	05/15/08	8,994,645
7,500,000	U.S.A. TREASURY COUPON	00.0000%	02/15/00	3,326,625
39,500,000	U.S.A. TREASURY COUPON	00.0000%	02/15/08	8,942,405
22,800,000	U.S.A. TREASURY COUPON	00.0000%	05/15/99	10,785,540
1,800,000	U.S.A. TREASURY COUPON	00.0000%	05/15/91	1,678,788
25,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/06	6,530,750
31,800,000	U.S.A. TREASURY COUPON	00.0000%	08/15/00	13,521,678
3,800,000	U.S.A. TREASURY COUPON	00.0000%	05/15/97	2,132,332
50,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/11	8,547,500
28,204,000	U.S.A. TREASURY COUPON	00.0000%	08/15/98	14,222,431
19,150,000	U.S.A. TREASURY COUPON	00.0000%	11/15/98	9,479,825
56,500,000	U.S.A. TREASURY COUPON	00.0000%	08/15/02	20,218,525
13,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/93	10,469,680
35,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/94	24,854,550
3,830,000	U.S.A. TREASURY COUPON	00.0000%	02/15/04	1,206,910
15,600,000	U.S.A. TREASURY COUPON	00.0000%	11/15/00	6,508,632
25,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/14	3,499,000
5,708,000	U.S.A. TREASURY COUPON	00.0000%	02/15/91	5,433,103
25,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/13	3,631,750
50,000,000	U.S.A. TREASURY COUPON	00.0000%	11/15/01	19,132,500
8,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/93	6,178,560
5,900,000	U.S.A. TREASURY COUPON	00.0000%	02/15/92	5,166,217
10,525,000	U.S.A. TREASURY COUPON	00.0000%	08/15/03	3,460,199
8,500,000	U.S.A. TREASURY COUPON	00.0000%	02/15/09	1,778,285
46,000,000	U.S.A. TREASURY COUPON	00.0000%	11/15/08	9,812,260
8,900,000	U.S.A. TREASURY COUPON	00.0000%	05/15/94	6,453,835
42,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/11	7,486,500
22,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/99	10,627,320
1,800,000	U.S.A. TREASURY COUPON	00.0000%	02/15/94	1,332,900
50,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/05	13,874,500
5,300,000	U.S.A. TREASURY COUPON	00.0000%	08/15/91	4,842,133
49,250,000	U.S.A. TREASURY COUPON	00.0000%	02/15/10	9,526,920
30,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/00	13,030,800
52,600,000	U.S.A. TREASURY COUPON	00.0000%	05/15/03	17,666,236
11,360,000	U.S.A. TREASURY COUPON	00.0000%	11/15/03	3,671,098

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 4,500,000	U.S.A. TREASURY COUPON	00.0000%	02/15/02	\$ 1,681,920
26,400,000	U.S.A. TREASURY COUPON	00.0000%	05/15/04	8,145,984
14,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/09	2,873,640
8,500,000	U.S.A. TREASURY COUPON	00.0000%	02/15/05	2,460,750
3,500,000	U.S.A. TREASURY COUPON	00.0000%	05/15/92	3,002,545
36,700,000	U.S.A. TREASURY COUPON	00.0000%	05/15/02	13,416,419
92,000,000	U.S.A. TREASURY COUPON	00.0000%	11/15/16	10,533,080
73,500,000	U.S.A. TREASURY COUPON	00.0000%	08/15/08	15,981,105
24,600,000	U.S.A. TREASURY COUPON	00.0000%	08/15/01	9,602,364
5,900,000	U.S.A. TREASURY COUPON	00.0000%	02/15/95	4,014,006
14,825,000	U.S.A. TREASURY COUPON	00.0000%	08/15/99	6,865,458
26,500,000	U.S.A. TREASURY COUPON	00.0000%	08/15/04	8,004,060
3,800,000	U.S.A. TREASURY COUPON	00.0000%	11/15/92	3,126,830
50,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/17	5,437,500
50,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/98	26,299,000
18,400,000	U.S.A. TREASURY COUPON	00.0000%	05/15/01	7,337,000
78,800,000	U.S.A. TREASURY COUPON	00.0000%	05/15/16	9,376,412
34,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/13	5,043,900
55,000,000	U.S.A. TREASURY COUPON	00.0000%	02/15/13	8,312,150
50,000,000	U.S.A. TREASURY COUPON	00.0000%	08/15/09	10,067,000
10,400,000	U.S.A. TREASURY COUPON	00.0000%	05/15/05	2,948,192
3,300,000	U.S.A. TREASURY NOTE	07.6250%	05/15/93	3,239,148
20,000,000	U.S.A. TREASURY NOTE	09.5000%	11/15/95	20,887,400
225,000	U.S.A. TREASURY NOTE	08.7500%	01/15/93	227,250
5,000,000	U.S.A. TREASURY NOTE	08.8750%	05/15/00	5,150,000
5,000,000	U.S.A. TREASURY NOTE	10.3750%	07/15/92	5,192,200
5,000,000	U.S.A. TREASURY NOTE	14.5000%	05/15/91	5,270,300
3,500,000	U.S.A. TREASURY NOTE	07.0000%	04/15/94	3,345,790
3,560,000	U.S.A. TREASURY NOTE	12.6250%	08/15/94	4,066,196
10,000,000	U.S.A. TREASURY NOTE	11.6250%	11/15/94	11,137,500
2,500,000	U.S.A. TREASURY NOTE	07.2500%	11/15/96	2,348,425
5,400,000	U.S.A. TREASURY NOTE	08.3750%	04/15/95	5,391,576
50,000,000	U.S.A. TREASURY NOTE	11.2500%	05/15/95	55,437,500
2,600,000	U.S.A. TREASURY NOTE	13.7500%	07/15/91	2,739,750
11,250,000	U.S.A. TREASURY NOTE	13.0000%	11/15/90	11,439,788
50,000,000	U.S.A. TREASURY NOTE	10.5000%	08/15/95	54,140,500
3,200,000	U.S.A. TREASURY NOTE	07.0000%	01/15/94	3,067,008
10,000,000	U.S.A. TREASURY NOTE	08.5000%	05/15/97	10,003,100
9,800,000	U.S.A. TREASURY NOTE	09.1250%	09/30/91	9,898,000
15,000,000	U.S.A. TREASURY NOTE	09.5000%	10/15/94	15,571,800
12,700,000	U.S.A. TREASURY NOTE	09.2500%	08/15/98	13,243,687
7,700,000	U.S.A. TREASURY NOTE	06.7500%	09/30/90	7,671,125
5,600,000	U.S.A. TREASURY NOTE	11.5000%	10/15/90	5,650,736
5,100,000	U.S.A. TREASURY NOTE	08.5000%	04/15/97	5,107,956
10,000,000	U.S.A. TREASURY NOTE	07.2500%	07/15/93	9,706,200
8,425,000	U.S.A. TREASURY NOTE	11.7500%	01/15/91	8,577,661
1,610,000	U.S.A. TREASURY PHY. COUPON	00.0000%	11/15/93	1,221,024
50,000,000	U.S.A. TREASURY SEC PRIN.	00.0000%	08/15/15	6,282,000
10,000,000	U.S.A. TREASURY SEC PRIN.	00.0000%	11/15/94	6,958,400
50,000,000	U.S.A. TREASURY SEC PRIN.	00.0000%	02/15/15	6,515,500
15,000,000	UNION PACIFIC CORP	08.5000%	01/15/17	13,026,900
4,555,000	WISCONSIN ELECTRIC POWER	08.8750%	05/15/08	4,345,470
<b>\$ 6,510,446,986</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 4,725,144,129</b>

**MINNESOTA STATE BOARD OF INVESTMENT  
SUPPLEMENTAL INVESTMENT FUND  
ALPHABETICAL HOLDINGS BY INVESTMENT OPTION  
JUNE 30, 1990**

SHARES / PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
<b>COMMON STOCK INDEX ACCOUNT</b>				
6,131	MN. INDEXED FUND POOL			\$ 9,538,616
<b>BOND MARKET ACCOUNT</b>				
6,542	MN. FIXED INCOME POOL			\$ 6,597,051
<b>GUARANTEED RETURN ACCOUNT</b>				
13,261,548	JOHN HANCOCK LIFE INS CO.	08.4000%	10/31/92	\$ 13,261,548
27,994,401	MUTUAL OF AMERICA	09.0100%	10/31/91	27,994,401
18,233,120	PRINCIPAL MUTUAL LIFE GIC	08.4500%	10/31/90	18,233,120
59,489,069				\$ 59,489,069
<b>INCOME SHARE ACCOUNT</b>				
1,250,000	ASSOCIATES CORP. NORTH AMERIC	11.4500%	11/15/92	\$ 1,311,738
1,000,000	DQU FUNDING CORP	11.9500%	12/01/16	1,087,000
1,500,000	FEDERAL FARM CREDIT BANK	12.3500%	03/01/94	1,676,250
2,000,000	FEDERAL HOME LOAN MORTGAGE	11.8500%	08/30/91	2,075,620
1,471,683	FNMA POOL # 002494	08.0000%	04/01/08	1,390,740
1,682,907	FNMA POOL # 002499	10.0000%	03/01/16	1,696,050
1,264,558	FNMA POOL # 006226	11.0000%	12/01/15	1,321,058
2,359,998	FNMA POOL # 030817	09.0000%	06/01/09	2,291,393
1,578,822	FNMA POOL # 049238	08.0000%	06/01/02	1,494,449
2,021,848	FNMA POOL # 051207	08.0000%	07/01/02	1,913,801
1,000,000	GERBER PRODUCTS CO	11.7500%	11/01/94	1,033,660
1,705,363	GNMA II POOL # 000587	08.0000%	07/20/16	1,574,255
2,158,339	GNMA POOL # 146852	09.5000%	04/15/16	2,146,857
2,156,586	GNMA POOL # 205012	09.5000%	02/15/17	2,145,113
2,112,174	GNMA POOL # 209563	09.5000%	10/15/17	2,100,937
3,904,431	GNMA POOL # 289781	09.5000%	04/15/20	3,883,659
3,000,000	ITT FINANCIAL CORP	08.7600%	05/02/94	3,000,000
95,962	MN. INDEXED FUND POOL			144,020,042
1,000,000	PNPP FUNDING CORP	12.0000%	05/30/16	1,087,500
2,000,000	RALSTON PURINA	09.2500%	10/15/09	1,920,060
3,000,000	RESOLUTION FUNDING CORP	08.1250%	10/15/19	2,785,320
21,334,371	S.B.I MONEY FUND			21,334,371
2,000,000	SECURITY PACIFIC CORP	09.7500%	05/15/99	1,992,280
1,400,000	U.S.A. TREASURY BOND	11.5000%	11/15/95	1,579,816
1,700,000	U.S.A. TREASURY BOND	11.6250%	11/15/02	2,092,054
1,800,000	U.S.A. TREASURY BOND	10.7500%	05/15/03	2,102,058
1,700,000	U.S.A. TREASURY BOND	11.8750%	11/15/03	2,139,348
1,600,000	U.S.A. TREASURY BOND	12.3750%	05/15/04	2,084,992
1,700,000	U.S.A. TREASURY BOND	11.6250%	11/15/04	2,118,098
1,600,000	U.S.A. TREASURY BOND	12.0000%	05/15/05	2,050,000
2,250,000	U.S.A. TREASURY NOTE	08.7500%	09/30/92	2,270,385
3,000,000	U.S.A. TREASURY NOTE	10.5000%	11/15/92	3,136,860
3,100,000	U.S.A. TREASURY NOTE	08.7500%	01/15/93	3,131,000
3,000,000	U.S.A. TREASURY NOTE	08.3750%	02/15/93	3,004,680
2,200,000	U.S.A. TREASURY NOTE	07.6250%	05/15/93	2,159,432
4,000,000	U.S.A. TREASURY NOTE	08.2500%	11/15/94	3,976,240
1,800,000	U.S.A. TREASURY NOTE	11.2500%	05/15/95	1,995,750
2,100,000	U.S.A. TREASURY NOTE	08.6250%	10/15/95	2,115,750
2,100,000	U.S.A. TREASURY NOTE	08.5000%	05/15/97	2,100,651
96,647,041				\$ 243,339,267
<b>GROWTH SHARES ACCOUNT</b>				
56,091	MN. EXT. ACTIVE MAN. POOL			\$ 74,070,066
2,578	SBI MONEY FUND			2,578
58,669				\$ 74,072,644
<b>MONEY MARKET ACCOUNT</b>				
81,370,311	S.B.I MONEY FUND			\$ 81,370,311

**MINNESOTA STATE BOARD OF INVESTMENT  
PERMANENT SCHOOL FUND  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 3,400,000	AMOCO	08.3750%	06/15/05	\$ 3,167,848
1,700,000	ASSOCIATES CORP NO. AMERICA	11.0000%	08/01/90	1,707,973
5,000,000	ATLANTIC RICHFIELD	09.8750%	03/01/16	5,268,100
5,000,000	ATLANTIC RICHFIELD	09.1250%	03/01/11	4,915,050
1,743,506	ATLANTIC RICHFIELD CO.	09.2500%	07/15/96	1,696,780
1,528,741	ATLANTIC RICHFIELD CO.	08.7500%	12/01/01	1,395,404
4,000,000	BARNETT BANKS INC	08.5000%	03/01/99	3,633,240
2,500,000	BELL TELE. CO CANADA	04.8500%	09/01/95	2,201,750
300,000	CANADIAN PACIFIC, LTD.	08.6250%	01/15/92	299,346
1,000,000	CHRYSLER FIN. MTN	09.8750%	02/01/94	959,780
5,000,000	CITICORP PERSON TO PERSON INC	08.7500%	03/01/98	4,620,350
4,500,000	COLUMBUS SOUTHERN POWER	09.5000%	08/01/15	4,286,070
7,000,000	COMMONWEALTH EDISON	09.1250%	01/15/14	6,588,750
5,000,000	CSX TRANSPORTATION	09.0000%	08/15/06	4,670,400
5,000,000	DOW CHEMICAL	08.6250%	04/01/06	4,722,300
3,690,000	DU PONT E I DE NEMOURS & CO	08.4500%	11/15/04	3,459,781
100,000	FEDERAL FARM CREDIT BANK	12.3500%	03/01/94	111,750
600,000	FEDERAL FARM CREDIT BANK	13.7500%	07/20/92	660,000
5,000,000	FEDERAL FARM CREDIT BANK	10.6000%	10/21/91	5,132,800
3,000,000	FEDERAL HOME LOAN BANK	11.7000%	07/26/93	3,247,500
3,000,000	FEDERAL HOME LOAN BANK	11.7000%	04/27/92	3,162,180
3,000,000	FEDERAL NATIONAL MORTGAGE ASSN	10.6000%	10/12/92	3,128,430
890,000	FLORIDA POWER & LIGHT	07.0000%	06/01/98	778,679
3,000,000	FMC CORP	09.5000%	01/15/00	2,820,000
1,400,000	FORD MOTOR COMPANY	08.8750%	04/01/06	1,326,640
2,000,000	FORD MOTOR CR. MTN	09.1500%	11/01/93	2,002,340
1,200,000	FORD MOTOR CR. MTN	09.7500%	11/04/94	1,221,924
3,900,000	GENERAL MOTORS ACCEPT CORP.	08.0000%	01/15/02	3,493,620
1,500,000	GMAC MTN	09.5000%	02/15/91	1,507,575
1,277,410	GNMA POOL # 00505	06.5000%	11/15/01	1,184,798
1,228,606	GNMA POOL # 00506	06.5000%	12/15/01	1,139,532
4,852,153	GNMA POOL # 00606	08.0000%	08/20/16	4,430,598
1,736,196	GNMA POOL # 00623	08.0000%	09/20/16	1,585,356
1,504,651	GNMA POOL # 02290	06.5000%	03/15/03	1,395,564
1,707,627	GNMA POOL # 02291	06.5000%	04/15/03	1,583,824
1,478,587	GNMA POOL # 02424	06.5000%	04/15/03	1,371,389
175,788	GNMA POOL # 03627	08.2500%	07/15/04	164,911
787,252	GNMA POOL # 03972	08.2500%	07/15/04	738,537
414,360	GNMA POOL # 03974	09.0000%	11/15/04	407,755
293,204	GNMA POOL # 03979	08.2500%	08/15/04	275,061
207,887	GNMA POOL # 04004	08.2500%	08/15/04	195,023
529,626	GNMA POOL # 04092	08.2500%	07/15/04	496,852
181,325	GNMA POOL # 04145	08.2500%	08/15/04	170,105
394,937	GNMA POOL # 04472	09.0000%	09/15/04	388,641
267,307	GNMA POOL # 09680	08.2500%	06/15/06	250,766
441,425	GNMA POOL # 10887	08.2500%	07/15/06	414,110
194,797	GNMA POOL # 17904	08.0000%	08/15/07	183,473
329,068	GNMA POOL # 18017	08.0000%	07/15/07	309,940
541,980	GNMA POOL # 18058	08.0000%	07/15/07	510,475
205,894	GNMA POOL # 18592	08.0000%	11/15/07	193,925
457,044	GNMA POOL # 18768	08.0000%	08/15/07	430,476
413,984	GNMA POOL # 18782	08.0000%	10/15/07	389,920
505,068	GNMA POOL # 19105	08.0000%	07/15/07	475,709
346,120	GNMA POOL # 19667	08.0000%	01/15/08	326,000
503,424	GNMA POOL # 19740	08.0000%	10/15/07	474,160
3,060,551	GNMA POOL # 19784	08.0000%	09/15/07	2,882,641
379,604	GNMA POOL # 19997	08.0000%	10/15/07	357,538
34,879	GNMA POOL # 20074	08.0000%	03/15/07	32,852
450,381	GNMA POOL # 20263	08.0000%	11/15/07	424,200
521,617	GNMA POOL # 20393	08.0000%	11/15/07	491,295
538,437	GNMA POOL # 20495	08.0000%	11/15/07	507,138
549,408	GNMA POOL # 21037	08.0000%	11/15/07	517,470
4,611,205	GNMA POOL # 210643	08.0000%	06/15/17	4,256,696
4,429,188	GNMA POOL # 210687	08.0000%	06/15/17	4,088,672
483,930	GNMA POOL # 21480	08.0000%	01/15/08	455,799
545,847	GNMA POOL # 21615	08.0000%	01/15/08	514,117
3,024,782	GNMA POOL # 217626	08.0000%	05/15/17	2,792,237

**MINNESOTA STATE BOARD OF INVESTMENT  
PERMANENT SCHOOL FUND  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 516,725	GNMA POOL # 21930	08.0000%	03/15/08	\$ 486,688
560,455	GNMA POOL # 22012	08.0000%	04/15/08	527,876
3,278,739	GNMA POOL # 224960	08.0000%	06/15/17	3,026,670
494,168	GNMA POOL # 22820	08.0000%	12/15/07	465,442
611,315	GNMA POOL # 24078	08.0000%	02/15/08	575,779
586,665	GNMA POOL # 24417	08.0000%	03/15/08	552,562
2,379,315	GNMA POOL # 27638	09.0000%	10/15/08	2,341,389
4,000,000	KANSAS POWER & LIGHT	08.1250%	06/01/07	3,588,680
2,500,000	MICHIGAN BELL TELEPHONE CO.	08.1250%	06/01/15	2,224,900
1,339,762	MN MTG. MARKETING CORP	12.5660%	06/01/14	1,467,458
488,119	MN MTG. MARKETING CORP	13.0040%	02/01/15	543,033
571,313	MN MTG. MARKETING CORP	12.8230%	09/01/14	630,676
2,223,000	MOORE-MCCORMACK LEASING	08.8750%	07/15/01	2,208,684
2,000,000	MORGAN J.P.	08.8750%	08/01/94	1,974,560
3,000,000	MOUNTAIN STATES TEL & TEL	07.7500%	06/01/13	2,553,060
2,500,000	NORTHERN STATES POWER CO. MINN	08.3750%	01/01/04	2,312,100
1,333,600	NORTON SIMON, INC.	09.8750%	06/01/04	1,168,007
1,500,000	NORWEST CORP	07.7500%	03/15/03	1,315,695
1,500,000	NORWEST CORP	05.1250%	10/15/90	1,469,070
6,400,000	PACIFIC GAS & ELEC.	09.3750%	02/01/11	6,141,184
1,009,000	PUGET SOUND TUG & BARG	09.1250%	02/15/01	1,009,000
3,254,698	SBA POOL - MEEDA BONDS SER 84A	11.7000%	12/01/04	3,609,663
2,160,000	SEARS	07.0000%	11/15/01	1,779,278
2,500,000	SECURITY PACIFIC CORP	09.7500%	05/15/99	2,490,350
260,000	SHELL OIL	07.6250%	10/15/93	249,267
8,400,000	SOUTHERN BELL TEL & TEL	07.6250%	03/15/13	7,157,136
92,000	STATES STEAMSHIP CO	05.1000%	03/31/93	83,801
3,000,000	TEXAS POWER & LIGHT	09.3750%	02/01/09	2,804,670
18,124,281	TRUST FUND POOL	00.0000%		18,124,281
3,400,000	U.S.A. TREASURY BOND	09.1250%	05/15/09	3,536,000
4,850,000	U.S.A. TREASURY BOND	07.8750%	02/15/00	4,636,309
5,000,000	U.S.A. TREASURY BOND	08.3750%	08/15/08	4,903,100
3,000,000	U.S.A. TREASURY BOND	11.7500%	02/15/01	3,660,000
7,000,000	U.S.A. TREASURY BOND	08.5000%	02/15/20	7,045,920
5,000,000	U.S.A. TREASURY BOND	10.3750%	11/15/09	5,693,750
500,000	U.S.A. TREASURY BOND	08.3750%	08/15/00	493,595
50,000	U.S.A. TREASURY BOND	03.5000%	11/15/98	47,250
9,000,000	U.S.A. TREASURY BOND	10.3750%	11/15/12	10,380,960
6,400,000	U.S.A. TREASURY BOND	07.8750%	11/15/07	6,022,016
1,000,000	U.S.A. TREASURY BOND	07.6250%	02/15/07	920,620
11,000,000	U.S.A. TREASURY BOND	09.1250%	05/15/18	11,735,570
5,100,000	U.S.A. TREASURY BOND	08.8750%	02/15/19	5,319,912
2,000,000	U.S.A. TREASURY BOND	12.7500%	11/15/10	2,686,240
5,500,000	U.S.A. TREASURY BOND	10.7500%	05/15/03	6,422,955
7,500,000	U.S.A. TREASURY BOND	11.6250%	11/15/02	9,229,650
3,500,000	U.S.A. TREASURY BOND	11.6250%	11/15/04	4,360,790
3,000,000	U.S.A. TREASURY BOND	09.8750%	11/15/15	3,414,360
6,400,000	U.S.A. TREASURY BOND	08.7500%	11/15/08	6,478,016
2,400,000	U.S.A. TREASURY BOND	08.7500%	08/15/94	2,426,256
5,890,000	U.S.A. TREASURY BOND	08.5000%	05/15/99	5,893,652
3,000,000	U.S.A. TREASURY BOND	11.7500%	11/15/14	3,872,820
2,000,000	U.S.A. TREASURY BOND	11.5000%	11/15/95	2,256,880
11,400,000	U.S.A. TREASURY BOND	08.7500%	05/15/17	11,695,716
9,400,000	U.S.A. TREASURY BOND	10.0000%	05/15/10	10,448,664
2,000,000	U.S.A. TREASURY BOND	08.6250%	11/15/93	2,016,880
8,000,000	U.S.A. TREASURY BOND	10.7500%	08/15/05	9,440,000
5,300,000	U.S.A. TREASURY BOND	08.1250%	08/15/19	5,112,857
4,400,000	U.S.A. TREASURY BOND	10.7500%	02/15/03	5,130,136
6,400,000	U.S.A. TREASURY BOND	07.2500%	05/15/16	5,571,968
2,400,000	U.S.A. TREASURY COUPON	00.0000%	05/15/12	385,416
2,000,000	U.S.A. TREASURY NOTE	08.3750%	04/15/95	1,996,880
2,100,000	U.S.A. TREASURY NOTE	08.5000%	05/15/97	2,100,651
5,500,000	U.S.A. TREASURY NOTE	08.8750%	11/15/97	5,611,705
5,650,000	U.S.A. TREASURY NOTE	07.3750%	05/15/96	5,363,941
1,200,000	U.S.A. TREASURY NOTE	09.5000%	11/15/95	1,253,244
820,000	U.S.A. TREASURY NOTE	09.5000%	10/15/94	851,258
\$ 370,200,951	TOTAL FIXED INCOME PORTFOLIO			\$ 370,290,811

**MINNESOTA STATE BOARD OF INVESTMENT  
PASSIVE EQUITY ACCOUNT  
ALPHABETICAL EQUITY HOLDINGS  
JUNE 30, 1990**

NO. OF SHARES	SECURITY	MARKET VALUE
30,500	A & W BRANDS INC	\$ 1,006,500
2,530	A G EDWARDS, INC	64,515
13,400	AAR CORP	321,600
399,340	ABBOTT LABS	16,372,940
39,698	ABITIBI PAPER LTD.	535,923
1,000	ACME CLEVELAND CORP	8,125
37,100	ACUSON	1,437,625
40,800	ADAPTEC INC	851,700
30,200	ADOBE SYS INC	1,109,850
152,500	ADVANCED MICRO DEV.	1,448,750
4,410	AEROVOX INCORPORATED	17,640
99,400	AETNA LIFE & CASUALTY CO.	5,193,650
28,000	AFFILIATED BANKSHARES COLO INC	329,000
70,900	AFFILIATED PUBLIC'NS NEW A	771,038
80,325	AGENCY RENT A CAR	1,104,469
87,900	AHMANSON H.F. CO.	1,801,950
45,100	AIR PRODUCTS & CHEM. INC.	2,548,150
44,114	AIR WIS AVIATION INC	446,654
46,200	AIRBORNE FGHT CORP	970,200
33,292	ALASKA AIR GROUP	749,070
37,500	ALBANY INTL CORP NEW	590,625
900	ALBERTO CULVER CO	22,838
120,080	ALBERTSONS INC	4,322,880
203,500	ALCAN ALUMINUM LTD.	4,578,750
24,100	ALCO STANDARD CORP.	846,513
46,700	ALEXANDER & ALEXANDER	1,138,313
37,300	ALEXANDER & BALDWIN INC	1,119,000
9,100	ALEXANDERS INC	379,925
31,500	ALLEGHENY LUDLUM CORP	1,492,313
45,100	ALLEGHENY POWER SYS INC	1,736,350
25,450	ALLEN GROUP INC	432,650
19,947	ALLEN ORGAN CLASS B	698,145
73,300	ALLERGAN INC	1,337,725
132,148	ALLIED-SIGNAL INC.	4,856,439
24	ALLIS CHALMERS CORP	102
56,732	ALLTEL CORP	1,872,156
102,200	ALLWASTE INC	1,239,175
76,800	ALUMINUM CO. OF AMERICA	4,896,000
29,800	ALZA CORPORATION	1,393,150
800	AM INTL INC	2,000
39,250	AMAX GOLD INC	544,594
73,800	AMAX INC	1,798,875
44,600	AMBASE CORPORATION	312,200
97,100	AMDAHL CORP	1,577,875
69,200	AMERADA HESS CORP.	3,053,450
96,700	AMERICAN BANK INSURANCE GRP	809,863
107,400	AMERICAN BARRICK RES CORP	2,080,875
2,300	AMERICAN BRANDS INC	148,638
3,000	AMERICAN CAP MGMT & RESH INC	32,250
82,100	AMERICAN CYANAMID	4,710,488
158,300	AMERICAN ELEC POWER INC	4,709,425
366,098	AMERICAN EXPRESS COMPANY	11,257,514
76,466	AMERICAN FAMILY CORP	1,213,898
54,200	AMERICAN FRUCTOSE CL A	1,294,025
96,300	AMERICAN GENERAL CORP	4,622,400
39,300	AMERICAN GREETINGS	1,375,500
720	AMERICAN HOME PRODS CORP	37,800
233,380	AMERICAN INFORMATION	14,294,525
143,200	AMERICAN INTERNATIONAL GRP.	13,800,900
32,900	AMERICAN MAIZE PRODS CO	674,450
6,355	AMERICAN MED HLDS	49,251
35,000	AMERICAN NURSERY PRODS INC	100,625
13,000	AMERICAN PETROFINA INC.	1,020,500
10,800	AMERICAN PRESIDENT' COS LTD	243,000

NO. OF SHARES	SECURITY	MARKET VALUE
20,000	AMERICAN STL & WIRE CORP	\$ 130,000
30,452	AMERICAN STORES NEW	2,028,865
10,200	AMERICAN SVGS BK FSB	25,500
946,450	AMERICAN TEL & TEL NEW	36,438,325
64,200	AMERICAN TELEVISION &	2,375,400
9,500	AMERICAN WATER WORKS	153,188
200	AMERICANA HOTELS & RLTY CORP	1,200
500	AMERON INC	22,938
51,800	AMETEK INC	679,875
20,700	AMGEN CORP.	1,609,425
450,000	AMOCO CORP	23,006,250
93,722	AMP INC.	4,416,649
54,000	AMR CORP.	3,462,750
200	AMREP CORP	1,625
33,500	AMSOUTH BANCORP.	740,300
55,000	AMWEST INS GROUP INC	591,250
400,700	ANACOMP	1,152,013
45,800	ANADARKO PETE CORP.	1,545,750
109,601	ANALOG DEVICES INC	822,008
126,400	ANALOGIC CORP	1,185,000
12,000	ANDOVER TOGS INC	33,000
17,400	ANDREW CORP.	330,600
2,800	ANGELICA CORP	92,750
3,400	ANHEUSER BUSCH CO. INC.	146,625
2,100	ANTHONY INDS INC	23,363
54,800	AON CORP	2,055,000
62,300	APACHE CORP	926,713
1,900	APL CORP	6,175
200	APPLE BANCORP INC	8,600
109,670	APPLE COMPUTER	4,907,733
6,120	APPLIED MAGNETICS	80,325
20,550	ARBOR DRUGS	405,863
400,074	ARCHER DANIELS MIDLAND CO.	10,251,896
111,100	ARCHIVE CORP	1,166,550
83,200	ARCO CHEM CO	3,390,400
113,900	ARCTIC ALASKA FISHERIES CORP	911,200
16,600	ARGONAUT GROUP INC	1,269,900
77,200	ARKLA INCORPORATED	1,823,850
40,900	ARMCO INC	306,750
39,700	ARMSTRONG IND. INC.	1,419,275
31,500	ARROW BK CORP	433,125
37,400	ASARCO INC.	991,100
51,600	ASHLAND OIL INC	1,806,000
35,700	ASPEN LEAF INC	13,388
11,000	ASSOCIATED BANC CORP	222,750
10,200	ATALANTA SOSNOFF CAP CORP	39,525
15,100	ATLANTA GAS LT CO	475,650
29,900	ATLANTIC ENERGY INC	1,087,613
146,700	ATLANTIC RICHFIELD	17,237,250
1,100	ATMOS ENERGY CORP	18,288
65,000	ATWOOD OCEANICS INC	1,283,750
30,300	AUGAT INC	424,200
21,400	AUTODESK INC	1,187,700
72,710	AUTOMATIC DATA PROCESSING INC	4,017,228
5,800	AVALON ENERGY CORP	25,375
79,900	AVANTEK INC	219,725
400	AVEMCO CORP	11,900
45,200	AVERY INTL. CORP.	1,050,900
42,900	AVNET INC	1,233,375
48,000	AVON PRODS INC	1,764,000
46,950	AYDIN CORP.	680,775
50,000	B E I ELECTRS INC	362,500
0	B-E HLDGS INC PFD	2
34,250	BAIRNCO CORP	222,625

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NO. OF SHARES	SECURITY	MARKET VALUE
114,320	BAKER HUGHES INC	\$ 3,115,220
12,800	BALL CORP	398,400
33,200	BALLY MFG CO	319,550
71,600	BALTIMORE GAS & ELEC CO	2,067,450
127,180	BANC ONE CORP	3,688,220
2,904	BANCFLOIDA CORP	15,609
13,000	BANDAG INC	1,101,750
90,100	BANK BOSTON CORP	1,114,988
221,922	BANK NEW ENGLAND CORP	693,506
58,505	BANK OF NY CO. INC.	1,864,847
43,183	BANK SOUTH CORP	383,249
181,200	BANKAMERICA CORP.	5,368,050
72,800	BANKERS TRUST NY CORP.	3,048,500
28,600	BANTA GEORGE & CO.	700,700
75,000	BARD C.R. INC.	1,134,375
9,400	BARNES GROUP INC	277,300
48,750	BARNETT BKS FLA	1,584,375
20,075	BAROID ENERGY SVCS INC	223,334
205	BASIX CORP WT	2
205	BASIX CORP NEW	60
205	BASIX CORP WT EXCH	2
5,751	BASS PUB. LTD.	109,988
15,600	BASSETT FURNITURE INDS INC	538,200
83,500	BATTLE MTN GOLD CL A	939,375
26,500	BAUSCH & LOMB INC	1,838,438
201,960	BAXTER INTL INC	4,847,040
42,800	BAYBANKS INC	674,100
35,700	BAYLY CORP.	49,088
41,600	BB&T FINANCIAL CORP	780,000
258,600	BCE INC	8,727,750
111,529	BEAR STEARNS COS INC	1,505,642
50,850	BEAUTICONTROL COSMETICS INC	1,067,850
65,575	BECKMAN INSTRS INC NEW	1,147,563
34,200	BECTON DICKINSON CO	2,398,275
30,900	BEEBAS CREATIONS INC	216,300
353,340	BELL ATLANTIC CORP.	17,534,498
421,520	BELL SOUTH CORP	21,919,040
35,400	BELO A H CORP CL A	1,274,400
900	BEMIS COMPANY	32,063
24,900	BENEFICIAL CORP.	1,316,588
53,477	BERGEN BRUNSWIG CORP.	1,437,194
23,000	BERKLEY W R CORP	937,250
1,020	BERKSHIRE HATHAWAY INC DEL	7,344,000
66,100	BETHLEHEM STEEL	1,065,863
6,600	BETZ LABS INC	496,650
203,700	BEVERLY ENTERPRISES INC	1,196,738
3,200	BIC CORP	92,000
67,600	BINDLEY WESTN INDS INC	895,700
10,000	BINKS MFG CO	397,500
46,000	BIOMET INC	1,345,500
6,000	BLACK & DECKER MFG CO	94,500
25,200	BLACK HILLS CORP	711,900
36,119	BLOCK DRUG INC CL A	1,255,135
47,540	BLOCK H & R INC.	2,020,450
1,100	BLOCKBUSTER ENTMT	25,988
16,400	BLOUNT INC CL A	184,500
2,000	BLOUNT INC CL B CV	22,500
25,000	BMA CORP NEW	775,000
200	BMC INDS INC MINN	2,100
40,962	BOATMEN'S BANCSHARES	1,346,626
92,382	BOB EVANS FARMS INC	1,339,539
302,381	BOEING COMPANY	17,689,259
34,600	BOISE CASCADE CORP	1,185,050
161,000	BORDEN INC.	5,796,000

NO. OF SHARES	SECURITY	MARKET VALUE
2,700	BOSTON EDISON CO	\$ 51,975
40,600	BOWNE & CO INC	563,325
67,900	BRASCAN LTD	1,196,738
800	BRIGGS & STRATTON CORP	26,300
457,734	BRISTOL MYERS SQUIBB CO	29,008,892
730	BRITISH AWYS PLC	26,919
70,250	BROAD INC	746,406
17,000	BROOKLYN UN GAS CO.	484,500
200	BROWN FORMAN CORP CL B	14,450
11,100	BROWN GROUP	306,638
130,500	BROWNING FERRIS INDS INC	5,790,938
93,100	BRUNOS INC	1,443,050
77,900	BRUNSWICK CORP.	993,225
34,500	BRUSH WELLMAN INC	858,188
57,600	BUR BROWN	576,000
79,950	BURLINGTON COAT FACTORY WHSE	1,039,350
65,600	BURLINGTON NORTHERN INC.	2,476,400
127,482	BURLINGTON RES INC	5,338,309
24,600	BUSINESS LAND INC	187,575
43,990	C V REIT INC	307,928
52,500	CADENCE DESIGN SYS INC	1,430,625
42,200	CAESAR'S WORLD	780,700
17,600	CAGLES INC	136,400
77,900	CALFED INC	1,304,825
152,500	CALGENE INC	1,105,625
20,400	CALGON CARBON CORP	948,600
57,900	CALIF MICROWAVE	499,388
6,300	CALMAT CO	214,200
135,900	CAMPBELL SOUP CO	7,780,275
30,000	CANADIAN MARCONI CO	243,750
272,357	CANADIAN PACIFIC LTD	4,800,292
105,550	CANAL CAPITAL CORP	171,519
15,885	CAPITAL CITIES/ABC INC.	9,896,355
40,167	CAPITAL HOLDING CORP.	1,817,557
300	CAPSTEAD MTG CO (COMMON)	4,538
200	CAPSTEAD MTG CORP	2,325
45,356	CARDINAL DISTR INC	1,224,612
35,000	CARL KARCHER ENTERPRISES INC.	315,000
16,900	CARLISLE CORP	612,625
113,900	CARNIVAL CRUISE LINES INC	2,762,075
27,000	CAROLINA FREIGHT CORP	536,625
64,100	CAROLINA PWR & LT CO	2,788,350
1,500	CARPENTER TECHNOLOGY CORP	81,750
171,700	CARTER HAWLEY HALE STORES INC	965,813
21,500	CARTER WALLACE INC	1,177,125
16,800	CASCADE NAT GAS CORP	277,200
154,100	CASTLE & COOKE INC	4,757,838
6,250	CASTLE A M & CO	82,813
89,200	CATERPILLAR INC.	4,694,150
33,700	CBI INDS INC	1,369,063
20,812	CBS INCORPORATED	4,185,814
43,833	CELLULAR COMMUNICATIONS INC	1,457,447
12,800	CENT HUDSON GAS & ELEC CORP	292,800
72,300	CENDEL CORP.	2,503,388
122,180	CENTERIOR ENERGY CORP	2,290,875
22,300	CENTEX CORP	886,425
43,600	CENTEX TELEMANAGEMENT INC	1,068,200
39,200	CENTOCOR INC	1,729,700
70,900	CENTRAL & SO WEST CORP.	2,853,725
10,000	CENTRAL FID BKS INC	297,500
15,000	CENTRAL ILL PUB SVC CO	320,625
19,800	CENTRAL JERSEY BANCORP	287,100
24,400	CENTRAL LA ELEC CO	832,650

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NO. OF SHARES	SECURITY	MARKET VALUE
30,600	CENTRAL ME PWR CO	\$ 577,575
1,138	CENVILL DEV CORP NEW	3,983
72,900	CETUS CORP	1,540,013
83,365	CHAMPION INTL.	2,542,633
30,000	CHAPARRAL STL CO	285,000
800	CHARTER CO	3,400
89,500	CHASE MANHATTAN CORP.	2,136,813
21,400	CHEMED CORPORATION	617,925
96,035	CHEMICAL BKG CORP	2,448,893
176,300	CHEMICAL WASTE MGMT INC	4,253,238
46,500	CHESAPEAKE CORP VA	889,313
15,000	CHESAPEAKE UTILS CORP	187,500
294,600	CHEVRON CORP	20,732,475
15,950	CHILIS INC	578,188
47,600	CHIPS & TECHNOLOGIES INC	1,011,500
76,300	CHIQUITA BRANDS INTL CORP	1,983,800
21,500	CHITTENDEN CORP	158,563
47,580	CHOCK FULL O NUTS CORP	404,427
32,196	CHRIS CRAFT INDUSTRIES INC	1,002,101
200	CHRISTIANA COS INC	2,575
203,025	CHRYSLER CORP.	3,197,644
74,050	CHUBB CORPORATION	3,313,738
63,150	CHURCH & DWIGHT INC	1,215,638
70,100	CIGNA CORPORATION	3,513,763
37,300	CILCORP INC	1,244,888
51,700	CINCINNATI BELL INC	1,234,338
13,500	CINCINNATI FINL CORP	1,100,250
43,600	CINCINNATI GAS & ELEC CO	1,313,450
37,825	CINCINNATI MICROWAVE INC	99,291
1,000	CINCINNATI MILACRON INC	18,250
17,750	CINTAS CORP.	869,750
48,100	CIRCUIT CITY STORES INC	1,208,513
25,600	CIRCUS CIRCUS ENTER.	1,692,800
285,400	CITICORP	6,457,175
52,160	CITIZENS & SOUTHERN CORP GA	1,245,320
35,813	CITIZENS UTILS DEL	1,253,457
45,475	CITY NATL CORP	864,025
97,000	CLAIRE'S STORES INC	1,673,250
500	CLARK EQUIP CO	19,375
39,503	CLEVELAND-CLIFFS INC	1,264,096
49,300	CLOROX CO.	2,076,763
900	CLUB MED INC	24,188
2,800	CMS ENERGY CORP	89,250
56,000	CNA FINL CORP	4,116,000
52,900	COACHMEN INDS INC	343,850
2,000	COAST SAVINGS FINANACIAL	13,250
89,650	COASTAL CORP	3,014,481
66,300	COCA COLA BOTTLING CO CONS	1,442,025
620,400	COCA COLA COMPANY	27,530,250
111,700	COCA COLA ENTERPRISES INC	1,787,200
61,045	COLGATE PALMOLIVE	4,173,952
33,700	COLLINS FOODS INTL.	732,975
39,700	COLUMBIA GAS SYSTEM INC	1,756,725
29,500	COMCAST CORP CL A	398,250
94,700	COMCAST CORP SP CL A	1,266,613
47,000	COMDISCO INC.	857,750
25,800	COMERICA INC	1,199,700
61,613	COMINCO LTD	1,386,293
21,100	COMMERCE CLEARING HOUSE INC	1,091,925
13,200	COMMERCE BANCSHARES INC	316,800
3,300	COMMERCIAL BANCORPORATION COL	19,800
45,754	COMMERCIAL METALS CO	920,799
1,400	COMMODORE INTL LTD	11,025
187,236	COMMONWEALTH EDISON CO.	6,131,979

NO. OF SHARES	SECURITY	MARKET VALUE
20,500	COMMUNICATIONS SATELLITE CORP	\$ 673,938
44,480	COMMUNITY PSYCHIATRIC CENTERS	1,189,840
34,300	COMPAQ COMPUTER CORP	4,270,350
1	COMPREHENSIVE CARE CORP	3
166,900	COMPUTER ASSOC INTL INC	2,649,538
31,900	COMPUTER SCIENCES CORP.	1,515,250
26,900	COMPUTRAC INC	60,525
150,600	CONAGRA INC.	5,327,475
3,300	CONNECTICUT WTR SVC INC	59,400
18,900	CONNOR PERIPHERALS INC	529,200
204,800	CONSOL. EDISON OF N.Y.	4,812,800
61,500	CONSOL. FREIGHTWAYS INC.	791,813
68,100	CONSOL. NAT. GAS	3,047,475
800	CONSOLIDATED NBS INC	1,200
35,900	CONSOLIDATED PAPERS INC	1,418,050
55,500	CONSOLIDATED RAIL CORP	2,608,500
18,600	CONSUMERS WTR CO	265,050
40,100	CONTEL CELLULAR INC CL A	741,850
134,800	CONTEL CORP	3,471,100
57,200	CONTINENTAL BK CORP	872,300
48,400	CONTINENTAL CORP	1,445,950
63,100	CONTROL DATA CORP.	1,206,788
93,500	COOPER INDS. INC.	3,962,063
21,000	COOPER TIRE & RUBBER	742,875
32,000	COPPERWELD CORP	540,000
62,557	CORESTATES FINL CORP	2,502,280
87,592	CORNING INC	3,832,150
30,900	CORROON & BLACK CORP	981,075
306	COUNTRYWIDE CR. IND.	2,486
34,500	COUSINS PPTYS INC	508,875
88,700	CPC INTL. INC.	7,107,088
85,000	CPC REXCEL INC	233,750
14,000	CPI CORP	444,500
53,000	CPT CORP.	11,594
62,577	CRACKER BARREL OLD CTRY STORE	1,673,935
4,800	CRAIG CORP	91,800
20,000	CRAIG CORP PFD CL A	342,500
9,600	CRANE CO.	248,400
45,550	CRAY COMPUTER CORP	162,272
28,400	CRAY RESEARCH INC	1,295,750
40,100	CRESTAR FINANCIAL CORP	922,300
483	CRI INDS MTG ASSN	3,924
12,400	CROMPTON & KNOWLES CORP	523,900
33,600	CROSS A T CO	1,012,200
1,100	CROWLEY MILNER & CO	29,288
23,600	CROWN CORK & SEAL	1,433,700
43,000	CRYSTAL BRANDS INC	1,230,875
87,106	CSX CORPORATION	2,961,604
62,200	CUC INTL INC	1,244,000
18,600	CUMMINS ENGINE CO.	974,175
39,937	CURTICE-BURNS FOODS INC. CL A	713,874
49,138	CYPRUS MINERALS CORP	1,099,463
20,000	D & N FINANCIAL CORPORATION	190,000
32,500	DANA CORPORATION	1,202,500
3,340	DANAHER CORP	66,383
22,000	DATA GENERAL CORP.	253,000
224,471	DATA SWITCH CORP	813,707
3,800	DATAPoint CORP	9,975
62,500	DAYTON-HUDSON CORP.	4,546,875
24,500	DCNY CORP	263,375
39,000	DEAN FOODS CO	1,423,500
67,100	DEERE & COMPANY	4,915,075
44,200	DEKALB ENERGY CL B	1,105,000

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NO. OF SHARES	SECURITY	MARKET VALUE
23,000	DEKALB GENETICS CORP	\$ 1,006,250
50,400	DELCHAMPS INC	1,260,000
63,200	DELMARVA PWR & LT CO	1,208,700
43,200	DELTA AIR LINES INC.	3,159,000
13,800	DELTA WOODSIDE INDS	112,125
75,900	DELUXE CORPORATION	2,609,063
1,964	DENISON MINES LTD B	10,066
14,400	DENNISON MFG CO	358,200
28,500	DESOTO INC	1,168,500
130,900	DETROIT EDISON CO	3,419,763
44,500	DEXTER CORP	1,045,750
40,000	DIAGNOSTICS INC	680,000
43,800	DIAMOND SHAMROCK R&M INC	1,007,400
53,826	DIANA CORP	235,489
20,400	DIEBOLD INC.	900,150
42,200	DIGITAL COMM. ASSOC.	944,225
104,520	DIGITAL EQUIPMENT CORP.	8,884,200
800	DIGITAL MICROWAVE CORP	13,800
31,436	DILLARD DEPT. STORES	2,766,368
45,560	DIONEX CORP	1,036,490
117,500	DISNEY WALT CORP	15,069,375
34,000	DIVERSIFIED ENERGIES INC MINN	1,062,500
41,400	DOLLAR GEN CORP	398,475
67,000	DOMINION BANKSHARES CORP	971,500
88,800	DOMINION RESOURCES	3,940,500
80,400	DOMTAR INC	904,500
16,000	DONALDSON INC	542,000
71,100	DONNELLEY RR & SONS	3,359,475
56,200	DOVER CORP.	2,191,800
242,800	DOW CHEMICAL COMPANY	13,900,300
90,000	DOW JONES & CO	2,216,250
20,550	DOWNEY SAVINGS & LN ASSN	369,900
67,650	DPL INC.	1,285,350
62,400	DQE INC.	1,404,000
600	DRAVO CORP	9,000
59,800	DRESSER INDUSTRIES	2,967,575
43,900	DREYERS GRAND ICE CREAM INC	1,788,925
36,100	DREYFUS CORP.	1,218,375
619,850	DU PONT EI DENEMOURS	23,864,225
91,100	DUKE POWER CO. NC	5,090,213
165,026	DUN & BRADSTREET COS INC	7,632,453
50,000	DUPLEX PRODS INC	812,500
20,200	DYNAMICS CORP AMER	381,275
46,800	DYNATECH CORP	748,800
44,200	E-SYSTEMS	1,116,050
25,000	EAGLE PICHER INDS INC	68,750
1,000	EAGLE FOOD CTFS INC	11,250
2,000	EASTERN ENTERPRISES	57,750
1,200	EASTERN UTILS ASSOC	38,850
283,650	EASTMAN KODAK CO.	11,487,825
33,100	EATON CORP.	2,081,163
72,000	ECHLIN INC.	999,000
88,700	ECHO BAY MINES LTD	1,142,013
173,200	ECOGEN INC	454,650
900	ECOLAB INC	23,625
15,600	EDISON BROS STORES INC	666,900
33,500	EG & G INC	1,268,813
72,400	EL PASO ELEC CO	506,800
200	ELCOR CHEM CORP	1,925
266	ELDON INDS INC	4,123
2,840	ELJER INDS INC	47,215
40,000	EMC INS GROUP INC	310,000
195,098	EMERSON ELECTRIC	7,999,018
143,700	ENCOR INC	310,392

NO. OF SHARES	SECURITY	MARKET VALUE
53,300	ENGLEHARD CORP	\$ 1,192,588
54,900	ENNIS BUSINESS FORMS INC	1,214,663
42,900	ENRON CORP.	2,434,575
66,800	ENRON OIL & GAS	1,586,500
56,900	ENSERCH CORP.	1,522,075
179,200	ENTERGY CORP	3,561,600
20,000	ENTREE CORP	3,750
130,300	EPSILON DATA MGMT INC	2,508,275
77,000	EQUIFAX INC	1,501,500
35,400	EQUITABLE RES INC	1,292,100
23,900	ESCROW TYLER CORP	0
44,600	ESTERLINE CORP	512,900
107,000	ETHYL CORP.	3,169,875
39,400	EVANS & SUTHERLAND COMPUTER	1,172,150
10,100	EVANS INC	15,150
1,074,900	EXXON CORPORATION	51,460,838
200	FABRI CTRS AMER INC	4,425
50,000	FARM & HOME FINANCIAL CORP	500,000
5,000	FARMER BROS CO	420,000
500	FEDDERS USA INC	8,000
46,600	FEDERAL EXPRESS CORP.	2,108,650
62,500	FEDERAL HOME LN MTG CORP	4,718,750
209,600	FEDERAL NATL MORTGAGE ASSN	8,515,000
4,300	FEDERAL PAPER BRD INC	87,613
37,000	FEDERAL-MOGUL CORP	652,125
36,400	FERRO CORP	928,200
58,300	FHP INTERNATIONAL CORP	1,049,400
2,476	FIBREBOARD CORP NEW	22,594
37,800	FIFTH THIRD BANCORP	1,200,150
71,400	FINEVEST FOODS INC	606,900
13,000	FINGERHUT COS INC	282,750
69,000	FIRST ALA BANCSHARES INC	1,207,500
17,500	FIRST AM. CORP TENN.	231,875
78,100	FIRST BANK SYSTEM	1,122,688
3,100	FIRST BANKERS TR & SVGS ASSN	3,772
20,000	FIRST BRANDS CORP	575,000
40,000	FIRST CAP HLDGS CORP	185,000
48,300	FIRST CHICAGO CORP	1,412,775
35,000	FIRST CITY BANKCORP TEXAS	0
25,000	FIRST COLONIAL BKS	337,500
30,000	FIRST COML BANCORP	303,750
26,300	FIRST COMM CORP	506,275
14,100	FIRST EASTN CORP PA	324,300
20,000	FIRST ESSEX BANCORP INC	80,000
58,408	FIRST FID BANCORPORATION NEW	1,065,946
20,810	FIRST FINL CORP WIC	301,745
525	FIRST FINL MGMT CORP	11,222
10,200	FIRST FLA BKS INC.	216,750
4,500	FIRST ILL CORP	35,438
47,600	FIRST INTERST. BANCORP	1,921,850
38,879	FIRST MICH BK CORP	583,185
4,700	FIRST MISS CORP	56,400
11,500	FIRST SEC CORP DEL	342,125
20,000	FIRST SVC BANK FOR SVGS	1,260
43,200	FIRST TENN NATL CORP	939,600
95,180	FIRST UNION CORP	1,796,523
75,300	FIRST WACHOVIA CORP	3,059,063
9,300	FIRSTAR CORPORATION	269,700
4,300	FIRSTCORP INC CL A	4,300
37,200	FIRSTFED MICHIGAN CORPORATION	548,700
14,700	FISERV INC	360,150
75,260	FLEET/NORSTAR FINL GROUP INC	1,458,163
1,000	FLEETWOOD ENTER. INC.	25,000
42,226	FLEMING COS.	1,551,806

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NO. OF SHARES	SECURITY	MARKET VALUE
29,150	FLIGHTSAFETY INTL INC	\$ 1,723,494
13,600	FLOATING POINT SYS INC	34,000
500	FLORIDA EAST COAST IND INC	29,125
43,800	FLORIDA PROGRESS CORP	1,609,650
10,000	FLORIDA ROCK INDS.	301,250
66,150	FLOWERS INDUSTRIES	1,232,044
12,771	FLUKE JOHN MFG.	284,155
70,100	FLUOR CORP	3,136,975
37,000	FMC CORP NEW	1,221,000
65,000	FMC GOLD CO	650,000
42,000	FNW BANCORP INC	934,500
269,700	FOOD LION CORP	3,809,513
136,200	FOOD LION INC CL A	1,855,725
38,200	FOOTE CONE & BELDING COMM	1,126,900
414,650	FORD MOTOR CO.	18,140,938
7,700	FORD MTR CO CDA LTD	1,112,650
27,400	FOREST LABS	1,236,425
58,938	FOREST OIL CORP	589,380
23,000	FORTUNE FINL GROUP INC	287,500
55,100	FOSTER WHEELER CORP	1,473,925
30,000	FPA CORP	33,750
117,200	FPL GROUP INC.	3,589,250
40,400	FRANKLIN RES INC	1,368,550
95,600	FREEMONT-MCMORAN COPPER INC	1,171,100
45,600	FREEMONT-MCMORAN INC	1,510,500
34,000	FREMONT GEN CORP	527,000
7,018	FRISCHS RESTAURANTS INC	138,606
36,800	FUND AMERICAN COS	1,219,000
21,700	FUQUA INDS INC	490,963
7,500	G R FOODS INC	60,000
30,000	G-III APPAREL GRP	450,000
144,580	GANNETT INC.	5,530,185
31,600	GAP INC	1,832,800
35,600	GATX	1,014,600
8,800	GAYLORD CONTAINER CORP	56,100
12,300	GEICO CORP.	1,989,525
48,572	GENCORP	546,435
74,200	GENENTECH INC	2,059,050
61,126	GENERAL CINEMA CORP	1,352,413
37,300	GENERAL DYNAMICS	1,193,600
794,490	GENERAL ELECTRIC CO.	55,018,433
300	GENERAL HOMES	131
44,400	GENERAL HOST CORP	288,600
39,100	GENERAL INSTRUMENT CORP	1,417,375
95,300	GENERAL MILLS INC.	8,565,088
103,940	GENERAL MOTORS (H)	2,247,703
86,820	GENERAL MOTORS CORP CL E	2,995,290
525,800	GENERAL MOTORS CORP.	25,041,225
52,200	GENERAL PUBLIC UTILITIES CORP	2,264,175
80,426	GENERAL RE CORP.	6,876,423
4,502	GENERAL SIGNAL CORP.	253,800
900	GENESCO INC	4,950
33,700	GENETICS INST INC	1,234,263
33,850	GENLYTE GROUP INC	270,800
69,150	GENUINE PARTS CO.	2,748,713
119,100	GEORGE A HORMEL & CO	2,188,463
79,200	GEORGIA PACIFIC CORP.	3,276,900
33,900	GERBER PRODS CO	1,877,213
35,000	GERBER SCIENTIFIC	516,250
578	GETTY PETE CORP	10,404
53,800	GIANT FOODS INC	1,499,675
15,700	GIBSON GREETINGS	355,213
53,000	GIDDINGS & LEWIS INC	1,046,750
84,800	GILLETTE COMPANY	5,035,000

NO. OF SHARES	SECURITY	MARKET VALUE
30,300	GITANO GROUP INC	\$ 1,022,625
110,000	GLENFED INC	1,333,750
56	GLOBAL MARINE INC WT	133
10,000	GOLDEN CYCLE GOLD CORP	17,500
59,333	GOLDEN ENTERPRISES	667,496
1,900	GOLDEN NUGGET INC	66,500
43,750	GOLDEN POULTRY INC	382,813
42,900	GOLDEN VY MICROWAVE FOODS INC	1,496,138
56,200	GOLDEN WEST FIN'L	1,707,075
21,500	GOLDOME BUFFALO N Y	21,500
21,500	GOODRICH (B.F.)	913,750
49,400	GOODYEAR TIRE & RUBBER	1,488,175
52,500	GORMAN RUPP CO	1,305,938
45,000	GOULDS PUMPS INC	1,023,750
114,325	GR. WESTERN FIN'L	2,057,850
75,033	GRACE W R & CO	2,222,853
24,200	GRAINGER W W INC	1,790,800
34,400	GREAT ATLANTIC & PAC TEA INC	1,965,100
5,500	GREAT CTRY BK ANSONIA CONN	31,625
29,900	GREAT LAKES CHEMICAL CORP	1,894,913
12,575	GREENMAN BROS INC	64,447
21,000	GREENTREE ACCEPT. INC.	346,500
27,500	GREYHOUND CORP.	766,563
77,000	GROSSMANS INC	433,125
39,434	GROW GROUP INC	389,411
79,200	GRUBB & ELLIS CO	257,400
3,400	GRUMMAN CORP.	64,600
575,550	GTE CORP.	18,633,431
100,800	GULF BROADCASTING CO LIQ TRUST	0
130,699	GULF CDA RES. LTD.	1,748,099
14,000	GULF RES & CHEM CORP	113,750
3,200	GULF STS UTILS CO	36,800
33,825	GUNDLE ENVIRONMENTAL SYS INC	456,638
2,700	GW UTIL. LTD.	81,675
298,900	HADSON CORP	597,800
94,010	HALLIBURTON INC.	4,524,231
16,900	HALLWOOD GROUP INC	114,075
37,600	HAMILTON OIL CORP	1,344,200
9,333	HANCOCK FABRICS INC	345,321
58,600	HANDY & HARMAN	966,900
3,750	HANDYMAN CORP	0
40,100	HANNAFORD BROS CO	1,483,700
26,500	HANOVER INS. CO	689,000
3,100	HARCOURT BRACE JOVAN.	9,688
52,538	HARLAND JOHN H CO	1,320,017
55,100	HARNISCHFEGER INDS INC	1,102,000
35,300	HARRIS CORP.	1,213,438
22,000	HARSCO CORP	519,750
14,000	HARTFORD STEAM BOILER INSP	840,000
23,100	HARTMARX CORP	254,100
19,800	HASBRO INC.	363,825
11,500	HAVERTY FURNITURE CO	126,500
10,500	HAVERTY FURNITURE COS INC	115,500
17,600	HAWAIIAN ELEC INDS INC	580,800
16,000	HB FULLER CO	440,000
10,800	HBO & CO	120,150
17,800	HEALTH CARE PPTY INVS INC	554,025
100,000	HEALTHCO INTERNATIONAL INC	1,962,500
72,841	HECHINGER CO CL B CV	901,407
25,900	HECLA INC.	301,088
34,500	HEEKIN CAN INC	1,293,750
40,500	HEICO CORPORATION	354,375
277,700	HEINZ H.J. & CO.	9,650,075
34,720	HELMERICH & PAYNE INC	1,067,640

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19,537	HENLEY PPTY INC	\$ 114,780
41,000	HERCULES INC.	1,368,375
111,200	HERSHEY FOODS CORP	4,183,900
208,500	HEWLETT PACKARD CO.	9,851,625
52,050	HIBERNIA CORP	761,231
32,100	HILLENBRAND INDS INC	1,432,463
41,500	HILTON HOTELS CORP	2,266,938
32,534	HOLLY CORP	898,752
1	HOLLY CORP (NEW)	14
59,250	HOME DEPOT INC.	3,421,688
28,400	HOMEFED CORPORATION	614,150
74,000	HOMESTAKE MNG CO	1,350,500
2,200	HONDO OIL & GAS	22,275
40,000	HONEYWELL INC.	3,940,000
51,000	HOUSEHOLD INTL.	2,492,625
105,100	HOUSTON INDUSTRIES INC.	3,533,988
31,093	HUBBELL INC.	1,430,278
45,400	HUDSON FOODS INC	459,675
39,200	HUFFY CORP	882,000
74,540	HUMANA INC.	3,652,460
66,215	HUNTINGTON BANCSHARES INC	1,142,209
78,100	I C H	380,738
71,400	IBP INC	1,276,275
1,900	IDAHO PWR CO	46,550
22,600	IE INDS INC	553,700
27,811	IFR SYS INC	267,681
0	ILLINOIS CENT TRANSN CO	2
71,400	ILLINOIS POWER CORP	1,106,700
47,100	ILLINOIS TOOL WORKS INC	2,537,513
97,900	IMC FERTILIZER GROUP INC	3,438,738
24,000	IMCERA GROUP INC	1,413,000
7,523	IMPERIAL CHEM INDS ORD NEW	149,521
93,825	IMPERIAL HOLLY CORP	2,075,878
133,925	IMPERIAL OIL CO. LTD.	6,294,475
11,750	IMREG INC CL A	13,219
11,750	IMREG INC EXP 12/31/91	8,813
24,933	INB FINANCIAL CORPORATION	598,392
81,300	INCO INC.	2,327,213
32,300	INFORMATION RES INC	472,388
45,650	INGERSOLL RAND	2,613,463
30,300	INLAND STEEL IND. INC.	973,388
9,200	INSPIRATION RES CORP	50,600
160,250	INTEL CORP.	7,531,750
14,300	INTELOGIC TRACE INC	23,238
15,800	INTER LEASE FINL.	489,800
11,000	INTER-CITY PRODS CORP	68,750
61,500	INTERGRAPH CORP.	1,045,500
33,300	INTERHOME ENERGY INC	1,398,600
7,100	INTERLAKE INC	58,575
508,263	INTERNATIONAL BUSINESS MACH	59,720,903
1,116	INTERNATIONAL CAP EQUIP. LTD	1,535
34,000	INTERNATIONAL FLAVORS & FRAG	2,354,500
18,500	INTERNATIONAL GAME TECHNOLOG	596,625
32,700	INTERNATIONAL MULTIFOODS	997,350
95,100	INTERNATIONAL PAPER CO	4,838,213
34,500	INTERPUBLIC GROUP	1,198,875
0	INTERSTATE BRANDS CORP PFD	4
22,900	INTERSTATE PWR CO	558,188
25,270	INTERTAN INC	995,006
56,600	IOWA ILL GAS & ELEC CO	1,174,450
188	IOWA ILL GAS & ELECT PFD 7.50	15,322
49,300	IOWA RESOURCES INC.	1,090,763
30,800	IPALCO ENTERPRISES	758,450
800	ITEL CORP NEW	15,400

NO. OF SHARES	SECURITY	MARKET VALUE
113,900	ITT CORP	\$ 6,549,250
17,800	J.P. INDS INC	298,150
53,200	JACOBS ENGR GROUP INC	1,250,200
72,286	JAMES RIV CORP VA	1,933,651
32,920	JAN BELL MARKETING	358,005
32,050	JEFFERSON PILOT CORP.	1,402,188
75,400	JEFFRIES GROUP	961,350
292,880	JOHNSON & JOHNSON	19,842,620
45,780	JOHNSON CONTROLS	1,447,793
71,700	JONES INTERCABLE INC CL A	770,775
53,100	JOSTENS INC	1,427,063
2	JOY TECHNOLOGIES PFD.	24
16,350	JUSTIN INDS INC	261,600
174,500	K MART CORPORATION	6,107,500
24,700	K N ENERGY INC.	617,500
8,000	KAISER STL CORP	250
700	KANEB SERVICES	4,200
37,000	KANSAS CITY PWR & LT CO	1,234,875
6,100	KANSAS CITY SO. IND.	274,500
25,500	KANSAS GAS & ELEC CO	522,750
49,000	KANSAS PWR & LT CO	1,090,250
64,925	KAUFMAN & BROAD HOME CORP	779,100
250	KAY JEWELERS INC	2,719
32,800	KAYDON CORP	1,205,400
133,000	KELLOGG CO	8,728,125
53,350	KELLWOOD CO.	786,913
42,135	KEMPER CORP.	1,748,603
19,400	KENNAMETAL INC	669,300
60,300	KENTUCKY UTILS CO	1,183,388
6,400	KERR GLASS MFG CORP	63,200
43,300	KERR MCGEE CORP.	1,959,325
42,611	KEYCORP	1,171,803
52,027	KEYSTONE INTL INC	1,378,716
70,400	KIMBERLY CLARK CORP	5,042,400
35,900	KING WORLD PRODTNS INC	1,346,250
53,500	KLA INSTRS CORP	642,000
44,000	KLM ROYAL DUTCH AIR	847,000
45,700	KNIGHT RIDDER INC.	2,330,700
11,500	KOGER PPTY INC FLA	240,063
70,700	KROGER COMPANY	1,140,038
40,000	KV PHARMACEUTICAL INC	310,000
19,200	L & N HSG CORP	196,800
20,400	LA Z BOY CHAIR CO	374,850
112,100	LAC MINERALS LTD NEW	1,050,938
12,400	LAFARGE CORP.	209,250
205,400	LAILAW INC CL B	4,672,850
61,866	LANCE INC.	1,639,449
20,000	LANDMARK SVGS ASSN PITTSBURGH	95,000
2,000	LAWSON MARDON GROUP LTD	17,750
32,000	LAWSON PRODS INC	912,000
18,100	LEE DATA CORP.	23,756
28,804	LEGENT CORP	799,311
44,000	LIEBERMAN ENTERPRISES CERT	0
239,400	LILLY ELI & CO	19,900,125
313,600	LIMITED INC.	7,565,600
23,388	LIN BROADCAST. CORP.	1,730,712
37,000	LINCOLN NATL CORP IND	2,048,875
34,400	LINCOLN TELECOMMUNICATIONS CO	825,600
21,800	LITTON INDS INC.	1,558,700
68,600	LIVE ENTERTAINMENT	1,629,250
77,080	LIZ CLAIBORNE INC.	2,505,100
56,120	LOCKHEED AIRCRAFT CORP	1,880,020
26,500	LOCTITE CORP	1,580,063
64,850	LOEWS CORP	7,109,181

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59,800	LONE STAR INDUSTRIES	\$ 635,375
29,730	LONG DRUG STORES INC	1,256,093
75,100	LONG ISLAND LTG CO	1,445,675
45,000	LORAL CORP	1,271,250
37,800	LOTUS	1,313,550
19,600	LOUISIANA LD & EXPL CO	840,350
2,300	LOUISIANA PAC. CORP.	88,263
2,400	LOUISVILLE GAS ELEC CO	91,500
40,500	LOWES COMPANY	1,969,313
29,500	LUBRIZOL CORP	1,220,563
38,100	LUBYS CAFETERIAS INC	1,100,138
32,750	LUKENS STL CO	1,289,531
29,700	LUMEX INC	230,175
65,800	LYONDELL PETROCHEMICAL CO	1,283,100
148,000	M E I DIVERSIFIED	1,036,000
14,576	M L X CORP	22,775
85,758	M N C FINANCIAL INC	1,093,415
2,400	M/A COM	12,900
85,600	MACMILLAN BLOEDEL LTD	1,316,100
94,600	MACNEIL SCHWENDLER CORP.	898,700
24,600	MAGMA COPPER CO NEW CL B	123,000
23,000	MANITOWOC INC	460,000
71,600	MANOR CARE INC	1,011,350
2,000	MANPOWER INC PLC	29,500
56,300	MANUFACTURERS HANOVER	1,942,350
15,400	MANUFACTURERS NATL CORP	669,900
33,758	MAPCO INC	1,535,989
239,278	MARION MERREL DOW	6,101,589
9,923	MARK IV INDS INC	133,954
86,700	MARRIOTT CORP.	1,972,425
61,800	MARSH & MCLENNAN	4,743,150
33,704	MARSHALL & ILSLEY CORP	1,070,102
45,300	MARSHALL INDUSTRIES	1,370,325
47,300	MARTIN MARIETTA	2,027,988
141,480	MASCO CORP	3,466,260
75,200	MASCO INDS	554,600
2,400	MATTEL INC	58,500
120,800	MAXUS ENERGY CORP	1,192,900
11,600	MAXXAM INC	446,600
110,352	MAY DEPT. STORES CO.	6,110,742
97,018	MAYTAG CO.	1,673,561
51,300	MBIA INC	2,103,300
63,750	MCA INC.	3,538,125
155,690	MCCAW CELLULAR COMMUNICATION	3,775,483
49,600	MCCLATCHY NEWSPAPERS INC	948,600
26,200	MCCORMICK & CO INC	661,550
48,900	MCDERMOTT INTL INC	1,467,000
5,600	MCDONALD & CO INVTS INC	33,600
327,606	MCDONALDS CORP.	11,630,013
34,200	MCDONNELL DOUGLAS CORP.	1,248,300
32,000	MCFARLAND ENERGY INC	320,000
42,200	MCGRAW HILL INC.	2,373,750
217,100	MCI COMMUNICATION	9,091,063
34,000	MCKESSON CORP	1,190,000
48,674	MCN CORP	1,034,323
56,550	MCORP	5,302
39,700	MDU RESOURCES GROUP	794,000
54,700	MEAD CORP.	1,736,725
40,100	MEASUREX CORP	857,138
70,000	MEDCO CONTAINMENT SVCS INC	1,636,250
21,900	MEDIA GEN INC	599,513
42,254	MEDICAL CARE INT'L INC	1,563,398
17,400	MEDICINE SHOPPE INTL INC	400,200
24,000	MEDTRONIC INC.	1,998,000

NO. OF SHARES	SECURITY	MARKET VALUE
39,300	MELLON BANK CORP	\$ 1,026,713
36,200	MELRIDGE INC.	13,575
91,400	MELVILLE CORPORATION	4,787,075
35,400	MENTOR GRAPHICS CORP.	769,950
31,200	MERCANTILE STORES INC	1,259,700
32,500	MERCANTILE BANCORPORATION INC	796,250
348,510	MERCK & COMPANY INC.	30,233,243
25,300	MEREDITH CORP	774,813
61,900	MERIDIAN BANCORP INC	982,663
65,000	MERRILL CORP	658,125
90,500	MERRILL LYNCH & CO. INC.	2,036,250
69,725	METRO MOBILE CTS INC CL B	1,333,491
17,125	METRO MOBILE CTS INC	336,078
22	METROPOLITAN FINL CORP	245
114,400	MEYER FRED INC DEL	1,916,200
64,600	MICHAELS FOODS	1,243,550
23,200	MICHIGAN NATL CORP	742,400
56,800	MICRON TECHNOLOGY	752,600
95,400	MICROSOFT CORP	7,250,400
53,700	MIDLANTIC CORP	778,650
1,000	MIDWEST ENERGY CO	20,500
33,900	MILLER HERMAN INC.	750,038
50,000	MILLICOM INC	975,000
37,200	MILLIPORE CORP.	1,218,300
50,000	MILTOPE GROUP INC	287,500
8,125	MINE SAFETY APPLIANCES CO	467,188
700	MINNESOTA PWR & LT CO	17,413
196,600	MINNESOTA MNG & MFG CO	17,030,475
35,800	MITCHELL ENERGY	630,975
352,700	MOBIL CORPORATION	21,779,225
31,075	MOLEX INC	1,390,606
17,200	MONARCH CAPITAL CORP.	219,300
116,800	MONSANTO CO.	5,562,600
61,600	MONTANA PWR CO	1,193,500
81,000	MOORE CORP LTD	2,440,125
160,400	MORGAN J P & COMPANY INC.	5,734,300
20,200	MORGAN PRODS LTD	212,100
31,700	MORGAN STANLEY GROUP INC	2,306,175
24,400	MORRISON KNUDSEN CORP	1,335,900
42,900	MORTON INTERNATIONAL	1,882,238
113,800	MOTOROLA INC.	9,516,525
29,300	MURPHY OIL	1,186,650
53,650	MYLAN LABS INC	1,294,306
46,700	N B B BANCORP INC	601,263
64,300	N B D BANCORP	2,049,563
86,800	N C N B CORP.	3,255,000
64,400	N C R CORP.	4,129,650
44,370	N L INDS INC.	709,920
0	N V RYAN LP	1
24,965	N W N L COMPANIES	711,503
19,500	NAC RE CORP	677,625
25,500	NACCO INDS INC CL A	1,561,875
32,900	NALCO CHEMICAL CO.	1,862,963
50,700	NASH FINCH CO	1,064,700
28,300	NASHUA CORP	1,139,075
1	NATIONAL BANKSHARES CORP.	0
53,442	NATIONAL CITY CORP	1,923,912
39,900	NATIONAL DATA CORP	578,550
900	NATIONAL EDUCATION CORP	5,063
21,900	NATIONAL INTERGROUP INC	391,463
31,500	NATIONAL LN BK HOUSTON TEX	47,250
20,000	NATIONAL SAN SUPPLY	180,000
14,100	NATIONAL STANDARD CO	56,400
42,800	NATIONAL SVC INDS INC	1,193,050

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1,200	NATL HEALTH LABS	\$ 16,500
16,300	NATL PATENT DEVEL CORP	97,800
26,800	NATL PRESTO	1,088,750
67,275	NATL. MEDICAL ENTER. INC.	2,548,041
165,200	NATL. SEMICONDUCTOR	1,218,350
247,900	NAVISTAR INTL CORP.	1,022,588
1,060	NELSON THOMAS INC CL B	10,070
51,400	NERCO INC	1,143,650
7,500	NETWORK SYSTEMS CORP.	102,188
32,200	NEUTROGENA CORP	668,150
40,800	NEVADA PWR CO	923,100
41,000	NEW ENGLAND BUS SVC INC	645,750
53,738	NEW ENGLAND ELEC SYS	1,437,492
14,200	NEW JERSEY RES CORP	262,700
25,000	NEW YORK BANCORP INC	281,250
53,100	NEW YORK ST ELEC & GAS CORP	1,287,675
68,200	NEW YORK TIMES CO	1,645,325
52,700	NEWELL COS.	1,686,400
90,400	NEWMONT GOLD CO	3,853,300
53,600	NEWMONT MINING	2,338,300
121,200	NIAGARA MOHAWK PWR CORP	1,711,950
33,400	NICOR INC	1,265,025
32,100	NIKE INC.	2,463,675
75,100	NIPSCO INDUSTRIES	1,323,638
61,500	NOBLE AFFILIATES INC	976,313
22,500	NOLAND CO.	427,500
19,462	NORD RES CORP	343,018
7,650	NORDSON CORP	321,300
68,200	NORDSTROM INC	2,335,850
152,400	NORFOLK SOUTHERN CORP	6,534,150
14,900	NORTANKERS INC	188,113
92,200	NORTEK INC.	311,175
12,200	NORTH CAROLINA NAT GAS CORP	271,450
22,800	NORTH FORK BANCORP INC	276,450
24,200	NORTH SIDE SVGS BK BRONX N Y	242,000
93,200	NORTHEAST UTILITIES	1,805,750
56,888	NORTHERN STATES PWR MINN	2,055,079
198,500	NORTHERN TELECOM LTD.	5,483,563
26,800	NORTHERN TRUST CORP	810,700
49,300	NORTHROP CORP	912,050
40,000	NORTHWESTERN PUB SVC CO	765,000
23,300	NORTON CO	2,070,788
102,292	NORWEST CORP.	2,224,851
85,000	NOVA PHARMACEUTICAL CORP	361,250
238,780	NOVA-AN ALBERTA CORP	1,761,003
16,500	NOVELL INC	903,375
27,500	NOWSCO WELL SERVICE LTD	374,688
17,500	NUCOR CORP	1,220,625
172,620	NYNEX	14,197,995
4,416	OAKWOOD HOMES CORP	52,440
256,336	OCCIDENTAL PETE CORP	6,600,652
48,400	OCCUPATIONAL URGENT CARE	1,149,500
47,000	OCEAN DRILLING & EXPL CO	934,125
8,400	OEA INC	256,200
56,400	OGDEN CORP.	1,536,900
49,012	OGDEN PROJIS INC	1,237,553
2,300	OGLEBAY NORTON CO	74,750
7,100	OHIO CAS CORP	301,750
135,800	OHIO EDISON CO	2,682,050
36,200	OKLAHOMA GAS & ELEC CO	1,276,050
46,950	OLD KENT FINL CORP	1,162,013
23,949	OLD REP INTL CORP	646,623
50,000	OLD STONE CORP	475,000
17,900	OLIN CORP	892,763

NO. OF SHARES	SECURITY	MARKET VALUE
39,856	OMNICOM GROUP INC.	\$ 1,046,220
52,500	ONEITA INDS INC	420,000
51,100	ONEOK INC	670,688
16,800	OPTICAL RADIATION CORP	571,200
111,700	ORACLE SYS CORP	2,583,063
8,500	ORANGE & ROCKLAND UTILS INC	256,063
3,200	ORANGE-CO INC NEW	23,200
13,500	OREGON STEEL MILLS	523,125
73,800	ORIENT EXPRESS HOTELS INC.	193,725
88,445	ORYX ENERGY COMPANY	3,792,079
1,400	OSHKOSH B GOSH INC CL B	35,700
41,000	OTTER TAIL POWER CO	1,025,000
2,800	OUTBOARD MARINE CORP	55,650
49,780	OVERSEAS SHIPHOLDING GROUP INC	964,488
61,700	OWENS CORNING FIBERGLAS (NEW)	1,372,825
100,200	OXFORD INDS INC	926,850
39,800	P H M CORPORATION	358,200
83,993	P N C FINANCIAL	2,519,790
80,800	P S I RESOURCES INC	1,403,900
28,400	PACCAR INC	1,192,800
58,240	PACIFIC ENTERPRISES	2,533,440
373,800	PACIFIC GAS & ELEC. CO.	8,690,850
47,000	PACIFIC TELECOM INC	1,410,000
357,236	PACIFIC TELESIS GP.	15,897,002
219,344	PACIFICORP	4,661,060
57,175	PAINE WEBBER	1,079,178
37,900	PALL CORP	1,288,600
5,000	PAN AM CORPORATION	11,875
40,900	PANCHOS MEX BUFFET	250,513
73,951	PANHANDLE EASTN CORP	1,811,800
63,500	PANSOPHC SYS INC	920,750
103,900	PARAMOUNT COMMUNICATION	4,480,688
100,700	PARKER DRILLING CO	881,125
43,000	PARKER HANNIFIN CORP	1,268,500
42,500	PAUL HARRIS STORES INC	170,000
15,550	PAYCHEX INC	248,800
89,700	PEGASUS GOLD INC	930,638
59,765	PENN CENT CORP	1,367,124
115,500	PENNEY J.C. INC.	7,002,188
64,700	PENNSYLVANIA PWR & LT CO	2,765,925
32,500	PENNZOIL CO.	2,465,938
42,325	PENTAIR INC	1,174,519
18,000	PEOPLES BANCORP	308,250
53,100	PEOPLES ENERGY CORP	1,168,200
45,000	PEOPLES HERITAGE SVGS BK	331,875
52,500	PEOPLES WESTCHESTER SVGS BK NY	735,000
41,600	PEP BOYS MANNY MOE & JACK	613,600
244,872	PEPSICO INCORPORATED	19,008,189
700	PERINI CORP	18,200
54,823	PERKIN ELMER	1,322,605
48,600	PETRIE STORES CORP.	1,275,750
16,200	PETROLITE CORP	388,800
144,300	PFIZER INCORPORATED	9,253,238
30,900	PHELPS DODGE	1,838,550
180,100	PHILADELPHIA ELEC. CO.	2,994,163
10,930	PHILIP MORRIS COS INC	508,245
2,300	PHILLIPS INDS. INC.	41,688
212,700	PHILLIPS PETROLEUM CO.	5,477,025
62,460	PHILLIPS VAN HEUSEN CORP	1,358,505
26,250	PIC N SAVE CORP.	318,281
59,000	PICCADILLY CAFETERIAS INC	885,000
5,200	PIER 1 IMPORTS	57,850
24,900	PILGRIMS PRIDE CORP	199,200
94,200	PINNACLE WEST CAPITAL CORP	1,542,525

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NO. OF SHARES	SECURITY	MARKET VALUE
16,954	PIONEER GROUP INC	\$ 419,612
30,600	PIONEER HI-BRED INTL.	1,269,900
64,900	PITNEY BOWES INC.	3,196,325
44,689	PITTSTON CO	815,574
211,625	PLACER DOME INC	3,280,188
24,100	PLAINS PETE CO	753,125
30,300	POGO PRODUCING CO	219,675
47,569	POLAROID CORP.	1,932,491
22,800	POLICY MGMT. SYS. CORP.	940,500
90,300	PONCE FED SVGS & LN ASSN P R	372,488
45,500	POPE & TALBOT	1,086,313
59,400	PORTLAND GENERAL CORP	1,017,225
33,000	POTLATCH CORP	1,340,625
84,100	POTOMAC ELEC. & PWR.	1,745,075
92,800	PPG INDUSTRIES INC.	4,454,400
35,800	PRATT & LAMBERT INC	451,975
18,700	PRECISION CASTPARTS CORP	575,025
32,175	PREMARK INTL INC	740,025
50,547	PREMIER INDL CORP	1,326,859
40,700	PRICE CO	1,689,050
46,600	PRIMARK CORP	366,975
1,200	PRIME MTR INNS INC	10,800
88,355	PRIMERICA CORP NEW	3,015,114
330,115	PROCTOR & GAMBLE	28,761,269
40,000	PROFIT SYS INC	465,000
22,600	PROMUS COS INC	598,900
26,100	PROTECTIVE LIFE CORP	378,450
38,500	PROVIDENCE FUND LIFE & ACC	909,563
11,800	PS GROUP INC.	442,500
193,772	PUBLIC SERVICE ENTERPRISE GROU	5,013,851
54,600	PUBLIC SVC CO COLO	1,153,425
54,100	PUBLIC SVC CO N MEX	547,763
55,800	PUGET SOUND BANCORP WASH	1,255,500
64,600	PUGET SOUND PWR & LT CO	1,316,225
35,000	PULITZER PUBG CO	875,000
45,800	PURITAN BENNETT CORP	973,250
90,200	QUAKER OATS CO	4,307,050
60,500	QUAKER ST CORP	741,125
63,400	QUALITY FOOD CTRS INC	2,361,650
29,725	QUANTUM CHEMICAL CORP	494,178
40,000	QUANTUM CORP.	880,000
78,050	QUEBECOR INC	809,769
29,300	QUESTAR CORP	1,010,850
31,700	QUICK & REILLY GROUP INC	443,800
50,000	R L I INC.	218,750
35,000	R M I TITANIUM CO	393,750
37,500	R P M INC OHIO	834,375
20,000	R S FINANCIAL CORP	135,000
1	R.P.S. CORP	12
3,400	RACAL ELECTRS LTD	22,950
62,600	RALSTON PURINA CO.	5,751,375
78,300	RANGER OIL LTD	479,588
35,700	RAYCHEM CORP	1,191,488
57,300	RAYTHEON COMPANY	3,574,088
40,000	READERS DIGEST CORP	1,025,000
9,800	RECOGNITION EQUIP.	53,900
88,600	REEBOK INTERNATIONAL LTD	1,561,575
5,900	RELIANCE GROUP HLDGS INC	30,975
2,000	REPSOL S A	50,250
2,508	REPUB. PICTURES CORP CL A	20,378
27,150	REPUBLIC N Y CORP	1,330,350
43,100	REYNOLDS & REYNOLDS CO	851,225
51,400	REYNOLDS METALS CO	2,974,775
5,000	RIEDEL ENVIRONMENTAL	64,375

NO. OF SHARES	SECURITY	MARKET VALUE
20,900	RIGGS NATL CORP WASH D C	\$ 318,725
6,500	RISER FOODS INC CL A	65,813
35,400	RITE AID CORP	1,208,025
33,700	ROADWAY SVCS INC	1,196,350
18,700	ROBERTSON H H CO	205,700
49,000	ROCHESTER GAS & ELEC CORP	931,000
29,300	ROCHESTER TEL CORP	941,263
208,300	ROCKWELL INTL CORP	5,702,213
59,400	ROHM & HAAS CO	2,041,875
38,800	ROHR INDS INC	950,600
95,300	ROLLINS ENVIR. SVS.	1,274,638
91,050	ROLLINS TRUCK LEASING	773,925
144	RORER GROUP INC.	9,882
39,800	ROTHSCHILD L F UNTERBERG	29,850
20,000	ROTO ROOTER INC	385,000
44,600	ROUSE CO	1,020,225
73,200	ROWAN COMPANIES INC	860,100
470	ROYAL DUTCH PETE CO NY REG	35,368
82,300	ROYAL INTL OPTICAL CORP	884,725
20,000	ROYAL PALM SVGS ASSN WEST PALM	2,500
66,640	RUBBERMAID INC	2,707,250
200	RUSS TOGS INC	1,900
48,000	RUSSELL CORP	1,278,000
1,200	RYAN BECK & CO	3,450
64,060	RYDER SYSTEMS INC.	1,393,305
56,525	RYKOFF S E & CO	1,088,106
2,600	RYMER CO	23,725
120	S & P 500 FUTURES SEPT	0
190,900	S C E CORP.	7,158,750
69,750	S C I SYSTEMS INC.	697,500
54,800	SAFECO CORPORATION	1,972,800
13,025	SAFETY KLEEN CORP	532,397
50,000	SAFEWAY INC	718,750
24,700	SALEM CARPET MLS INC	101,888
111,200	SALOMON INC	2,724,400
47,900	SAN DIEGO GAS & ELEC CO	2,083,650
140,645	SANTA FE SO. PACIFIC CORP.	2,971,126
233,000	SARA LEE	6,786,125
67,200	SAVANNAH FOODS & INDS INC	1,646,400
40,300	SCANA	1,319,825
30,000	SCHIEB EARL INC	435,000
196,492	SCHERING PLOUGH CORP	9,284,247
208,220	SCHLUMBERGER LTD	11,972,650
19,600	SCHULMAN A INC	833,000
2,500	SCHUTLZ SAV O STORES INC	36,250
15,500	SCHWAB CHARLES CORP NEW	236,375
2,840	SCHWITZER INC	19,525
58,200	SCIENTIFIC ATLANTA INC	1,535,025
2,840	SCOTSMAN INDS INC	23,785
65,200	SCOTT PAPER CO.	3,137,750
60,300	SCRIPPS E W CO CL A	1,190,925
1,600	SCURRY RAINBOW OIL	34,800
13,600	SEA CONTAINERS LTD.	773,500
400	SEAGRAM LTD	32,900
298,800	SEARS ROEBUCK & COMPANY	10,906,200
23,631	SECURITY BANCORP INC	443,081
97,840	SECURITY PACIFIC CORP.	3,620,080
48,300	SELECTIVE INSURANCE GROUP INC.	772,800
100,200	SENSORMATIC ELECTRS CORP	1,390,275
11,730	SEQUA CORP CLASS A	865,088
3,350	SEQUA CORP CLASS B	274,700
37,737	SERVICE CORP. INT'L	731,154
18,000	SEVEN OAKS INTL INC	65,250
96,100	SHARED MED. SYSTEMS CORP.	1,249,300

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16,300	SHAW INDS INC	\$ 442,138
89,750	SHAWMUT NATL CORP	1,088,219
108,800	SHEARSON LEHMAN HUTTON HOLDIN	1,577,600
38,600	SHERWIN WILLIAMS CO.	1,539,175
5,120	SHL SYSTEMHOUSE INC	35,840
1,400	SHONEYS INC	21,000
40,100	SHOREWOOD PACKAGING CORP	1,042,600
38,600	SIERRA PAC RES	849,200
23,740	SIGMA ALDRICH	1,608,385
32,800	SIGNET BANKING CORP.	754,400
35,500	SILICON GRAPHICS INC	1,331,250
30,000	SILICON VY GROUP	390,000
20,400	SKYLINE CORP.	303,450
55,500	SMITHFIELD FOODS INC	777,000
35,000	SMUCKER J M CO	1,452,500
37,600	SNAP ON TOOLS CORP	1,330,100
8,700	SO JERSEY INDS INC	151,163
60,300	SO. CAROLINA NATL. CORP.	1,108,013
32,900	SOCIETY CORP	1,065,138
4,500	SOFTSEL COMPUTER PRODS	25,875
50,000	SOMERSET BANKSHARES INC	118,750
36,600	SONAT INC.	1,848,300
34,900	SONOCO PRODS CO	1,125,525
29,500	SOTHEBY'S HOLDINGS	446,188
25,406	SOUTHDOWN INC.	685,962
80,400	SOUTHEAST BKG CORP	763,800
286,360	SOUTHERN CO	7,230,590
52,900	SOUTHERN NEW ENGLAND TELECOM	1,772,150
8,912	SOUTHERN UN CO INC	165,986
13,866	SOUTHTRUST CORP	244,388
33,600	SOUTHWEST AIRLINES	865,200
264,550	SOUTHWESTERN BELL CORP.	14,252,631
24,500	SOUTHWESTERN ENERGY CO	839,125
44,400	SOUTHWESTERN PUB SVC CO	1,226,550
53,095	SOVRAN FINANCIAL CORP.	1,539,755
5,100	SPELLING ENTMT INC CL A	44,625
24,200	SPRINGS INDS INC	780,450
18,500	SPS TECHNOLOGIES INC	663,688
13,500	SPX CORPORATION	393,188
22,700	SQUARE D CO	1,310,925
1,319	SSMC INC	43,692
57,840	ST JUDE MED INC	1,995,480
44,100	ST. PAUL COS. INC.	2,535,750
36,700	STANDARD BRANDS PAINT CO	467,925
2,200	STANDARD COML CORP	26,950
30,025	STANDARD PRODS CO	728,106
38,850	STANLEY WKS	1,340,325
21,800	STAR BANC CORP	479,600
33,500	STARRETT L S CO	816,563
34,200	STATE STREET BOSTON CORP	1,389,375
5,000	STERLING SOFTWARE INC	53,125
81,300	STERLING CHEMS INC	569,100
44,600	STEWART & STEVENSON SVCS INC	1,627,900
17,900	STEWART INFORMATION SVCS CORP	331,150
61,000	STOKELY USA INC	1,242,875
2,200	STONE & WEBSTER INC	86,075
51,400	STONE CONTAINER CORP	841,675
10,793	STRAWBRIDGE & CLOTHIER	350,773
6,100	STRIDE RITE CORP	166,988
54,785	STRYKER CORP	1,533,980
84,550	STUDENT LN MARKETING ASSN	4,491,719
2,800	SUAVE SHOE CORP	23,800
13,409	SUMMIT BANCORP.	197,783
94,845	SUN COMPANY INC	3,521,121

NO. OF SHARES	SECURITY	MARKET VALUE
25,000	SUN ELEC CORP	\$ 521,875
48,100	SUN GUARD DATA SYSTEMS	1,166,425
75,900	SUN MICROSYSTEMS INC	2,580,600
36,000	SUNDSTRAND CORP	1,278,000
1,501	SUNSHINE MNG CO HLD	4,689
115,000	SUNTRUST BKS INC	2,314,375
60,000	SUPER FOOD SVCS INC	1,132,500
2,387	SUPER RITE FDS HLD WTS	634
68,700	SUPER VALU STORES INC.	1,949,363
19,500	SURGICAL CARE AFFIL.	546,000
101,300	SYNTEX CORPORATION	5,938,713
101,600	SYSCO CORP	3,479,800
46,050	T C B Y ENTERPRISES INC	874,950
54,100	T R W INC	2,515,650
20,000	T SF COMMUNICATIONS	90,000
23,300	T.J. INTL. INC.	553,375
10,100	TAB PRODS CO	162,863
13,325	TALLEY INDS INC	96,606
19,000	TAMBRANDS INC.	1,605,500
84,900	TANDEM COMPUTERS INC	2,026,988
73,940	TANDY CORP	2,624,870
21,050	TASTY BAKING CORP	368,375
64,500	TECH SYM CORP	588,563
48,700	TECO ENERGY INC	1,412,300
5,900	TECUMSEH PRODS CO	666,700
12,048	TEJAS GAS CORP DEL	328,308
25,100	TEJON RANCH CO	1,000,863
1,100	TEKTRONX INC	17,050
303,100	TELE COMMUNICATIONS INC	4,319,175
6,600	TELECOM CORP	8,250
22,500	TELECREDIT INC	1,122,188
49,800	TELEDYNE INC.	1,182,750
30,450	TELEPHONE & DATA SYS INC	1,111,425
113,400	TELESPHERE COMMUNICATIONS	567,000
46,990	TEMPLE INLAND	1,609,408
10,000	TENNANT CO	412,500
113,810	TENNECO INC.	7,710,628
18,056	TENNIS LADY INC	1,129
44,200	TESORO PETE CORP	408,850
101,748	TEXACO CDA PETE INC	80,381
229,000	TEXACO INC.	12,967,125
200	TEXAS AMERN BANCSHARES INC	38
31,808	TEXAS INDUSTRIES	743,512
71,900	TEXAS INSTRUMENTS	2,849,038
156,400	TEXAS UTILITIES CO.	5,532,650
78,800	TEXTRON INC	1,871,500
1,000	THERMO ELECTRON CORP.	30,500
31,475	THERMO INST SYS INC	487,863
16,900	THOMAS & BETTS CORP	925,275
64,800	THREE COM CORP.	1,077,300
28,200	TIDEWATER INC.	426,525
136,200	TIE COMMUNICATIONS	110,663
18,900	TIFFANY & CO NEW	852,863
57,700	TIME WARNER INC	5,798,850
1,755	TIME WARNER PFD SER D CV	75,902
103,600	TIMES MIRROR CO CL A	3,224,550
30,400	TIMKEN CO	953,800
81,831	TJX COS INC NEW	1,084,261
6,900	TNP ENTERPRISES INC	124,200
500	TONKA	3,125
38,032	TOOTSIE ROLL INDS INC	1,663,900
46,500	TORCHMARK CORP	2,220,375
35,600	TOTAL ASSETS PROTN INC	40,050
20,200	TOWN & CTRY CORP	146,450

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NO. OF SHARES	SECURITY	MARKET VALUE
166,750	TOYS R US	\$ 8,024,844
10,000	TRANS WORLD MUSIC CORP	312,500
67,366	TRANSAMERICA CORP	2,644,116
130,500	TRANSCANADA PIPELINES LTD	1,810,688
31,100	TRANSCO ENERGY CO.	1,310,088
4,200	TRANSTECHNOLOGY CORP	27,825
91,500	TRAVELERS CORP.	2,722,125
64,400	TRIBUNE COMPANY	2,769,200
1,200	TRINITY INDS INC.	33,600
46,200	TRINOVA CORP	1,241,625
721	TRITON ENERGY CORP	8,742
27,600	TUCSON ELECTRIC PWR CO	348,450
55,600	TULTEX CORP	437,850
36,662	TURNER BROADCASTIN	1,888,093
37,400	TYCO LABS	2,127,125
54,600	TYCO TOYS INC	1,146,600
23,900	TYLER CORP DEL	95,600
50,500	TYSON FOODS INC	1,559,188
19,113	U A L CORP	2,866,950
2,500	U G I CORP	87,500
65,300	U J B FINANCIAL CORP	1,061,125
69,800	U N C RESOURCES	305,375
42,780	U S BANCORP	1,192,493
8,020	U S BIOSCIENCE INC.	120,300
75,600	U S F & G CORP.	2,012,850
42,400	U S WEST NEWVECTOR GROUP INC	1,431,000
3,400	U.S. HOME CORP.	3,825
38,500	UNI MARTS INC	211,750
61,350	UNION CAMP CORP.	2,162,588
15,197	UNION CARBIDE CORP RTS	0
120,191	UNION CARBIDE CORP	2,313,677
87,600	UNION ELEC CO	2,310,450
88,800	UNION PACIFIC CORP.	6,227,100
66,500	UNION TEX PETE HLDGS INC	1,330,000
141,700	UNISYS CORP.	1,877,525
44,700	UNITED ARTISTS ENTMT CL B	692,850
118,600	UNITED ARTISTS ENTMT CL A	1,808,650
20,700	UNITED ASSET MGMT CORP	388,125
44,000	UNITED BKS COLO INC	836,000
75,000	UNITED HEALTHCARE CORP	1,293,750
6,000	UNITED INNS INC	54,000
31,584	UNITED INVESTORS MGT CO	536,928
43,700	UNITED MERCHANTS & MFRS. INC.	35,506
11,800	UNITED MO BANCSHARES	345,150
8,000	UNITED NEW MEXICO FIN'L CORP.	90,000
57,200	UNITED STATES SHOE CORP	1,422,850
45,200	UNITED STATES SURGICAL CORP	2,096,150
118,600	UNITED TECHNOLOGIES CORP.	6,789,850
180,400	UNITED TELECOM. INC.	7,148,350
59,400	UNITRIN INC	2,004,750
51,937	UNIVERSAL FOODS CORP	1,681,460
101,800	UNIVERSAL HEALTH SVCS INC	954,375
80,037	UNO RESTAURANT CORP	1,200,555
203,560	UNOCAL CORP.	5,521,565
34,800	UNUM CORP	1,857,450
161,600	UPJOHN COMPANY	6,625,600
36,700	US AIR GROUP	922,088
70,000	US FACS CORP	271,250
22,900	US HEALTHCARE INC.	426,513
324,740	US WEST CORP	11,650,048
140,883	USG CORP	563,532
9,600	USLICO CORP	206,400
19,800	USLIFE CORP.	762,300

NO. OF SHARES	SECURITY	MARKET VALUE
227,684	USX CORP.	\$ 7,513,572
21,385	UTILICORP UTD INC	427,700
51,707	V F CORP	1,350,845
1,000	VALERO ENERGY CORP	15,750
95,900	VALHI INC NEW	1,414,525
64,700	VALLEY NATIONAL CORP.	1,043,288
44,900	VAN DORN CO	825,038
44,100	VARIAN ASSOC. INC.	1,240,313
10,790	VARTITY CORP	33,719
25,450	VARLEN CORP	397,656
68,176	VERMONT FIN'L SVCS	869,244
600	VESTRON INC	244
33,220	VIACOM INC	901,093
33,220	VIACOM INC NON-VTG	838,805
23,900	VICORP RESTAURANTS INC	597,500
105,000	VIE DE FRANCE CORP	249,375
25,700	VISTA CHEM CO	1,015,150
4,545	VIVRA INC	154,530
2,800	VONS COMPANIES INC.	63,000
8,400	VORNADO INC	865,200
34,400	VULCAN MATLS CO	1,500,700
420	W. C. I. HOLDINGS CORP	4,620
155,483	WABAN INC	1,263,299
496,340	WAL-MART STORES INC.	30,959,208
37,500	WALBRO CORP	600,000
55,800	WALGREEN CO	2,769,075
44,600	WALLACE COMPUTER SER INC	1,075,975
156,900	WANG LABS CL B	666,825
118,600	WARNER LAMBERT	7,812,775
100,000	WARWICK INS MGRS INC	50,000
19,700	WASHINGTON GAS LT CO	593,463
56,550	WASHINGTON MUT SVGS BK SEATTLE	968,419
36,200	WASHINGTON NATL CORP	773,775
9,400	WASHINGTON POST B	2,472,200
34,900	WASHINGTON WTR PWR CO	1,042,638
401,880	WASTE MANAGEMENT	16,627,785
19,400	WATKINS JOHNSON CO.	315,250
13,700	WATTS INDS INC	554,850
20,570	WAUSAU PAPER MLS CO	910,223
27,000	WD 40 CO	850,500
25,000	WEIRTON STL CORP	234,375
36,100	WEIS MARKETS INC.	1,055,925
15,000	WEITEK CORP	326,250
34,700	WELLMAN INC	945,575
45,500	WELLS FARGO & CO.	3,594,500
91,300	WENDYS INTL INC	604,863
42,400	WEST INC	726,100
11,025	WEST ONE BANCORP	267,356
1,300	WESTCOAST ENERGY INC	22,750
57,100	WESTERN PUBG GROUP INC	970,700
300	WESTERN SVGS & LN ASSN PHOENIX	141
254,000	WESTINGHOUSE ELEC. CO.	9,334,500
27,060	WESTMARK INTL INC	1,163,580
34,700	WESTMORELAND COAL CO	841,475
57,875	WESTVACO CORP	1,483,047
41,200	WETTERAU INC	1,297,800
3,300	WETTERAU PPTYS INC	44,550
180,050	WEYERHEUSER CO.	4,591,275
34,734	WHEELBRATOR TECH COM NEW	1,497,904
61,800	WHIRLPOOL CORP.	1,738,125
35,400	WHITEHALL CORP.	455,775
91,878	WHITMAN CORP	2,515,160
50,000	WICOR INC	1,112,500
6,100	WILEY JOHN + SON	277,550

**MINNESOTA STATE BOARD OF INVESTMENT  
PASSIVE EQUITY ACCOUNT  
ALPHABETICAL EQUITY HOLDINGS  
JUNE 30, 1990**

NO. OF SHARES	SECURITY	MARKET VALUE
23,166	WILLAMETTE INDS INC.	\$ 1,146,717
800	WILLIAMS COMPANIES INC	24,000
33,100	WILMINGTON TRUST CO.	1,373,650
7,400	WINDMERE CORP	44,400
35,500	WINN DEXIE STORES INC	2,436,188
89,500	WINNEBAGO IND INC.	425,125
57,700	WISCONSIN ENERGY CORP	1,673,300
2,500	WISCONSIN PUB SVC CORP	53,438
20,800	WISER OIL CO DEL	377,000
28,550	WITCO CORP.	1,027,800
112,800	WOOLWORTH CORP	3,708,300
47,300	WORTHINGTON INDS INC	1,158,850
21,100	WPL HOLDINGS INC	472,113
35,300	WRIGLEY WM JR CO	1,950,325
65,700	WYMAN-GORDON CO.	903,375
82,700	XEROX CORP	3,876,563
13,900	XTRA CORP.	330,125
50,900	YELLOW FREIGHT SYSTEM	1,412,475
16,600	ZENITH ELECTRONICS CORP	139,025
26,000	ZIONS BANCORP	744,250
32,100	ZURN INDS INC	1,556,850
TOTAL EQUITY PORTFOLIO		\$ 2,738,511,511

**MINNESOTA STATE BOARD OF INVESTMENT  
 PASSIVE EQUITY ACCOUNT  
 ALPHABETICAL FIXED INCOME HOLDINGS  
 JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 400	BORG WARNER CORP JR	00.0000%	07/15/07	\$ 240
200	C B S INC	00.0000%	08/01/95	206
435,000	CUC INTL INC ZERO CV	00.0000%	06/06/96	281,663
167,288	D R HOLDINGS INC.	10.8750%	01/30/02	39,313
251	DYNCORP	00.0000%	06/30/03	161
232	G-I HLDGS INC	10.5000%	03/15/05	195
8,760	GENERAL MOTORS CONT	00.0000%	10/28/91	7,944
400	HOSPITAL CORP OF AMER SDB	12.0000%	07/01/03	304
100	INTERCO INC	16.0000%	12/15/00	23
27	INTERCO INC	00.0000%	12/15/03	1
103	INTERCO INC	13.7500%	12/15/03	3
300	KROGER CO	00.0000%	10/15/08	203
700	MARY KAY CORP	14.5000%	11/30/00	574
19,000	MHS HOLDINGS CORP	00.0000%	01/01/04	8,199
400	NEWELL CO	16.6200%	07/01/99	400
475	RJR HLDGS CORP CV	00.0000%	05/01/09	489
700	RJR HLDGS GROUP INC	00.0000%	05/01/07	588
29,837,295	S.B.I MONEY FUND			29,837,295
600	SHONEYS INC	16.8750%	07/01/00	618
585,000	U.S.A. TREASURY BILL			574,101
<b>\$ 31,057,231</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 30,752,520</b>

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE EQUITY ACCOUNT  
ALPHABETICAL EQUITY HOLDINGS  
JUNE 30, 1990**

NO. OF SHARES	SECURITY	MARKET VALUE
ALLIANCE CAPITAL MANAGEMENT		
140,000	ABBOTT LABS	\$ 5,740,000
155,200	AMERICAN EXPRESS COMPANY	4,772,400
89,200	AMERICAN INTERNATIONAL GRP.	8,596,650
77,000	AMR CORP.	4,937,625
226,275	BOEING COMPANY	13,237,088
245,000	BURLINGTON NORTHERN INC.	9,248,750
206,824	BURLINGTON RES INC	8,660,755
389,200	COCA COLA COMPANY	17,270,750
55,000	COMPAQ COMPUTER CORP	6,847,500
309,174	COMPUTER ASSOC INTL INC	4,908,137
445,000	CONTEL CORP	11,458,750
205,000	DAYTON-HUDSON CORP.	14,913,750
103,000	DEERE & COMPANY	7,544,750
113,600	DISNEY WALT CORP	14,569,200
142,000	DOW CHEMICAL COMPANY	8,129,500
400,000	FEDERAL NATL MORTGAGE ASSN	16,250,000
188,000	FORD MOTOR CO.	8,225,000
248,000	GENERAL ELECTRIC CO.	17,174,000
158,000	GENERAL RE CORP.	13,509,000
153,000	GTE CORP.	4,953,375
389,750	INTEL CORP.	18,318,250
183,000	INTERNATIONAL BUSINESS MACH	21,502,500
121,000	LILLY ELI & CO	10,058,125
141,162	LIN BROADCAST. CORP.	10,445,988
243,000	MCA INC.	13,486,500
161,000	MERCK & COMPANY INC.	13,966,750
55,000	MICROSOFT CORP	4,180,000
27,000	MOTOROLA INC.	2,257,875
75,000	MULTIMEDIA INC. NEW	5,343,750
345,000	NORWEST CORP.	7,503,750
185,000	PEPSICO INCORPORATED	14,360,625
360,000	PHILLIPS PETROLEUM CO.	9,270,000
50,000	REUTERS HOLDINGS PLC	3,350,000
346,750	STUDENT LN MARKETING ASSN	18,421,094
84,500	TIME WARNER INC	8,492,250
267,625	TOYS R US	12,879,453
492,000	UNOCAL CORP.	13,345,500
228,200	WAL-MART STORES INC.	14,233,975
105,000	WARNER LAMBERT	6,916,875
30,400	WASHINGTON POST B	7,995,200
414,600	WASTE MANAGEMENT	17,154,075
	TOTAL EQUITY PORTFOLIO	\$ 434,429,515

CONCORD CAPITAL MANAGEMENT		
159,450	ADVANCED MICRO DEV.	\$ 1,514,775
46,500	ALCAN ALUMINUM LTD.	1,046,250
38,000	ALCO STANDARD CORP.	1,334,750
35,200	ALUMINUM CO. OF AMERICA	2,244,000
40,000	AMAX INC	975,000
58,000	AMERICAN GENERAL CORP	2,784,000
35,632	ANALOG DEVICES INC	267,240
38,400	APPLIED MATLS INC	1,459,200
67,725	ARCHER DANIELS MIDLAND CO.	1,735,453
28,000	AUTOMATIC DATA PROCESSING INC	1,547,000
25,100	BOISE CASCADE CORP	859,675
64,100	BURLINGTON NORTHERN INC.	2,419,775
27,400	CALMAT CO	931,600
64,000	CENTRIOR ENERGY CORP	1,200,000
24,000	CENTEX CORP	954,000
37,500	CHAMPION INTL.	1,143,750
6,300	CHICAGO MILWAUKEE CORP	872,550
44,100	CIRCUIT CITY STORES INC	1,108,013

NO. OF SHARES	SECURITY	MARKET VALUE
CONCORD CAPITAL MANAGEMENT (cont.)		
57,810	CRANE CO.	\$ 1,495,834
22,400	DELTA AIR LINES INC.	1,638,000
11,000	DIGITAL EQUIPMENT CORP.	935,000
31,500	DOW CHEMICAL COMPANY	1,803,375
22,000	FIRST INTERST. BANCORP	888,250
45,000	FIRST UNION CORP	849,375
28,800	FIRST WACHOVIA CORP	1,170,000
19,400	FOXBORO CO	996,675
33,300	GENERAL DYNAMICS	1,065,600
113,237	GENERAL HOST CORP	736,041
26,000	GENERAL PUBLIC UTILITIES CORP	1,127,750
159,450	GENRAD INC.	717,525
96,900	GEORGIA GULF CORP	920,550
101,900	GEORGIA PACIFIC CORP.	4,216,113
29,800	HARRIS CORP.	1,024,375
38,000	HERSHEY FOODS CORP	1,429,750
30,000	HOUSEHOLD INTL.	1,466,250
65,000	IBP INC	1,161,875
55,000	INTEL CORP.	2,585,000
56,000	ITT CORP	3,220,000
50,000	K MART CORPORATION	1,750,000
33,000	KEMPER CORP.	1,369,500
42,400	KING WORLD PRODTNS INC	1,590,000
59,800	LANDS END INC	1,016,600
42,261	LOUISIANA PAC. CORP.	1,621,766
97,050	LSI LOGIC CORP.	1,091,813
31,700	MARTIN MARIETTA	1,359,138
71,600	MCCORMICK & CO INC	1,807,900
33,200	MCDONALDS CORP.	1,178,600
39,989	MEDUSA CORP	769,788
30,000	MENTOR GRAPHICS CORP.	652,500
34,496	MIDLANTIC CORP	500,192
22,000	MORTON INTERNATIONAL	965,250
46,000	MOTOROLA INC.	3,846,750
37,500	N B D BANCORP	1,195,313
37,000	NATL. MEDICAL ENTER. INC.	1,401,375
96,700	NATL. SEMICONDUCTOR	713,163
63,975	NETWORK SYSTEMS CORP.	871,659
36,900	NORDSTROM INC	1,263,825
47,492	QUANTUM CHEMICAL CORP	789,555
73,500	QUANTUM CORP.	1,617,000
51,600	REYNOLDS METALS CO	2,986,350
74,000	RYDER SYSTEMS INC.	1,609,500
38,000	SALOMON INC	931,000
42,000	SARA LEE	1,223,250
6,000	SCOTSMAN INDS INC	50,250
116,400	SEAGATE TECHNOLOGY	1,644,150
25,000	SECURITY PACIFIC CORP.	925,000
61,900	SERVICE CORP. INT'L	1,199,313
44,400	SHARED MED. SYSTEMS CORP.	577,200
40,000	SOUTHEAST BKG CORP	380,000
58,100	STERLING SOFTWARE INC	617,313
26,000	SYNTEX CORPORATION	1,524,250
52,000	TANDEM COMPUTERS INC	1,241,500
34,000	TANDY CORP	1,207,000
29,400	TEKTRONIX INC	455,700
21,000	TELEDYNE INC.	498,750
55,400	TEMPLE INLAND	1,897,450
20,500	TENNECO INC.	1,388,875
23,600	TERADYNE INC.	238,950
50,000	TEXAS INSTRUMENTS	1,981,250
31,100	TEXAS UTILITIES CO.	1,100,163

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE EQUITY ACCOUNT  
ALPHABETICAL EQUITY HOLDINGS  
JUNE 30, 1990**

NO. OF SHARES	SECURITY	MARKET VALUE
CONCORD CAPITAL MANAGEMENT (cont.)		
35,000	TEXTRON INC	\$ 831,250
47,700	THIokol CORPORATION	554,513
16,400	THREE COM CORP.	272,650
29,000	TOYS R US	1,395,625
44,400	U S BANCORP	1,237,650
8,900	UNITED STATES SHOE CORP	221,388
21,000	UNITRIN INC	708,750
24,100	VARIAN ASSOC. INC.	677,813
29,200	VISTA CHEM CO	1,153,400
25,000	VLSI TECHNOLOGY INC	253,125
32,300	WESTERN DIGITAL CORP.	427,975
22,000	WILLAMETTE INDS INC.	1,089,000
24,000	XEROX CORP	1,125,000
	TOTAL EQUITY PORTFOLIO	\$ 114,841,402

FORSTMANN LEFF ASSOCIATES

160,300	AMAX INC	\$ 3,907,313
67,000	AMERICAN EXPRESS COMPANY	2,060,250
27,000	ATWOOD OCEANICS INC	533,250
66,300	BIOGEN INC	1,599,488
280,865	BURLINGTON RES INC	11,761,222
127,100	COSTCO WHSL CORP	5,417,638
12,800	CPC INTL. INC.	1,025,600
40,700	CRYSTAL BRANDS INC	1,165,038
197,275	DIAMOND SHAMROCK R&M INC	4,537,325
172,200	DREYFUS CORP.	5,811,750
137,100	FIRST MISS CORP	1,645,200
20,600	GENENTECH INC	571,650
126,900	GENERAL ELECTRIC CO.	8,787,825
102,500	GENERAL MOTORS CORP.	4,881,563
40,500	GRACE ENERGY CORP	759,375
105,300	HELMERICH & PAYNE INC	3,237,975
515,100	INCO INC.	14,744,738
34,500	INTERNATIONAL BUSINESS MACH	4,053,750
30,100	LILLY ELI & CO	2,502,063
211,000	MAGMA COPPER CO NEW CL B	1,055,000
41,800	MARINE HLDG CO	266,475
62,900	MCDERMOTT INTL INC	1,887,000
139,600	MEAD CORP.	4,432,300
41,100	MYLAN LABS INC	991,538
21,000	NABORS INDS	123,375
94,500	NELCOR INC	1,972,688
115,700	PRICE CO	4,801,550
44,100	REPSOL S A	1,108,013
53,400	SAFETY KLEEN CORP	2,182,725
156,700	SANTA FE ENERGY RES	2,820,600
327,700	SERVICE MERCHANDISE	2,621,600
140,800	SMITH INTL INC	1,953,600
96,700	SPX CORPORATION	2,816,388
118,200	UNUM CORP	6,308,925
141,600	VALERO ENERGY CORP	2,230,200
116,100	VARITY CORP	362,813
13,900	WASTE MANAGEMENT	575,113
27,150	WHEELBRATOR TECH COM NEW	1,170,844
	TOTAL EQUITY PORTFOLIO	\$ 118,683,753

FRANKLIN PORTFOLIO ASSOC TRUST

20,000	AETNA LIFE & CASUALTY CO.	\$ 1,045,000
123,500	AHMANSON H.F. CO.	2,531,750
23,800	AMERADA HESS CORP.	1,050,175
12,700	AMERICAN INTERNATIONAL GRP.	1,223,963
63,500	AMERICAN TEL & TEL NEW	2,444,750

NO. OF SHARES	SECURITY	MARKET VALUE
FRANKLIN PORTFOLIO ASSOC TRUST (cont.)		
15,000	APPLIED MATLS INC	\$ 570,000
106,200	ARCHER DANIELS MIDLAND CO.	2,721,375
47,200	ASARCO INC.	1,250,800
13,900	ATLANTIC RICHFIELD	1,633,250
53,400	AUTOMATIC DATA PROCESSING INC	2,950,350
32,600	AVNET INC	937,250
11,550	BANCORP HAWAII INC	586,163
99,200	BANKAMERICA CORP.	2,938,800
142,900	BETHLEHEM STEEL	2,304,263
61,500	BOSTON EDISON CO	1,183,875
56,100	CENTEX CORP	2,229,975
43,000	CENTRAL ILL PUB SVC CO	919,125
4,265	CHICAGO & NORTHWEST. HLDS PFD	42,650
63,200	CHUBB CORPORATION	2,828,200
72,500	CLARK EQUIP CO	2,809,375
78,700	COMMUNICATIONS SATELLITE CORP	2,587,263
70,500	CONAGRA INC.	2,493,938
1,300	COOPER TIRE & RUBBER	45,988
222,600	CYPRESS SEMICONDUCTOR CORP	3,227,700
87,350	CYPRUS MINERALS CORP	1,954,456
30,600	DILLARD DEPT. STORES	2,692,800
42,000	DUKE POWER CO. NC	2,346,750
14,800	FEDERAL NATL MORTGAGE ASSN	601,250
117,500	FEDERAL PAPER BRD INC	2,394,063
99,140	FIRST FINL MGMT CORP	2,119,118
120,100	FRUIT OF THE LOOM INC	1,501,250
63,200	GENERAL PUBLIC UTILITIES CORP	2,741,300
8,200	GRAINGER W W INC	606,800
35,200	GREAT ATLANTIC & PAC TEA INC	2,010,800
35,700	GREAT LAKES CHEMICAL CORP	2,262,488
59,900	GRUMMAN CORP.	1,138,100
67,000	HARRIS CORP.	2,303,125
72,100	IMO DELAVAL INC	1,243,725
90,000	IPALCO ENTERPRISES	2,216,250
18,250	KELLY SVCS INC	693,500
135,300	KENTUCKY UTILS CO	2,655,263
47,700	KEYCORP	1,311,750
56,600	LONG DRUG STORES INC	2,391,350
11,100	LOUISIANA LD & EXPL CO	475,913
49,300	MARTIN MARIETTA	2,113,738
77,700	MATTEL INC	1,893,938
26,600	MERCK & COMPANY INC.	2,307,550
33,500	MORGAN STANLEY GROUP INC	2,437,125
15,000	MULTIMEDIA INC. NEW	1,068,750
27,200	MURPHY OIL	1,101,600
95,800	NIPSCO INDUSTRIES	1,688,475
123,400	NORWEST CORP.	2,683,950
11,700	PENN CENT CORP	267,638
44,100	PENNEY J.C. INC.	2,673,563
93,400	PEOPLES ENERGY CORP	2,054,800
36,500	PEPSICO INCORPORATED	2,833,313
63,300	PHH GROUP INC	2,278,800
10,700	PRIME MTR INNS INC	96,300
75,500	SHAW INDS INC	2,047,938
87,300	SUPER VALU STORES INC.	2,477,138
74,500	TEXAS UTILITIES CO.	2,635,438
78,900	US WEST CORP	2,830,538
80,300	WELLMAN INC	2,188,175
	TOTAL EQUITY PORTFOLIO	\$ 115,894,786

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE EQUITY ACCOUNT  
ALPHABETICAL EQUITY HOLDINGS  
JUNE 30, 1990**

NO. OF SHARES	SECURITY	MARKET VALUE
<b>GEO CAPITAL</b>		
36,000	ADELPHIA COMMUNICATIONS	\$ 432,000
21,300	ADOBE SYS INC	782,775
16,500	ALEX BROWN INC	235,125
55,000	AMERICAN SOFTWARE INC	1,423,125
57,200	AMERICAN TELEVISION &	2,116,400
34,400	ASK COMPUTER	301,000
24,560	BHC COMMUNICATIONS	1,166,600
60,000	BMC SOFTWARE INC	1,560,000
66,700	CABLEVISION SYS CORP	1,792,563
49,300	CASTLE & COOKE INC	1,522,138
32,000	CELLULAR COMMUNICATIONS INC	1,064,000
12,000	CENTEX CORP	477,000
45,700	CENTURY COMM. CORP CL A	382,738
34,200	CENTURY TEL ENTERPRISES INC	949,050
66,600	COLLINS FOODS INTL.	1,448,550
112,000	COMCAST CORP CL A	1,512,000
45,000	CONTEL CELLULAR INC CL A	832,500
56,000	CONTINENTAL MED SYSTEMS	840,000
67,000	CULLEN FROST BANKERS INC	787,250
45,800	DIGITAL MICROWAVE CORP	790,050
55,500	FIRST ILL CORP	437,063
30,000	HEALTH IMAGES INC	360,000
99,000	INFORMATION RES INC	1,447,875
76,400	LA QUINTA MOTOR INNS INC.	1,270,150
103,033	LAWTER INTL INC	1,455,341
47,400	LEGENT CORP	1,315,350
17,500	LEGG MASON INC	293,125
22,500	MCCORMICK & CO INC	568,125
63,500	MEDICAL IMAGING CTRS	817,563
53,800	MENTOR GRAPHICS CORP.	1,170,150
63,000	MERCURY FIN CORP	1,260,000
8,200	METRO MOBILE CTS INC	160,925
90,900	METRO MOBILE CTS INC CL B	1,738,463
44,200	NATIONAL CONVENIENCE STORES	254,150
37,789	NEIMAN-MARCUS GROUP INC	651,860
44,400	NORTHERN TRUST CORP	1,343,100
46,500	NOVACARE INC	970,688
41,500	PARAMETRIC TECH	1,120,500
65,000	PHARMACY MGT SVCS	812,500
12,700	POLICY MGMT. SYS. CORP.	523,875
10,000	SEI CORP.	207,500
52,200	SERVICE CORP. INT'L	1,011,375
47,066	SHONEYS INC	705,990
46,500	SIERRA TUCSON COS INC	935,813
675	SOFTWARE PUBL. CORP.	16,706
48,200	STRATUS COMPUTER INC.	1,283,325
52,000	SYSTEMS CTR INC	1,163,500
25,000	T2 MED INC	662,500
20,000	TELE COMMUNICATIONS RT	65,000
51,000	TOKOS MED CORP	726,750
36,000	U S TR CORP	1,332,000
95,000	UNITED ARTISTS ENTMT CL A	1,448,750
98,300	US HEALTHCARE INC.	1,830,838
48,100	VALUE LINE INC	937,950
30,000	VANGUARD CELLULARSYS INC	742,500
33,200	VIACOM INC	900,550
33,200	VIACOM INC NON-VTG	838,300
18,000	VITALINK COMMUNICATIONS CORP	182,250
25,000	WESTCOTT COMMUNICATIONS	287,500
60,000	WESTERN DIGITAL CORP.	795,000
	<b>TOTAL EQUITY PORTFOLIO</b>	<b>\$ 54,459,760</b>

NO. OF SHARES	SECURITY	MARKET VALUE
<b>IDS ADVISORY</b>		
100,000	AHMANSON H.F. CO.	\$ 2,050,000
90,000	ALBERTSONS INC	3,240,000
120,000	ALLEGHENY LUDLUM CORP	5,685,000
20,000	AMERICAN INTERNATIONAL GRP.	1,927,500
100,000	AMERICAN TEL & TEL NEW	3,850,000
75,000	AMOCO CORP	3,834,375
150,450	ARCHER DANIELS MIDLAND CO.	3,855,281
50,000	ATLANTIC RICHFIELD	5,875,000
160,000	BOEING COMPANY	9,360,000
140,000	COMPUTER ASSOC INTL INC	2,222,500
100,000	CONAGRA INC.	3,537,500
80,000	CORNING INC	3,500,000
135,000	CYPRUS MINERALS CORP	3,020,625
80,000	DEERE & COMPANY	5,860,000
50,000	DISNEY WALT CORP	6,412,500
75,000	DRESSER INDUSTRIES	3,721,875
150,000	FLUOR CORP	6,712,500
60,000	FMC CORP NEW	1,980,000
150,000	FOSTER WHEELER CORP	4,012,500
60,000	GENERAL ELECTRIC CO.	4,155,000
100,000	GENERAL MOTORS CORP CL E	3,450,000
60,000	GENERAL RE CORP.	5,130,000
100,000	GOLDEN WEST FIN'L	3,037,500
120,000	HALLIBURTON INC.	5,775,000
100,000	INTEL CORP.	4,700,000
50,000	JEFFERSON PILOT CORP.	2,187,500
65,000	LILLY ELI & CO	5,403,125
150,000	LIZ CLAIBORNE INC.	4,875,000
50,000	MERCK & COMPANY INC.	4,337,500
30,000	MOTOROLA INC.	2,508,750
50,000	PACIFIC TELESIS GP.	2,225,000
120,000	PRIMERICA CORP NEW	4,095,000
70,000	REUTERS HOLDINGS PLC	4,690,000
120,000	TANDEM COMPUTERS INC	2,865,000
50,000	TENNECO INC.	3,387,500
90,000	TOYS R US	4,331,250
80,000	TYCO LABS	4,550,000
90,000	UNITED TELECOM. INC.	3,566,250
160,000	UNOCAL CORP.	4,340,000
100,000	US WEST CORP	3,587,500
80,000	WAL-MART STORES INC.	4,990,000
200,000	WASTE MANAGEMENT	8,275,000
80,000	WESTINGHOUSE ELEC. CO.	2,940,000
150,000	WOOLWORTH CORP	4,931,250
	<b>TOTAL EQUITY PORTFOLIO</b>	<b>\$ 184,990,281</b>
<b>INVESTMENT ADVISORS INC.</b>		
80,000	ADT LTD ADR	\$ 2,550,000
50,000	ARCHER DANIELS MIDLAND CO.	1,281,250
22,500	ATLANTIC RICHFIELD	2,643,750
50,000	BAXTER INTL INC	1,200,000
35,000	CHEVRON CORP	2,463,125
37,500	DAYTON-HUDSON CORP.	2,728,125
48,800	DIGITAL MICROWAVE CORP	841,800
48,800	DONNELLEY RR & SONS	2,305,800
45,000	DOVER CORP.	1,755,000
80,700	EMERSON ELECTRIC	3,308,700
30,000	FEDERAL HOME LN MTG CORP	2,265,000
60,000	FOREST LABS	2,707,500
80,000	GANNETT INC.	3,060,000
50,000	GOLDEN VY MICROWAVE FOODS INC	1,743,750
37,500	HONEYWELL INC.	3,693,750

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NO. OF SHARES	SECURITY	MARKET VALUE
INVESTMENT ADVISORS INC. (cont.)		
85,000	INTEL CORP.	\$ 3,995,000
30,000	INTERNATIONAL BUSINESS MACH	3,525,000
30,000	MEDTRONIC INC.	2,497,500
95,000	NETWORK SYSTEMS CORP.	1,294,375
50,000	NEWELL COS.	1,600,000
40,000	ORACLE SYS CORP	925,000
32,000	PENTAIR INC	888,000
100,000	PLACER DOME INC	1,550,000
100,000	PUBLIC SERVICE ENTERPRISE GROU	2,587,500
28,300	RUBBERMAID INC	1,149,688
55,000	SIGMA ALDRICH	3,726,250
80,000	SUN MICROSYSTEMS INC	2,720,000
60,000	SYNTEX CORPORATION	3,517,500
50,000	TENNECO INC.	3,387,500
25,000	TIME WARNER INC	2,512,500
37,500	USX CORP.	1,237,500
	<b>TOTAL EQUITY PORTFOLIO</b>	<b>\$ 71,660,863</b>

**LIEBER & COMPANY**

17,600	A G EDWARDS, INC	\$ 448,800
10,000	A L LABS INC	230,000
17,700	AIRGAS INC	340,725
4,038	ALASKA AIR GROUP	90,855
55,000	ALCO STANDARD CORP.	1,931,875
24,800	ALEXANDERS INC	1,035,400
22,000	ALFA CORP	209,000
55,000	AMERICAN FAMILY CORP	873,125
30,000	AMERICAN GREETINGS	1,050,000
13,400	AMERICAN INTERNATIONAL GRP.	1,291,425
2,100	AMERICAN PETROFINA INC.	164,850
74,400	AMERICAN SOFTWARE INC	1,925,100
20,000	AMERICAN TRAVELERS CORP	315,000
53,100	AMERICAN WATER WORKS	856,238
26,000	AMR CORP.	1,667,250
30,500	ANDREW CORP.	579,500
22,000	ARMSTRONG IND. INC.	786,500
24,000	ATLANTIC SOUTHEAST	456,000
40,000	B S B BANCORP	590,000
20,000	BAXTER INTL INC	480,000
20,000	BB&T FINANCIAL CORP	375,000
15,000	BECTON DICKINSON CO	1,051,875
19,800	BIOCRAFT LABS INC	334,125
20,000	BIOMET INC	585,000
10,200	BK. OF NEW HAMP. CORP.	102,000
24,000	BLOCK H & R INC.	1,020,000
55,000	BOWNE & CO INC	763,125
34,698	BRISTOL MYERS SQUIBB CO	2,198,986
33,000	BURLINGTON RES INC	1,381,875
20,000	BYTEX CORP	215,000
4,237	CBS INCORPORATED	852,167
60,000	CEM CORP	555,000
15,000	CNA FINL CORP	1,102,500
13,000	CODE-ALARM INC	185,250
30,000	COLONIAL COS INC	637,500
30,000	COMMERCIAL INTERTECH CORP	690,000
9,000	CONROY INC.	0
14,500	CORROON & BLACK CORP	460,375
29,940	CROWN CRAFTS INC	490,268
27,500	CRYSTAL BRANDS INC	787,188
30,000	CUC INTL INC	600,000
3,500	DART GROUP	325,500

NO. OF SHARES	SECURITY	MARKET VALUE
LIEBER & COMPANY (cont.)		
30,000	DELCHAMPS INC	\$ 750,000
25,000	DELTA AIR LINES INC.	1,828,125
25,000	DH TECHNOLOGY INC	353,125
49,000	DIAGNOSTIC PRODUCTS CORP.	1,739,500
9,618	DILLARD DEPT. STORES	846,384
5,000	DISNEY WALT CORP	641,250
40,000	DOLLAR GEN CORP	385,000
15,000	DONNELLEY RR & SONS	708,750
15,000	DOW CHEMICAL COMPANY	858,750
15,000	ENRON CORP.	851,250
38,800	EQK RLTY INVS 1	160,050
72,200	EQUITABLE RES INC	2,635,300
50,000	EXCEL INDS INC	581,250
13,900	EXXON CORPORATION	665,463
5,000	FEDERAL HOME LN MTG CORP	377,500
94,666	FHP INTERNATIONAL CORP	1,703,988
20,000	FINGERHUT COS INC	435,000
22,500	FIRST AM. CORP TENN.	298,125
10,000	FIRST AMER BK CORP	477,500
24,600	FIRST EMPIRE ST CORP	1,534,425
50,000	FIRST FID BANCORPORATION NEW	912,500
35,000	FIRST HAWAIIAN CREDITCORP INC	875,000
17,700	FIRST INTER-BANCORP	146,025
14,600	FIRST INTERST BANCORP RTS	0
10,000	FIRST VA BKS INC	260,000
35,100	FLEMING COS.	1,289,925
30,800	FLORIDA ROCK INDS.	927,850
20,000	FLOWERS INDUSTRIES	372,500
5,400	FRP PPTYS INC	71,550
130,595	G & K SERVICES INC.	2,105,844
13,200	GANNETT INC.	504,900
52,000	GERBER SCIENTIFIC	767,000
41,800	GIANT FOODS INC	1,165,175
20,000	GOLDEN WEST FIN'L	607,500
15,800	GOODRICH (B.F.)	671,500
26,700	GOODY PRODS INC	390,488
46,500	GRADCO SYSTEMS	389,438
22,800	GREAT LAKES CHEMICAL CORP	1,444,950
44,750	GUNDE ENVIRONMENTAL SYS INC	604,125
20,000	HANDEX ENVIRONMENTAL	440,000
28,000	HB FULLER CO	770,000
11,200	HEXCEL CORP	169,400
28,000	HOME FED SVGS & LN ASSN	259,000
23,250	HOOPER HOLMES INC	296,438
43,100	HOUGHTON MIFFLIN CO.	1,217,575
18,742	HUBBELL INC.	862,132
10,000	INB FINANCIAL CORPORATION	240,000
57,749	INSTEEL INDS INC	620,802
30,000	INTERLAKE INC	247,500
45,000	INTERTAN INC	1,771,875
10,000	JACOBSON STORES INC	212,500
22,000	JAMES RIV CORP VA	588,500
30,000	JEFFERSON BANKSHRS. VA.	570,000
12,600	JOSTENS INC	338,625
38,500	JUNO LIGHTING INC.	832,563
30,000	JWP INC	1,140,000
40,000	K MART CORPORATION	1,400,000
8,500	KANSAS CITY SO. IND.	382,500
19,000	KNIGHT RIDDER INC.	969,000
25,000	LADD FURNITURE	275,000
2,628	LIN BROADCAST. CORP.	194,472
26,200	LOUISIANA LD & EXPL CO	1,123,325

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NO. OF SHARES	SECURITY	MARKET VALUE
LIEBER & COMPANY (cont.)		
70,000	LSI LOGIC CORP.	\$ 787,500
55,100	MARINE CORP ILL	1,074,450
27,200	MAY DEPT. STORES CO.	1,506,200
16,000	MCA INC.	888,000
1,407	MCCAW CELLULAR COMMUNICATION	34,120
30,000	MCGRAW HILL INC.	1,687,500
12,000	MEAD CORP.	381,000
33,750	MEDICINE SHOPPE INTL INC	776,250
7,800	MELVILLE CORPORATION	408,525
10,000	MERCANTILE BANCORPORATION INC	245,000
13,000	MERCHANTS NATL CORP	321,750
7,500	MERCK & COMPANY INC.	650,625
15,000	METRO MOBILE CTS INC CL B	286,875
49,000	MEYER FRED INC DEL	820,750
28,000	MICHIGAN NATL CORP	896,000
24,000	MILLER HERMAN INC.	531,000
25,000	MORGAN PRODS LTD	262,500
35,000	NATIONAL DATA CORP	507,500
31,000	NATL HEALTH LABS	426,250
25,000	NCH CORP	1,368,750
20,000	NELLCOR INC	417,500
40,000	NEWELL COS.	1,280,000
57,128	NICHOLS INST	914,048
38,500	NORTH FORK BANCORP INC	466,813
35,000	NOVELL INC	1,916,250
20,500	NOWSCO WELL SERVICE LTD	279,313
30,000	OCTEL COMMUNICATIONS	682,500
12,000	OSHKOSH B GOSH INC	423,000
29,000	OUTBOARD MARINE CORP	576,375
15,000	PALL CORP	510,000
33,000	PARAMOUNT COMMUNICATION	1,423,125
20,600	PARK ELECTROCHEMICAL CORP	290,975
55,000	PEP BOYS MANNY MOE & JACK	811,250
12,500	PIER 1 IMPORTS	139,063
64,000	PITNEY BOWES INC.	3,152,000
7,223	POLAROID CORP.	293,434
39,900	PRECISION CASTPARTS CORP	1,226,925
57,900	RAYMOND JAMES FINL INC	1,143,525
12,000	REYNOLDS & REYNOLDS CO	237,000
45,000	SANFORD CORP ILL	1,012,500
20,000	SCHULMAN A INC	850,000
51,250	SEALRIGHT INC	1,146,719
20,000	SENSORMATIC ELECTRS CORP	277,500
15,000	SHAW INDS INC	406,875
20,000	SHOREWOOD PACKAGING CORP	520,000
5,000	SIGMA ALDRICH	338,750
5,000	SOUTHINGTON SVGS BK CONN	40,000
13,600	SPRINGS INDS INC	438,600
9,375	STATE O MAINE INC	92,578
20,000	STRUCTURAL DYNAMICS	535,000
30,000	SUMMAGRAPHICS CORP	367,500
34,650	SUPER FOOD SVCS INC	654,019
15,000	SUPER VALU STORES INC.	425,625
47,000	SUSQUEHANNA BNKSHRS. INC.	869,500
25,000	SYNOPTICS COMM	1,321,875
25,000	T.J. INTL. INC.	593,750
15,000	TANDY CORP	532,500
8,200	TASTY BAKING CORP	143,500
25,800	TELEFLEX INC.	893,325
20,000	TORCHMARK CORP	955,000
20,000	TRANSCO ENERGY CO.	842,500
52,000	U S WEST NEWVECTOR GROUP INC	1,755,000
22,000	UNUM CORP	1,174,250

NO. OF SHARES	SECURITY	MARKET VALUE
LIEBER & COMPANY (cont.)		
30,800	US AIR GROUP	\$ 773,850
34,033	VERMONT FIN'L SVCS	433,921
30,000	VICORP RESTAURANTS INC	750,000
2,000	VORNADO INC	206,000
33,200	WALGREEN CO	1,647,550
15,600	WALLACE COMPUTER SER INC	376,350
30,000	WASTE MANAGEMENT	1,241,250
20,000	WATTS INDS INC	810,000
40,000	WELLMAN INC	1,090,000
40,000	WETTERAU INC	1,260,000
30,000	WILEY JOHN + SON	1,365,000
60,000	WOOLWORTH CORP	1,972,500
25,000	ZIONS BANCORP	715,625
15,000	ZURN INDS INC	727,500
	TOTAL EQUITY PORTFOLIO	\$ 135,892,636
ROSENBERG INSTITUTIONAL EQUITY MGMT		
600	AKTIEBOLAGET ELECTRO	\$ 26,025
400	ALBERTO CULVER CO	10,150
9,900	ALEXANDER & ALEXANDER	241,313
1,000	ALLEN ORGAN CLASS B	35,000
900	ALUMINUM CO. OF AMERICA	57,375
25,400	AMAX INC	619,125
11,700	AMBASE CORPORATION	81,900
23,900	AMERADA HESS CORP.	1,054,588
3,625	AMERICAN BUSINESS PRODS INC GA	83,828
1,400	AMERICAN ECOLOGY	7,700
11,300	AMERICAN GREETINGS	395,500
100	AMERICAN INFORMATION	6,125
8,400	AMERICAN NATL INS CO	287,700
59,100	AMERICAN TEL & TEL NEW	2,275,350
11,500	AMERICAN WATER WORKS	185,438
34,500	AMOCO CORP	1,763,813
4,500	AMSOUTH BANCORP.	99,000
75,600	ARCHER DANIELS MIDLAND CO.	1,937,250
2,200	ARCO CHEM CO	89,650
32,900	ARMCO INC	246,750
900	ARMSTRONG IND. INC.	32,175
18,300	ASARCO INC.	484,950
31,200	ATLANTIC RICHFIELD	3,666,000
10,700	AUTOMATIC DATA PROCESSING INC	591,175
1,800	AVERY INTL. CORP.	41,850
400	B A T INDS ADR ORD	4,575
13,100	BALLY MFG CO	126,088
19,900	BANKAMERICA CORP.	589,538
1,300	BAUSCH & LOMB INC	90,188
52,400	BAXTER INTL INC	1,257,600
59,200	BCE INC	1,998,000
6,400	BECTON DICKINSON CO	448,800
2,800	BELO A H CORP CL A	100,800
80	BERKSHIRE HATHAWAY INC DEL	576,000
6,901	BLOCK DRUG INC CL A	239,810
2,300	BMC INDS INC MINN	24,150
5,100	BOISE CASCADE CORP	174,675
10,900	BOND INTL GOLD INC	57,225
4,600	BRITISH GAS PLC	178,825
5,300	BROOKLYN UN GAS CO.	151,050
500	BUR BROWN	5,000
23,300	BURLINGTON NORTHERN INC.	879,575
200	CANADIAN PACIFIC LTD	3,525
4,700	CAPITAL CITIES/ABC INC.	2,928,100
2,600	CARTER WALLACE INC	142,350

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NO. OF SHARES	SECURITY	MARKET VALUE
ROSENBERG INSTITUTIONAL EQUITY MGMT (cont.)		
5,400	CBS INCORPORATED	\$ 1,086,075
40,200	CENTERIOR ENERGY CORP	753,750
4,900	CENTEX CORP	194,775
8,900	CF & I STL CORP	8,900
10,400	CHAMPION INTL.	317,200
12,900	CHIQUITA BRANDS INTL CORP	335,400
7,980	CHRIS CRAFT INDUSTRIES INC	248,378
12,700	CINCINNATI GAS & ELEC CO	382,588
29,200	CMS ENERGY CORP	930,750
14,900	COCA COLA ENTERPRISES INC	238,400
11,900	COLUMBIA GAS SYSTEM INC	526,575
11,100	COMDISCO INC.	202,575
1,100	COMMERCE BANCSHARES INC	26,400
15,900	COMMODORE INTL LTD	125,213
100	COMMONWEALTH EDISON CO.	3,275
9,200	COMMUNICATIONS SATELLITE CORP	302,450
24,100	CONSOLIDATED RAIL CORP	1,132,700
18,500	CONTINENTAL BK CORP	282,125
2,700	COOPER INDS. INC.	114,413
13,400	CPC INTL. INC.	1,073,675
5,300	CRAWFORD & CO.	172,250
27,500	CSX CORPORATION	935,000
1,100	CYCARE SYS INC	8,388
17,250	CYPRUS MINERALS CORP	385,969
20,500	DAYTON-HUDSON CORP.	1,491,375
8,800	DEAN FOODS CO	321,200
2,900	DELTA AIR LINES INC.	212,063
6,100	DETROIT EDISON CO	159,363
44,500	DIGITAL EQUIPMENT CORP.	3,782,500
12,900	DONNELLEY RR & SONS	609,525
58,750	DOW CHEMICAL COMPANY	3,363,438
100	ECOLAB INC	2,625
6,600	EDISON BROS STORES INC	282,150
4,800	ENSTAR GROUP	10,200
1,200	ENTERGY CORP	23,850
17,200	EQUIFAX INC	335,400
59,100	FEDERAL NATL MORTGAGE ASSN	2,400,938
5,600	FIRST AMER BK CORP	267,400
7,100	FIRSTAR CORPORATION	205,900
1,100	FLIGHTSAFETY INTL INC	65,038
4,900	FMC GOLD CO	49,000
2,600	FRUIT OF THE LOOM INC	32,500
1,540	FUJI PHOTO NEW ADR	94,710
7,800	GATX	222,300
8,000	GENERAL DYNAMICS	256,000
5,400	GENERAL ELECTRIC CO.	373,950
8,700	GENERAL INSTRUMENT CORP	315,375
105,200	GENERAL MOTORS CORP.	5,010,150
22,900	GENERAL PUBLIC UTILITIES CORP	993,288
2,500	GEORGE A HORMEL & CO	45,938
20,500	GEORGIA PACIFIC CORP.	848,188
14,800	GIANT FOODS INC	412,550
13,300	GREAT ATLANTIC & PAC TEA INC	759,763
11,800	GREYHOUND CORP.	328,925
62,500	GTE CORP.	2,023,438
6,300	HANNAFORD BROS CO	233,100
13,100	HARRIS CORP.	450,313
2,100	HON INDUSTRIES	87,675
1,300	HONEYWELL INC.	128,050
11,300	HOUSEHOLD INTL.	552,288
3,300	HUNTINGTON BANCSHARES INC	56,925
6,500	IMCERA GROUP INC	382,688
4,300	IMPERIAL CHEM INDS PLC	341,313

NO. OF SHARES	SECURITY	MARKET VALUE
ROSENBERG INSTITUTIONAL EQUITY MGMT (cont.)		
600	INDEPENDENT INS GROUP INC NV	\$ 12,450
15,400	INTERGRAPH CORP.	261,800
3,000	IOWA ILL GAS & ELEC CO	62,250
23,700	ITT CORP	1,362,750
21,300	JAMES RIV CORP VA	569,775
1,300	KAUFMAN & BROAD HOME CORP	15,600
8,900	KEYCORP	244,750
6,800	KING WORLD PRODTNS INC	255,000
1,200	L V M H MOET HENNESSY	192,600
16,600	LAFARGE CORP.	280,125
3,100	LAILAW INC CL B	70,525
5,700	LEGETT & PLATT INC	210,900
5,100	LITTON INDS INC.	364,650
2,200	LOTUS	76,450
4,300	LOUISIANA PAC. CORP.	165,013
14,300	LOWES COMPANY	695,338
10,000	M.A. HANNA CO	227,500
4,600	MANUFACTURERS NATL CORP	200,100
18,900	MARTIN MARIETTA	810,338
800	MATSUSHITA EL. IND.	110,800
15,100	MATTEL INC	368,063
1,300	MCCLATCHY NEWSPAPERS INC	24,863
13,300	MCCORMICK & CO INC	335,825
15,400	MELVILLE CORPORATION	806,575
7,500	MEREDITH CORP	229,688
6,100	MERRY GO ROUND ENTERPRISES	137,250
4,200	MICHIGAN NATL CORP	134,400
3,200	MIDLANTIC CORP	46,400
15,400	MITCHELL ENERGY	271,425
71,300	MOBIL CORPORATION	4,402,775
3,000	MORRISON KNUDSEN CORP	164,250
13,500	N C N B CORP.	506,250
5,900	NATIONAL FUEL GAS CO N J	138,650
7,000	NATIONAL SVC INDS INC	195,125
700	NATIONAL WESTMINSTER PLC ADR	23,275
2,900	NERCO INC	64,525
5,900	NEWS LTD	107,675
4,400	NICOR INC	166,650
11,800	NIKE INC.	905,650
1,800	NOVO INDS-ADR	89,100
43,100	NYNEX	3,544,975
1,700	OVERSEAS SHIPHOLDING GROUP INC	32,938
9,000	OWENS CORNING FIBERGLAS (NEW)	200,250
3,000	PACIFIC TELECOM INC	90,000
26,200	PENN CENT CORP	599,325
3,700	PENNEY J.C. INC.	224,313
1,800	PEOPLES ENERGY CORP	39,600
14,700	PHILIPS N.V.	260,925
2,600	PHILLIPS PETROLEUM CO.	66,950
600	PIONEER HI-BRED INTL.	24,900
30,600	PPG INDUSTRIES INC.	1,468,800
63,800	PROCTOR & GAMBLE	5,558,575
1,700	QUANTUM CORP.	37,400
36,000	REEBOK INTERNATIONAL LTD	634,500
1,700	REUTERS HOLDINGS PLC	113,900
1,400	ROCKWELL INTL CORP	38,325
1,336,721	ROSENBERG SMALL CAPITALIZATION	14,530,156
29,300	SALOMON INC	717,850
8,800	SAVANNAH FOODS & INDS INC	215,600
2,300	SCIENTIFIC ATLANTA INC	60,663
12,700	SCRIPPS E W CO CL A	250,825
467	SEA CONTAINERS LTD.	26,561
19,900	SEAGATE TECHNOLOGY	281,088

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NO. OF SHARES	SECURITY	MARKET VALUE
ROSENBERG INSTITUTIONAL EQUITY MGMT (cont.)		
3,300	SEARS ROEBUCK & COMPANY	\$ 120,450
4,100	SEQUA CORP CLASS A	302,375
9,500	SHAW INDS INC	257,688
9,700	SHERWIN WILLIAMS CO.	386,788
200	SO JERSEY INDS INC	3,475
6,600	SOTHEBY'S HOLDINGS	99,825
5,600	SOUTHDOWN INC.	151,200
72,900	SOUTHERN CO	1,840,725
4,500	SOUTHERN NEW ENGLAND TELECOM	150,750
7,400	SPIEGEL INC CL A	180,375
3,600	SPRINGS INDS INC	116,100
10,100	STORAGE TECH COM PAR .10	343,400
2,700	TECUMSEH PRODS CO	305,100
17,800	TELEFONICA DE ESPANA S A	445,000
17,400	TEMPLE INLAND	595,950
37,900	TEXAS UTILITIES CO.	1,340,713
27,700	TEXTRON INC	657,875
17,600	TYSON FOODS INC	543,400
18,200	UNION TEX PETE HLDGS INC	364,000
4,500	UNIVERSAL CORP VA	131,063
4,500	UNIVERSAL FOODS CORP	145,688
16,000	UNUM CORP	854,000
82,100	US WEST CORP	2,945,338
4,300	USLIFE CORP.	165,550
4,800	WALLACE COMPUTER SER INC	115,800
9,500	WASTE MANAGEMENT	393,063
2,400	WESTINGHOUSE ELEC. CO.	88,200
12,000	WINN DIXIE STORES INC	823,500
21,700	XEROX CORP	1,017,188
	TOTAL EQUITY PORTFOLIO	\$ 120,824,323

SASCO CAPITAL INC

41,982	ALLEGHANY CORP NEW	\$ 3,710,159
123,002	ALLIED-SIGNAL INC.	4,520,324
194,500	CASTLE & COOKE INC	6,005,188
215,600	CONTROL DATA CORP.	4,123,350
88,389	CYCLOPS INDS INC	2,121,336
138,456	CYPRUS MINERALS CORP	3,097,953
57,500	DIVERSIFIED ENERGIES INC MINN	1,796,875
123,500	EASTERN ENTERPRISES	3,566,063
166,574	GENERAL CINEMA CORP	3,685,450
109,967	GRACE W R & CO	3,257,772
478,100	INSPIRATION RES CORP	2,629,550
172,617	ITEL CORP NEW	3,322,877
84,700	KATY INDS INC	2,191,613
71,900	KERR MCGEE CORP.	3,253,475
460,251	LONE STAR TECH	2,013,598
164,100	M.A. HANNA CO	3,733,275
126,142	MAPCO INC	5,739,461
75,000	MURPHY OIL	3,037,500
145,213	OCCIDENTAL PETE CORP	3,739,235
158,600	OCEAN DRILLING & EXPL CO	3,152,175
209,459	PANHANDLE EASTN CORP	5,131,746
181,435	PENN CENT CORP	4,150,326
221,157	PERKIN ELMER	5,335,413
131,111	PITTSTON CO	2,392,776
202,345	PRIMERICA CORP NEW	6,905,023
117,500	QUAKER ST CORP	1,439,375
36,600	U G I CORP	1,281,000
42,200	UNION PACIFIC CORP.	2,959,275
179,900	UNITED STATES SHOE CORP	4,475,013
64,500	VARIAN ASSOC. INC.	1,814,063
133,994	WHITMAN CORP	3,668,086
	TOTAL EQUITY PORTFOLIO	\$ 108,249,321

NO. OF SHARES	SECURITY	MARKET VALUE
WADDELL & REED		
49,700	ALEXANDER & ALEXANDER	\$ 1,211,438
72,400	AMAX INC	1,764,750
36,500	AMOCO CORP	1,866,063
44,800	APPLE COMPUTER	2,004,800
79,400	ARMSTRONG IND. INC.	2,838,550
52,700	BEMIS COMPANY	1,877,438
91,800	BOEING COMPANY	5,370,300
59,000	BP PRUDHOE BAY RTY TR	1,652,000
412,200	BUSINESS LAND INC	3,143,025
52,900	CALGON CARBON CORP	2,459,850
110,700	CETUS CORP	2,338,538
68,000	CHAMBERS DEV INC CL A	1,581,000
91,400	CHEMICAL WASTE MGMT INC	2,205,025
89,100	CIRCUIT CITY STORES INC	2,238,638
16,300	COMPAQ COMPUTER CORP	2,029,350
44,700	COMPUTER SCIENCES CORP.	2,123,250
124,600	CONSOL. EDISON OF N.Y.	2,928,100
60,000	CONSOL. NAT. GAS	2,685,000
43,300	COOPER INDS. INC.	1,834,838
20,400	DIGITAL EQUIPMENT CORP.	1,734,000
53,100	DILLARD DEPT. STORES	4,672,800
178,750	DOWNEY SAVINGS & LN ASSN	3,217,500
64,000	DUKE POWER CO. NC	3,576,000
45,000	EDISON BROS STORES INC	1,923,750
39,400	EXXON CORPORATION	1,886,275
130,000	GENCORP	1,462,500
35,600	GENERAL MOTORS CORP CL E	1,228,200
164,700	GIDDINGS & LEWIS INC	3,252,825
240,800	HECLA INC.	2,799,300
169,600	HOMESTAKE MNG CO	3,095,200
81,700	INTEL CORP.	3,839,900
54,500	INTERNATIONAL BUSINESS MACH	6,403,750
61,100	JOHNSON CONTROLS	1,932,288
91,800	LAIDLAW INC CL B	2,088,450
51,200	LIMITED INC.	1,235,200
63,800	LOUISIANA PAC. CORP.	2,448,325
279,900	LSI LOGIC CORP.	3,148,875
50,000	MBIA INC	2,050,000
31,900	MCA INC.	1,770,450
24,600	MERCK & COMPANY INC.	2,134,050
162,000	MOBILE TELECOMMUNICATIONS	1,701,000
23,000	MOTOROLA INC.	1,923,375
53,800	NATL. MEDICAL ENTER. INC.	2,037,675
442,300	NATL. SEMICONDUCTOR	3,261,963
90,000	NETWORK SYSTEMS CORP.	1,226,250
10,200	NEWMONT MINING	444,975
30,400	NIKE INC.	2,333,200
115,600	NOBLE AFFILIATES INC	1,835,150
177,000	NORTANKERS INC	2,234,625
146,200	OUTBOARD MARINE CORP	2,905,725
62,900	PANHANDLE EASTN CORP	1,541,050
30,000	PHELPS DODGE	1,785,000
54,025	POLAROID CORP.	2,194,766
53,900	POLICY MGMT. SYS. CORP.	2,223,375
151,400	POTOMAC ELEC. & PWR.	3,141,550
125,700	PUBLIC SERVICE ENTERPRISE GROU	3,252,488
89,300	SMITH INTL INC	1,239,038
88,000	SOUTHWEST AIRLINES	2,266,000
55,950	TOYS R US	2,692,594
128,000	UNION ELEC CO	3,376,000
97,300	UNITED HEALTHCARE CORP	1,678,425
60,000	URCARCO INC	1,012,200
103,000	WAL-MART STORES INC.	6,424,625
109,400	WEYERHEUSER CO.	2,789,700
	TOTAL EQUITY PORTFOLIO	\$ 155,572,634

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE EQUITY ACCOUNT  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
<b>ALLIANCE CAPITAL MANAGEMENT</b>				
\$ 11,950,151	S.B.I MONEY FUND			\$ 11,950,151
2	TRANS WORLD AIRLINES	12.0000%	07/10/01	1
<b>\$ 11,950,153</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 11,950,152</b>
<b>CONCORD CAPITAL MANAGEMENT</b>				
\$ 1,383,826	S.B.I MONEY FUND			\$ 1,383,826
177,000	GEORGIA GULF CORP	15.0000%	04/15/00	181,868
<b>\$ 1,560,826</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 1,565,694</b>
<b>FORSTMANN LEFF ASSOCIATES</b>				
\$ 4,150,000	E-II HLDGS INC	13.0500%	03/01/99	\$ 1,909,000
23,300,000	LOEWS CORP CV	00.0000%	10/17/04	9,028,750
5,300,000	M C I COMMUNICATIONS CV	00.0000%	07/07/04	2,047,125
1,000,000	MOTOROLA INC CV	00.0000%	09/07/09	405,000
5,425,000	PRICE CO CV	05.5000%	02/28/12	4,448,500
25,380,984	S.B.I MONEY FUND			25,380,984
35,800,000	U.S.A. TREASURY NOTE	07.6250%	12/31/93	34,994,500
<b>\$ 100,355,984</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 78,213,859</b>
<b>FRANKLIN PORTFOLIO ASSOC TRUST</b>				
\$ 581,576	S.B.I MONEY FUND			\$ 581,576
<b>GEO CAPITAL</b>				
\$ 10,857,088	S.B.I MONEY FUND			\$ 10,857,088
<b>IDS ADVISORY</b>				
\$ 7,183,879	S.B.I MONEY FUND			\$ 7,183,879
<b>INVESTMENT ADVISORS INC.</b>				
\$ 23,300,491	S.B.I MONEY FUND			\$ 23,300,491
565,000	USX CORP CV SUB DEB	07.0000%	06/15/17	563,588
<b>\$ 23,865,491</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 23,864,079</b>
<b>LIEBER &amp; COMPANY</b>				
\$ 8,696,142	S.B.I MONEY FUND			\$ 8,696,142
210,000	CUC INTL INC ZERO CV	00.0000%	06/06/96	135,975
<b>\$ 8,906,142</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 8,832,117</b>
<b>ROSENBERG INSTITUTIONAL EQUITY MGMT</b>				
\$ 345,567	S.B.I MONEY FUND			\$ 345,567
<b>SASCO</b>				
\$ 2,760,411	S.B.I MONEY FUND			\$ 2,760,411
<b>WADDELL &amp; REED</b>				
\$ 31,639,666	S.B.I MONEY FUND			\$ 31,639,666
1,200,000	SCI SYSTEMS CV	09.0000%	04/01/15	1,266,000
<b>\$ 32,839,666</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 32,905,666</b>

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE BOND MANAGERS ACCOUNT  
INVESTMENT ADVISORS  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 2,000,000	A.T.& T CREDIT CORP	08.9500%	10/15/93	\$ 1,991,300
1,000,000	AMERICAN GEN FIN CORP	08.6250%	06/30/91	997,890
1,282,364	FED HOME LN PC # 200059	08.5000%	11/01/01	1,232,672
7,000,000	FINANCING CORP CPN FICO STRIPS	00.0000%	06/27/93	5,402,600
5,000,000	FIRST BANK NATIONAL	10.2000%	04/12/93	5,100,000
3,891,059	GNMA POOL # 151275	09.0000%	10/15/16	3,780,397
2,500,692	GNMA POOL # 186476	09.0000%	12/15/16	2,429,573
3,629,682	GNMA POOL # 194905	09.0000%	11/15/16	3,526,454
2,450,000	MCDONNELL DOUGLAS FIN CORP	08.8500%	09/20/94	2,420,331
3,000,000	NORTHERN TELECOM LTD	09.2500%	06/02/94	3,019,380
2,500,000	PACCAR FINL COPR	09.4000%	11/29/91	2,519,525
2,750,000	PHH GROUP INC	08.7500%	08/15/91	2,748,845
10,700,000	RESOLUTION FUNDING CORP	08.1250%	10/15/19	9,934,308
1,838,018	S.B.I MONEY FUND	00.0000%		1,838,018
7,850,000	U.S.A. TREASURY BOND	08.8750%	11/15/16	7,033,129
30,250,000	U.S.A. TREASURY BOND	08.1250%	08/15/17	31,422,188
5,000,000	U.S.A. TREASURY BOND	07.5000%	08/15/19	4,823,450
5,000,000	U.S.A. TREASURY NOTE	09.1250%	08/15/97	5,032,800
13,000,000	U.S.A. TREASURY NOTE	08.6250%	11/15/98	13,280,280
2,000,000	U.S.A. TREASURY NOTE	08.8750%	05/15/99	2,076,240
<b>\$ 112,641,815 TOTAL FIXED INCOME PORTFOLIO</b>				<b>\$ 110,609,380</b>

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE BOND MANAGERS ACCOUNT  
LEHMAN MANAGEMENT INC  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 900,000	AMERICAN GEN FIN CORP	08.6250%	06/30/91	\$ 898,101
2,400,000	ASSOCIATES CORP NORTH AMER	08.8750%	02/15/92	2,395,632
1,500,000	BALTIMORE GAS & ELECTRIC	09.5000%	05/01/93	1,487,820
1,200,000	COCA COLA ENTERPRISES	08.3500%	06/20/95	1,166,952
2,882,051	FED HM LN PC # 306617	08.5000%	12/01/18	2,718,120
2,792,260	FED HM LN PC # 501721	08.0000%	06/01/02	2,574,101
1,390,506	FNMA POOL # 020420	08.0000%	10/01/06	1,320,981
3,073,270	FNMA POOL # 046333	08.0000%	04/01/17	2,846,616
4,246,133	FNMA POOL # 070008	08.0000%	06/01/03	4,019,219
1,896,080	FNMA POOL # 070355	08.5000%	03/01/04	1,832,088
1,121,779	FNMA POOL # 070365	08.5000%	08/01/04	1,083,919
1,000,000	GENERAL MOTORS ACCEPT CORP	08.0000%	07/01/93	972,910
893,097	GNMA POOL # 161211	09.0000%	11/15/16	867,698
881,240	GNMA POOL # 182843	09.0000%	10/15/16	856,177
985,535	GNMA POOL # 184906	09.0000%	01/15/17	957,507
989,787	GNMA POOL # 224225	09.0000%	11/15/18	961,638
987,474	GNMA POOL # 262993	09.0000%	12/15/18	959,390
956,286	GNMA POOL # 269049	09.0000%	01/15/19	929,089
1,000,000	INT'L BUSINESS MACHINES	08.3750%	11/01/19	931,930
1,000,000	PHILLIP MORRIS COS INC	08.8750%	07/01/96	981,760
2,000,000	REPUBLIC NATL BK NEW YORK NY	08.6250%	05/15/92	1,999,340
1,333,244	S.B.I MONEY FUND	00.0000%		1,333,244
1,000,000	SEARS	07.0000%	11/15/01	823,740
1,000,000	SEARS ROEBUCK & CO	09.3500%	05/15/93	1,005,770
500,000	SOUTHERN CALIF GAS CO	08.8750%	01/15/93	496,880
1,000,000	TENNESSEE VALLEY AUTH.	08.3750%	10/01/99	962,810
3,500,000	U.S.A. TREASURY BOND	09.3750%	08/15/05	4,130,000
3,000,000	U.S.A. TREASURY BOND	07.2500%	02/15/06	3,218,430
5,300,000	U.S.A. TREASURY BOND	08.7500%	05/15/16	4,614,286
300,000	U.S.A. TREASURY BOND	10.7500%	11/15/16	268,782
2,400,000	U.S.A. TREASURY BOND	07.5000%	05/15/17	2,462,256
5,000,000	U.S.A. TREASURY NOTE	06.6250%	05/15/91	4,998,450
10,400,000	U.S.A. TREASURY NOTE	08.2500%	08/31/91	10,393,448
3,000,000	U.S.A. TREASURY NOTE	08.8750%	02/15/92	2,925,000
8,000,000	U.S.A. TREASURY NOTE	08.1250%	08/15/92	7,992,480
8,200,000	U.S.A. TREASURY NOTE	07.6250%	02/15/93	8,184,584
3,950,000	U.S.A. TREASURY NOTE	07.3750%	05/15/93	3,877,162
3,500,000	U.S.A. TREASURY NOTE	08.8750%	10/15/93	3,377,500
3,500,000	U.S.A. TREASURY NOTE	08.2500%	05/15/96	3,322,795
3,100,000	U.S.A. TREASURY NOTE	08.0000%	02/15/99	3,167,797
3,300,000	U.S.A. TREASURY NOTE	08.2500%	08/15/99	3,202,023
3,200,000	U.S.A. TREASURY NOTE	07.1250%	05/15/00	3,296,000
9,600,000	U.S.A. TREASURY NOTES	09.0000%	05/15/92	9,717,024
6,000,000	U.S.A. TREASURY NOTES	07.2500%	11/15/96	5,636,220
1,200,000	WESTINGHOUSE ELECTRIC CORP	07.7500%	04/15/96	1,125,264
<b>\$ 125,378,742</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 123,292,933</b>

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE BOND MANAGERS ACCOUNT  
MILLER ANDERSON  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 1,500,000	AFRICAN DEV BANK	09.3000%	07/01/00	\$ 1,497,285
2,000,000	AMERICAN GEN FIN CORP	08.4500%	10/15/09	1,814,100
1,800,000	AMERICAN GENERAL CORP	08.1250%	08/15/09	1,662,768
2,000,000	AMERICAN HSG TR	09.5500%	09/01/20	1,797,500
3,000,000	ASSOCIATES CORP	08.1500%	08/01/09	2,866,170
1,100,000	BAXTER INTL INC	09.5000%	06/15/08	1,099,131
1,500,000	CALFED INC	06.5000%	02/20/01	1,485,000
2,625,000	CATERPILLAR INC	08.0000%	11/01/01	2,454,428
5,461,756	CHEMICAL MTG CO	05.7620%	01/15/97	4,917,274
1,825,000	CHRYSLER FINL CORP	13.2500%	10/15/99	1,934,737
1,400,000	CONSOLIDATED RAIL CORP	09.7500%	06/01/00	1,410,570
1,200,000	CROSSLAND FDG CORP	09.5000%	06/15/93	1,201,872
1,257,202	DREXEL BURNHAM LAMBERT CMO TR	00.0000%	07/01/03	733,112
1,900,000	ENRON CORP	09.6500%	05/15/01	1,880,810
3,558,859	FED HM LN PC # 170217	08.0000%	03/01/17	3,280,806
8,654,117	FED HM LN PC # 306613	08.5000%	12/01/18	8,161,871
3,711,720	FEDERAL NATL MTG ASS STRIP	07.5000%	01/01/20	3,340,548
5,376,695	FEDERAL NATL MTG ASSN STRIP	00.0000%	09/01/18	3,199,134
3,955,941	FEDERAL NATL MTG ASSN STRIPPED	00.0000%	01/01/18	2,346,387
1,543,259	FEDERAL NATL MTG GTD	00.0000%	11/25/18	989,137
1,400,000	FEDERAL NATL MTG GTD	00.0000%	03/25/19	730,184
2,534,461	FEDERAL NATL MTG STRIPPED	00.0000%	07/01/17	1,478,706
17,656	FEDERAL NATL MTG STRIPPED	00.0000%	12/01/18	10,147
1,196,446	FEDERAL NATL MTG STRIPPED	00.0000%	01/01/19	704,037
4,000,000	FHLM	09.5000%	05/15/19	4,005,000
1,649,253	FIRST BOSTON MTG SECS CORP	00.0000%	04/16/18	976,160
2,241,307	FNMA POOL # 019084	07.0000%	08/01/06	2,022,779
2,000,000	FORD MOTOR CR CO MED TERM NOTE	09.5000%	05/30/97	2,009,420
3,635,417	FORTUNE MORTGAGE CORP	07.9430%	05/01/03	3,353,672
4,338,555	FSA CAP INC	08.2000%	03/20/13	3,944,007
1,500,000	FULTON FED SVGS BK ATLANTA GA	10.3750%	04/01/93	1,500,000
1,700,000	GENERAL MOTORS ACCEP CORP	09.3750%	04/01/00	1,704,828
1,328,814	GS TR 4	04.7810%	05/01/19	1,131,153
825,000	HOUSEHOLD FIN CORP	09.5500%	04/01/00	818,194
1,700,000	HOUSEHOLD FIN CORP	10.2500%	10/08/03	1,700,000
850,000	HOUSEHOLD FINANCE	08.9500%	09/15/99	817,896
2,300,000	ITT CORP	08.8750%	02/01/08	2,269,180
1,800,000	ITT FINL CORP	10.1250%	04/05/99	1,867,896
8,600,000	LOMAS & NETTLETON FINL CORP	00.0000%	09/03/01	688,000
1,750,000	MARRIOTT CORP	09.3750%	06/15/07	1,749,510
2,328,580	MIDWEST FEDERAL SAVINGS & LOAN	08.8100%	04/01/11	2,205,608
1,800,000	NYNEX CORP	09.5500%	05/01/10	1,838,790
2,900,000	PHILADELPHIA SVG FD SOC	12.0000%	11/15/94	2,893,214
2,300,000	PHILIP MORRIS COS	09.2500%	02/15/00	2,255,242
5,423,000	RESOLUTION FUNDING CORP	00.0000%	01/15/03	1,798,050
5,350,000	RESOLUTION FUNDING CORP	08.6250%	01/15/30	5,293,130
5,000,000	RURAL HSG TRUST	06.3300%	04/01/26	4,073,450
13,461,393	S.B.I MONEY FUND	00.0000%		13,461,393
2,900,000	SECURED FINANCE DELS	09.0500%	12/15/01	2,781,709
850,000	ST PAUL COS INC	09.3750%	06/15/97	848,360
4,813,044	TALMAN FED SVGS & LN	09.1650%	03/01/08	4,659,219
1,750,000	TORCHMARK CORP	08.2500%	08/15/09	1,633,993
2,900,000	TRANSAMERICA FINL CORP	08.3750%	02/15/93	2,854,673
11,102,958	TRI CITY PPTY INV CORP	00.0000%	03/01/00	4,392,441

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE BOND MANAGERS ACCOUNT  
MILLER ANDERSON  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 2,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/00	\$ 868,720
2,400,000	U.S.A. TREASURY COUPON	00.0000%	05/15/01	957,000
22,250,000	U.S.A. TREASURY COUPON	00.0000%	08/15/01	8,685,065
7,500,000	U.S.A. TREASURY COUPON	00.0000%	11/15/01	2,869,875
9,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/02	3,290,130
7,250,000	U.S.A. TREASURY NOTE	09.2500%	08/15/98	7,560,373
25,250,000	U.S.A. TREASURY SEC PRIN.	00.0000%	02/15/15	3,290,327
2,725,000	UNITED AIR LINES INC	13.0000%	06/15/98	2,534,250
7,067,609	UNITED SAVINGS HOUSTON	09.0410%	05/01/08	6,652,387
1,825,000	UPJOHN CO EMPLOYEE STK	09.7900%	02/01/04	1,864,110
5,476,692	VIRGINIA BEACH FED SAVINGS & L	08.2470%	02/01/00	5,062,162
\$ 256,359,735	TOTAL FIXED INCOME PORTFOLIO			\$ 176,177,080

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE BOND MANAGERS ACCOUNT  
MORGAN STANLEY ASSET  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

	PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$	4,000,000	CHESAPEAKE & POTOMAC TELE	08.3750%	10/01/29	\$ 3,899,720
	5,000,000	DEERE & CO	08.9500%	06/15/19	4,916,050
	5,000,000	EASTMAN KODAK CO	10.0500%	03/15/94	5,099,550
	6,510,806	FED HM LN PC # 170170	09.0000%	06/01/16	6,286,964
	3,909,938	FED HM LN PC # 538343	09.0000%	01/01/20	3,775,515
	8,000,000	FEDERAL HOME LN MTG CORP	09.0000%	09/15/18	7,857,600
	4,000,000	FEDERAL NATL MTG ASSN	09.5000%	09/25/18	3,905,200
	8,402,500	FEDERAL NATL MTG ASSN	09.0000%	07/25/19	8,272,261
	3,000,000	MANITOBA PROV CDA	09.1250%	01/15/18	3,117,660
	2,350,000	NEWFOUNDLAND PROV CDA	09.0000%	06/01/19	2,265,212
	5,000,000	OCCIDENTAL PETE CORP MED TERM	10.6900%	05/22/00	5,299,300
	6,000,000	PHILLIP MORRIS COS INC	08.8750%	07/01/96	5,890,560
	12,502,720	S.B.I MONEY FUND	00.0000%		12,502,720
	5,000,000	SALOMON INC MED TERM NOTE	09.7500%	05/18/93	5,086,300
	6,000,000	SEAGRAM JOSEPH E & SONS INC	09.6500%	08/15/18	6,261,420
	10,000,000	SHEARSON LEHMAN HUTTON INC	10.7500%	04/29/96	10,033,500
	6,000,000	TIMES MIRROR CO	08.7000%	06/15/99	5,965,800
	4,000,000	U.S.A. TREASURY NOTE	08.5000%	11/15/92	3,952,480
	2,750,000	U.S.A. TREASURY NOTE	07.8750%	07/15/96	2,670,938
	10,000,000	U.S.A. TREASURY NOTE	07.7500%	02/15/00	10,025,000
\$	117,425,964	TOTAL FIXED INCOME PORTFOLIO			\$ 117,083,750

**MINNESOTA STATE BOARD OF INVESTMENT  
ACTIVE BOND MANAGERS ACCOUNT  
WESTERN ASSET MANAGEMENT  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 5,900,000	ARIZONA PUB SVC CO	10.7500%	04/01/19	\$ 6,018,000
1,700,000	CHRYSLER FINL CORP	09.5000%	06/01/08	1,670,199
7,300,000	CHRYSLER AUBURN HILLS TR GTD	12.3750%	05/01/20	7,579,590
3,400,000	COMMERCIAL INC	08.7000%	06/15/09	3,235,610
17,400,000	DEERE & CO.	08.0000%	11/15/02	16,334,946
24	EASTMAN KODAK WT EXP 11/01/04	00.0000%		930,000
40	EURO DOLLAR DECEMBER FUT	00.0000%		0
40	EURO DOLLAR SEPT 1989 FUTURE	00.0000%		0
4,300,000	FARM CR SYS FINL ASSISTANCE	09.3750%	07/21/03	4,469,291
3,993,162	FED HM LN MTG CORP	08.5000%	03/15/97	3,963,213
2,550,495	FED HM LN PC # 181257	08.0000%	01/01/09	2,351,225
5,770,900	FED HM LN PC # 220009	08.2500%	08/01/01	5,545,431
3,820,306	FED HM LN PC # 538237	07.5000%	10/01/19	3,438,275
4,335,834	FED HM LN PC # 538307	07.5000%	01/01/19	3,902,250
3,728,963	FEDERAL HOME LN MTG CORP PARTN	10.2500%	12/31/14	3,873,460
526,216	FEDERAL NATIONAL MTG. AS. STR.	06.5000%	03/01/09	478,857
1,570,714	FEDERAL NATL MTG ASSN STRIP	06.0000%	02/01/20	1,350,814
6,449,262	FEDERAL NATL MTG ASSN STRIP	05.0000%	01/01/06	5,352,888
13,521,097	FHA CITICORP #136	07.4300%	05/01/23	11,698,453
7,366,407	FHA GMAC # 2	07.3200%	11/01/19	6,535,476
4,131,588	FHA RELLY PROJ #48	07.4300%	07/01/23	3,718,429
4,220,711	FNMA POOL # 000797	07.2500%	01/01/23	3,756,433
4,399,702	FNMA POOL # 070479	08.0000%	01/01/20	4,143,727
6,000,000	GTE CORP	09.8750%	04/01/20	3,661,704
3,600,000	GTE CORP	10.2500%	05/01/19	5,959,980
5,500,000	KFW INTL FIN INC	09.5000%	12/15/00	5,627,160
3,423,000	LITTON INDS INC	12.6250%	07/01/05	3,808,601
30,000	MANITOBA PROV CDA WTS 8/15/98	00.0000%		142,500
6,000,000	MID-ST TR II	09.6250%	04/01/03	6,120,000
3,000,000	NATIONAL AUSTRALIA BANK	09.7000%	10/15/98	2,959,110
5,000,000	OCCIDENTAL PETE CORP	11.1250%	06/01/19	4,926,650
6,500,000	QUEBEC PROV CDA	09.1250%	03/01/00	6,427,070
5,300,000	RESOLUTION FDG CORP	00.0000%	01/15/15	636,000
5,300,000	RESOLUTION FDG CORP	00.0000%	01/15/16	611,143
5,300,000	RESOLUTION FDG CORP	00.0000%	01/15/17	587,982
5,300,000	RESOLUTION FDG CORP	00.0000%	07/15/15	566,411
5,300,000	RESOLUTION FDG CORP	00.0000%	07/15/16	546,536
5,300,000	RESOLUTION FDG CORP	00.0000%	07/15/17	526,661
10,615,000	RESOLUTION FUNDING CORP	08.6250%	01/15/30	10,502,163
11,614,261	S.B.I MONEY FUND	00.0000%		11,614,261
5,720,000	STANDARD CREDIT CARD TRUST	09.3750%	07/10/97	5,734,300
214,000	STANDARD OIL CO	00.0000%	03/15/92	206,029
214,000	STANDARD OIL CO	00.0000%	12/15/90	183,775
95,200	STUDENT LN MARKETI	00.0000%		1,404,200
87,750	STUDENT LN MARKETI	00.0000%		5,484
2,600,000	TENNECO INC	10.0000%	03/15/08	2,706,860
5,880,000	TENNESSEE VALLEY AUTH.	08.3750%	10/01/99	5,661,323
5,400,000	U.S.A. TREASURY NOTE	08.6250%	11/15/91	5,416,848
1,155,000	U.S.A. TREASURY NOTE	08.0000%	09/30/93	1,151,385
5,625,000	U.S.A. TREASURY NOTE	07.3750%	12/31/93	5,498,438
6,200,000	U.S.A. TREASURY NOTE	08.8750%	01/15/95	6,252,328
5,565,000	U.S.A. TREASURY NOTE	08.2500%	10/15/95	5,606,738
26,688,000	U.S.A. TREASURY NOTE	08.6250%	05/15/96	25,336,787
35,830,000	U.S.A. TREASURY NOTE	08.5000%	01/15/97	34,945,357
3,000,000	U.S.A. TREASURY NOTE	07.6250%	05/15/00	3,090,000
136	U.S.T. BD SEPT 96 CALL	00.0000%		85,000
-204	U.S.T. BD SEPT 98 CALL	00.0000%		-127,500
7,000,000	UNITED TELECOMMUNICATIONS	09.7500%	04/01/00	7,008,890
-105	US TREAS BD SEPT	00.0000%		0
110	UST BD/FUT 91.25 SEPT PUT	00.0000%		24,200
110	UST BD/FUT 91.75 SEPT CALL	00.0000%		3,300
\$ 310,741,720 TOTAL FIXED INCOME PORTFOLIO				\$ 275,764,241

**MINNESOTA STATE BOARD OF INVESTMENT  
PASSIVE BOND MANAGERS ACCOUNT  
FIDELITY MANAGEMENT TRUST  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 3,000,000	AFRICAN DEV BK	08.8000%	09/01/19	\$ 2,962,650
2,000,000	AFRICAN DEV BK	09.5000%	12/15/95	2,040,900
3,000,000	ASSOCIATES CORP NORTH AMER	08.3750%	06/01/96	2,991,690
1,335,671	BEAR STEARNS SECD INVS INC	00.0000%	12/01/18	1,173,507
1,367,581	BEAR STEARNS SECD INVS INC	09.0500%	12/01/18	1,363,082
10,000,000	CHRYSLER FINL CORP	09.5000%	11/01/92	9,984,300
3,000,000	CHRYSLER FINL CORP MEDIUM	10.2000%	04/14/93	2,936,220
2,500,000	CIRCUS CIRCUS ENTERPRISES	10.6250%	05/01/97	2,513,825
2,600,000	CONSUMERS PWR CO	08.7500%	02/15/98	2,572,674
1,800,000	DETROIT EDISON CO	09.3750%	08/15/92	1,808,064
2,845,000	ENRON CORP	09.5000%	09/15/93	2,863,009
639,498	FED HM LN PC # 140186	07.0000%	11/01/03	571,551
1,635,639	FED HM LN PC # 160099	12.5000%	01/01/10	1,763,922
2,354,703	FED HM LN PC # 181419	08.0000%	10/01/07	2,214,880
229,728	FED HM LN PC # 181535	08.5000%	06/01/09	220,968
70,640	FED HM LN PC # 183320	07.0000%	04/01/11	63,134
742,532	FED HM LN PC # 183352	09.0000%	12/01/08	728,141
1,684,789	FED HM LN PC # 183354	06.0000%	11/01/10	1,442,601
2,000,664	FED HM LN PC # 184989	08.0000%	06/01/09	1,881,864
216,033	FED HM LN PC # 186988	09.0000%	01/01/09	211,846
1,164,364	FED HM LN PC # 188689	08.0000%	10/01/07	1,105,412
644,981	FED HM LN PC # 188844	07.5000%	08/01/08	595,395
500,689	FED HM LN PC # 200007	11.5000%	02/01/00	522,904
639,744	FED HM LN PC # 210229	11.0000%	09/01/00	662,532
77,391	FED HM LN PC # 210388	11.2500%	10/01/00	80,100
613,158	FED HM LN PC # 210589	11.0000%	12/01/00	634,999
87,866	FED HM LN PC # 253863	09.2500%	03/01/10	86,219
549,721	FED HM LN PC # 255674	09.0000%	11/01/99	530,822
194,511	FED HM LN PC # 255955	09.0000%	04/01/10	190,742
115,738	FED HM LN PC # 258115	09.0000%	11/01/09	113,495
693,511	FED HM LN PC # 271338	07.2500%	11/01/07	627,627
105,526	FED HM LN PC # 279794	09.0000%	03/01/11	103,481
643,108	FED HM LN PC # 287482	07.0000%	03/01/17	562,720
390,870	FED HM LN PC # 292346	08.5000%	07/01/06	377,920
1,005,197	FED HM LN PC # 304981	09.5000%	06/01/18	993,255
1,818,861	FED HM LN PC # 305552	09.5000%	07/01/18	1,797,253
2,800,378	FED HM LN PC # 305850	09.0000%	07/01/18	2,704,101
854,850	FED HM LN PC # 306381	09.0000%	08/01/18	838,283
5,058,284	FED HM LN PC # 539020	10.0000%	09/01/19	5,096,221
4,000,000	FEDERAL NATL MTG ASSN	07.0000%	02/10/96	3,668,760
10,000,000	FINANCING CORP	09.8000%	04/06/18	10,721,900
1,805,000	FINANCING CORP	10.7000%	10/06/17	2,103,385
4,445,000	FINANCING CORP	09.8000%	11/30/17	4,795,044
3,800,000	FINANCING CORP CPN FICO STRIPS	00.0000%	05/11/92	3,240,032
1,300,000	FINANCING CORP CPN FICO STRIPS	00.0000%	08/08/91	1,186,250
1,000,000	FINANCING CORP CPN FICO STRIPS	00.0000%	05/11/91	931,680
2,175,000	FINANCING CORP CPN FICO STRIPS	00.0000%	08/03/92	1,819,801
1,000,000	FINANCING CORP CPN FICO STRIPS	00.0000%	06/27/93	771,800
2,300,000	FINANCING CORP CPN FICO STRIPS	00.0000%	08/08/92	1,919,350
1,175,000	FINANCING CORP CPN FICO STRIPS	00.0000%	08/03/92	983,240
2,000,000	FINANCING CORP CPN FICO STRIPS	00.0000%	11/11/90	1,944,160
5,000,000	FINANCING CORP CPN FICO STRIPS	00.0000%	06/06/91	4,630,650
1,300,000	FINANCING CORP CPN FICO STRIPS	00.0000%	02/08/92	1,133,847
8,000,000	FINANCING CORP CPN FICO STRIPS	00.0000%	12/27/93	5,912,080
3,000,000	FIRST CHICAGO CORP	08.5000%	06/01/98	2,957,820
2,285,000	FIRST FID BANCORPORATION	08.5000%	04/01/98	1,848,062
1,500,000	FIRST FID BANCORPORATION NEW	09.6250%	08/15/99	1,286,280
4,000,000	FIRST INTST BANCORP	12.7500%	05/01/97	4,230,000
1,500,000	FIRST NATIONWIDE	09.4500%	08/23/91	1,500,465
731,530	FNMA POOL # 000248	08.5000%	09/01/10	706,380
647,962	FNMA POOL # 000704	08.5000%	06/01/10	625,685
1,727,614	FNMA POOL # 002494	08.0000%	04/01/08	1,632,595

**MINNESOTA STATE BOARD OF INVESTMENT  
PASSIVE BOND MANAGERS ACCOUNT  
FIDELITY MANAGEMENT TRUST  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 613,447	FNMA POOL # 044049	08.0000%	04/01/08	\$ 579,707
188,993	FNMA POOL # 045986	08.0000%	04/01/02	178,893
430,628	FNMA POOL # 046584	08.0000%	05/01/02	407,615
440,082	FNMA POOL # 046845	08.0000%	04/01/02	416,564
134,210	FNMA POOL # 047227	08.0000%	04/01/02	127,038
179,296	FNMA POOL # 050078	08.5000%	06/01/03	173,245
715,315	FNMA POOL # 050157	09.0000%	12/01/18	694,521
2,284,278	FNMA POOL # 050267	09.0000%	01/01/20	2,217,874
2,272,515	FNMA POOL # 050275	09.0000%	02/01/20	2,206,453
4,165,261	FNMA POOL # 050305	09.5000%	05/01/20	4,136,604
147,430	FNMA POOL # 052998	08.0000%	07/01/02	139,551
227,367	FNMA POOL # 060125	08.5000%	05/01/03	219,693
265,054	FNMA POOL # 062485	08.0000%	06/01/03	250,890
458,051	FNMA POOL # 062502	08.0000%	06/01/03	433,573
595,919	FNMA POOL # 062556	08.0000%	06/01/03	564,073
1,070,899	FNMA POOL # 068832	09.5000%	02/01/19	1,063,531
321,248	FNMA POOL # 077312	09.0000%	06/01/19	311,909
397,167	FNMA POOL # 080813	09.5000%	08/01/19	394,434
479,543	FNMA POOL # 083800	09.5000%	08/01/18	476,244
923,123	FNMA POOL # 088090	09.0000%	02/01/20	896,288
919,830	FNMA POOL # 088486	09.0000%	02/01/20	893,091
967,770	FNMA POOL # 088564	09.0000%	02/01/20	939,637
636,893	FNMA POOL # 088600	09.0000%	02/01/20	618,378
936,802	FNMA POOL # 088734	09.0000%	02/01/20	909,570
2,035,648	FNMA POOL # 089034	09.0000%	02/01/20	1,976,472
1,796,697	FNMA POOL # 089161	09.0000%	02/01/20	1,744,467
1,017,862	FNMA POOL # 089166	09.0000%	02/01/20	988,273
933,135	FNMA POOL # 089235	09.0000%	02/01/20	906,008
1,964,121	FNMA POOL # 089300	09.0000%	02/01/20	1,907,024
395,575	FNMA POOL # 089486	09.0000%	02/01/20	384,075
922,611	FNMA POOL # 089502	09.0000%	01/01/20	895,791
139,798	FNMA POOL # 089528	09.0000%	02/01/20	135,734
489,551	FNMA POOL # 093026	09.5000%	04/01/20	486,183
1,999,017	FNMA POOL # 094427	09.5000%	05/01/20	1,985,264
2,926,619	FNMA POOL # 094625	09.5000%	05/01/20	2,906,484
349,670	FNMA POOL # 094635	09.5000%	05/01/20	347,265
999,568	FNMA POOL # 094751	09.5000%	05/01/20	992,691
1,999,108	FNMA POOL # 095417	09.5000%	05/01/20	1,985,354
625,107	FNMA POOL # 50099	08.5000%	08/01/03	604,010
810,950	FNMA POOL # 50109	10.0000%	08/01/18	821,338
733,762	FNMA POOL # 63571	08.5000%	07/01/03	708,997
1,002,499	FNMA POOL # 63983	10.0000%	08/01/18	1,015,341
143,740	FNMA POOL # 64565	10.0000%	08/01/18	145,582
795,086	FNMA POOL # 8245	08.0000%	12/01/08	736,449
1,000,000	FORD MTR CR CO	08.0000%	04/01/97	935,400
1,500,000	GENERAL ELEC CAP CORP	08.2500%	01/15/91	1,494,375
3,000,000	GENERAL MTRS ACCEP CORP	08.3750%	05/01/97	2,976,780
239,571	GNMA II POOL # 115563	12.5000%	06/20/14	260,533
210,125	GNMA II POOL # 121529	12.0000%	02/20/15	227,198
792,346	GNMA POOL # 026667	09.0000%	09/15/08	779,716
550,978	GNMA POOL # 028628	09.0000%	01/15/09	542,196
473,722	GNMA POOL # 038419	11.0000%	02/15/10	498,592
233,531	GNMA POOL # 038567	11.0000%	03/15/10	245,791
93,575	GNMA POOL # 039333	11.0000%	02/15/10	98,488
463,698	GNMA POOL # 039454	11.0000%	03/15/10	488,042
555,983	GNMA POOL # 039607	11.0000%	07/15/10	585,172
298,392	GNMA POOL # 040070	11.0000%	08/15/10	314,057
58,621	GNMA POOL # 041522	11.0000%	09/15/10	61,698
369,817	GNMA POOL # 043405	11.0000%	09/15/10	389,233
96,144	GNMA POOL # 050936	15.0000%	10/15/11	109,784
236,091	GNMA POOL # 051011	15.0000%	02/15/12	269,585
318,063	GNMA POOL # 052820	15.0000%	07/15/12	363,187

**MINNESOTA STATE BOARD OF INVESTMENT  
 PASSIVE BOND MANAGERS ACCOUNT  
 FIDELITY MANAGEMENT TRUST  
 ALPHABETICAL FIXED INCOME HOLDINGS  
 JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 49,233	GNMA POOL # 054838	15.0000%	09/15/12	\$ 56,218
213,759	GNMA POOL # 061667	11.5000%	05/15/13	227,786
582,030	GNMA POOL # 063723	11.5000%	04/15/13	620,222
170,083	GNMA POOL # 064099	11.5000%	06/15/13	181,244
398,787	GNMA POOL # 064266	11.5000%	04/15/13	424,955
316,584	GNMA POOL # 065675	11.5000%	03/15/13	337,359
195,057	GNMA POOL # 068121	12.0000%	05/15/13	210,906
388,807	GNMA POOL # 101134	11.5000%	08/15/13	414,320
116,377	GNMA POOL # 115029	13.0000%	12/15/14	129,179
505,835	GNMA POOL # 122005	12.5000%	01/15/15	555,154
463,965	GNMA POOL # 128012	13.0000%	03/15/15	515,001
1,108,789	GNMA POOL # 128071	11.5000%	05/15/00	1,167,688
266,063	GNMA POOL # 130246	11.5000%	08/15/15	283,522
81,856	GNMA POOL # 134666	11.0000%	08/15/15	86,154
46,561	GNMA POOL # 137158	11.0000%	01/15/16	49,006
653,249	GNMA POOL # 138429	11.0000%	09/15/15	687,545
188,918	GNMA POOL # 139246	11.0000%	10/15/15	198,837
826,194	GNMA POOL # 141475	11.0000%	12/15/15	869,569
390,020	GNMA POOL # 144784	11.5000%	11/15/15	415,613
603,734	GNMA POOL # 149505	11.0000%	02/15/16	635,430
86,009	GNMA POOL # 152511	08.5000%	08/15/01	83,859
895,814	GNMA POOL # 157454	09.0000%	06/15/16	870,337
736,274	GNMA POOL # 159654	08.5000%	08/15/01	717,867
778,712	GNMA POOL # 160593	09.0000%	05/15/16	756,565
42,884	GNMA POOL # 162447	08.5000%	06/15/01	41,812
31,075	GNMA POOL # 164169	09.0000%	06/15/16	30,191
22,762	GNMA POOL # 165925	09.0000%	07/15/16	22,114
26,603	GNMA POOL # 167248	09.0000%	06/15/16	25,846
109,719	GNMA POOL # 168516	08.5000%	08/15/01	106,976
847,684	GNMA POOL # 172667	08.5000%	07/15/01	826,492
617,795	GNMA POOL # 174041	08.5000%	10/15/01	602,350
862,462	GNMA POOL # 175230	09.0000%	10/15/16	837,933
834,485	GNMA POOL # 178945	09.0000%	02/15/17	810,752
250,780	GNMA POOL # 181131	09.0000%	10/15/18	243,648
861,960	GNMA POOL # 182459	09.0000%	12/15/16	837,446
39,394	GNMA POOL # 189876	09.0000%	11/15/16	38,274
157,426	GNMA POOL # 192807	09.0000%	12/15/16	152,949
46,366	GNMA POOL # 194842	09.0000%	11/15/16	45,047
52,488	GNMA POOL # 198000	09.0000%	06/15/17	50,995
52,076	GNMA POOL # 200811	08.5000%	03/15/02	50,774
2,880,080	GNMA POOL # 200914	08.0000%	04/15/17	2,658,659
500,181	GNMA POOL # 203481	10.0000%	08/15/18	509,090
23,734	GNMA POOL # 209710	09.0000%	06/15/18	23,059
205,932	GNMA POOL # 210376	08.5000%	09/15/02	200,784
500,986	GNMA POOL # 210816	10.0000%	09/15/18	509,909
189,571	GNMA POOL # 216114	10.0000%	11/15/17	192,947
408,260	GNMA POOL # 216690	10.0000%	08/15/17	415,531
84,941	GNMA POOL # 224490	11.0000%	11/15/17	89,400
949,913	GNMA POOL # 225781	09.5000%	06/15/18	944,859
936,322	GNMA POOL # 229897	09.0000%	08/15/17	909,693
111,630	GNMA POOL # 232920	09.0000%	08/15/17	108,456
29,450	GNMA POOL # 236626	08.5000%	05/15/03	28,714
181,301	GNMA POOL # 237713	10.0000%	11/15/17	184,530
97,383	GNMA POOL # 238070	09.0000%	10/15/17	94,613
916,787	GNMA POOL # 238521	11.0000%	12/15/18	964,919
474,424	GNMA POOL # 251278	10.0000%	09/15/18	482,873
250,595	GNMA POOL # 252286	10.0000%	08/15/18	255,059
1,968,126	GNMA POOL # 252954	09.5000%	08/15/18	1,957,655
100,641	GNMA POOL # 255115	09.0000%	05/15/18	97,778
914,707	GNMA POOL # 255149	10.0000%	12/15/18	930,998
449,507	GNMA POOL # 255309	10.0000%	08/15/18	457,512
43,169	GNMA POOL # 256063	10.0000%	06/15/18	43,937

**MINNESOTA STATE BOARD OF INVESTMENT  
PASSIVE BOND MANAGERS ACCOUNT  
FIDELITY MANAGEMENT TRUST  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 968,747	GNMA POOL # 257253	10.0000%	08/15/18	\$ 986,001
474,936	GNMA POOL # 258289	10.0000%	02/15/19	483,395
488,499	GNMA POOL # 258804	09.0000%	08/15/18	474,606
371,863	GNMA POOL # 259737	10.0000%	08/15/18	378,486
59,440	GNMA POOL # 261058	09.0000%	02/15/19	57,750
551,816	GNMA POOL # 26157	09.0000%	10/15/08	543,020
495,322	GNMA POOL # 263657	10.0000%	12/15/18	504,144
345,759	GNMA POOL # 264467	10.0000%	05/15/19	351,917
973,284	GNMA POOL # 264931	10.0000%	05/15/19	990,619
514,433	GNMA POOL # 265370	09.0000%	01/15/19	499,803
976,152	GNMA POOL # 270697	10.0000%	05/15/19	993,537
24,830	GNMA POOL # 271798	10.0000%	04/15/19	25,272
209,065	GNMA POOL # 271905	09.0000%	10/15/19	203,119
1,337,589	GNMA POOL # 27245	09.0000%	12/15/08	1,316,267
968,418	GNMA POOL # 273466	10.0000%	05/15/19	985,666
960,240	GNMA POOL # 274430	10.0000%	04/15/19	977,342
1,953,245	GNMA POOL # 275065	09.0000%	10/15/19	1,897,695
126,078	GNMA POOL # 275191	10.0000%	05/15/19	128,324
959,580	GNMA POOL # 276003	09.0000%	10/15/19	932,289
1,928,418	GNMA POOL # 276197	10.0000%	05/15/19	1,962,764
476,267	GNMA POOL # 277317	10.0000%	05/15/19	484,750
487,873	GNMA POOL # 277462	09.0000%	11/15/19	473,998
752,548	GNMA POOL # 278028	10.0000%	05/15/19	765,951
2,028,405	GNMA POOL # 279422	09.0000%	10/15/19	1,970,717
485,906	GNMA POOL # 279478	09.0000%	11/15/19	472,087
6,979,092	GNMA POOL # 281729	09.0000%	10/15/19	6,780,607
766,413	GNMA POOL # 282394	09.0000%	10/15/19	744,616
2,029,033	GNMA POOL # 282804	09.0000%	10/15/19	1,971,327
981,246	GNMA POOL # 282806	09.0000%	11/15/19	953,340
536,517	GNMA POOL # 29011	09.0000%	12/15/08	527,965
208,230	GNMA POOL # 42799	11.0000%	08/15/10	219,162
655,396	GNMA POOL # 44607	11.0000%	09/15/10	689,804
392,648	GNMA POOL # 60325	11.5000%	01/15/13	418,414
261,024	GNMA POOL # 63571	11.5000%	02/15/13	278,152
3,250,000	GOLDEN WEST FINL CORP	10.2500%	05/15/97	3,294,688
3,000,000	HERTZ CORP	08.5000%	03/01/96	2,997,540
2,250,000	HOME SVGS AMER IRWINDALE CALIF	10.5000%	06/12/97	2,253,038
3,000,000	INTER AMERICAN DEV. BANK	09.5000%	10/15/97	3,102,300
625,000	INTERNATIONAL BK FOR RECON &	14.7500%	06/01/92	689,150
1,000,000	INTERNATIONAL LEASE FIN CORP	07.6000%	02/01/92	977,670
3,000,000	MANITOBA PROV CDA	09.1250%	01/15/18	3,117,660
3,470,000	MANUFACTURERS HANOVER CORP	08.5000%	02/15/99	2,984,061
7,950,000	MBNA CR CARD TR 1988-C	09.6500%	06/15/94	8,082,209
10,050,000	MERRILL LYNCH & CO. INC.	00.0000%		10,024,911
5,000,000	MORGAN STANLEY MTG TR H	08.2500%	07/20/18	4,668,750
14,000,000	NATIONAL CREDIT CARD TR	08.7500%	08/01/94	13,800,500
3,000,000	NORINCHUKIN NK	10.2500%	03/13/91	3,034,440
2,000,000	PHILIP MORRIS COS INC	09.0000%	05/15/98	2,014,080
3,000,000	PHILLIP MORRIS COS INC.	07.5000%	08/01/96	2,960,040
2,000,000	PITNEY BOWES CR CORP	08.6250%	02/15/08	1,936,500
3,560,000	QUEBEC PROV CDA	09.1250%	03/01/00	3,520,057
10,500,000	RESOLUTION FUNDING CORP	08.1250%	10/15/19	9,748,620
1,405,981	S.B.I MONEY FUND	00.0000%		1,405,981
10,000,000	SEARS CR ACCOUNT TR	08.6500%	11/15/94	9,814,800
9,897,000	SEARS CREDIT ACCOUNT TR	09.3500%	12/15/93	9,955,887
5,000,000	SEARS CREDIT ACCT TRUST	09.0000%	09/15/93	4,983,900
2,000,000	SOUTHERN CALIF GAS CO	09.3750%	06/15/98	1,995,000
11,935,000	SYSTEM ENERGY RES INC	14.0000%	11/15/94	13,695,413
5,413,000	SYSTEM ENERGY RESOURCES	09.8750%	09/01/91	5,433,299
3,000,000	U.S.A. TREASURY BOND	10.3750%	11/15/12	3,460,320
28,740,000	U.S.A. TREASURY BOND	10.7500%	08/15/05	33,913,200
2,400,000	U.S.A. TREASURY BOND	08.8750%	02/15/19	2,503,488

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 PASSIVE BOND MANAGERS ACCOUNT  
 FIDELITY MANAGEMENT TRUST  
 ALPHABETICAL FIXED INCOME HOLDINGS  
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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 2,000,000	U.S.A. TREASURY BOND	09.8750%	11/15/15	\$ 2,276,240
4,650,000	U.S.A. TREASURY BOND	08.8750%	08/15/17	4,830,188
10,000,000	U.S.A. TREASURY COUPON	00.0000%	05/15/99	4,730,500
4,100,000	U.S.A. TREASURY NOTE	08.8750%	11/15/97	4,183,271
1,620,000	U.S.A. TREASURY NOTE	09.1250%	05/15/99	1,681,754
2,000,000	U.S.A. TREASURY NOTE	08.6250%	08/15/94	2,015,000
9,500,000	U.S.A. TREASURY NOTE	09.5000%	11/15/95	9,921,515
7,150,000	U.S.A. TREASURY NOTE	07.6250%	05/15/93	7,018,154
6,500,000	U.S.A. TREASURY NOTE	08.5000%	05/15/97	6,502,015
4,300,000	U.S.A. TREASURY NOTE	08.3750%	04/15/95	4,293,292
1,850,000	U.S.A. TREASURY NOTE	09.5000%	10/15/94	1,920,522
1,500,000	U.S.A. TREASURY NOTE	08.2500%	06/30/91	1,500,930
20,250,000	U.S.A. TREASURY NOTE	08.8750%	02/15/99	20,692,868
8,400,000	U.S.A. TREASURY NOTE	08.6250%	08/15/97	8,455,104
3,670,000	U.S.A. TREASURY NOTE	07.3750%	05/15/96	3,484,188
10,600,000	U.S.A. TREASURY NOTE	07.8750%	03/31/92	10,533,750
15,100,000	U.S.A. TREASURY NOTES	09.0000%	05/15/92	15,284,069
<b>\$ 510,515,838</b>	<b>TOTAL FIXED INCOME PORTFOLIO</b>			<b>\$ 506,456,255</b>

**MINNESOTA STATE BOARD OF INVESTMENT  
 PASSIVE BOND MANAGERS ACCOUNT  
 LINCOLN CAPITAL MANAGEMENT  
 ALPHABETICAL FIXED INCOME HOLDINGS  
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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 475,000	AFRICAN DEV BK	10.0000%	11/01/97	\$ 495,316
1,240,000	AFRICAN DEV BK	08.8000%	09/01/19	1,224,562
1,000,000	AMERICAN EXPRESS CR CORP	07.7500%	03/01/97	923,800
385,000	AMOCO CO	07.8750%	08/15/96	364,614
895,000	ARIZONA PUB SVC CO	09.0000%	02/01/17	803,039
1,380,000	ASSOCIATES CORP NORTH AMER	08.3000%	05/01/91	1,367,925
785,000	BALTIMORE GAS & ELEC CO	07.1250%	01/01/02	671,097
965,000	BECTON DICKINSON & CO E GIVEN	07.8750%	12/15/96	899,033
625,000	BENEFICIAL CORP	09.3750%	01/15/93	627,988
775,000	BRITISH COLUMBIA HYDRO & PWR	15.0000%	04/15/11	998,076
500,000	C I T GROUP HLDGS INC	08.8750%	06/15/96	492,435
1,105,000	CAROLINA PWR & LT	07.3750%	01/01/01	971,859
2,664,819	CFC GRANTOR TR	09.5000%	04/17/95	2,675,158
1,200,000	CHASE MANHATTAN CORP	10.0000%	06/15/99	1,171,512
4,193,964	CHEMICAL BK GRANTOR TR	09.0000%	02/15/95	4,184,779
545,000	CHEVRON CAP USA INC	07.8750%	03/01/97	509,357
4,205,000	CHEVY CHASE CR CARD	08.6000%	07/31/95	4,167,449
120,000	CHRYSLER CORP	13.0000%	03/01/97	123,881
460,000	CHRYSLER FIN CORP	12.7500%	11/01/99	480,341
530,000	CHRYSLER FINL CORP	08.5000%	02/01/18	517,990
860,000	CIT GROUP HLDGS INC	07.4000%	02/15/92	840,091
150,000	CITICORP	08.6250%	07/01/91	149,637
125,000	CITICORP	08.1250%	07/01/07	108,676
365,000	COMMERCIAL CREDIT CO	09.8750%	12/01/95	369,646
600,000	COMMONWEALTH EDISON CO	08.0000%	10/15/03	532,872
950,000	CONNECTICUT LIGHT & POWER CO	09.7500%	11/01/18	930,430
150,000	CONSOLIDATED NAT GAS CO	08.6250%	12/01/11	138,705
460,000	CORNING GLASS WKS	08.3750%	11/01/96	438,688
2,211,950	COUPON TREAS RCPT	00.0000%	11/15/92	1,815,148
9,639,840	COUPON TREAS RCPT	00.0000%	02/15/92	8,429,654
2,259,000	COUPON TREAS RCPT	00.0000%	02/15/93	1,813,593
1,000,000	DETROIT EDISON	09.0000%	02/15/17	910,700
4,460,000	DISCOVER CARD TR	09.2000%	11/16/95	4,485,065
520,000	DOW CHEMICAL	08.6250%	04/01/06	491,119
1,170,000	DOW CORNING CORP	08.1500%	10/15/96	1,105,182
610,000	DU PONT (E.I.) DENEMOURS	06.0000%	12/01/01	476,056
215,000	DUKE PWR CO	07.5000%	03/01/97	197,499
1,055,000	DUKE PWR CO	07.7500%	06/01/03	937,241
340,000	EATON CORP	07.0000%	04/01/11	260,800
610,000	EATON CORP	09.0000%	03/15/16	563,817
830,000	EXPORT DEV CORP	07.3750%	02/01/97	764,596
860,000	FARM CR CORP	07.5000%	12/24/96	797,039
368,403	FED HM LN PC # 170020	07.5000%	06/01/08	338,238
459,192	FED HM LN PC # 181020	07.5000%	06/01/09	421,594
816,546	FED HM LN PC # 181539	07.5000%	11/01/08	749,687
829,330	FED HM LN PC # 200055	08.5000%	10/01/01	797,194
647,869	FED HM LN PC # 217458	08.5000%	06/01/02	622,764
10,168,976	FED HM LN PC # 261051	09.0000%	02/01/20	9,819,366
1,749,178	FED HM LN PC # 278430	07.5000%	10/01/16	1,605,955
5,303,611	FED HM LN PC # 279044	09.0000%	10/01/16	5,121,272
533,173	FED HM LN PC # 284283	09.0000%	01/01/17	514,843
624,624	FED HM LN PC # 284523	09.0000%	12/01/16	603,149
1,011,716	FED HM LN PC # 285462	09.0000%	01/01/17	976,933
152,122	FED HM LN PC # 285622	09.0000%	01/01/17	146,892
494,658	FED HM LN PC # 286554	09.0000%	02/01/17	477,651
577,743	FED HM LN PC # 287395	09.0000%	02/01/17	557,880
1,903,376	FED HM LN PC # 287698	09.0000%	01/01/17	1,837,938
573,410	FED HM LN PC # 293097	09.0000%	05/01/17	553,696
60,848	FED HM LN PC # 295485	09.0000%	06/01/17	58,756
370,555	FED HM LN PC # 297604	09.0000%	07/01/17	357,815
2,371,561	FED HM LN PC # 298791	09.0000%	09/01/17	2,290,027
104,814	FED HM LN PC # 298955	09.0000%	08/01/17	101,210

**MINNESOTA STATE BOARD OF INVESTMENT  
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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 671,130	FED HM LN PC # 299561	08.5000%	07/01/17	\$ 632,956
67,704	FED HM LN PC # 302270	09.0000%	01/01/18	65,377
53,554	FED HM LN PC # 303434	09.0000%	04/01/18	51,713
24,754	FED HM LN PC # 304277	09.0000%	07/01/18	23,903
691,695	FED HM LN PC # 304441	09.0000%	05/01/18	667,915
818,296	FED HM LN PC # 309542	09.0000%	12/01/18	790,163
222,891	FED HM LN PC # 309564	09.0000%	12/01/18	215,228
176,320	FED HM LN PC # 380073	08.5000%	11/01/04	169,488
990,866	FED HM LN PC # 380084	08.5000%	03/01/05	952,470
529,033	FED HM LN PC # 535853	09.0000%	11/01/18	510,845
1,135,000	FEDERAL FARM CREDIT BANK	10.6500%	01/20/93	1,187,142
1,385,000	FEDERAL HOME LOAN BANK	10.7500%	05/25/93	1,459,014
3,125,000	FEDERAL HOME LOAN BANK	11.7000%	07/26/93	3,382,813
960,000	FEDERAL NATIONAL MORTGAGE ASSN	10.1250%	06/10/92	988,502
1,180,000	FEDERAL NATIONAL MORTGAGE ASSN	10.9500%	03/10/93	1,246,009
325,000	FEDERAL NATIONAL MORTGAGE ASSN	11.5000%	02/10/95	357,094
450,000	FEDERAL NATIONAL MORTGAGE ASSN	08.0000%	07/10/96	432,279
1,625,000	FEDERAL NATIONAL MORTGAGE ASSN	10.9000%	01/11/93	1,712,344
500,000	FIRST UN CORP	08.1250%	12/15/96	461,580
580,000	FLORIDA PWR & LT CO	09.7500%	04/01/17	576,746
510,000	FLORIDA PWR & LT CO	09.8000%	11/01/18	510,041
414,626	FNMA POOL # 007424	11.5000%	07/01/14	436,913
158,175	FNMA POOL # 013532	11.5000%	11/01/15	166,677
143,047	FNMA POOL # 019999	11.5000%	11/01/15	150,735
105,896	FNMA POOL # 022642	11.5000%	12/01/15	111,588
148,602	FNMA POOL # 022752	11.5000%	01/01/16	156,589
199,401	FNMA POOL # 025622	11.5000%	02/01/16	210,119
176,357	FNMA POOL # 029017	11.5000%	03/01/14	185,836
4,656,520	FNMA POOL # 038128	08.5000%	12/01/16	4,409,119
300,335	FNMA POOL # 040463	08.5000%	01/01/17	284,379
852,957	FNMA POOL # 040738	08.5000%	01/01/17	807,639
434,270	FNMA POOL # 041740	08.5000%	03/01/17	411,198
2,129,747	FNMA POOL # 042542	08.5000%	03/01/17	2,016,593
544,339	FNMA POOL # 042691	08.5000%	03/01/17	515,418
39,419	FNMA POOL # 044688	07.5000%	04/01/02	36,647
497,388	FNMA POOL # 044691	07.5000%	04/01/02	462,411
39,226	FNMA POOL # 045371	07.5000%	04/01/02	36,467
306,115	FNMA POOL # 046551	07.5000%	05/01/02	284,589
78,499	FNMA POOL # 046655	11.5000%	01/01/16	82,719
423,485	FNMA POOL # 047134	07.5000%	05/01/02	393,706
417,284	FNMA POOL # 047233	07.5000%	05/01/02	387,940
384,576	FNMA POOL # 048313	07.5000%	07/01/02	357,532
23,160	FNMA POOL # 049389	07.5000%	06/01/02	21,532
79,447	FNMA POOL # 049521	07.5000%	06/01/02	73,861
29,393	FNMA POOL # 050208	11.5000%	05/01/19	30,973
130,945	FNMA POOL # 051614	11.5000%	02/01/16	137,984
278,157	FNMA POOL # 051821	07.5000%	06/01/02	258,597
330,429	FNMA POOL # 053161	11.5000%	07/01/17	348,189
400,822	FNMA POOL # 054457	07.5000%	07/01/02	372,636
134,543	FNMA POOL # 055385	11.5000%	05/01/15	141,775
629,764	FNMA POOL # 055534	11.5000%	04/01/99	663,613
4,501,856	FNMA POOL # 059124	07.0000%	03/01/08	4,062,925
164,305	FNMA POOL # 065744	11.5000%	11/01/10	173,136
853,033	FNMA POOL # 067743	11.5000%	02/01/16	898,883
705,558	FNMA POOL # 069061	11.5000%	11/01/17	743,481
1,276,706	FNMA POOL # 070338	11.0000%	07/01/19	1,327,366
205,557	FNMA POOL # 070505	08.0000%	01/01/05	194,572
610,093	FNMA POOL # 071883	11.5000%	02/01/19	642,886
282,986	FNMA POOL # 078046	08.5000%	08/01/17	267,951
502,240	FNMA POOL # 080819	11.5000%	01/01/16	529,235
389,250	FNMA POOL # 080926	11.5000%	09/01/19	410,172
316,130	FNMA POOL # 083007	11.5000%	01/01/16	333,122

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PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 248,692	FNMA POOL # 087212	11.5000%	01/01/16	\$ 262,060
713,756	FNMA POOL # 090548	08.5000%	03/01/05	689,667
1,110,000	FORD MOTOR CR CO	08.7500%	01/15/95	1,094,882
725,000	FORD MTR CR CORP	07.5000%	03/01/94	687,757
885,000	GENERAL ELEC CR CORP	05.5000%	11/01/01	664,193
500,000	GENERAL MOTORS ACCEPT CORP	08.0000%	04/15/94	481,380
610,000	GENERAL MOTORS ACCEPT CORP.	08.0000%	01/15/02	546,438
980,000	GENERAL MTRS ACCEP CORP	05.5000%	12/15/01	722,740
1,200,000	GEORGIA POWER CO	10.0000%	08/01/16	1,186,692
132,254	GNMA POOL # 129477	10.5000%	09/15/00	137,295
321,871	GNMA POOL # 135150	10.5000%	12/15/00	334,141
468,845	GNMA POOL # 140248	10.5000%	10/15/00	486,717
680,916	GNMA POOL # 140995	11.0000%	09/15/00	714,744
1,292,265	GNMA POOL # 143208	08.5000%	01/15/17	1,223,607
728,097	GNMA POOL # 144023	09.5000%	03/15/16	724,224
912,246	GNMA POOL # 154528	09.0000%	05/15/16	886,301
900,581	GNMA POOL # 158527	09.0000%	06/15/16	874,968
898,715	GNMA POOL # 159718	09.0000%	09/15/16	873,155
117,969	GNMA POOL # 162031	09.0000%	10/15/16	114,614
900,000	GNMA POOL # 164230	09.0000%	07/15/16	874,404
169,159	GNMA POOL # 166173	09.0000%	06/15/16	164,348
898,621	GNMA POOL # 169419	09.0000%	10/15/16	873,065
913,020	GNMA POOL # 170694	09.0000%	08/15/16	887,053
57,147	GNMA POOL # 172116	09.0000%	09/15/16	55,522
830,533	GNMA POOL # 172600	09.0000%	11/15/16	806,912
56,270	GNMA POOL # 177171	09.0000%	11/15/16	54,669
803,668	GNMA POOL # 179002	09.0000%	11/15/16	780,812
301,633	GNMA POOL # 179370	08.5000%	01/15/17	285,608
362,251	GNMA POOL # 179582	08.5000%	12/15/16	343,005
512,494	GNMA POOL # 179591	08.5000%	01/15/17	485,265
523,171	GNMA POOL # 180292	08.5000%	03/15/17	495,375
142,269	GNMA POOL # 180630	09.0000%	11/15/16	138,223
118,473	GNMA POOL # 181455	08.5000%	01/15/17	112,178
904,880	GNMA POOL # 181782	09.0000%	10/15/16	879,145
706,406	GNMA POOL # 182127	09.0000%	11/15/16	686,316
893,065	GNMA POOL # 183198	09.0000%	11/15/16	867,666
720,373	GNMA POOL # 183253	09.0000%	11/15/16	699,886
276,486	GNMA POOL # 183731	08.5000%	12/15/16	261,797
77,739	GNMA POOL # 185367	09.0000%	10/15/16	75,528
219,974	GNMA POOL # 186068	09.0000%	11/15/16	213,718
364,014	GNMA POOL # 186205	08.5000%	01/15/17	344,674
783,946	GNMA POOL # 186539	09.0000%	10/15/16	761,651
248,209	GNMA POOL # 187389	08.5000%	01/15/17	235,021
57,821	GNMA POOL # 188178	09.0000%	11/15/16	56,177
469,699	GNMA POOL # 189890	08.5000%	01/15/17	444,744
299,952	GNMA POOL # 191369	08.5000%	02/15/17	284,016
297,744	GNMA POOL # 192074	08.5000%	02/15/17	281,925
471,305	GNMA POOL # 193665	09.0000%	11/15/16	457,901
92,732	GNMA POOL # 194842	09.0000%	11/15/16	90,095
886,051	GNMA POOL # 195594	09.0000%	12/15/16	860,852
292,282	GNMA POOL # 195603	08.5000%	01/15/17	276,753
707,790	GNMA POOL # 196102	09.0000%	03/15/17	687,660
362,920	GNMA POOL # 196956	08.5000%	01/15/17	343,638
81,159	GNMA POOL # 199467	08.5000%	02/15/17	76,847
658,302	GNMA POOL # 199849	08.5000%	03/15/17	623,327
647,248	GNMA POOL # 200309	08.5000%	02/15/17	612,859
606,176	GNMA POOL # 200723	08.5000%	01/15/17	573,970
500,707	GNMA POOL # 201170	08.5000%	01/15/17	474,105
251,775	GNMA POOL # 201760	08.5000%	02/15/17	238,398
102,145	GNMA POOL # 202239	08.5000%	02/15/17	96,718
167,322	GNMA POOL # 202574	08.5000%	02/15/17	158,432
473,015	GNMA POOL # 204874	09.0000%	01/15/17	459,562

**MINNESOTA STATE BOARD OF INVESTMENT  
PASSIVE BOND MANAGERS ACCOUNT  
LINCOLN CAPITAL MANAGEMENT  
ALPHABETICAL FIXED INCOME HOLDINGS  
JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 277,844	GNMA POOL # 210210	08.5000%	05/15/17	\$ 263,082
250,819	GNMA POOL # 210512	08.5000%	05/15/17	237,493
247,513	GNMA POOL # 214156	08.5000%	04/15/17	234,362
360,899	GNMA POOL # 235216	08.5000%	08/15/17	341,724
24,652	GNMA POOL # 284320	09.0000%	02/15/20	23,951
4,955,000	GOVERNMENT TR CTFS	09.4000%	05/15/02	5,074,416
10,330,000	GOVERNMENT TR CTFS	08.5500%	11/15/97	10,217,403
5,525,000	GOVERNMENT TR CTFS	09.2500%	11/15/01	5,606,770
150,000	HELLER FINANCIAL	09.1250%	06/15/91	150,432
565,000	HOUSEHOLD FIN CORP	07.7500%	11/01/91	558,796
375,000	HOUSEHOLD FIN CORP	08.5000%	08/15/91	373,849
795,000	HOUSTON LTG & PWR	10.2500%	02/01/19	820,734
1,685,000	INTERNATIONAL BK FOR RECON	11.6250%	12/15/94	1,851,663
320,000	IIT CORP	07.8750%	04/15/93	310,480
755,000	IIT FINL CORP	08.5500%	06/15/09	731,142
490,000	MANITOBA PROV CDA	07.7500%	07/17/16	462,859
4,560,000	MARINE MIDLAND CR CARD TR	08.9500%	12/15/94	4,469,621
1,380,000	MARRIOTT CORP	09.3750%	06/15/07	1,379,614
1,505,000	MARTIN-MARIETTA CORP.	07.0000%	03/15/11	1,148,947
665,000	MID-ST TR II	09.3500%	04/01/98	665,200
740,000	NATIONAL CREDIT CARD	09.8500%	03/31/95	757,893
1,415,000	NEW ENGLAND TEL & TELEG CO	07.8750%	11/15/29	1,350,561
765,000	NEW JERSEY BELL TEL CO	07.8500%	11/15/29	729,076
785,000	NIAGRA MOHAWK PWR CO	10.0000%	11/01/16	744,109
1,500,000	OCCIDENTAL PETE CORP	09.2500%	08/01/19	1,367,445
675,000	ONTARIO PROV CDA	15.1250%	05/01/11	876,305
450,000	PACIFIC GAS & ELEC CO	08.5000%	02/01/20	395,703
600,000	PHILIP MORRIS INC	06.0000%	07/15/01	453,372
435,000	PROCTER & GAMBLE CORP	08.0000%	10/26/29	420,893
1,000,000	RALSTON PURINA CO	09.0000%	06/15/96	977,200
1,350,000	REPUBLIC NY CORP	09.7000%	02/01/09	1,371,249
1,490,000	ROCKWELL INTL CORP	08.8750%	09/15/99	1,453,480
51,083,192	S.B.I MONEY FUND	00.0000%		51,083,192
1,080,000	SECURITY PACIFIC CORP	09.7500%	05/15/99	1,075,831
900,000	SOUTH CENTRAL BELL TELEPHONE	08.2500%	03/01/17	809,478
660,000	STANDARD OIL CO	06.3000%	07/01/01	526,680
710,000	STANDARD OIL CO	07.0000%	12/15/91	695,495
3,990,000	STUDENT LN MARKETING ASSN	10.5000%	04/22/93	4,170,787
825,000	TENNECO INC	10.0000%	03/15/08	858,908
4,925,000	TENNESSEE VALLEY AUTH	08.2500%	11/15/96	4,763,411
985,000	TRANSAMERICA FINL CORP	06.5000%	03/15/11	704,866
6,675,000	U.S.A. TREASURY BOND	10.7500%	05/15/03	7,795,132
21,035,000	U.S.A. TREASURY BOND	09.8750%	11/15/15	23,940,354
9,890,000	U.S.A. TREASURY BOND	11.6250%	11/15/04	12,322,347
9,415,000	U.S.A. TREASURY BOND	08.8750%	08/15/17	9,779,831
16,460,000	U.S.A. TREASURY BOND	08.7500%	05/15/17	16,886,972
1,390,000	U.S.A. TREASURY BOND	09.2500%	02/15/16	1,493,819
6,065,000	U.S.A. TREASURY BOND	14.0000%	11/15/11	8,860,601
4,040,000	U.S.A. TREASURY BOND	07.5000%	11/15/16	3,619,598
22,165,000	U.S.A. TREASURY COUPON	00.0000%	05/15/92	19,014,689
3,900,000	U.S.A. TREASURY COUPON	00.0000%	08/15/96	2,333,292
2,260,000	U.S.A. TREASURY COUPON	00.0000%	02/15/96	1,411,573
15,925,000	U.S.A. TREASURY COUPON	00.0000%	02/15/93	12,825,358
4,065,000	U.S.A. TREASURY NOTE	08.8750%	07/15/95	4,137,398
23,570,000	U.S.A. TREASURY NOTE	07.3750%	05/15/96	22,376,651
5,530,000	U.S.A. TREASURY NOTE	10.3750%	07/15/92	5,742,573
90,000	U.S.A. TREASURY NOTE	08.1250%	05/15/91	89,972
7,505,000	U.S.A. TREASURY NOTE	08.8750%	02/15/96	7,640,991
2,445,000	U.S.A. TREASURY NOTE	11.6250%	01/15/92	2,560,380
9,040,000	U.S.A. TREASURY NOTE	08.8750%	11/15/97	9,223,602
420,000	U.S.A. TREASURY NOTE	07.2500%	03/31/91	415,670
1,540,000	U.S.A. TREASURY NOTE	06.7500%	10/15/93	1,486,100

**MINNESOTA STATE BOARD OF INVESTMENT  
 PASSIVE BOND MANAGERS ACCOUNT  
 LINCOLN CAPITAL MANAGEMENT  
 ALPHABETICAL FIXED INCOME HOLDINGS  
 JUNE 30, 1990**

PAR VALUE	SECURITY	COUPON	MATURITY	MARKET VALUE
\$ 5,780,000	U.S.A. TREASURY NOTE	07.1250%	07/31/91	\$ 5,752,892
6,885,000	U.S.A. TREASURY NOTE	07.7500%	11/15/93	7,543,344
9,660,000	U.S.A. TREASURY NOTE	11.7500%	05/15/92	9,391,355
12,985,000	U.S.A. TREASURY NOTE	06.6250%	05/15/95	14,397,119
6,425,000	U.S.A. TREASURY NOTE	11.2500%	08/15/91	6,374,821
280,000	U.S.A. TREASURY NOTE	07.5000%	08/31/91	279,824
2,800,000	U.S.A. TREASURY NOTE	08.2500%	09/30/90	2,789,500
2,415,000	U.S.A. TREASURY NOTE	06.7500%	08/15/97	2,430,842
1,330,000	U.S.A. TREASURY NOTE	08.6250%	02/15/95	1,468,812
3,590,000	U.S.A. TREASURY NOTE	11.2500%	02/15/92	3,500,250
1,465,000	U.S.A. TREASURY NOTE	06.6250%	11/15/98	1,496,585
1,650,000	U.S.A. TREASURY NOTE	08.8750%	08/15/93	1,804,688
2,100,000	U.S.A. TREASURY NOTE	11.8750%	11/15/91	2,053,401
6,025,000	U.S.A. TREASURY NOTES	06.5000%	11/15/96	5,659,704
500,000	VIRGINIA ELEC & PWR CO	08.6250%	03/01/07	457,490
820,000	WESTINGHOUSE CR CORP	08.7500%	06/22/92	817,196
500,000	WESTINGHOUSE CREDIT CORP	07.3000%	11/15/91	491,330
1,000,000	XEROX	08.7500%	11/01/95	984,820
235,000	XEROX CR CORP	08.7500%	06/01/91	234,995
\$ 507,013,228 TOTAL FIXED INCOME PORTFOLIO				\$ 501,690,386

**MINNESOTA STATE BOARD OF INVESTMENT  
ALTERNATIVE INVESTMENT ACCOUNTS  
ASSETS HELD JUNE 30, 1990**

**REAL ESTATE ACCOUNT**

NO. OF SHARES	SECURITY	MARKET VALUE
20,744	AETNA REAL EST. FUND	\$ 65,392,299
200	AMERICAN REP REALTY FUND	1
13,321	EQUIT. LIFE ASSUR. SOCIETY	79,057,601
6,000	HETTMAN ADV. REALTY II	35,595,468
19,621	HETTMAN ADVISORY CORP. GRP.	21,358,520
3,998	HETTMAN ADVISORY III	20,897,525
100,000	PAINE WEBBER MORTGAGE V	100,000
75,000	PAINE WEBBER QUAL FD I	75,000
125,000	PAINE WEBBER QUAL FD II	125,000
100,000	PAINE WEBBER QUAL. FD III	100,000
100,000	PAINE WEBBER QUAL. FD IV	100,000
5,231	PRUDENTIAL REAL EST FUND	37,490,755
41,837,299	S.B.I MONEY FUND	41,837,299
19,783	SSB REAL ESTATE FD III	23,239,270
14,802	SSB REAL ESTATE FUND IV	16,253,832
14,899	SSB REAL ESTATE FUND V	17,402,725
6,000	TCW REALTY FUND IV	34,872,000
8,000	TCW REALTY FUND III	43,880,449
75,000,000	THE RREEF FUNDS USA III	81,867,825
	TOTAL PORTFOLIO	\$ 519,645,568

**RESOURCE ACCOUNT**

NO. OF SHARES	SECURITY	MARKET VALUE
16,630	AMGO I	\$ 4,096,800
2,088,920	AMGO II	4,834,097
12,300,000	AMGO IV	11,891,830
12,445,027	AMGO V	12,445,027
1,343,424	APACHE CORP LTD I PART	1,216,816
1	APACHE CORP LTD II PART	0
30,000,000	APACHE CORP LTD III PART	20,762,169
1,000,000	BP ROYALTY TRUST	19,661,782
8,400,000	MORGAN J P PETROLEUM FUND II	8,400,000
316,606	S.B.I MONEY FUND	316,606
	TOTAL PORTFOLIO	\$ 83,625,127

**VENTURE CAPITAL ACCOUNT**

NO. OF SHARES	SECURITY	MARKET VALUE
4,569,170	ALLIED VENTURE PARTNERS	\$ 4,076,079
22,691	BANCTEC INC	462,329
4,288,018	CENTURY PTN III	5,522,701
1,000	CHIPS & TECHNOLOGIES INC	21,250
10,000,000	DSV PARTNERS IV	11,364,810
5,000	DULUTH GROWTH CO	0
3,686	FIRST CHICAGO V.P.A.F	3,631,606
5,250,000	G & K VENTURE PARTNERSHIP	4,462,091
6,300,000	GTC L.P. FUND III	5,986,084
16,237,282	K K R INVT. FD	16,237,282
7,911,342	KKR INVT FUND II	7,911,342
140,984,126	KKR INVT FUND III	140,984,126
8,556,138	MATRIX PARTNERS II L.P.	9,597,719
1,000,000	MATRIX PARTNERS III LP	998,948
8,341	NORTHWEST VENTURE PARTNERS	6,859,019
17,836	OFFICE CLUB INC	280,917
1,931,624	S.B.I MONEY FUND	1,931,624
7,225,932	SUMMIT VENTURE LTD PARTN	9,665,099
8,328,701	SUMMIT VENTURE LTD PART II	6,763,379
4,153,125	SUPERIOR VENTURE PARTNERS	3,679,498
	TOTAL PORTFOLIO	\$ 240,435,903

**MINNESOTA STATE BOARD OF INVESTMENT  
MANAGERS FEES PAID FOR  
FISCAL YEAR 1990**

**ACTIVE EQUITY ACCOUNT (1)**

Alliance Capital	\$	2,007,928
BMI Capital		177,349
Concord Capital Management		507,020
Forstmann Leff Associates		355,089
Franklin Portfolio Assoc. Trust		902,072
Geocapital		95,809
IDS Advisory		616,851
Investment Advisors		263,484
Lieber & Company		1,293,578
Rosenberg Institutional Equity Mgmt.		698,512
Sasco Capital Inc.		380,647
Waddell & Reed		783,924
Active Managers Sub-Total	\$	8,082,263

**PASSIVE EQUITY MANAGERS (2)**

Wilshire Associates	318,810
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**ACTIVE BOND MANAGERS (2)**

Investment Advisors	193,144
Lehman Management	244,130
Miller Anderson	352,852
Morgan Stanley	233,061
Western Asset Mgmt.	359,864
Active Bond Managers Sub-Total	\$ 1,383,051

**PASSIVE BOND MANAGERS (3)**

Fidelity Management Trust	342,542
Lincoln Capital Management	299,036
Passive Bond Managers Sub-Total	\$ 641,578

**TOTAL**

\$ 10,425,702
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- (1) Active stock 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 71 in Part I of the Annual Report for a more complete description of this formula.)
- (2) The passive stock manager and active bond managers are compensated based on a specified percentage of assets under management.
- (3) Passive bond managers are compensated on a performance-based fee formula. Fees earned range from 3.5 to 11.5 basis points of assets under management, depending on the manager's performance relative to an established benchmark. (See page 71 in Part I of the Annual Report for a more complete description of this formula.)

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